

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
ATCHISON, TOPEKA & SANTA FE RAILWAY NEAR ACME, N. M.,
ON FEBRUARY 14, 1928.

March 24, 1928.

To the Commission:

On February 14, 1928, there was a derailment of a passenger train on the Atchison, Topeka and Santa Fe Railway near Acme, N.M., which resulted in the death of two employees, and the injury of one mail clerk, one express messenger and one employee.

Location and method of operation

This accident occurred on the Roswell District of the Pecos Division, which extends between Clovis and Roswell, N.M., a distance of 107.8 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. The accident occurred at the switch leading to what is known as Ewell Spur located approximately $3\frac{1}{2}$ miles west of Acme; approaching this point from the west there is a 3° curve to the right 1,245 feet in length, followed by 3,332 feet of tangent, the switch leading to Ewell Spur being located on this tangent at a point 1,454 feet from its western end. The grade at the point of accident is practically level.

Ewell Spur is 591 feet in length and leads off to a sand pit on the left side of the main track, and the switch is a facing-point switch for eastbound trains, with a No. 10 turnout. The switch stand is of the high Star type and is located on the south side of the track. It is equipped with a metal disk 18 inches in diameter located 5 feet 10 inches above the head-block ties and displays a red indication when the switch is set for the spur; when the switch is ~~open~~ ^{closed} no indication is displayed. Under a time-table rule, no switch lamps are used on the Roswell District. A clear view of the target could be had from the engineman's side of an eastbound train for a distance of approximately 2,150 feet. At the time of the accident there were six freight cars standing on the spur at a point 295 feet from the switch.

It was daylight and the weather was clear at the time of the accident, which occurred at about 5.20 p.m.

Description

Eastbound passenger train No. 92 consisted of one mail car, one baggage car, two coaches and one Pullman sleeping car, all of steel construction, hauled by engine 1470, and was in charge of Conductor Fitzpatrick and Engineman Withers. This train left Roswell, 17.8 miles west of Acme, at 5 p.m., according to the train sheet, five minutes late and upon reaching Ewell Spur it entered the open switch leading to the spur and collided with the cut of cars standing on the spur track while traveling at a speed estimated to have been between 30 and 35 miles per hour.

The engine came to rest on its right side against an embankment at a point 420 feet beyond the switch; the tender also came to rest on its right side immediately behind the engine. The first two cars and the forward truck of the third car in the train were also derailed. Four of the cars standing on the spur track were destroyed, the remaining two cars being slightly damaged. The employees killed were the engineman and fireman.

Summary of evidence

Conductor Fitzpatrick stated that the engine had been cut off at Roswell for the purpose of taking water, but that after it was recoupled to the train the brakes were inspected and tested, and upon leaving that point a running test of the brakes was made. He said he could not remember of the brakes having been applied again between that point and the point of accident and he was certain they were not applied before the accident occurred, at which time the train was traveling at a speed of about 35 miles per hour. His first knowledge of anything wrong was when he felt a sudden jar; he looked at his watch as soon as the train came to a stop and noticed that it was 5.20 p.m. On getting off the rear car, in which he had been riding, Conductor Fitzpatrick examined the switch and found it to be lined for the spur track, with the open switch lock suspended by its chain. He then proceeded to the engine and assisted in removing Engineman Withers from the wreckage. After having been placed in the Pullman car, the engineman, who was still conscious, inquired as to what caused the accident and when informed that the switch

was open the engineman replied that he had not noticed it. Conductor Fitzpatrick said the sun was still shining at the time of the accident and that he could not account for Engineman Witors' failure to bring the train to a stop before reaching the switch as he had ample time in which to have done so after the switch target came within his range of vision.

Brakeman Greenleaf stated that his first intimation of anything unusual was when he felt a shock which was immediately followed by a second shock; he estimated the speed of the train at the time of the accident to have been between 30 and 35 miles per hour. Brakeman Greenleaf further stated that he did not feel any application of the brakes as the train approached the point of accident and that the first shock appeared to have occurred when the engine entered the switch. As soon as he had ascertained what had occurred he secured flagging equipment and proceeded to Melona, a point west of where the accident occurred, but before departing he observed that the switch was set for the spur track, with the target displaying a red indication.

Acting Transportation Inspector Abrams, who was riding in the rear car of the train, estimated the speed at not more than 35 miles per hour at the time of the accident. He said the brakes were not applied when the train was approaching Ewell Spur, but that they were applied as the train entered the spur, probably due to the breaking of the train line between the first and second cars which he believed was the result of the derailment of the first car at a point about a car-length east of the clearance point, where a broken rail was subsequently discovered. Inspector Abrams corroborated the statements of Conductor Fitzpatrick as to the weather conditions and the position of the switch after the accident.

Division Engineer Raymond stated that he arrived at the scene of accident at 12.30 on the morning of February 15 and found the switch and stand in good condition; the color of the target, which he thought was repainted in August, 1927, was bright, while there was no evidence of tampering. The track leading to the spur was also in good condition to a point about one rail-length beyond the clearance point, from which point it was completely torn up. It was his opinion that the train was not derailed until it collided with the cars standing on the spur track.

The statements of members of the crew of train No. 47, the last train to use the switch at Ewell Sour, about two hours prior to the accident, were to the ef-

fect that before their train departed from that point the switch was lined for the main track and locked.

Section Foreman Nix stated that he worked the entire day of the accident at Ewell Spur, hauling earth with a push car from along the spur track to a point along the main track west of the switch, and that he used the switch after the departure of train No. 47. He said he had instructions from the roadmaster that he must personally close and lock the switch each time it was used while this work was in progress and that he did so, except at times when dirt was unloaded while the push car was standing on the switch points. After the day's work had been completed, at about 4 p.m., he closed the switch, and set the push car off the track at a point west of the switch. He had instructions which required frequent inspections of a bridge some distance east of the point of accident but he could not recall whether he proceeded westward to Melena or first went eastward to make an inspection of this bridge, although he said that had he proceeded first to the bridge then his motor car would have been derailed upon its return trip, providing the switch was open. Upon being questioned closely with respect to his having failed to close the switch before leaving Ewell Spur he admitted that he was not certain about it, although he thought that it had been done.

No definite information as to the exact movements made by the motor car after completing work on the day of the accident could be obtained from the testimony of the four Mexican laborers comprising the section crew that had been working at Ewell Spur. The first, third, and fourth, in the order in which they were interrogated, had to be examined through an interpreter and they maintained that a movement was made eastward to inspect the bridge before proceeding to Melena, while the ~~second~~ second member, who could speak English, could not remember whether such a movement had been made, being very evasive in his statements.

Conclusions

This accident was caused by an open switch, for which Section Foreman Nix is responsible.

According to the evidence the switch had been used by only one train crew on the day of the accident, the crew of train No. 47, and they left it properly lined for the main track. Section Foreman Nix and his crew had been working at Ewell Spur during the entire day and had

used the switch at different times while passing over it during the progress of their work, both before and after the departure of train No. 47. Section Foreman Nix, who handled the switch at all times, was not positive whether he had closed the switch after it was last used by him, while the testimony of the other members of the section crew was considered to be of little value in this respect. The switch was found to be in good condition after the accident, with no evidence of tampering, and it is believed that the section foreman failed to close and lock the switch when quitting work for the day.

Conductor Fitzpatrick said the engineman made a statement to the effect that he did not notice the open switch, and this is substantiated by other statements to the effect that no application of the air brakes was made as the train approached the switch. Engineman Withers had been the regular engineman on this train for more than a year and should have been thoroughly familiar with the locality. In view of the fact that the weather was clear and that the switch target could be seen a distance of 2,150 feet, there does not appear to be any reason why he could not have ascertained the position of the switch in time to stop, providing he had been maintaining a proper lookout.

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

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.