

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY AT LANDCO, CALIF., ON DECEMBER 2, 1922.

December 20th, 1922

To the Commission:

On December 2, 1922, there was a derailment of a ^{passenger} train on the Atchison, Topeka and Santa Fe Railway, at Landco, Calif., resulting in the death of two employees and one mail clerk, and the injury of eight passengers, one employee, three other persons and two trespassers. The investigation of this accident was made in conjunction with representatives of the Railroad Commission of California.

Location and method of operation.

This accident occurred on the first district of the Valley Division, which extends from Kern Junction to Calwa, Calif., a distance of 110 miles. This is a single track line over which trains are operated by time table and train orders, and an automatic block-signal system in the immediate vicinity of the point of accident, which was at a spur-track switch approximately one mile west of Landco. The track is tangent for a considerable distance in each direction from the point of accident, while the grade is slightly ascending for eastbound trains.

The switch involved is a facing-point switch for eastbound trains, and leads off to the north to a spur track 654 feet in length. The switch stand is located on the engineman's side of an eastbound train. It was dark and cloudy at the time of the accident, which occurred at about 5:37 p.m.

Description.

Eastbound passenger train No. 22 consisted of one mail car, one baggage car, one smoking car, one chair car, one tourist car, and one Pullman sleeping car, hauled by engine 1469, and in charge of Conductor Bowyer and Engineman Runyon. This train left Shafter, 15.7 miles west of Landco and the last open office, at 5.21 p. m., 13 minutes late, and was derailed at the spur-track switch while traveling at a speed estimated by the train crew to have been 45 or 50 miles an hour.

Engine 1489 came to rest 365 feet from the switch points, on the left side of the track, badly damaged. The first five cars were derailed and came to rest on the left side of the main track while the forward truck of the sixth car was also derailed. The employees killed were the engineman and fireman.

Summary of evidence.

Flagman Heaster was the only member of the train crew who noticed the indication of the switch light immediately after the occurrence of the accident; according to his statement, he started back to flag and when he had gone back a distance of about two car lengths he turned around and looked toward the rear end of the train and saw that the switch light was displaying a green indication. Conductor Bowyer and Brakeman Rathburn went to the head end of the train as soon as they were able to get out. Brakeman Rathburn examined the switch about 20 or 30 minutes afterwards and found it lined for the spur-track, with the light displaying a green indication, while the rod leading from the tie rod to the switch stand was disconnected from the tie rod. He did not notice the condition of the rod connecting the switch points with the switch box, but did notice that the switch lever was in place. The conductor did not examine the switch until about an hour after the occurrence of the accident; his statements practically corroborate those of Brakeman Rathburn and he added that he found the switch locked. When Flagman Heaster returned to his train after being relieved from flagging, nearly two hours after the accident, he found the conditions to be as described by the conductor and brakeman, and also found that the rod connecting the switch points with the switch box had been disconnected.

Car Foreman Mack said a cold chisel or other sharp instrument apparently had been used in removing the bolts connecting the Pitman rod with the tie rod, while there were marks of a sharp tool having been used to pry the north switch point away from the rail, in doing which the rod connecting the points with the switch box had been slightly bent, while the rod itself was marked for a distance of about 13 inches. Car Foreman Mack also found a track spike had evidently been used at some time in spiking the north switch point against the main track rail and the lip of this spike showed plainly that a bar had been used to bend it backward, apparently in an endeavor to open the switch point; this spike was found under the point, flattened down. Car Foreman Mack walked westward examining the track for a distance of more than a mile to see if there were any signs of dragging equipment but failed to find that there had been anything of this kind.

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Immediately after the accident neither of the missing bolts could be found but one of them was afterward found about 50 feet from the track near an irrigation ditch which parallels the railroad at this point.

The last eastbound train to pass this point was extra 472, which arrived at Bakersfield, about three miles east of the point of accident, at 11:55 a.m.; the last westbound train to pass was extra 497, which left Bakersfield at 3:30 p. m.

Conclusions.

This accident was caused by a switch having been opened with malicious intent.

The evidence is clear that this is a case of malicious tampering, apparently by persons familiar with this type of switch and with its connections with the automatic block-signal system. The points had been pried open and the bolt connecting the tie rod to the switch or Pitman rod had been removed, as well as the bolt connecting the switch points with the switch box. The removal of this latter bolt prevented the automatic block-signal from displaying a stop indication, which would have been the case had the switch been opened in the usual manner. It also appears that as a result of the manner in which this switch was disconnected, the switch target and light displayed a green or clear indication, and that the switch lever was still in place and properly locked.

The train crew had been on duty about 10 hours and the engine crew about 5½ hours, previous to which they had been off duty from 18 to 36 hours.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.