

THE ATCHISON, TOPEKA & SANTA FE RAILWAY, AT - 40

BARSTOW, CALIF., JULY 1, 1918. 31

Aug. 5, 1918.

On July 1st, 1918, there was a derailment of a troop train on the Atchison, Topeka & Santa Fe Railway, at Barstow, California. Owing to the slow movement of the train at the time of the accident, there were no personal injuries, the only damage being to equipment. After investigation, the Chief of the Bureau of Safety reports as follows:

The third District of the Arizona Division of this road extends from Bakersfield, Calif., to Barstow, Calif., a distance of 140.7 miles. Train movements within Barstow Yard are controlled by automatic block signals under direction of a switch tender.

Approaching the scene of derailment from the east end of Bridge A-748, located at the west end of Barstow Yard, there is a 10° curve to the right 178 feet long, then 131 feet of tangent track, then two curves of 9° 33' to the left 165 feet long, with a short piece of tangent 18 feet long between the curves; then there is another piece of tangent 130 feet in length, followed by a 10° curve 94 feet long, on which the derailment occurred. The grade at the point of derailment was practically level.

East

The train involved was troop train Extra 1365^{East} and consisted of locomotive 1365, 2 box cars, 1 Pullman car, 1 tourist car, 1 Pullman car, 2 tourist cars, 2 baggage cars, 3 Pullman cars, 2 tourist cars, 1 Pullman car and a caboose, in the order named, and was in charge of Conductor Fowler and Engineman Poulson.

This train left Bakersfield, Calif., about 4:50 A. M., July 1st, arriving at Mojave at 9:00 A. M., where the train was inspected, and left there at 9:10 A. M. At about 11:15 A. M., it was derailed at the west entrance to Barstow yard, while occupying the east bound main passenger track and after having passed over two slip switches and one single switch.

Three cars of the train were derailed; the rear end of tourist sleeping car 1416, the 13th car in the train, and the front end of tourist sleeper 4803, the 14th car in the train, were thrown to the right of the track a distance of 33 feet, 3 inches, their opposite ends remaining on the roadbed, the coupler between them being broken and they came to rest a distance of 19 feet, 3 inches apart, the position of the cars in relation to the track forming a triangle. The front trucks of Pullman Vincennes, the 15th car in the train, were derailed and its vestibule damaged. The weather at the time was clear.

The first indication of derailment was 76 feet, 3 inches west of the west middle point of the middle split switch, indicating that some part of the equipment, evidently a brake beam, had been dragging, and where the marks indicated that the rail was crossed by a wheel. The derailed cars moved a distance of 245 feet after the derailment before coming to a stop. After picking up the wreck, a brake hanger casting was found loose on the middle wheel of the rear truck of the 13th car, permitting the brake hanger to come down.

Bakersfield at 4:50 A. M. and they left at 4:55 A. M. His train stopped at Mojave about 10 minutes, where the train was inspected by car inspectors and the air was tested. The engineman stated that he made but two applications of the air after leaving Mojave. He had no trouble in handling the train until descending the grade east of Jim Gray Station, 25.3 miles west of Barstow, at which point he made an application of the brakes and the brakes went into emergency, on account of a triple valve failing to operate properly, but he was able to release them promptly. He stated he did not stop for an inspection of the train after the brakes went into emergency, as he had no trouble in releasing them. He did not use the air again until he made an application to slacken the speed approaching the west end of Barstow yard, and as in the previous instance, the triple valve failed to operate properly; when near the block signal at the west end of the yard, he applied the air and when at the west wye switch, the brakes went into emergency; he released the brakes and the speed was reduced to approximately 8 miles per hour. The switches were lined up for the east main track of the passenger yard and the signals were clear coming in, and after he received a proceed signal from the switch tender, he proceeded at a speed of from 8 to 9 miles per hour, to the entrance to the passenger station yard when he felt a slight jerk at the head end of the train and the slack ran out, and upon looking back, he saw the cars leaving the track.

Conductor Fowler stated that his train left Bakersfield at 4:50 A. M., on time; on arrival of the train at Mojave, the air

was inspected and tested and he considered the train in perfect condition, although no reports were made to him. The train left Mojave at 9:10 A. M. Between Mojave and Barstow, they took siding for train No. 9, and had no trouble in making the stop. Up to the time of the derailment, he stated that he had noticed there were two emergency applications of the air; the first trouble they experienced was while descending the grade between Jim Grey Station and Hawes, the first emergency application, which was not severe, occurring when they were on the bridge about one quarter of a mile away, coming around the curve east of Jim Grey Station, at which time he looked to see if he could ascertain anything wrong, but could find nothing. The second emergency application was the one approaching Barstow yard. At the time of the accident, he estimated their speed at not more than 5 miles per hour; he was in the caboose when he felt the jar and went to the side door and looked out and saw the cars off the track; he went back to apply the air, but found no pressure. He could not see ahead on account of being on a reverse curve. The accident occurred at 11:12, they having made the run from Mojave in about two hours. As soon as they stopped, he went back to ascertain what had caused the derailment, but the only thing he could see was where the wheel had crossed the guard rail opposite the frog in the slip switch.

Fireman Olds stated that their train was inspected by the car inspectors at Mojave, but nothing was said about bad order brakes. He had noticed two small lurches or jars of the train west of Jim Grey Station and another on the bridge, and his attention was first attracted by the air going on in emergency. He was sitting on the

seatbox, being on the inside of the curve. After about 10 or 15 cars had passed the point of derailment, he felt a jolt or jar just before the derailment actually occurred and looked back from his side of the locomotive, but could not see anything wrong, then crossed over to the engineman's side and saw the cars off the track. He saw nothing which indicated that a brake beam had been dragging and did not know what caused the derailment.

Head Brakeman Priest stated that he saw the brakes inspected and tested at Mojave. An air whistle hose had been broken and had not been coupled and had been allowed to drag, resulting in the breakage of the cock, and he advised the inspectors of this fact. He stated that there had been two emergency applications of the brakes before the accident, and they were not working very well. He estimated their speed at the time of the derailment at about 5 or 6 miles per hour. He was on the third car from the locomotive and was looking back at the time the cars left the track, but saw nothing wrong with the equipment.

Rear Brakeman Ferguson stated that they left Bakersfield at 4:50, the time they were called. He said that as they were approaching Hawes Station, the engineman made a light application of the air, but it was not an emergency application. Just after they left Jim Grey Station, the air set pretty heavily, at which time the caboose indicator showed 90 pounds pressure, and he got down on the side door of the caboose and looked over, but nothing appeared to be wrong, and the swing brakeman left the cab and went over the train to see if anything was wrong, but there were no brakes sticking, and he did not come back, so he concluded that everything was clear. Ap-

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say it was an emergency application; he was just getting on top of
the caboose when he noticed the cars leaving the track; he estimated
their speed at from 8 to 8 miles per hour and did not think the brakes
were set at the time of the derailment; in his opinion, the emergen-
cy application was caused by the train parting.

Swing Brakeman Christensen stated that except when the
brake first went into emergency after leaving Jim Grey Station, they
had no trouble with the train and the engineman was able to release
without shock. He was riding on the steps of the 14th car in the
train and had no warning of the impending derailment until the rear
trucks of the 13th car left the track and the train broke to the
south, and he jumped off on the north side. He is positive the
brakes were not set when the accident occurred and said the train
was drifting at a speed of not over 8 miles per hour. After the
accident, he looked the train over and the only unusual thing he
found about the cars was a worn tread of a left wheel of the rear
trucks of the 13th car, and he did not think that could have caused
the cars to go off.

Switchtender Reilly stated that on the approach of train
1265 he lined up the switches and signalled them to proceed into the
yard. He was standing at his shanty, on the north side of the track,
about 12 or 15 feet away from the switch, and estimated the speed
of the train at not more than 9 or 10 miles an hour. He had no in-
timation of anything wrong until the cars started to derail; he said
13 cars had passed over safely and thought the 14th car was the first
derailed. The switchtender thought the derailment was caused by a

twice daily.

Roadmaster Gauldin stated that he reached the scene of the derailment at 12:30 and looked over the equipment to ascertain the cause of the derailment, but found no defects; after gauging the track in the vicinity of the derailment, he said there was nothing wrong with it or with the switch points. About 75 or 100 feet west of the slip switch, he noticed that something had been dragging and he found marks along on the ties and guard rail at the slip switch west of the one where the derailment occurred; there were also marks on the clamp shoes, evidently made by something dragging. He stated that the switches are inspected by inspectors every day, and he inspects them on an average of once a week.

This accident was caused by the brake hanger bracket on the rear truck of the 13th car in the train becoming disconnected from the truck frame on the right hand side of the train and striking the switch point; this caused the rear wheel of the truck to climb the switch point, which in turn forced the middle wheel of the six-wheel truck to mount the rail about 5 feet, 3 inches from the point.

The train crew involved in this accident was composed of experienced men with good records. Engineman Poulson had been employed on this district for more than six years. At the time of the accident, the crew had been on duty a little more than seven hours, with periods off duty ranging individually from seventeen to forty hours.

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