REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE DELAWARE, LACKAWANNA & WESTERN RAILROAD NEAR NEW MILFORD, PA , ON OCTOBER 13, 1924.

October 28, 1924.

To the Commission:

On October 13, 1924, there was a rear-end collision between a freight train and a passenger train on the Delaware, Lackawanna & Western Railroad near New Milford, Pa., which resulted in the death of 3 employees, and the injury of 12 passengers and 5 employees

Location and method of operation

This accident occurred on that part of the Scranton Division extending between Binghamton, N. Y., and Washington, N J., a distance of 165.55 miles In the vicinity of the point of accident this is a four-track line over which trains are operated by time-table, train orders, and an automatic block-signal system, the two eastbound tracks are separated from the two westbound tracks a distance of about 430 feet. The point of accident was 1.24 miles west of the station at New Milford; approaching this point from the west there is a curve of 1° to the left followed by tangent track to the point of accident, 5,442 feet distant. The grade is about 0.6 per cent ascending for several miles

The signals are of the two-arm, two-position, lower-quadrant type, those involved in the accident being mounted on signal bridges spanning the two eastbound tracks. The signal indications are red and yellow, green and yellow, and double green, for stop, caution, and proceed, respectively. Signal bridge 1734 is located at a point about 3,400 feet west of the point of accident, while signal bridge 1744 is about 4,800 feet farther west.

It was dark and very foggy at the time of the accident, which occurred at about 5.12 a.m.

Description

Eastbound freight train extra 3118 consisted of 84 cars and a caboose, hauled by engine 3118, and was in charge of Conductor Webster and Engineman Coyle. It was being assisted by helper engine 725, coupled to the rear of the caboose, in charge of Engineman Kelly and Flagman Decker. It left Hallstead Tower, 7.16 miles west of New Milford, at 2.45 a.m. on fast eastbound track 2, there being another train on slow eastbound track 4. A stop for

water was made at a point about 1½ miles beyond the tower and in starting a coupler was pulled out, resulting in considerable delay. The train finally proceeded at about 4.25 a.m., and was moving at a speed of about 15 miles an hour when it was struck by train No. 14.

Eastbound passenger train No. 14 consisted of 10 cars, hauled by engine 1108, and was in charge of Conductor McLane and Engineman Sawyer. The first car was of wooden construction while the others were of steel construction. This train passed Hallstead Tower at 5.0[illegible] a.m., according to the train sheet, and collided with the rear end of extra 2118 while traveling at a speed estimated to have been 40 or 45 miles an hour

Engine 1108 was entirely derailed but remained upright, the first car in train No. 14 was demolished and the second car damaged to some extent. Helper engine 725, on the rear of extra 2118, was derailed and considerably damaged, the caboose was thrown clear of the track, and six cars immediately ahead of it were derailed, two of them being demolished. The employees killed were the engineman and fireman of helper engine 725 and the train flagman of extra 2118.

Summary of evidence

Conductor Webster said that after setting out the car on which the coupler had been pulled out his train proceeded and at first did not make very good time, the speed then increased but at about 4.50 a.m. he told Train Flagman Woodward to watch out for train No. 14, which is due at Hallstead passenger station, 1½ miles east of Hallstead Tower, at 4.59 a.m. Conductor Webster said the flagman replied that there was a flagman on the helper engine, and Conductor Webster remarked that he did not know, but if there was to see that that flagman got off. At about 4.55 a.m he asked Flagman Woodward if he saw the flagman on the helper engine and according to his statement Flagman Woodward replied that he saw a red light down the track out did not know how far distant it was, and Conductor Webster said that when Flagman Woodward told him he was positive the flagman of the helper engine had gotten off he thought everything was all right Conductor Webster said he did not know of his own personal knowledge whether or not his train was protected as required by rule 99-F, under which lighted green fusees should have been thrown off at proper intervals, but he did know that at no time had Flagman Woodward left the caboose.

Flagman Decker, of helper engine 725, said extra 2118 was moving at a speed of about 15 miles an hour, that the weather was foggy, and that he knew his train was on the time of train No 14, but that there was no conversation on his engine concerning it nor had anything been said to him

by Conductor Webster, nor did he know whether or not Train Flagman Woodward had gotten off to provide flag protection. Flagman Decker was unable to explain why flag protection had not been furnished or why he did not attend to it himself, except to say that he had thought about it but also had been of the opinion that if the crew of train No. 14 obeyed the signal indications it would be impossible for train No. 14 to overtake his own train, had his train stopped he would have thought it his duty to go back and protect against train No. 14. Flagman Decker said that on other occasions when on the time of superior trains he had not thrown off fusees

Under the laws of the State of New York flagmen are required on helper engines, and engine 725, being operated within the State of New York as well as within the State of Pennsylvania, was furnished with a flagman, such flagmen are not required in the State of Pennsylvania. In connection with the examination of Conductor Webster, General Superintendent Shepard made the statement that he had never heard of depending on the flagman of a helper engine to protect a train by flag, that this should have been done by the train flagman, and that it was the duty of the conductor to see that the train flagman provided this protection

Engineman Sawyer, of train No. 14, stated that the fog seemed to be thicker after passing the station at Hallstead, making it impossible to observe signal indications until the engine was under the particular signal. When passing under signal bridge 1744 at a speed of nearly 60 miles an hour Engineman Sawyer caught just a glimpse of green and called the signal as green, to which he said the fireman replied that he could not see the signal and Engineman Sawyer said he then shut off steam. When he thought his train had proceeded far enough to reach signal bridge 1734 and he still had not seen any sign of it, he reached for the brake valve and it was at this time that he saw the rear end of extra 2118 about 10 or 15 feet distant. He estimated the speed of his train at 40 or 45 miles an hour at the time of the collision. After the accident he went back to look at signal 1734 and found it displaying a stop indication. He also stated that he did not encounter any burning fusees Engineman Sawyer acknowledged his responsibility for the occurrence of this accident on account of passing signal 1734 without observing its indication.

Fireman Schaff denied having had any conversation with Engineman Sawyer about seeing the indication at signal bridge 1744, saying he was busy working on the fire and that while he did not know definitely he thought steam was being worked practically up to the time of the collision

Conductor McLane stated he thought he would have noticed it if the engineman had shut off steam for any length of time prior to the accident, but that he had not noticed this being done. Baggageman Barnett had not noticed any reduction in speed or any application of the brakes. Brakeman Oakley thought the engine was working steam up to the time of the accident, while Flagman Jones said he did not feel any reduction in speed or application of the brakes and also thought steam was being worked when the accident occurred. On going back to flag after the accident he did not see any burning fusees.

Signal Maintainer Pope said he examined signals 1734 and 1744 after the occurrence of the accident. Signal 1734 was displaying a stop indication and signal 1744 was displaying a caution indication, and he said his examination developed no defects in the signal mechanisms. Supervisor of Signals Robbins said he examined and tested the signals in company with Assistant Supervisor of Signals Turn and found them to be in proper working order.

Investigation showed that the automatic signals were displaying the proper indications when passed by Engineman Coyle, on the head end of extra 2118, while after the occurrence of the accident signal 1734 was observed by Engineman Sawyer to be displaying a stop indication. In view of these facts, as well as the fact that subsequent inspection and test failed to disclose anything wrong with the signal system, it is believed that the signals were displaying the proper indications at the time train No. 14 passed them.

Conclusions

This accident was caused by the failure of Conductor Webster and Flagman Woodward of extra 2118 properly to protect their train, and by the failure of Engineman Sawyer of train No. 14 properly to observe and obey automatic signal indications.

Although the weather was very foggy, rendering the observation of signals a matter of great difficulty, the testimony of Conductor Webster shows that Flagman Woodward did not leave the caboose. Conductor Webster knew his train was on the time of train No. 14, and in view of the unfavorable weather conditions he should have taken extra precautions for the protection of his train, whereas his statements indicate that he made no real attempt to do so. The rules of this railroad provide for the throwing off of fusees when a train is moving under circumstances in which it may be overtaken by a following train, and for such other action by the flagman as may be necessary. Had either of these employees complied with the rules it is probable that the accident

would not have occurred. In this connection, Flagman Decker of helper engine 725 is open to criticism for his failure to show more interest in the protection of his train. He was an experienced employee, was aware of the existing conditions both as to the weather and as to the fact that a first-class train was due, yet he did not even know whether or not the train flagman had taken any steps to provide flag protection and apparently was depending entirely on the automatic block signals for the prevention of an accident.

Engineman Sawyer said he got a glimpse of a green signal when passing signal bridge 1744. The signal at this point undoubtedly was displaying a caution indication, which is green and yellow, and it seems probable that Engineman Sawyer saw the green indication displayed by the top arm of the signal but failed to see the yellow indication displayed by the bottom arm. But even after accepting the indication as a clear indication, had Engineman Sawyer observed the stop indication displayed by signal 1734 there still would have been ample distance in this particular case within which he could have brought his train to a stop. Engineman Sawyer said he was looking for this signal but apparently he did not realize he had passed it until a second or two before the collision occurred.

The statements of the conductor and train flagman of extra 2118 and of the flagman of helper engine 725 indicate that the question of flag protection needs more careful supervision on the part of the officials. Assuming that Flagman Woodward made the comments he was quoted by Conductor Webster as making, it appears that both he and the conductor were depending on the flagman of the helper engine for protection, while the latter was depending on the automatic block signals, as a matter of fact, according to General Superintendent Shepard, the duty devolved upon the train flagman, and yet paragraph 8 of the general instructions in the time-table says helper engines without flagmen must be protected by the crew of the train to which attached, implying that if the helper engine has a flagman he will be the one to do the flagging. Helper service is a common necessity in this section of the country and there is no reason why there should ever be any doubt as to which employee is to do the flagging. There is also to be considered the statement of Flagman Decker that at other times he had been on the time of superior trains without throwing off fusees, the rule on this point is plain, and its requirements should be rigidly enforced.

This accident would have been prevented had an adequate automatic train stop or train control device been in use.

The employees involved were experienced men. At the time of the accident the engine crew of train No. 14 had been on duty about 2 hours and the train crew about 1½ hours, previous to which they had been off duty 38 and 21 hours, respectively. The members of the crew of extra 2118 and of helper engine 725 had been on duty from 7 to 9½ hours after periods off duty varying from about 9 hours to 18½ hours.

Respectfully submitted,

W. P. BORLAND,

Director.