

## 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 NEW HAVEN, MO., ON JANUARY 13, 1927.

February 25, 1927.

To the Commission.

On January 13, 1927, there was a collision between two work trains on the Missouri Pacific Railroad near New Haven, Mo., resulting in the death of one employee and one construction company foreman, and the injury of four employees and three construction company laborers.

Location and method of operation.

This accident occurred on the St. Louis District of the Eastern Division, extending between Kirkwood and Jefferson City, Mo., a distance of 111.85 miles, in the immediate vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders and an automatic block-signal system. The accident occurred about  $1\frac{3}{4}$  miles west of the station at New Haven, approaching this point from the east there is a compound curve to the right 447 feet in length and then 167 feet of tangent, followed by a  $1^{\circ} 46'$  curve to the left 517 feet in length, the accident occurring on the last-mentioned curve at a point 290 feet from its eastern end. The grade is practically level. Owing to a high bluff on the inside of the curve the view of the point of accident is restricted from either direction to a few car-lengths.

Westbound automatic signal 675, of the two-position type, is located 745 feet west of the station at New Haven, when a stop indication is displayed it is required that trains stop, wait five minutes, and then proceed under control. Mile post 68 is located about 3,575 feet west of signal 675, while there is a steam shovel pit located just west of the mile post. At a point about 3,285 feet west of mile post 68 there is a switch leading to a temporary spur track, about 2,275 feet in length, which parallels the main track on the north, the switch is a facing-point switch for westbound trains. There was a tent located between the spur track and the main track at a point 2,060 feet west of the spur-track switch, while the eastern end of double track is located at a point 550 feet west of the tent.

It was snowing at the time of the accident, which occurred at about 1.15 p.m.

### Description

Work extra CJL 10 consisted of one dirt spreader and engine CJL 10, headed west, and was in charge of Conductor Hammons and Engineman Brown. It left New Haven at about 1 p.m., pushing the spreader ahead of it, and proceeded westward to the tent, at which point some tools were loaded on the spreader. The train then started eastward, with the engine backing up, and collided with work extra 2654 at a point 750 feet east of the tent while moving at a speed variously estimated to have been from 4 to 15 miles an hour.

Work extra 2654 consisted, from west to east, of one caboose, one coach, and engine 2654, headed east, and was in charge of Conductor Carman and Engineman Harmack. It departed westward from New Haven backing up, a few minutes after work extra CJL 10 had departed, passed signal 675, which was displaying a stop indication, and collided with work extra CJL 10 while moving at a speed variously estimated to have been from 2 to 15 miles an hour.

The tender of engine CJL 10 and the caboose of work extra 2654 were derailed to the south; the caboose was practically demolished while the coach to which it was coupled was badly damaged. The employee killed was the engineman of engine CJL 10.

### Summary of evidence.

Work of constructing an additional main track was in progress in the vicinity of New Haven and on the day of the accident there were ten work trains between WH Junction and Washington, stations located 10.83 miles west and 12.46 miles east, respectively, of New Haven, with orders which required them to protect against each other. During the middle of the day the two work trains involved proceeded to New Haven and Conductor Hammons of work extra CJL 10 said that just before starting back from New Haven, Conductor Carman of work extra 2654 inquired as to where extra CJL 10 was going and was informed by Conductor Hammons that it was going to get some cars which had been left on the temporary spur track. Work extra 2654 was not ready to leave at this time and Conductor Carman asked him to arrange to let work extra 2654 pass so it could proceed to Etah, west of the point where extra CJL 10 was going to work and Conductor Hammons agreed to do so but said that if work extra CJL 10 did not show up to look out for it as it would be coming back to the steam shovel; no definite arrangements were made, however, as to what would be done by the two trains. Conductor Hammons said that as his train proceeded westward from New Haven the dump foreman decided to continue as far as the tent, pick up some tools and then return to the spur-track switch for the cars. The tools had been picked up and the train was on its way back to the spur-

track switch, moving at a speed estimated by Conductor Hammons to have been about 4 or 5 miles an hour, when the accident occurred. Conductor Hammons said he did not construe his conversation with Conductor Carman to mean that extra CJL 10 would be obliged to remain in clear on the spur track until extra 2654 had passed, nor on the other hand, did he think that extra 2654 was obliged to wait at the spur-track switch for his own train, saying that while he knew work extra 2654 intended to move from New Haven to Etlah after dinner, yet he did not know when it could appear, as the working arrangements frequently are changed. The flagman protecting his train against westbound movements was stationed in the vicinity of mile post 66, located about  $1\frac{1}{2}$  miles east of New Haven, at which point dirt had been dumped for the day and a half preceding the accident. Conductor Hammons' understanding of the phrase "protecting against each other" as used in the work order was that the trains had to proceed under control expecting to find the track occupied anywhere within the working limits, he defined "under control" as proceeding at a speed so as to be able to stop within 25 or 50 feet.

Fireman Lybarger, of work extra CJL 10, stated that he had just finished putting in a fire and had returned to his seat box when Engineman Brown applied the air brakes and shouted a warning of danger, on looking out the fireman saw work extra 2654 about three car-lengths distant. He estimated the speed of his own train at the time of the accident to have been about 15 miles an hour. Fireman Lybarger also said that so far as he was aware his crew had no understanding with the crew of any other work train at New Haven as to where extra CJL 10 was going and what was to be done. The statements of Head Brakeman Talbert were similar to those of Fireman Lybarger, he was riding on the west end of the spreader at the time of the accident and estimated the speed of his train to have been not more than 15 miles an hour at the time of the accident.

Spreader Operator Regan, of work extra CJL 10, estimated the speed of his train to have been from 10 to 15 miles an hour when about three car-lengths from work extra 2654 and about 4 or 5 miles an hour at the time the accident occurred. The statements of Laborers Barrett, Conway, Strand and Heusell brought out nothing additional of importance.

Conductor Carman, of work extra 2654, stated that just before work extra CJL 10 departed from New Haven he asked Conductor Hammons if he would remain clear of the main track after going in on the spur track, so that work extra 2654 could pass on its way to Etlah, and that Conductor Hammons replied that he would do so provided work extra 2654 did not stay too long at New Haven, it was not definitely arranged,

however, to let work extra 2654 pass at this point. Work extra 2654 departed westward from New Haven, backing up a few minutes after the departure of work extra CJL 10. Conductor Carman said he was riding in the cupola of the caboose, on the left side, with his right hand on the conductor's emergency valve, and on reaching a point about two car-lengths west of the spur-track switch he saw work extra CJL 10 standing near the end of double track and presumed that the working arrangements of that train had been changed and that it was going to Etah so as to allow his train to pass. While rounding the curve, however, at a speed of about 10 to 12 miles an hour, Conductor Carman saw work extra CJL 10 approaching, at which time it was about 6 or 10 car lengths distant. He said he at once applied the air brakes, shouted a warning of danger, and jumped just before the collision occurred, at which time his train was moving at a speed of about 2 or 3 miles an hour. He said that his train had been drifting from mile post 68 and he did not think it moved more than two car-lengths after he applied the air brakes. Brakeman Mullen was riding in the caboose, looking out of the back door, he estimated the speed of his train to have been about 15 miles an hour after leaving New Haven, and he said that after Conductor Carman applied the air brakes the speed was reduced considerably, estimating it to have been about 5 miles an hour at the time of the collision.

Engineman Harnack of work extra 2654 said he saw work extra CJL 10 approaching when it was about two or three car-lengths distant. The speed of his own train was about 12 or 15 miles an hour, and he at once moved the brake valve to the emergency position, estimating that the speed was reduced to 7 or 9 miles an hour by the time the accident occurred, he had not noticed any air-brake application made by the conductor. The statements of Fireman Adams were practically the same as those of Engineman Harnack, except that he did not think there was any material reduction in the speed of his train prior to the occurrence of the accident. Brakeman Bowers estimated the speed of his train to have been about 25 or 30 miles an hour after leaving New Haven and said that Engineman Harnack applied the air brakes in emergency, at which time the train was drifting, just before the accident occurred.

Conclusions.

This accident was caused by the failure of the crews of work extras CJL and 2654 to operate their trains under proper control within working limits.

The conductors of the two work extras admitted that they did not have any definite understanding as to how extra 2654 was to pass extra CJL 10, and this may have been due in part to the fact that their plans for doing their work were subject to change on short notice. Neither of the enginemen had been informed as to the conversation between the two conductors, and since no definite plans had been made it was incumbent on each of the crews to operate in accordance with their train-order instructions, protecting against each other at all times. Neither of these work extras was being operated under proper control and this fact is the underlying reason for the occurrence of the accident. With respect to the conductor of work extra CJL 10, attention is called to the fact that he knew there was a strong probability that the other work extra would follow his train westward from New Haven, and had he exercised good judgment he would have left a flagman at the spur-track switch to protect the return movement of his train to that point; had this been done, the accident would not have occurred.

The conductors and enginemen in charge of the two work extras, all of whom were Missouri Pacific employees, were experienced men; at the time of the accident none of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.