

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE SEABOARD AIR LINE RAILWAY AT PINOCA, N. C., ON JANUARY 1, 1924.

April 14, 1924.

To the Commission:-

On January 1, 1924, there was a collision between a work train and a cut of standing cars on the Seaboard Air Line Railway at Pinoca, N.C., resulting in the death of 5 employees and the injury of 12 employees.

Location and method of operation.

The line on which this accident occurred extends between Monroe and Rutherfordton, N.C., a distance of 104.7 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. Trains are operated within yard limits in accordance with time-table rule R, reading in part as follows:

"All trains will approach and move between all yard limit boards under control or with ability to stop within half the range of vision."

The accident occurred on the main track, within yard limits, about 400 feet north of the south yard-limit board at Pinoca, approaching this point from the south the track is tangent for about 5,525 feet, followed by a 2° curve to the right 569 feet in length, and is then tangent for about 5,800 feet, the accident occurring about 230 feet south of the south end of the curve. The grade from the south is descending for about 3,500 feet, being 1.25 per cent descending at the point of accident. At a point approximately 1,300 feet north of the south yard-limit board and east of the main track there is a track connecting with the Piedmont & Northern Railway, the switch being a trailing-point switch for northbound trains. The switch stand is of the ground-throw type with a mast about 7 feet above the tops of the ties, having two color indications, red for the siding and white for the main track. The weather was cloudy and it was dark at the time of the accident, which occurred about 6.15 p.m.

Description.

Yard engine 1047, in charge of Conductor Farrits and Engineman Newman, while switching in the Piedmont & Northern Railway yard, placed 12 cars on the main track of the Seaboard Air Line Railway, the rear car being about 700 feet south of the Piedmont & Northern switch, and they had been standing at that point about 10 minutes when they were struck by work extra 644.

Work extra 644 consisted of engine 644, headed south, with one bad-order hopper car and a caboose ahead of it and 13 cars behind it, and was in charge of Conductor Sewell and Engineman Bradshaw. This train left Thrift, about 3 miles south of Pinoca, at 5.55 p.m., proceeded northward, and collided with the cars standing on the main track while running at a speed estimated to have been about 12 miles an hour.

The caboose which was next to engine 644 had both platforms demolished and its ends otherwise damaged; none of the other cars was derailed or seriously damaged. The employees killed were track laborers riding on the caboose platform next to the engine tender.

Summary of evidence.

Conductor Sewell, of work extra 644, said that before leaving Thrift he directed Brakeman White to ride the bad-order hopper car, and as the train pulled out of the siding, he saw the brakeman board that car carrying a lighted lantern, the conductor boarded the rear car after closing the main-track switch. Conductor Sewell said the brakes were applied about 300 yards south of the point of accident and were again applied, in emergency, just prior to the accident, at which time the speed was about 12 miles an hour; previous to this he had no intimation of the cars standing on the main track until the accident occurred. His statements concerning the air-brake applications were corroborated by Flagman Hunnicutt, who was working on reports in the caboose. Both of these employees thought their train was being operated in accordance with the rules.

Brakeman White said he rode inside the head car on the engineman's side and did not see the cars standing on the main track until within four or five car lengths of them, at which time the speed was about 12 miles an hour and he signalled the engineman to stop. As he did not feel the speed being reduced immediately, he shouted several times, gave an emergency stop signal, crossed over to the opposite side of the car where there was a ladder, and started to get off, but was on the ladder when the collision occurred he thought the speed had

been reduced to about 8 miles an hour. He also said he did not see any lights in the vicinity nor did he see any of the yard crew before the accident. Brakeman White further said it was a frequent occurrence to find a yard crew working at the Piedmont & Northern switch and that he had maintained a close lookout approaching the switch, and while he did not consider the speed of the train too high approaching the yard-limit board he said he did not think the train was being operated so that it could have been stopped within half the range of vision; he thought if there had been a light on the standing cars it would easily have been seen in time to stop.

Engineman Bradshaw said no air-brake test was made before leaving Thrift, but that the brakes were in good working order. Approaching the point of accident he was riding on his seat box, looking in the general direction in which the train was moving, and as he was unable to see the track on account of the cars ahead of the engine, he depended on the brakeman riding on the head car to give him a signal in case the track was obstructed. At numerous times between Thrift and the point of accident he sounded crossing whistle signals as a warning and when reaching the approximate location of the yard-limit board he made a 2 or 3-pound application of the air brakes and told the fireman to look out on his side; the fireman complied and told him that the track was clear. On again looking ahead he saw a stop signal being given by the head brakeman and made an emergency application of the air brakes, not having released after the previous application; the accident occurred at about this time, while the train was traveling at a speed of about 10 miles an hour. Engineman Bradshaw said he was familiar with yard rules and considered that his train was being operated in accordance with those rules.

The last part of bulletin C-387, issued under date of November 3, 1923, reads as follows:

"In all cases where necessary for yard crews to leave cars on main line same must be protected either by a switchman or a white or red light should be attached to the cut of cars."

Engineman Bradshaw said that in view of the requirements of this circular he was expecting to find any cars which might be on the main track protected accordingly, and expressed the opinion his train was moving at such a rate of speed that it could have stopped had the cars been protected, although he said that had a light been placed on the cars he would not have been able to see it on account of the curvature and the cars being pushed ahead of the engine.

Fireman Gravely said he had just finished putting in a fire when the collision occurred, prior to which he had had no indication of the presence of the cars on the main track. He also said that he did not recall looking out to see if the track was clear before the accident nor did he remember telling the engineer that the track was clear.

Conductor Farris of yard engine 1047, said he was on the inside of the curve near the station looking in the general direction of the rear of the cut of cars and did not have any information of the approach of the work train until the collision occurred. At which time the cars had been standing on the main track about 10 minutes. Conductor Farris also said he was familiar with the rules governing the operation of trains within yard limits but had not read the circular to the effect that when necessary for yard crews to leave cars on the main track they should be protected by a switchman or by a red or white light, and he said he had not taken any steps to protect the cars as the rear of the crew were in the vicinity of the cars and their lanterns could be seen by an approaching train for a considerable distance.

Switchman Hunter said he had started back toward the rear car of the cut, on the inside of the curve, and had reached a point about seven or eight car lengths from the rear end when he heard the sound of an approaching train and began giving stop signals. He heard several shouts after he had given two or three stop signals, about the time the collision occurred, he also said that he did not see any lights on the approaching train or hear any whistle signals sounded. Switchman Hunter also said he had not seen the bulletin requiring protection for standing cars. Switchman Green had closed and locked the main track switch a few seconds before the collision occurred, he said that the light on the switch stand was burning, and he thought the crew of an approaching train could have seen the light change from red to white when the switch was thrown from the siding to the main track.

Trainmaster Adams said that Bulletin C-387 was issued on November 5, 1923, to the effect that cars left standing on the main track must be protected either by a switchman or a white or red light, and that this bulletin was not issued to abrogate or modify time-table rule "R" which provides that all except first-class trains should move through yard limits under such control that they can be stopped within one-half the range of vision. Trainmaster Adams further said that under the rules work extra 644 should have been operated under such control that it could be stopped within one-half the range of vision, and expressed the opinion, in view of the manner in which extra 644 was made up, that it should have been flagged through the yard limits.

Conclusions.

This accident was caused by the failure of work extra 644 to be operated under proper control within yard limits for which Engineman Bradshaw and Brakeman White are responsible. The crew of yard engine 1047 are also open to severe censure for their failure to protect cars standing on the main track in compliance with the provisions of Bulletin C-387.

The investigation discloses that the work extra was not being operated under such control as would permit it to be stopped within one half the range of vision as required by the rules. Upon Brakeman White who was riding on the head car devolved the duty of seeing that the track ahead was clear within yard limits. He was aware that yard engines as well as road crews used the Piedmont & Northern switch and had full knowledge of the practice, and he should have signalled the engineman to reduce speed to a rate at which it could have been stopped within one-half the range of his limited vision. The fact that he did not discover the standing cars until the train was within a short distance from them, and his failure to see the lanterns of the yard crew indicate that he was grossly negligent in the performance of his duties. Engineman Bradshaw was also familiar with the custom of yard engines using the Piedmont & Northern switch and knew or should have known that his train was within yard limits, yet except for a 2 or 3-pound reduction of the air brakes several hundred yards distant from the yard limit board, and on a descending grade, he took no further action toward controlling the speed of the train, but depended upon Brakeman White to signal him in case the track was obstructed; for his failure to operate his train under proper control he is equally culpable with Brakeman White.

The evidence also discloses that the yard crew had not protected the standing cars as required by Bulletin C-387, the crew maintaining that it did not apply to them, taking the position that they were working within the immediate vicinity of the cars at all times and that they had not left the cars standing on the main track within the construction of the bulletin order. Obviously, either the purport and effect of the bulletin is not firmly implanted in the minds of the employees involved, or is generally misunderstood as to its application, and the danger of ambiguity, inadequacy or lack of full understanding of this bulletin is a matter requiring prompt attention by the officials of this road.

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Had an adequate automatic train control system been in use this accident probably would have been averted.

All of the employees involved except Fireman Gravely were experienced men and 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 law.

Respectfully submitted,

W. P. BORLAND,

Director.