

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ERIE RAILROAD AT CLEVELAND, OHIO, ON OCTOBER 22, 1930.

December 20, 1930.

To the Commission:

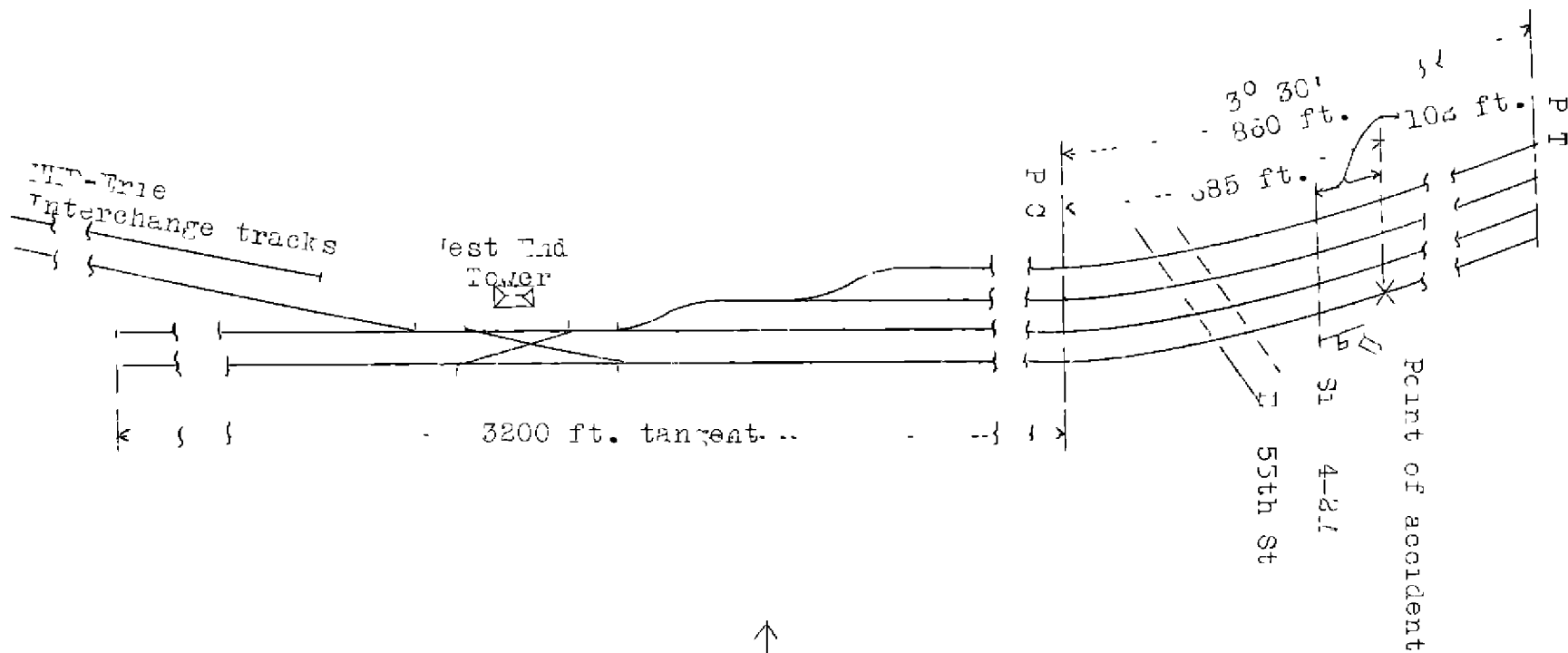
On October 22, 1930, there was a rear-end collision between a New York, Chicago & St. Louis Railroad transfer train and an Erie Railroad freight train on the tracks of the latter railroad at Cleveland, Ohio, resulting in the death of one employee, and the injury of two employees. This accident was investigated in conjunction with representatives of the Ohio Commission of Public Utilities.

Location and method of operation

This accident occurred on the First Subdivision of the Mahoning Division, Western District, extending between Cleveland, Ohio, and Pymatuning, Pa., a distance of 89.2 miles, in the vicinity of the point of accident, the main line is double-tracked and trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred within yard limits, on the eastbound main track, just east of E. 55th Street, an underpass; approaching this point from the west, the track is tangent for approximately 3,200 feet, followed by a $3^{\circ} 30'$ curve to the left 860 feet in length, the accident occurring on this curve at a point about 685 feet from its western end. The grade for eastbound trains in this vicinity is ascending, varying from 0.15 to 1.41 per cent, being at its minimum at the point of collision. Under the rules, within yard limits the main track may be used, protecting against first-class trains; all other trains and engines must move within yard limits prepared to stop unless the main track is seen or known to be clear.

West End tower is located on the north side of the tracks and almost at the extreme western end of the tangent above mentioned, starting at a point just east of the tower and extending beyond the point of collision, there are two yard tracks, both of which parallel the main tracks on the north, or inside of the curve. At the time of the collision, three freight cars, coupled, stood on the most northerly of these two yard tracks, the west car of these three being opposite the east side of E. 55th Street.

Signal 4-2M, located 102 feet west of the point of collision, is a two-arm, upper-quadrant signal, the top arm is an automatic block signal and operates in three



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positions, night indications being red, yellow, and green, while the bottom arm is a train-order signal and operates in two positions, night indications being red and green. Signal 4-2M is located 3,760 feet east of where transfer trains of the New York, Chicago & St. Louis Railroad, hereinafter referred to as the Nickle Plate Road or NKP, enter upon the eastbound main track of the Erie Railroad west of West End tower, and is the first automatic block signal encountered by such transfer trains. A view of signal 4-2M can be had across the inside of the curve from the cab of an eastbound engine for a distance of 2,600 feet, however, owing to the three freight cars standing on the yard track at E. 55th Street, a view of the caboose standing at the point of accident could not be obtained until it was only 650 feet distant.

The weather was clear at the time of the accident, which occurred between 10.05 and 10.10 p.m.

Description.

Eastbound Erie Railroad freight train No. 176 consisted of 25 cars and a caboose, hauled by engine 4509, and was in charge of Conductor Perczynske and Engineer Van Pelt. This train passed West End tower at 9.52 p.m., and was brought to a stop with the caboose just east of signal 4-2M, at about 9.55 p.m., in order to pick up two cars, after standing at this point about 10 or 15 minutes the caboose was struck by NKP extra 205.

NKP transfer train extra 205 consisted of 12 cars of iron ore, hauled by engine 205, backing up, and was in charge of Conductor Patterson and Engineer Chase, this train was also being shoved by helper engine 63 in charge of Conductor Garrison and Engineer Matter, and the crew in charge of extra 205 was making its second round trip of the day over the Erie tracks. Extra 205 entered upon the eastbound main track of the Erie Railroad at West End tower, passed the tower at 10.04 p.m., passed signal 4-2M, which was displaying a stop indication on the automatic block signal and a green indication on the train-order signal, and collided with the rear of train No. 176 while traveling at a speed variously estimated to have been between 15 and 40 miles per hour.

The caboose of train No. 176 was telescoped and the two cars ahead of it were derailed, the tender of engine 205 was derailed and destroyed and the engine cab was demolished. The employee killed was the engineer of extra 205, while the employees injured were the conductor and fireman of that train, both of whom were also riding on engine 205.

Summary of evidence.

Conductor Perchinski, of train No. 176, stated that when his train came to a stop with the caboose just east of signal 4-2M, he noticed that the top arm of that signal displayed a red indication and the bottom arm a green indication, while the caboose markers also were burning and were showing red to the rear. In this instance, flag protection was not required within yard limits, so he and Flagman O'Connor went toward the head end of their train, performed work, returned to the caboose, went inside, and laid down the cills. Shortly afterwards they heard an engine working steam and on looking out of the window they saw the reflection from the headlight on the tender of engine 205, which was approaching at a speed estimated by them to have been about 40 miles per hour, and they jumped just before the collision occurred, without having any opportunity to give stop signals, the conductor, however, said he saw some one giving stop signals when extra 205 was about 19 car-lengths distant. The statements of Flagman O'Connor practically corroborated those of Conductor Perchinski, while no statements were taken from Engineman Van Pelt, Fireman Richardson or Head Brakeman Stacio, as they were at the head end of their train when the accident occurred.

Head Brakeman Buckley, of extra 205, stated that he was on the ground near West End tower when No. 176 passed, following which the dwarf signal was displayed for his own train to cross over to the eastbound main track of the Erie Railroad. Head Brakeman Buckley got on engine 205, and remarked to Engineman Chase, and only to the engineman, about the Erie train ahead of their own train, but the engineman was looking out of the window at the time and did not answer him. Head Brakeman Buckley said that Conductor Patterson rode on the fireman's side of the cab and that he himself rode in front of the fire door, except when Fireman Lyons was putting in a fire, when the head brakeman would get up next to the engineman. Approaching signal 4-3M, the head brakeman noticed the engineman become excited and start to close the throttle and reach for the brake valve, therefore, the head brakeman went to the side of the gangway, saw both of the markers on the caboose ahead, about two car-lengths away, shouted a warning of danger, and jumped from the engineman's side, at which time he estimated the speed to have been about 20 miles per hour, he also saw several men giving stop signals with lanterns. Head Brakeman Buckley did not observe the indication displayed by signal 4-2M prior to the accident, he said it was customary to call signal indications, but that it was not done on this occasion.

Fireman Lyons, of extra 205, stated that both he and Conductor Patterson called the indication displayed by the dwarf signal at West End tower, which signal was on their side of the cab with the engine backing up, preparatory to moving out on the Erie tracks. Fireman Lyons did not go to the engineer's side of the cab to look for signal indications and did not hear any call when approaching E. 55th Street, nor did he know where signal 4-2M was located. Fireman Lyons was putting in a fire and the first he knew of anything wrong was when the air brakes were applied in emergency. He had not noticed when train No. 176 passed West End tower, had not heard the head brakeman mention anything to the engineer about that train being ahead, nor had he heard any conversation between Conductor Patterson and Engineer Chase as to whether the engineer was qualified to run over this section of the Erie Railroad, but he did hear the conductor ask the engineer if he had been over this part of the road before and the engineer replied in a very positive manner that he had been, the fireman was not certain when or where this conversation took place, but thought that it was before the first round trip of the day was made. Fireman Lyons, however, was of the opinion that the engineer was well qualified to operate over this track, judging from the way the engineer replied to the conductor, and the thought never entered the fireman's mind that the reverse might be the case. Statements of Brakeman Buchanan, who was riding on the rear car of extra 205, and Conductor Garrison, Engineer Matter, and Fireman Joseph, all of whom were riding on helper engine 63, were to the effect that the helper engine was working steam at the time of the collision, and that the air brakes were coupled through the train but not through to the helper engine, their estimates of the speed at the time of the accident ranged from 15 to 20 miles per hour.

Conductor Patterson, of extra 205, stated that he was familiar with the operating rules of the Erie Railroad within yard limits and understood that movements must be made on permission of the yard dispatcher, he was qualified over the track where the accident occurred and was familiar with the physical characteristics of that part of the road and the location of signal 4-2M. Before the first round trip was made over the Erie Railroad tracks, he telephoned Operator Mahone, of West End tower, around 6 p.m., and reported engine 205 with engine 63 helping, ready to depart with the cars of ore and he claimed that he also reported to the operator the name of Engineer Chase, in connection with the requirement that engineers and conductors be qualified to operate over the Erie tracks, and that the operator said to "wait a minute, who is that engineer," the conductor saying "Chase," then the operator said to "wait a minute," after which the operator said "all right." The same procedure was followed when Conductor Patterson reported his own name, and, following this, Conductor Patterson also gave the names of the conductor and engineer on

helper engine 63, in a like manner. He indistinctly heard the operator talking to the dispatcher on another telephone, after which the operator came back on the telephone with Conductor Patterson and told the conductor that it would be all right to go when another train cleared. The conductor requested that the operator call back when that train did clear, which was agreed to, and when it did clear, the operator called and told the conductor that it was "all right for engine 203 to go." This was all the conversation Conductor Patterson had with the operator, and it took place prior to making the first round trip. On the second trip, Conductor Patterson again telephoned Operator Mahone at West End tower and, on being asked, informed the operator that it was the same crew, and the operator said that it would be all right to go after train No. 176 had cleared. After that train passed, a yellow indication was displayed on the dwarf signal and he called its indication, but did not know whether Engineman Chase repeated it, the conductor was aware that under the yellow indication displayed by the dwarf signal, his train was required to proceed under full control prepared to stop at signal 4-2M. Conductor Patterson rode on the fireman's side of the cab, which placed him on the outside of the curve at E. 55th St. Steam was being worked and the speed of the train was from 18 to 25 miles per hour, which the conductor thought was too fast, but he hesitated about saying anything to the engineman. Conductor Patterson knew train No. 176 was just ahead of his own train, and was looking toward the east all the time, but the top of the tender obscured his view and he did not see the red indication displayed at signal 4-2M until it was only four or five car-lengths distant, he was about to call a warning of danger when Engineman Chase closed the throttle and applied the air brakes; it was not until this time that the conductor saw one of the red markers on the caboose ahead, and he said that at no time did he see any one on the ground giving stop signals with lanterns. Conductor Patterson further stated that at the time he talked to the operator over the telephone prior to making the first round trip, he presumed that each time the operator said to "wait a minute", the operator was looking up on a list of qualified men the names of the men as the conductor gave them. Conductor Patterson claimed that the operator did not mention anything about the qualifications of Engineman Chase, but that the operator did ask the conductor, after the conductor called his own name, whether the conductor was qualified and the conductor replied that he was, the conductor said that he did not know Engineman Chase was not qualified, explaining that before reaching the Erie tracks prior to making the first round trip, he asked Engineman Chase whether the engineman had been over the Erie tracks and the engineman replied that he had been there several times. The conductor did not take it from this that the engineman was qualified, but after the operator looked up the record and did not say anything, then the conductor did not question it, assuming that Engineman

Chase was qualified. Conductor Patterson said that had he felt that Engineman Chase did not know what he was doing on the trip in question, he would have made it a point to have personally crossed over in the cab to the engineman's side and seen for himself the indication displayed by signal 4-2M. Conductor Patterson emphatically maintained that Operator Mahone did not tell him to pilot Engineman Chase, saying that had he been so instructed, he would have ridden on the engine right with the engineman, instead of riding on the fireman's side.

Operator Mahone, at West End tower, stated that when Conductor Patterson telephoned him before making the first round trip, he received the register of the crew, compared it with the qualification file, found that Engineman Chase was not qualified, and then checked with the dispatcher, following which Operator Mahone told Conductor Patterson that he would be responsible for piloting Engineman Chase, to which the conductor replied "all right". On the second trip, the operator asked the conductor whether the crew was the same, was informed that it was, and then told the conductor it would be all right to go after train No. 176 had passed.

Yard Dispatcher Dietrich stated that when he received the report from the crew of extra 205 prior to the time the first round trip was made, he found that Engineman Chase was not qualified; the dispatcher then told Operator Mahone that Conductor Patterson is qualified and would have to pilot the engine crew. On the second trip, the operator reported to the dispatcher that it was the same crew, and the dispatcher told the operator that extra 205 could follow train No. 176, it being understood that Conductor Patterson was to pilot.

Conclusions.

This accident was caused by the failure of Engineman Chase and Conductor Patterson, of NKP transfer train extra 205, to maintain a proper lookout ahead and by the failure of the engineman to operate under proper control within yard limits.

Engineman Chase was not qualified to run over this portion of the Erie Railroad, although according to the records he had made two round trips over this track during the month of October, 1929, and five round trips during the month of October, 1930, including the first round trip made on the day of the accident. Whether he was not thoroughly familiar with the physical characteristics in this vicinity and was unaware of the location of signal 4-2M, or whether he misread its indication, is not known, as he was killed in the accident. Conductor Patterson claimed that he was unaware that Engineman Chase was not qualified,

otherwise he would have ridden right beside the engineman instead of on the fireman's side, and he maintained that Operator Mahone did not instruct him to pilot Engineman Chase. Operator Mahone, however, maintained that he did instruct Conductor Patterson to pilot Engineman Chase. There is no way of determining definitely just what conversation took place between Conductor Patterson and Operator Mahone, but it seems apparent that the operator checked the names of the members of the crew for the purpose of determining whether they were qualified to run over the Erie tracks, and it is very improbable that he would have said nothing about piloting Engineman Chase after having found he was not qualified. Conductor Patterson also knew his train was not being operated at a reasonable rate of speed in this territory, while it is apparent that neither he nor Engineman Chase was maintaining sufficient lookout to enable them to see the stop signals given by some men on the ground between them and the rear end of train No.176.

The investigation developed that the crew of NKP extra 205 did not call signal indications to each other, as required by the rules, and it also appeared that although the air brakes in their train were coupled through all of the cars, yet they were not cut through to helper engine 63. In the interest of safety, the air brakes should have been cut through to the helper engine.

None of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. Borland,

Director.