INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE MISSOURI PACIFIC RAILROAD NEAR GUM SPRINGS, ARK., ON APRIL 16, 1926.

May 12, 1926.

To the Commission:

On April 15, 1926, there was a derailment of a passenger train on the Missouri Pacific Railroad near Gum Springs, Ark., which resulted in the death of two employees, and the injury of one passenger, one person carried under contract, and one employee.

Location and method of operation

This accident occurred on the Little Rock District, extending between North Little Rock and Texarkana, Ark., a distance of 146.05 miles, which in the vicinity of the point of accident is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The point of accident was 3,461 feet north of the station at Gun Springs; approaching this point from the north there is a long tangent followed by a 2° curve to the left 2,847 feet in length, the accident occurring in about the center of the curve. The grade is slightly ascending for a distance of nearly 1 mile. The track is laid with 90-pound rails, 33 feet in length, with about 20 treated ties to the rail-length, single-spiked, tie-plated, and is ballasted with about 18 inches of gravel. The general maintenance is good.

The weather was clear at the time of the accident, which occurred at 10 18 a.m.

Description

Southbound passenger train No. 5 consisted of one express car, four baggage cars, one mail car, one coach, two chair cars, one dining car, and two Pullman sleeping cars, hauled by engines 6413 and 6403, and was in charge of Conductor Guidici and Enginemen Neese and Hobbs. All the cars were of steel construction with the exception of the second car, which was of steel—underframe construction. This train left Arkadelphia, the last open office, 4.09 miles from Gum Springs, at 10.11 a.m., 11 minutes late, and was derailed near Gum Springs while traveling at a speed estimated to have been about 40 miles an hour.

Engine 6413 broke away from engine 6403 and came to rest upright, with all wheels derailed, at a point 374 feet south of the point of derailment, its tender was partly overturned. Engine 6403 turned over and came to rest on its right side across the roadbed, its tender was turned bottom up. The first three cars were derailed and overturned, while the fourth car and the forward truck of the fifth car were also derailed. The employees killed were the engineman and fireman of engine 6403.

Summary of evidence

On April 14 Roadmaster Smith had found a piped rail in the track and sent a message to Section Foreman Lockwood instructing him to remove the rail on the following day. The section foreman, however, did not receive the message until the morning of the accident. He then proceeded to the point where the defective rail was located, after having been advised that train No. 5 was running about five minutes late, and sent one of his men in each direction, with flagging equipment, with instructions to hold all trains until recalled. The section foreman stated that he watched these men until they disappeared from sight around the curve and then proceeded to remove the defective rail. rail was immediately placed in position, but it was found that the rails in the track had expanded sufficiently to prevent a uniform alinement at the joint with the new rail. The section crew then removed some spikes on the inside of the rail immediately south of the new rail, pulled the north end of that rail and the south end of the new rail inward towards the center of the track until the ends matched, and then began to force the rails back to their proper position. While thus engaged, three signal men arrived from the north on a motor car and stopped at the north end of the small bridge located immediately north of where the section men were working, two of them crossing the bridge and assisting the section men in getting the rails back in their proper position. Section Foreman Lockwood stated that while this was being done he heard the explosion of two torpedoes, followed by two short blasts of an engine whistle, and shortly afterwards he heard the exhaust of an engine and on looking northward he saw train No. 5 approaching at a speed he estimated to have been about 60 miles an hour. Together with one of the signal men he ran toward the approaching train, giving stop signals, but the train could not be stopped before reaching the point where the work was in progress. Section Foreman Lockwood further stated that when sending out flagmen he usually gave them specific instructions as to how far they should go and he also said that his method of recalling them was to go within speaking distance and notify them.

The man he used on this occasion to protect against train No. 5, Section Laborer Browning, had been instructed how to flag, was generally used when it was necessary to send out a flagman, and on this occasion had been told to go as far north as mile post 414, which is located about 2,400 feet from the point of accident and is on tangent track where the flagman could have been seen for a considerable distance.

Section Laborer Browning said he had had about 15 years' experience as a section laborer and had often been used as a flagman. He said that in this case he was told to go as far as the station mile board, which is about 800 feet south of mile post 414 but still is far enough north to have placed him on the end of the long tangent approaching the curve on which the accident occurred. He said he was also instructed to take a red flag and torpedoes and to hold all trains. Shortly after reaching the mile board the motor car of the signal men approached and after flagging them and pointing in the direction in which the work was being done he went a short distance farther north to a point near a road crossing and placed two torpedoes on the Shortly afterwards he saw train No. 5 as it was leaving Arkadelphia and then looked in the opposite direction and saw someone he thought was the section foreman, partly obscured by foliage, giving a "highball" signal, and he said he responded by giving the same kind of signal. Shortly afterwards the same man again appeared and repeated the signal, and Section Laborer Browning said he then went to the point where the torpedoes were located and removed them from the rail. Train No. 5 was then about one-half mile from the road crossing, and the engineman sounded the road-crossing whistle signal while Section Laborer Browning stepped back from the track on the engine nan's side and allowed the train to pass.

Four of the section laborers working with Section Foreman Lockwood corroborated his statements as to the work being done, instructions given the flagmen, and the fact that they heard the explosion of two torpedoes as train No. 5 approached, followed by two short blasts on the whistle. Another one of the section laborers said he did not hear the explosion of any torpedoes.

Time Keeper Meek, of the General Railvay Signal Company, said he was on a motor car en route southward from Arkadelphia and that as he approached Gum Springs he saw a negro bending over the rail, but that this negro did not give him any flagging signal of any kind. On rounding the curve he saw the section crew removing the rail and inquired of the section foreman as to whether the flagman had been sent out and whether he was equipped with torpedoes. While waiting at this point for the work to be completed he noted that the section foreman remained there with his men.

Shortly afterwards he heard the whistle of train No. 5 but did not hear the explosion of any torpedoes, and, in company with the section foreman, he ran toward the approaching train for the purpose of flagging it.

Engineman Nesse, in charge of the leading engine of train No. 5, said he sounded the whistle for the road-crossing located north of the station mile board, and near the board he saw a negro standing on the engineman's side of the track near the right of way fence. When passing the station mile board he sounded a meeting-point whistle signal, and shortly afterwards the fireman called a warning, saying that the train was being flagged, and he at once applied the air brakes in emergency. He estimated the speed of this train at this time to have been 45 or 50 miles an hour.

Fireman Harris, also of the leading engine, said he was sitting on his seatbox as the train rounded the curve, but that his view was restricted by a line of telegraph poles to a distance of about four or five telegraph poles. His first warning of danger was when he saw a man waving a stop signal with his hat and he at once notified the engineman accordingly.

Flagman Brown, of train No. 5, said he was on the rear end of the train as it approached Gum Springs, that he saw a negro laborer with a flag walking back on the track after the train had passed, and that shortly afterwards he felt the air brakes being applied. On going back to flag after the occurrence of the accident he found a red flag on the track and saw the negro ahead of him going toward Arkadelphia but was unable to overtake him or get him to stop. Flagman Brown said he had not heard the explosion of any torpedoes, which statement was verified by Conductor Guidici, and also by Division Engineer Davis and Supervisor of Bridges and Buildings Best, both of whom were riding on the rear end of the last car.

Tests were made for the purpose of ascertaining the extent of the ran e of vision of the fireman across the inside of the curve and it was found that the wires, crossarms and poles of the telephone and signal lines interfered at intervances with the clear view of the fireman.

Conclusions

This accident was caused by failure properly to protect the work of removing a rail, for which Section Laborer Browning is responsible.

Section Laborer Browning had been told to hold all trains, was furnished with a red flag and torpedoes, and he had frequently been used for this purpose. He said he saw some one give a signal which he interpreted to mean that the work had been completed, but the evidence indicated that at no time did the section foreman leave the point at which the work was being done, out of sight of Section Laborer Browning, and it could not be ascertained that there was any one else within his line of vision making any motion which he could have misinterpreted.

While Section Foreman Lockwood and several of his men said they heard the explosion of torpedoes, there were as many other witnesses who stated to the contrary and these latter statements are supported by that of the flagman himself, who stated that he picked up the torpedoes before train No. 5 arrived, and apparently the engine crew of that train had no warning that the track was not safe for the passage of their train.

The employees involved were experienced men. At the time of the accident the train crew had been on duty about 8 hours and the engine crews about 3 hours, previous to which all of these employees had been off duty more than 13 hours.

Respectfully submitted,

W. P. BORLAND,

Director.