

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE SPOKANE, PORTLAND & SEATTLE RAILWAY AT AVON, ORE., JULY 10, 1924.

August 27, 1924.

To the Commission:

On July 10, 1924, there was a head-end collision between two passenger trains on the Spokane, Portland & Seattle Railway at Avon, Ore., resulting in the death of one employee and the injury of three passengers and two employees. This accident was investigated in conjunction with the Public Service Commission of Oregon.

Location and method of operation.

This accident occurred on that part of the Portland Division extending between Portland and Astoria, Ore., a distance of 99.8 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred on the main track, between switches of the passing track at Avon, about 1,000 feet east of the west switch; this siding is 3,014 feet in length and parallels the main track on the south. Approaching the point of accident from the west the track is tangent for more than 2 miles, extending almost to the west switch of the passing track, from which point there is a 00° 30' curve to the left 2,903 feet in length, the accident occurring on this curve at a point about 1,050 feet from its western end. Approaching from the east there is a short tangent, followed by the curve on which the accident occurred. The weather was clear at the time of the accident, which occurred at about 10.20 a.m.

Description

Eastbound passenger train No. 22 consisted of one mail car, one baggage car, one smoking car, two coaches, and one observation car, in the order named, all of wooden construction, hauled by engine 151, and was in charge of Conductor Thieshoff and Engineman Walch. At Clatskanie, 15.4 miles west of Avon, copy of train order No. 115, Form 31, was received, reading in part as follows:

"* * * No 22 Eng 151 meet No 29
Eng 1076 at Avon No 22 take
siding at Avon"

This train left Clatskanie at 9.45 a.m., 13 minutes late, but instead of heading in at the west switch of the passing track at Avon the train continued on the main track and collided with train No. 29 while traveling at a speed estimated to have been between 20 and 35 miles an hour.

Westbound passenger train No. 29 consisted of one baggage car, one smoking car, two coaches, and one observation car, in the order named, all of wooden construction, hauled by engine 1076, and was in charge of Conductor Kirkendall and Engineman Fake. At St. Helens, 19.2 miles east of Avon, copy of train order No. 115, Form 19, previously quoted, was received. This train left St. Helens at 9.32 a.m., one minute late, and when approaching the meeting point fixed by this train order collided with train No. 22 while traveling at a speed estimated to have been about 10 miles an hour.

Both engines were derailed and badly damaged. Engine 151 came to rest on its left side, and its tender remained upright; two cars in this train were badly damaged, the forward end of the third car telescoping the rear end of the second car about 8 feet. Engine 1076, together with its tender, came to rest on their right sides, the tender telescoping the forward end of the first car a distance of about 20 feet. The employee killed was the head brakeman of train No. 22.

Summary of Evidence

Engineman Walen of train No. 22 stated that early in the year he had been ill with influenza and did not work from the 9th of February until the 11th of May. When he reported for duty he did not visit the company's physician as he felt that he was in proper condition to resume work, but reported to the master mechanic who has charge of the assignment of enginemen. Since then he had at times felt weak but he attributed this principally to nervousness, on one occasion about three weeks before this accident, while on duty in the locomotive cab his sense of location deserted him, but he quickly recovered and thought perhaps it was due to his eyesight as he had previously had some trouble with glasses. On the evening before this accident his wife commented upon the fact that

he was rubbing his eyes and the back of his head, but he attributed this to the fact that he had probably been reading too much. He stated that he felt all right when he went on duty on the morning of the accident. He received and thoroughly understood train order No. 115, after which two station stops were made, one at Quincy where train No. 21 was met and one at Mayger where they passed the local freight. At both of these points he felt dizzy, and at Mayger where he experienced some difficulty in reversing the engine for the purpose of taking slack, he felt a pain as though something were pulling in the back of his head. After leaving Mayger he remembered whistling for and passing through a tunnel located about 1-1/2 miles east of that point, but he did not remember passing Pyramid, a station just east of the tunnel, nor anything that occurred between that point and the point of accident. He stated that everything seemed like a dream and it appeared as though he were looking at a bright light; the next thing he knew was that he was falling, and when he regained his senses he was crawling out from under the baggage car after the accident had occurred. He further stated that he read train order No. 115 aloud to Fireman Swenson and then passed it to him, but that with the exception of matters pertaining to their duties he and the fireman never conversed, and even when at times he was ill on the locomotive he did not tell the fireman of his condition as the fireman was a peculiar man and difficult to talk with; it has not been Fireman Swenson's habit to call his attention to orders or meeting points.

Fireman Swenson, of train No. 22, who is a qualified engineman, stated that he read train order No. 115 and was fully aware of the meet with train No. 29 at Avon. Approaching this point he was sitting on his seat box with his hand on the firing valve and looking ahead; Engineman Walch sounded a whistle signal, but he did not recall whether it was the meeting-point signal or a crossing signal. He did not remember having called the engineman's attention to the meet at Avon and did not particularly notice the speed of the train until reaching the switch when he thought it was about 40 miles per hour, no material reduction in speed having been made. He said he was unaware that the engineman was not in possession of his faculties, as he was sitting on his seat box and appeared to be on the alert as usual, and his only explanation of his failure to note that they were approaching the switch at excessive speed in view of the meet order was that Engineman Walch was a very careful man and he did not realize the situation until they were practically over the switch. Fireman Swenson stated that he first saw

train No. 29 coming around the slight curve when it was about 800 or 1,000 feet away, at about the same time Engineman Walch applied the air brakes in emergency; he crossed to the engineman's side of the cab and jumped just before the accident occurred, and the last time he saw the engineman prior to the accident he had crossed to the fireman's side of the cab. Fireman Swenson further stated that he did not recall having had any conversation with Engineman Walch on this trip, nor had the engineman complained of being ill at any time since returning to duty in May. There was nothing about the engine to keep him from maintaining a proper lookout ahead.

Conductor Thiehoff, of train No. 22, stated that he was fully aware of the contents of train order No. 115, which he received at Clatskanie, and that he personally delivered the engineman's copy to him. Approaching Avon he was riding in the rear car, and he heard the station whistle signal sounded; another signal was sounded but he did not know whether this was a road-crossing signal or the meeting-point signal, but was of the impression it was the meeting-point signal. Approaching Avon he was going toward the rear end of the train, it being his intention to ascertain his location on reaching this point, but he was delayed by a passenger who asked a question and shortly afterwards the air brakes were applied in emergency, at which time the speed was about 30 or 35 miles an hour, at that time the rear end of the train had just passed the west switch, the accident occurring immediately afterwards. Conductor Thiehoff further stated it is difficult to determine one's location approaching Avon owing to the absence of landmarks; when he realized that his train had passed the switch, it was then too late to take any action toward averting the accident. He further stated that he gave his copy of train order No. 115 to the head brakeman, and did not show it or mention its contents to Flagman Humphreys; it is customary for the head brakeman, provided there is time at his disposal, to show the orders to the flagman, or the flagman sometimes comes forward for the purpose of ascertaining what orders have been received.

Flagman Humphreys, of train No. 22, stated that he knew the train order board was set against his train at Clatskanie, but did not know what orders had been received. He knew Avon is the regular meeting point with train No. 29. After departing from Clatskanie the conductor passed him while collecting tickets, but he made no effort to ascertain what orders had been received. Flagman Humphreys was riding in the rear of the next to the last car in the train approaching Avon; the only whistle signal he recalled having been sounded approaching this point was the station signal. He es-

tirated the speed of the train to have been about 20 or 25 miles an hour at the west switch, and stated that the air brakes were applied in emergency just about the time the rear car reached this point.

The testimony of members of the crew of train No. 29 was to the effect that their train was proceeding toward the west switch at a low rate of speed, preparatory to coming to a stop at the switch as required by train order No. 115, and the first knowledge they had of anything wrong was on seeing train No. 22 a short distance away, approaching on the main track at a high rate of speed. The air brakes were applied in emergency just before the collision occurred.

Chief Surgeon McDaniel stated that he saw Engineman Walch at the scene of the accident at about two o'clock and he appeared to be in a somewhat dazed condition, apparently having difficulty in recognizing him. A physical examination conducted afterwards disclosed that Mr. Walch was anaemic and somewhat lacking in blood cells, and indicated a lowered amount of resistance both nervous and physical. This is a condition that frequently follows influenza, it may develop within two or three weeks or it may be two months, but it comes in nearly every case. This condition of lowered resistance would make a man more susceptible to fainting spells or mental lapses. With reference to the statement of Engineman Walch that when in his dazed condition he appeared to see a bright light, Dr. McDaniel stated that this could not come from the eye itself but probably resulted from some congestion of the brain. Dr. McDaniel stated that when an employee reports back for duty under circumstances in which Engineman Walch did he is not required to undergo a physical examination, and had Engineman Walch undergone a physical examination on reporting back for work the condition of lowered resistance would have been found but it is doubtful whether the condition complained of as being responsible for his lapse of memory would have been disclosed.

Conclusions

This accident was caused by the failure of the crew of train No. 22 to obey a train order establishing a meeting point, for which Engineman Walch, Fireman Swenson and Conductor Thiehoff are primarily responsible.

The investigation disclosed that as a result of illness Engineman Walch was subject to mental lapses and that during one of these periods he ran by the meeting point.

Fireman Swenson, who is a qualified engineman, was fully aware of the meeting point and could have prevented this accident. While it appeared he was not aware that Engineman Walch was not in possession of all his faculties, the speed of his train was excessive approaching Avon in view of the meet order, and this fact should have been a sufficient warning. However, he took no action whatever toward safeguarding his train, which is his paramount duty, and even when he saw the approaching train he took no action to avert the accident. For such negligence on his part there can be no excuse.

Rule 90 reads in part as follows:

"*** The engineman will give signal 14 (n), (two long and one short blasts on the engine whistle) at least one mile before reaching a point where by train order the train is to meet or wait for an opposing train. Should the engineman fail to give signal 14 (n) as herein prescribed, the conductor must take immediate action to stop the train."

Conductor Thiehoff admitted that after the station whistle signal was sounded approaching Avon, he heard another whistle signal, but that he did not know whether this was a road crossing signal or the meeting point signal, however, he assumed that it was the meeting point signal and was depending on Engineman Walch to properly execute the meet order. Had he been on the alert and complied with the requirements of the above quoted rule he would have known definitely whether the meeting point whistle signal was sounded as required, and in the event that it was not he could have taken proper steps to avert the accident.

In a report issued by the Commission under date of October 10, 1923, covering the investigation of an accident on the New York, New Haven & Hartford Railroad at Readville, Mass., September 11, 1923, the desirability of periodical physical examinations of enginemen was pointed out, as follows:

" * * * In the interests of safety it is believed that not only should the railroads have their enginemen examined by competent physicians but that they should be reexamined at stated intervals. * * *"

According to the record in this case, Engineman Walch was last examined on March 7, 1921, and at that time his condition was pronounced good. Had he been recently examined the condition which was responsible for his mental lapses might have been discovered.

Had an adequate block signal system been in use on this line, this accident probably would not have occurred; and adequate automatic train stop or train control device would have prevented it.

All of the employees involved were experienced men. At the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service laws.

Respectfully submitted,

W. P. BORLAND

Director.