

RAILROAD ACCIDENT INVESTIGATION

Report No 3775

THE NEW YORK CENTRAL RAILROAD COMPANY

WHITE PIGEON, MICH

NOVEMBER 16, 1957

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	November 16, 1957
RAILROAD	New York Central
LOCATION	White Pigeon, Mich
KIND OF ACCIDENT	Derailment
TRAIN INVOLVED	Passenger
TRAIN NUMBER	Passenger Extra 4000 East
LOCOMOTIVE NUMBER	Diesel electric units 4000 and 4085
CONSIST	16 cars
SPEED	55 m p h
OPERATION	Timetable, train orders, and manual block-signal system
TRACK	Single, 7°25'10" curve, 0 20 percent ascending grade eastward
WEATHER	Cloudy
TIME	2 05 a m
CASUALTIES	1 killed, 32 injured
CAUSE	Excessive speed entering turnout

INTERSTATE COMMERCE COMMISSION

REPORT NO 3775

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

THE NEW YORK CENTRAL RAILROAD COMPANY

February 24, 1958

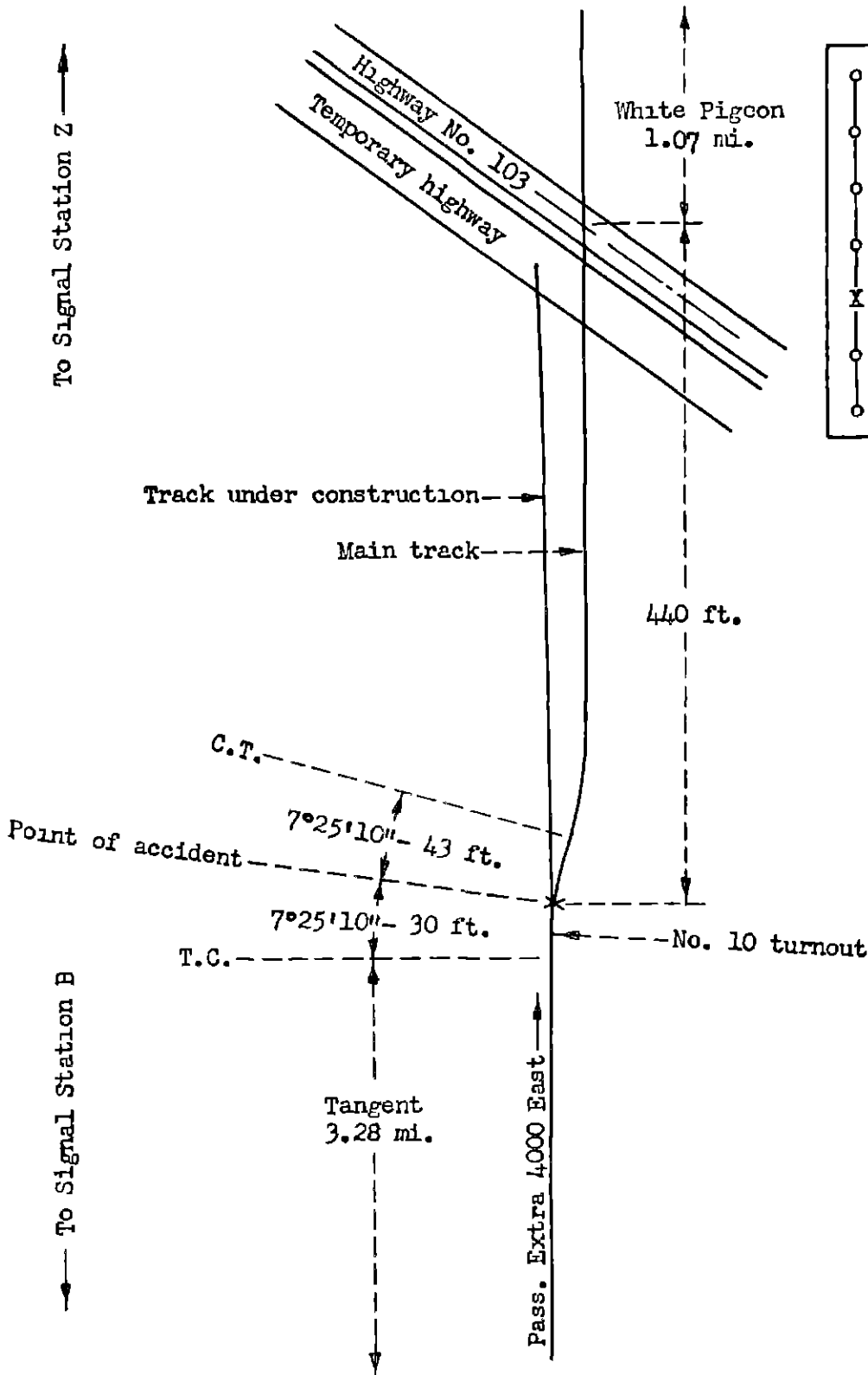
Accident at White Pigeon, Mich , on November 16, 1957, caused by excessive speed entering a turnout

REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

On November 16, 1957, there was a derailment of a passenger train on the New York Central Railroad at White Pigeon, Mich , which resulted in the death of 1 railway mail clerk, and the injury of 8 passengers, 23 railway mail clerks, and 1 train-service employee

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



- Toledo, Ohio 2.00 mi.
- Signal Station Z 63.68 mi.
- Hillsdale, Mich. 57.96 mi.
- White Pigeon, Mich. 1.15 mi.
- X Point of accident 17.48 mi.
- Signal Station B 0.15 mi.
- Elkhart, Ind.

The New York Central Railroad
 White Pigeon, Mich.
 November 16, 1957

Location of Accident and Method of Operation

This accident occurred on that part of the Toledo Division extending between Signal Station B, Elkhart, Ind., and Signal Station Z, Toledo, Ohio, 140.27 miles, designated as the Old Road. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders, and a manual block-signal system. At White Pigeon, Mich., 18.63 miles east of Signal Station B, Michigan State Highway No. 103 crosses the main track at grade. The centerline of the highway is 1.07 miles west of the station. Prior to the time the accident occurred the main track in the vicinity of the highway was relocated approximately 14 feet south of its original location and a track was being laid parallel to and approximately 15 feet north of the main track. The main track and the west end of the track under construction were connected by a No. 10 turnout at a point 1.15 miles west of the station at White Pigeon and 440 feet west of the centerline of the highway. Planking was laid immediately west of the highway at the intersection and was being used as a temporary crossing while work was being performed on the highway. At the time the accident occurred the switch of the turnout was lined for movements on the main track and was spiked in that position. The accident occurred at the turnout. From the west there are, in succession, a tangent 3.28 miles in length, a $7^{\circ}25'10''$ curve to the right 30 feet to the point of accident and 43 feet eastward. The grade for eastbound trains is 0.20 percent ascending at the point of accident.

The track structure of the main track in the immediate vicinity of the point of accident consists of 127-pound rail, 39 feet in length, laid on an average of 24 treated ties to the rail length. It is fully tyeplated with double-shoulder canted tie plates, single spiked, and is provided with 6-hole 36-inch joint bars and an average of 11 rail anchors per rail. It is ballasted with gravel and crushed rock to a depth of 10 inches below the bottoms of the ties. The turnout connecting the main track and the track under construction consists of 127-pound switch rails 16 feet 6 inches in length, 127-pound rails, a No. 10 railbound manganese-steel frog 18 feet 6 inches in length, and hook-flange guard rails 13 feet in length.

The switch stand of the turnout is of the low-stand ground-throw type. It is not provided with either a banner or a light.

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

DEFINITIONS,

* * *

Pilot—An employe assigned to a train when the engineman or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

* * *

Speeds

* * *

Slow Speed—A speed not exceeding fifteen miles per hour.

Restricted Speed—A speed not exceeding that which will enable a train to stop short of a train, obstruction, or switch not properly lined, look out for broken rail, and not exceeding slow speed.

* * *

OPERATING RULES.

109 Bulletin boards and books will be maintained at points designated by timetable, where Bulletin Orders, Notices and other instructions will be posted. Employees in train and yard service must examine them before commencing each day's work and qualified conductors and enginemen must sign for Bulletin Orders for which they have not previously signed.

* * *

The maximum authorized speed for passenger trains is 60 miles per hour but it is restricted to 15 miles per hour in the vicinity of the point of accident by bulletin orders.

Description of Accident

Copies of Bulletin Orders Nos 12 and 13, modifying Toledo Division Timetable No 2, the current timetable at the time the accident occurred, were posted on the proper bulletin boards in accordance with the rules of the carrier on November 4, 1957.

Bulletin Order No 12 reads as follows:

Effective 8 00 a m Tuesday November 5, 1957, all trains must move at restricted speed prepared to stop at temporary highway crossing just West of Route M 103, West of White Pigeon.

Bulletin Order No 13 reads as follows:

Effective 7 30 a m Friday November 8, 1957, new turnout will be installed and main track re-located about 14 feet South of its present location, 1 mile West of White Pigeon Station.

West end of this turnout controlled by hand operated switch which will be lined and spiked for Old Road Main Track movement at restricted speed of 15 miles per hour.

Passenger Extra 4000 East consisted of diesel-electric units 4000 and 4085, coupled in multiple-unit control, 2 mail cars, 1 baggage car, 1 mail car, 1 baggage car, 1 passenger-baggage car, 4 coaches, 3 sleeping cars, 1 sleeping-lounge car, 1 sleeping car, and 1 business car, in the order named. The 1st to the 5th cars, inclusive, and the 16th car were of conventional all-steel construction. The other cars were of lightweight construction. The 6th to the 15th cars, inclusive, were equipped with tightlock couplers. This train departed from Elkhart, 0.15 miles west of Signal Station B, at 1 41 a m, passed Signal Station B, the last open office, at 1 44 a m, and while moving at a speed of 55 miles per hour as indicated by the tape of the speed-recording device, the 1st to the 10th cars, inclusive, and the front truck of the 11th car were derailed at the turnout 1.15 miles west of the station at White Pigeon.

Separations occurred at both ends of the 1st to the 7th cars, inclusive, and between the 9th and 10th cars. The locomotive stopped with the front end approximately 2,082 feet east of the point of accident. The first car stopped on its side with the front end 525 feet east of the point of accident. The front end of this car was on the track structure and the rear end was about

50 feet south of the track. The second car stopped across the track behind the first car. It leaned to the north at an angle of about 20 degrees. The third car stopped on its side across the track behind the second car. The other derailed cars stopped on or near the track structure and leaned at various angles. The 1st to the 5th cars, inclusive, were destroyed, and the 6th to the 10th cars, inclusive, were heavily damaged. The 11th car was slightly damaged.

The front brakeman of Passenger Extra 4000 East was injured.

The weather was cloudy at the time of the accident which occurred at 2:05 a. m.

Discussion

The train involved in the accident originated in Chicago, Ill., as No. 90 and was scheduled to operate over the Main Line from Chicago to New York, N. Y. However, since the Main Line was obstructed as a result of an accident east of Elkhart, the train dispatcher decided to detour the train over the Old Road from Elkhart to Toledo. He issued a train order to be delivered to the crew of No. 90 at Elkhart authorizing them to operate the train as Passenger Extra 4000 East from Signal Station B to Hillsdale, Mich., 76.59 miles.

After the train arrived at Elkhart, the conductor received copies of the train order. The conductor was unfamiliar with the Old Road and, upon his request, a pilot conductor was assigned to the train. The engine crew went on duty at Elkhart and at that time expected to operate No. 90 over the Main Line. Approximately 5 minutes before the train departed the conductor gave a copy of the train order to the engineer. The engineer did not request a pilot engineer and none was assigned. He said he was aware that a pilot conductor had been assigned to the train. The engineer and fireman did not review bulletin orders pertaining to operation over the Old Road and neither the conductor nor the pilot conductor called their attention to Bulletin Orders Nos. 12 and 13. The engineer said that he was not certain when he last operated a train over the Old Road but he was certain that he had not done so during the 3 years immediately preceding the day of the accident. Since he had not recently operated a train over the Old Road, he instructed the fireman to examine the timetable for special instructions, restrictions, or any other information pertaining to operation over that part of the railroad.

As Passenger Extra 4000 East was approaching the point where the accident occurred the enginemen were in their respective positions in the control compartment of the first diesel-electric unit. The conductor was in the 9th car, the pilot conductor and the front brakeman were in the 6th car, a helper conductor was in the 14th car, and the flagman was in the 15th car. The engineer was closely observing the wayside for crossing-whistle signs and any other signs or signals that might affect the movement of the train. The fireman was engaged in examining the timetable for information pertaining to operation over the Old Road. The first the engineer and the fireman became aware of anything being wrong was when the locomotive entered the turnout. The engineer initiated an emergency application of the brakes immediately before the derailment occurred. The first the other members of the crew became aware of anything being wrong was when the brakes became applied in emergency. Each member of the crew said that he did not reread Bulletin Orders Nos. 12 and 13 at the start of that day's work but that he had read and understood them on a previous date. The engineer had not operated a train over the Old Road for a considerable period of time, and was not familiar with the location of Highway No. 103 or of the turnout involved. He said that he did not observe anything to warn him that the train was approaching the turnout. The conductor said that he did not know the location of the highway or of the turnout involved. The pilot conductor and the other members of the crew said that they overlooked the fact that Bulletin Orders Nos. 12 and 13 restricted the speed of the train in the vicinity of the point of accident.

Examination of the equipment after the accident occurred disclosed no defects which could have caused or contributed to the cause of derailment

Examination of the track structure for a considerable distance west of the point of accident disclosed no indications of dragging equipment

Examination of the turnout disclosed that the switch rails had been forced eastward a distance of about 3 inches. The first mark of derailment was a flange mark on the base of the south side of the south closure rail at a point 29 feet 7 inches east of the switch point. Opposite this point and throughout a distance of about 5 feet the north closure rail was canted outward. The canting extended to the east joint of the rail at which point the joint-bar bolts were broken and the north closure rail east of that point was torn out. The frog was badly damaged. The track was destroyed throughout a distance of approximately 370 feet immediately east of the frog.

A local official of the carrier said that the rules of the carrier do not provide for requalification of an engineer on a portion of the railroad over which he has not operated for a period of several years.

Another officer of the carrier said that it is the practice of the carrier to designate the limits of permanent speed restriction areas in the current timetable. He said that if a permanent speed restriction is placed on a section of track after the current timetable has been issued, the limits of the speed restriction for that section of track are designated by bulletin order, and, unless the section of track involved is under repairs, reduce speed boards and slow boards are not provided. Although it is not the practice of the carrier to provide warning signs in this region under the conditions existing in the instant case it is probable that if warning signs had been installed the engineer of Passenger Extra 4000 East would have observed the signs and the accident could have been averted.

Cause

This accident was caused by excessive speed entering a turnout.

Recommendation

It is recommended that whenever speed restrictions are imposed, because of line changes or for operational or other reasons, which materially modify the previous maximum permissible speed in a specific area or location, the carrier provide, as additional protection, adequate warning signs in approach to the point where such restriction applies.

Dated at Washington, D. C., this twenty-fourth day of February, 1958

By the Commission, Commissioner Tuggle

(SEAL)

HAROLD D. McCOY,

Secretary