

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE PERE MARQUETTE RAILWAY AT PLYMOUTH,
MICH., ON SEPTEMBER 30, 1932.

December 6, 1932

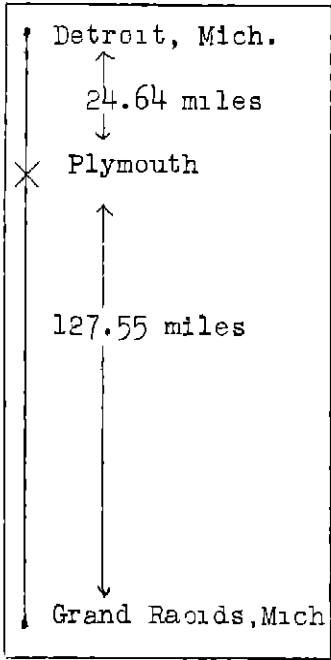
To the Commission:

On September 30, 1932, there was a side collision between a mixed train and a freight train on the Pere Marquette Railway at Plymouth, Mich., which resulted in the injury of 2 passengers, 1 person carried under contract, and 3 employees.

Location and method of operation

This accident occurred on Sub-Division No. 1 of the Detroit-Grand Rapids Division, which extends between Detroit and Grand Rapids, Mich., a distance of 152.19 miles, east of Plymouth this is a double-track line and west of Plymouth it is a single-track line, over all of which trains are operated by time-table, train orders, and an automatic-block signal and train-stop system. There is a wye track at Plymouth which connects the Detroit-Grand Rapids Division, extending east and west, with the Toledo-Ludington Division, extending north and south. This wye is 1,509 feet in length and leads off the Detroit-Grand Rapids Division towards the south around a $70^{\circ} 30'$ curve, the accident occurred at the fouling-point of this track and the main line of the Detroit-Grand Rapids Division. Approaching the wye from the east on the Detroit-Grand Rapids Division, and also from the south on the Toledo-Ludington Division, the track is tangent for a considerable distance. The grade through the wye track is slightly undulating, but is practically level at the point of accident.

A house track parallels the eastern portion of the wye, on the south side of it, and immediately south of this house track there is a freight house platform 4 feet 8 inches in height which extends 237 feet west of the east wye switch. The only signal involved is located between the wye track and the house track, 60 feet 8 inches east of the west end of the freight house platform, it is of the searchlight, two-position, dwarf type, displaying yellow for proceed and red for stop, governing movements from the wye to the Detroit-Grand Rapids Division, and is operated in conjunction with the Detroit-Grand Rapids Division automatic signals. Owing to the location of this signal, the view of it from the engine's side of an engine approaching from the south on the wye track is obscured by the platform until the engine reaches a point 592 feet from the signal. There were no cars on the house track which interfered with a view of the signal.



Point of accident

Direction of Train 99

Station
Freight House

Team Track

Platform

House Track

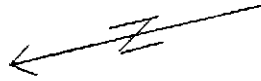
Direction of Ex 1022

7°31'
1509 ft.

Detroit-Grand Rapids Div

Toledo-Ludington Div.

Inv. No 1788
Pere Marquette Railway
Plymouth, Mich.
September 30, 1932.



The Toledo-Ludington Division time-table restricts the speed of all trains to 10 miles per hour when entering the wye, while at the north end of the wye and at the depot the speed of passenger trains is restricted to 10 miles per hour and trains other than passenger trains must move under full control. In the Detroit-Grand Rapids Division time-table the speed of all trains through the wye is restricted to 15 miles per hour.

A light rain was falling at the time of the accident, which occurred about 10.47 p.m.

Description

Westbound Detroit-Grand Rapids Division second-class mixed train No. 99 consisted of 4 freight cars, 1 cafe car, 1 express car, 1 mail car, and 1 combination car, in the order named, hauled by engine 712, and was in charge of Conductor Huber and Engineman Slade. This train departed from Detroit, 24.64 miles east of Plymouth, at 9.40 p.m., on time, and arrived at Plymouth at 10.45 p.m. After performing station work it started to pull ahead past the wye switch and was traveling at a speed of about 8 miles per hour when the rear car was cornered by extra 1022.

Northbound Toledo-Ludington Division freight train extra 1022 consisted of 43 cars and a caboose, hauled by engine 1022, and was in charge of Conductor Rinker and Engineman Huff. This train departed from Erie, on the Toledo-Ludington Division, 45.34 miles south of Plymouth, at 9.25 p.m., and was moving through the wye connection to the Detroit-Grand Rapids Division at Plymouth when it collided with train No. 99 while traveling at an estimated speed of 5 miles per hour.

None of the equipment was derailed although the rear car of train No. 99 was badly damaged. Engine 1022 stopped with the rear tender truck on the wye track switch, and was only slightly damaged. The employees injured were the conductor and two freight handlers of train No. 99.

Summary of evidence

Engineman Slade, of train No. 99, stated that as soon as the station work had been completed he started moving the train ahead for the purpose of clearing a street crossing and to get orders at the yard office, this movement began at 10.46 p.m., the scheduled departing time from Plymouth not being until 10.52 p.m. The train had attained a speed of approximately 10 miles per hour when the brakes were applied from the rear, bringing the train to a sudden stop. He had not seen another train approaching, and he did not know that a collision had occurred until he went back to the rear of his train after the accident.

Baggageman Parmenter, of train No. 99, was standing in the doorway on the south side of the baggage car while the train was leaving the station at Plymouth and observed a train approaching on the wye track, but he could not say how fast that train was traveling or the distance that separated it from his own train at the time he first noticed it. As soon as he realized that a collision would occur he jumped off from the north side of the car and at that time the speed of his train was about 6 or 7 miles per hour.

Engineman Huff, of extra 1022, stated that his train approached Plymouth yard at a speed of about 25 miles per hour, but this speed was reduced to about 20 miles per hour upon entering the wye track, and with steam working lightly he made a medium application of the brakes, the head end of the train at this time being about half way through the wye, but did not think the brakes responded properly. He did not see the dwarf signal until the engine was about three car-lengths from it, as something appeared to obscure it, and also because he was interested in the train orders which had been handed on at the south switch of the wye. At about the time he saw the signal he also saw the rear end of train No. 99 and immediately applied the brakes in emergency, which brought the train nearly to a stop by the time the accident occurred. He further stated that he had train No. 99 in mind and knew the schedule of that train, but as he thought he had seen a lantern ahead he assumed it was the yardmaster and expected the latter would give him a signal to proceed. Engineman Huff also was familiar with the 10-miles-per-hour speed restriction on the wye track, as well as with the fact that a train would have to approach the signal prepared to stop, and he thought at the time that he was operating his train accordingly, but later he realized that he had underestimated the speed.

Fireman White, of extra 1022, stated that the brakes appeared to function properly en route, and when the train entered the wye at Plymouth the engineman made a light application, at which time the train was traveling at a speed of about 20 miles per hour. He knew this was excessive but refrained from calling it to the attention of the engineman, and the train continued through the wye at about the same speed until the brakes were applied in emergency a short time before the collision occurred. Fireman White could not fix the location of the engine at the time of this emergency application and did not see train No. 99 prior to the accident, although he was leaning on the armrest on his side of the engine cab looking around and also operating the stoker.

Head Brakeman Kersey, of extra 1022, stated that the first brake application was made just before the train reached the south switch of the wye, and he estimated that this application reduced the speed to between 15 and 20 miles per hour by the time the train entered the wye. Another application of the brakes was made about the middle of the wye, further reducing the speed approximately to 5 miles per hour, which was the speed when the engineman applied the brakes in emergency about seven car-lengths from the signal. He did not see train No. 99 until just about the time the collision occurred, when he jumped off. Head Brakeman Kersey further stated that when the train entered the wye he crossed from the left to the right side of the engine cab and

received train orders, following which he located himself alongside the engineman for the purpose of reading the orders to the engineman, but the collision occurred before he could do so. It had been the practice to handle train orders in this manner so that the engineman could watch ahead for the indication of the signal near the east switch, then the orders would be handed to the engineman, who in turn would read them, but it was always customary for speed to be reduced sufficiently to know whether or not the orders gave permission to enter the Detroit-Grand Rapids Division main track, and to permit the train to be stopped provided the signal was not clear for the movement. In this instance the orders had not been read by any of those on the engine.

Rear Brakeman Downs, of extra 1022, stated that the only time he felt the brakes apply was when the head end of the train was about to enter the wye, this application reducing the speed from about 20 miles per hour to 12 or 14 miles per hour. He did not notice that the brakes were released after this application was made, neither did he feel an emergency application of the brakes, as there was no shock at the rear end of the train while it was coming to a stop.

Yard Clerk Lockwood stated that upon the arrival of extra 1022 he opened the south switch of the wye and when the engine passed him he delivered train orders to the crew but gave them no signals. He observed that the train was entering the wye at an excessive rate of speed, which he judged to be approximately 35 miles per hour, and did not notice any reduction in speed while the train was passing through the wye.

Conclusions

This accident was caused by the failure of Engineman Huff, of extra 1022, properly to observe and obey signal indications.

Engineman Huff was familiar with the 10-miles-per-hour speed restriction in effect on this wye, yet according to his own statements he permitted his train to enter the wye at a speed of 20 miles per hour and took no further action to reduce speed until the head end of the train was about half way around the wye and then made only a slight application of the brakes, not enough to be under full control. He was familiar with the location of the signal near the east end of the wye, but for some reason he did not see the indication displayed by this signal until it was only three car-lengths distant, although it could have been seen from his side of the engine for a distance of 392 feet. Had his train been moving under proper control and had he seen the signal as soon as it came into view, he would have had no difficulty in stopping in time to avoid the accident.

Fireman White, of extra 1022, failed to observe train No. 99 prior to the accident. He was riding on the left side of the engine cab, or on the outside of the curve, with no obstruction between him and train No. 99 for approximately 500 feet, and if he had been on the alert it would seem that he could have seen that train in time to warn Engineman Huff.

The crew of extra 1022 received train orders at the south switch of the wye, among them being an order authorizing their train to run extra Plymouth to Oak, this order also stating that all trains due at Plymouth up to 10 p.m. had arrived. Oak is between Plymouth and Detroit. The accident occurred at about 10.47 p.m., before any of the orders had been read, and as train No. 99 is not scheduled to leave Plymouth until 10.52 p.m., it would appear that the crew of extra 1022 intended to disregard the schedule of train No. 99 and enter the single track main of the Detroit-Grand Rapids Division prepared to proceed eastward a very short distance to the beginning of double track without knowing whether other trains due had arrived. This appears to have been somewhat of a practice and should be discontinued.

As previously noted, the time-tables of the two divisions involved are not in agreement as to the speed limit while entering and passing around this wye. This also should be corrected at the earliest practicable time.

Respectfully submitted,

W. P. BORLAND,

Director.