

Dept. of Transportation

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The weather was cloudy at the time of the accident, which occurred at 8.a.m.

Description

Work extra 442 consisted of two empty steel gondolas, one ditching machine, two empty steel gondolas and a caboose, in the order named, hauled by engine 442 and was in charge of Conductor Harris and Engineman Cassidy. The crew of this train held a copy of train order No. 12, directing it to work from 6.01 a.m. to 6.45 p.m. between Princeton and Elmore. Train order No. 15, not involved in this accident, was received at King, 8.4 miles west of Princeton, being made complete at 7.40 a.m. and soon thereafter the train proceeded westward en route to Rock, a distance of 2.9 miles, intending to back in on the passing track at that point; upon arriving at Rock, however, the passing-track switch at that point was found to be undergoing repairs and could not be used. It was then decided to back the train to the east passing-track switch, about $1\frac{1}{2}$ miles distant, and head in at that point, and it was while this back-up movement was being made, without flag protection, at a speed variously estimated to have been from 1 or 2 miles an hour up to 14 miles an hour, that the train collided with extra 460.

Work extra 460 consisted of engine 460 and a caboose, and was in charge of Conductor Cawley and Engineman High. This train departed from Princeton at 6.15 a.m. holding copies of train orders Nos. 12 and 15. It departed from Kegley, 2.6 miles east of King, at 7.42 a.m., after having met an eastbound train at that point, and proceeded westward en route to Elmore, colliding with work extra 442 while running at a speed estimated to have been about 15 miles an hour.

The force of the collision derailed and practically demolished the caboose of extra 442; while the gondola ahead of it was thrown diagonally across the track. The engine truck and some of the driving wheels of engine 460 were derailed and the front end of the engine somewhat damaged. The employees killed were the flagman of extra 442, the ditching machine engineer, and a laborer, all of whom were in the caboose of extra 442.

Summary of evidence.

Engine 442 had been laid up over night on the house track at King in charge of an engine watchman. All of the crew, except Flagman Nichols, who slept in the caboose at King, deadheaded from Princeton on the morning of the accident and took charge of work extra 442 at 6.45 a.m., although Conductor Harris stated that he received his copy of train order No. 12 before leaving Princeton.

Before work extra 442 departed from King he said he told Flagman Nichols to remain at that point and to hold everything until he telephoned to him from Rock, which instructions the flagman acknowledged, adding that he would close the switch after the train left. Conductor Harris then got into communication with the dispatcher by telephone, received some additional train orders and delivered them to the engineman, at the same time informing the engineman that a flagman would be left at King. His train departed after an eastbound train had passed and he boarded it at the rear of the caboose and walked through to the front end, from which position he saw the arm of some one waving a proceed signal and also noted that the switch target indicated that the switch had been closed. Upon arriving at Rock and being advised by the extra gang foreman that the switch at that point could not be used until about noon, he started toward the telephone booth; it was being used by some one else, however, so he returned to his train and having decided to back up and head in at the east switch he so indicated by hand signal to the engineman and also gave a back-up signal. He then boarded the rear end of the caboose and was riding thereon as the back-up movement was made, and shortly afterwards he noticed for the first time that Flagman Nichols was also with the train, riding on the rear platform of the caboose, and he told the flagman to have his flagging equipment ready as it would be necessary to flag through the tunnel, and that they were going to head in at the east switch. Shortly afterwards, as his train was moving through the cut, he saw the opposing train about two or three car-lengths distant and applied the air brakes in emergency by means of the back-up hose on the rear of the caboose, jumping from the train, just before the impact of the collision, at which time his own train had practically come to a stop. When questioned as to why he had not given the flagman written instructions in accordance with the rules, Conductor Harris replied that he intended to call the flagman by telephone from Rock and give him additional instructions which would have been verbal and would have been in conflict with any written instructions he might have issued, and he had therefore avoided this by instructing him verbally in the first instance.

Engineman Cassidy, of work extra 442, said he and Conductor Harris discussed the movement of their train before departing from King and it was decided that they would proceed to Rock on the main track to the west passing-track switch; a flagman was to be left at King to hold all westbound movements and then in the event they were not able to get in on the passing track through the west switch at Rock they would return to the east switch

and head in at that point. Several minutes later the conductor brought three orders to the engine and after the departure of an eastbound train his own train proceeded to Rock and found that that switch could not be used. While at that point he noticed Conductor Harris apparently returning from the telephone booth, and from the conversation they had had at King understood from the signals now given by the conductor that they would back up and head in at the east passing-track switch. Drakeman Dowers asked him how they were going to make the movement and he replied that the conductor said they had flag protection, he did not notice that the flagman was still with the train. He began the back-up movement upon hand signals given by the conductor and was moving at a speed of about 6 or 8 miles an hour when the brakes were applied in emergency from the rear end, followed about five seconds later by the jar of the collision.

Brakeman Dowers, of work extra 442, said he observed Flagman Nichols at the rear of the train while it was standing at Rock, and when the back-up movement was started, knowing that it was intended to head in at the east passing-track switch, he asked the engineman what he was moving back on, to which Engineman Cassidy replied, "I guess the conductor has made arrangements to go back." When the back-up movement was started from Rock, Fireman Long, of engine 442, said he also asked the engineman if they should not have some protection for the movement and the engineman replied in effect that he guessed it was all right as the conductor had given the back-up signal and evidently knew what he was doing. Neither of these employees had heard anything said about leaving a flagman at King.

Laborer Frank Crotty stated that he was riding on the rear platform of the caboose of work extra 442 as the train left King and saw Flagman Nichols close the main-track switch and board the rear platform of the caboose, after having given the engineman a signal to proceed. When the train got around to the first tunnel they both went inside out of the smoke and he noticed that Conductor Harris was also in the caboose at that time. He said Flagman Nichols was standing near the conductor at Rock while the conductor was talking to the extra gang foreman relative to the west switch, and that they both returned to the caboose, the conductor saying that they would back to the east switch. Flagman Nichols said something about having to flag back, to which the conductor replied "No, we will take a chance, - get on here and we will go," and upon signal from the conductor the train started the back-up

movement. Laborer Crotty thought the speed of the train was about 10 miles an hour just prior to the emergency brake application which the conductor made just prior to the collision.

Engineman High, of extra 460, said his train was moving through the rock cut in which the collision occurred at a speed of about 15 miles an hour when Fireman Goode shouted a warning of danger and jumped from the engine, and although he applied the air brakes in emergency there was not time enough to reduce the speed of the train. On account of being on the outside of the curve, Engineman High did not see the opposing train until the collision occurred. Fireman Goode, of extra 460, said he had just finished working on his fire and had climbed back on his seat box when the caboose of extra 442 came into view, about 90 feet distant. He waited a second to see if it were on the main track and then called a warning of danger to the engineman and jumped from the engine. The statements of Conductor Cawley and of Brakeman Reed and Caldwell brought out no additional facts of importance.

Conclusions

This accident was caused by work extra 442 moving against an opposing train on the main track without flag protection, for which Conductor Harris is primarily responsible.

While Conductor Harris stated that he verbally instructed flagman Nichols, who was killed in the accident, to remain at King and to hold all westbound movements until further instructed, there was no evidence to sustain this statement; to the contrary there was evidence which indicated that he knew the flagman was with the train at Rock; that while at that point the flagman suggested to him that it would be necessary to flag back to the east switch, and that the conductor replied that they would take a chance. That this was the case is also indicated by the fact that when about 1,400 feet from the point of accident Conductor Harris told the flagman to be ready to protect the movement of the train through a tunnel located some distance east of where the accident occurred.

Rule 97 (b) provides in part as follows:

#Conductors must deliver to their engineers a copy of all flagging instructions given their flagman, and will require the engineer to acknowledge receipt by endorsing a copy to be retained by the conductor. Upon this copy the conductor will also take a receipt of the flagman. * * *

Had Engineman Cassidy, of work extra 442, complied with this rule, any error in connection with leaving a flagman at King would have been prevented.

Engineman High, of work extra 460, held an order restricting his speed to 8 miles an hour between mile post 351 and the station at Rock, the accident occurred within these limits while his train was moving at a speed he estimated to have been about 15 miles an hour. Had he complied with the order, the consequences of the accident probably would have been much less serious than actually was the case.

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

At the time of the accident the train and engine crews of work extra 442 had been on duty 1 hour and 15 minutes, and the train and engine crews of extra 460 had been on duty 2 hours and 15 minutes, excepting the fireman who had been on duty 8 hours and 30 minutes, all of the employees involved had been off duty for periods ranging from 10 to 16 hours.

Respectfully submitted,

W. P. BORLAND,

Director.