INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE MISSOURI PACIFIC RAILROAD AT ALIX, ARK., ON AUGUST 23, 1934.

October 27, 1934.

To the Commission:

On August 23, 1934, there was a side collision between two portions of the same train on the Missouri Pacific Railroad at Alix, Ark., which resulted in the death of one employee.

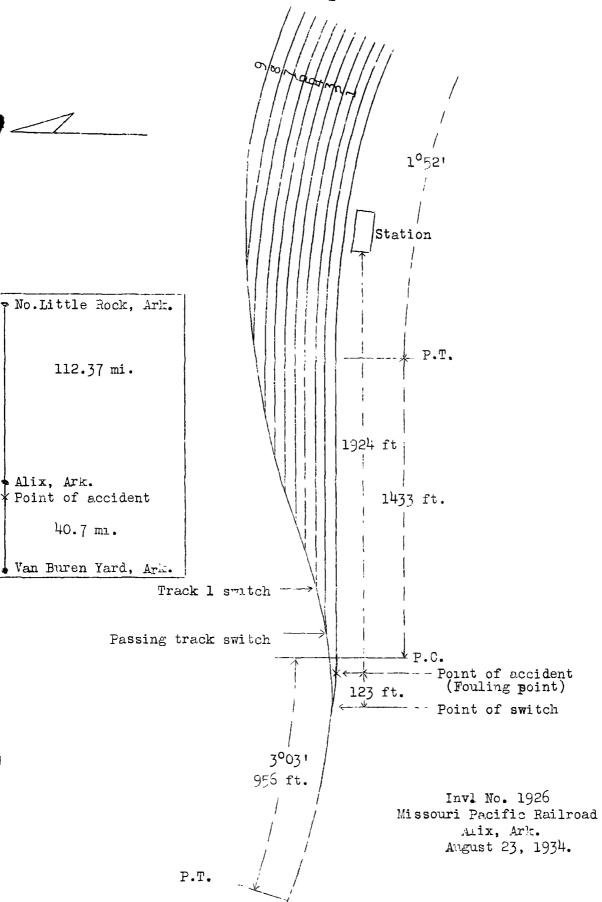
Location and method of operation

This accident occurred on the Van Buren District of the Southern Kansas and Contral Divisions, extending between Van Buren Yard and North Little Rock, Ark., a distance of 153.07 miles; this is a single-track line over which trains are operated by time table and train orders, no form of block-signal system being in use in the vicinity of the point of accident. At Alix there is a yard consisting of 10 tracks paralleling the main track on the east, the tracks being known from west to east as the passing track and then numbered from 1 to 9, re-The north switch of the yard is located 2,047 spectively. feet north of the station, and the accident occurred at the fouling point of this switch, approximately 123 feet south of the switch point. Approaching the point of accident from the south, there is tangent track for a distance of 1,433 feet, followed by a 30031 curve to the right 956 feet in length, the accident occurring on this curve at a point approximately 55 feet from its southern end. The grade for north-bound trains is 0.146 percent ascending at the point of accident.

The weather was clear at the time of the accident, which occurred about 8:05 a.m.

Description

North-bound freight Train Second No.160 consisted of 42 cars and a caboose, hauled by engine 1544, and was in charge of Conductor Muse and Engineman Keese. This train arrived at Alix at 7:55 a.m., and after taking water the train proceeded to the north end of the yard where a cut was made behind the fourth car, preparatory to picking up cars in the yard, leaving 38 cars and the caboose standing on the main track with the head car approximately 123 feet south of the switch. The engine and four cars then pulled ahead and started to back in on the lead track.



The four cars being handled by the engine passed the first car of the portion of the train left standing on the main track, but the left rear corner of the tender struck the right front corner of that car while moving at a low rate of speed.

The left side of the tender was raked by the car at a point more than 8 feet above the rails and the left side of the engine cab was practically demolished. The lead car on the main track was shoved back a distance of approximately 4 feet and the engine stopped with the front air pump opposite the front end of that car. None of the equipment was derailed. The employee killed was the fireman.

Summary of evidence.

Engineman Keese stated that after the cut had been made behind the fourth car he pulled ahead and started to back in on the lead track with Brakeman Sweeten on the rear end of the fourth car, the brakeman having to get off first to line the passing track switch and again to line the switch to track 1. Engineman Keese then received a back-up signal out had moved only about half a car length when he heard his fireman cry out, followed by a noise as if the trailer truck had jumped the track. He immediately applied the air brakes in emergency and almost instantly the left side of the cab was crushed, breaking steam pipes and causing the fireman to be pinned in the front part of the cab. While this movement was being made, the fireman had been occupied first in blowing out the boiler and then had put on the injector, and Engineman Keese said that the fireman was facing him the last time he noticed the fireman. From his own position in the cab the engineman was unable to see if there was sufficient clearance for the engine and was giving his attention to watching the brakeman; he knew that Brakeman Sweeten was an experienced man and as he was riding the lead car the engineman naturally assumed that the cut cleared the cars on the main track. He stated their speed was from 2 to 4 miles per hour at the time of the accident.

Middle Brakeman Sweeten stated that after cutting off the engine and first four cars he stood between the main and lead tracks extending his arm to judge the clearance and considered it sufficient. In making the back-up movement he was riding on the fourth car from the engine, in view of the engineman at all times, and noticed that the clearance was close between the cut and the first car on the main track, stating that it was about I foot, but inasmuch as it was sufficient to clear the cars he supposed it was sufficient to clear the engine, even though he knew that the engine cab required more clearance than the cars. At no time did he signal the engineman that the clearance was close. When the car on which he was riding had passed the lead

car on the main track about a car length he signalled the engineman to stop in order to enable him to line the switch for track 1; the cut then proceeded backing up and had gone an additional distance of about $1\frac{1}{2}$ car lengths when the accident occurred. He did not observe the clearance between the cars when the stop was made, inasmuch as the first car had cleared. There was no particular reason for making the cut between the fourth and fifth cars except that the cars back of the fourth car were through cars. After the accident Brakeman Sweeten made an examination of the four cars in the cut but found no indication of their having come in contact with the lead car on the main track.

None of the other memcers of the crew of Train Second No. 160 was aware of anything wrong until after the accident occurred; Conductor Muse was checking the cars to be picked up on yard track 1, Head Brakeman Bargeil was packing a hot box, and Rear Brakeman Seaman was out flagging.

Trainmaster Murphy and Car Foreman Goodin stated that on their arrival at the scene of the accident they found that as a result of the impact the sixth car of those remaining on the main track had been knocked off the jack which Head Brakeman Bargerl had been using while working on a hot box, and the wheel had turned about one third its circumference, or about 33 inches. They estimated the slack to be about 3 inches to a car, and with an aggregate of 18 inches for slack allowance for the first six cars, it made a total of 51 inches that the first car had been shoved to the south. They further estimated by measurements on the ground, with the lead car standing where it then was located, or 51 inches south of where it stood at the time of the accident, that another car of the same class would fail to clear this car by 2 inches; this car was a coal car.

Conclusions

This accident was caused by failure to note that there was not sufficient clearance to permit the engine and cars to back past the cars which had been left on the main track.

Brakeman Sweeten stated that after making the cut back of the fourth car he stood between the main and lead tracks with his arm extended in order to measure the clearance and considered it sufficient. As the back-up movement was being made, however, he rode on the left side of the lead car in the direction they were moving and observed that the clearance was close when his car passed the cars on the main track, there being only about a 12-inch clearance. A stop was then made so that he could line the switch to track 1 but he did not cross over to the other side and ascertain positively if it was safe to continue the movement, saying that since the cars got by in safety it did

not occur to him that the engine and tender would not do like-wise, although he knew the cab of the engine required more clearance than the cars.

It appears that the fireman was giving his attention to duties inside of the cab, first blowing out the boiler and then turning on the injector, at which time he was facing the engineman. The engineman then became engaged in watching the brakeman for signals, and it is not known what effort was made by the fireman, who was on the outside of the curve, to see if the way was clear.

Respectfully submitted,

W. J. PATTERSON,

Director.