### INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATCHISON, TOPTKA AND SANTA FE RAILWAY AT TEJON, N. M., ON OCTOBER 18, 1927.

November 21, 1927.

To the Commission:

On October 18, 1927, there was a rear-end collision between two freight trains on the Atchison, Topeka and Santa Fe Railway at Tejon, N. M., which resulted in the death of two employees.

# Location and method of operation

This accident occurred on the Second District of the Pecos Division which extends between Vaughn and Belen, N. M., a distance of 109 miles and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. At Tejon, 4.8 miles west of Vaughn, there is a passing track 5,461 feet in length, which parallels the main track on the south, the accident occurring on this passing track at a point 2,250 feet east of the west switch. Approaching the point from the west beginning at the switch, the track is tangent for a distance of 857 feet, followed by a 20 curve to the left extending to the point of accident and for a short distance beyond that point. The grade is approximately 0.60 per cent descending for eastbound trains.

The weather was clear and dark at the time of the accident, which occurred at about 5.10 a.m.

### Description

Eastbound freight train extra 3822 consisted of 57 cars and caboose, hauled by engine 3822, and was in charge of Conductor Ochse and Engineman Nuzum. This train passed Encino, the last open office, 11.5 miles west of Tejon, at 3.35 a.m., and at about 4.10 a.m., it was brought to a stop on the bassing track at Tejon, at which point it was standing when it was struck by extra 3829.

Eastbound freight train extra 3829 consisted of 84 cors and a caboose, hauled by engine 3329, and has in charge of Conductor Mathis and Engineman Abbott. The crew had in their possession, among others, a copy of train order No. 22, Form 19, instructing extra 3829 to take siding and meet westbound extra 3810 at Tejon. Extra 3829 passed Encino at 3.57 a.m., stopped to permit the headbrakeman to open the west switch of the passing track at Tejon and then headed in on the passing track and collided with extra 3822 while traveling at a speed estimated to have been between 5 and 8 miles per hour.

The caboose of extra 3822 was demolished and consumed by fire; the car next to the caboose was derailed and damaged while the three cars ahead of it were badly damaged. Engine 3829 came to rest at a point 56.6 feet east of the point of collision, derailed but in an upright position, with its front end considerably damaged. Four cars in the train of extra 3829 were derailed, three of them being overturned. The employees killed were the conductor and brakeman of extra 3822.

# Summary of evidence

Engineman Abbott, of extra 3829, stated that he stopped the train about eight car-lengths west of the passing track switch and as soon as the switch was opened he started the train ahead and then permitted it to drift as it entered the switch, at the same time asking the fireman to look ahead and see if the train to be met at this point was approaching but not saying anything about observing if the passing track was clear. The fireman replied that he could see the reflection of the headlight of the approaching train at about the east switch. Engineman Abbott said he continued to look ahead, the fireman and head brakeman doing likewise, but that he did not expect to find the passing track occupied. Upon reaching a point about 20 or 25 car-lengths in on the passing track he made a 5-pound brake-pipe reduction to check the speed of the train, which was then moving about 10 miles per hour; this application of the brakes was not released and shortly afterwards the fireman warned him of the train ahead on the passing track. Engineman Abbott estimated that his train then was only six or eight car-lengths from the caboose of extra 3822, and said he immediately applied the brakes in emergency and sounded the whistle several times as a warning, but was unable to bring his train to a stop in time to

prevent the accident; he estimated the speed of the train at that time to have been 6 or 8 miles per hour. Engineman Abbott further stated that he was unable to see the rear end of extra 3822 due to his position on the outside of the curve, but that the fireman or head brakeman should have seen it, although they both stated immediately after the accident that they did not see any markers on the rear of that train. Engineman Abbott also said that he had no knowledge of the existence of extra 3822.

يا وي معاد ا

Fireman Boyd, of extra 3829, correborated the statements of Engineman Abbott as to the handling of the brakes and the speed of the train from the time it stopped west of the passing-track switch until the occurrence of He said that after his train entered the the accident. passing-track he continued looking ahead for the westbound train they were to meet and that he did not see the capoose of extra 3822 until it was only 6 car-lengths distant, when the rays of the headlight of his own engine first shone on it; he at once shouted a warning of danger and got off the engine. Fireman Boyd also stated that he did not see the markers on the caccose at any time, explaining that this was due possibly to the angle at which his train approached the standing train, as well as to the fact that the reflection of the headlight of the approaching westbound train had a tendency to interfere with his range of vision, although not shining directly towards him.

The statements of Head Brakeman Pierce, of extra 3829, regarding the speed of the handling of the train prior to the accident were in accordance with those of Engineman Abbott and Fireman Boyd. Brakeman Pierce stated that after opening the west switch of the passing track he boarded the first car in the train and then proceeded to the engine and stationed himself in the left gangway; he was looking ahead part of the time for the purpose of observing the location of th westbound train which was to be met, the balance of the time being spent in looking backward at the train as it entered the passing He did not see the caboose of extra 3822 until he heard the shout of warning of the fireman and could give no reason for not observing it other than the fact that during the time his head was turned in that direction he was watching the main track, to the left of the caboose, to see if the westbound extra was approaching.

Conductor Mathis, of extra 3829, stated that the train entered the passing track at a speed of 10 or 12 miles per hour and he believed it was being handled under proper control providing the passing track was not occupied. He said a slight application of the brakes was made just after the engine entered the passing track, followed by another application which came just prior to the slight shock

caused by the accident, he estimated the speed of the train at the time of the accident at 8 miles per hour.

Engineman Nuzum, of extra 3822, said he observed that the right marker on the caboose was burning at the time the train rounded the last curve before reaching Tejon, while both Fireman McManis and Head Brakeman Norman, of the same train, said they saw the left marker burning at the time the train entered the passing track. The statements of all members of the crew of westbound extra 3824-3805, except Brakeman Pruitt, were to the effect that they saw the left marker burning on the caboose of extra 3822 at the time their train passed Tejon at about 4.30 a.m.; Brakeman Pruitt said he noticed both markers burning.

During a test made a short time after the accident, in which the Commission's inspectors participated, it was ascertained that markers on a caboose standing at any point within the slight cut in which the accident occurred could be seen continuously from the time a train entered the west switch of the passing track.

#### Conclusions

This accident was caused by the failure of Fireman Boyd and Head Brakeman Pierce, of extra 3829, to maintain a proper lookout while their train was entering the passing track, resulting in their failure to see the rear end of extra 3822 until it was too late to avoid the accident.

The responsibility for an accident of this character usually rests chiefly with the engineman, but in this instance he had practically no view of the track ahead on account of the curve to the left and was obliged to depend upon the alertness of the fireman and head brakeman. Engineman Abbott did not specifically tell either of these employees to be on the lookout for any obstruction on the passing track; he did, however, tell the fireman, at the time his train entered the passing track, to ascertain if the train which they were to meet at that point was then pproaching, and he knew they were looking ahead as the train proceeded along the passing track. Under these circumstances he had a right to expect that he would be warned of any preceding train in time to enable him to bring his train to a stop. Fireman Boyd and Head Brakeman Pierce, however, have little excuse for their failure to observe the markers on the rear end of extra 3822; the only apparent reason for this failure is the fact that they probably were looking across the inside of the curve toward

the headlight of the train approaching on the main track, not noticing the caboose on the passing track until their own train had rounded the curve far enough to bring the caboose nearly in line with the direction in which they were looking. Some question was raised as to whether the markers on the caboose of extra 3822 were burning, but the best evidence is to the effect that they were burning and that the fireman and head brakeman of extra 3829 failed to observe them.

All of the employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. Borland,

Director.