INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CINCINNATI, NEW ORLEANS & TEXAS PACIFIC RAILWAY, SOUTHERN RAILWAY SYSTEM, AT HELENWOOD, TENN., ON MARCH 3, 1925.

July 16, 1925.

To the Commission:

On March 3, 1925, there was a derailment of a passenger train on the Cincinnati, New Orleans & Texas Pacific Railway, Southern Railway System, at Helenwood, Tenn., which resulted in the death of two employees.

Location and method of operation

This accident occurred on the Second District, which extends between Oakdale, Tenn., and Danville, Ky., a distance of 137.9 miles; in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system.

The point of accident was on the storage track at a point 3,598.5 feet north of the station at Helenwood; approaching this point from the south, a facing-point switch leads from the northbound track to a passing track which lies east of and parallels the main tracks northward a distance of 2,825 feet to a crossover which leads back to the northbound track; the storage track, an extension of the passing track, extends northward from this crossover for an additional distance of 2,064.4 feet to the point of derailment, which was at a derailer located 320.8 feet south of the switch leading to the main track. The tracks described are tangent more than 1 mile from a point south of Helenwood to a point 71.6 feet north of the point of derailment. The grade is 0.5 percent ascending northward for a distance of 3,060.4 feet to the point of accident.

The main tracks are laid with 100-pound rails and are ballasted with slag; the storage track is laid with 75 to 100-pound rails and is ballasted with cinders; all tracks are laid with 18 ties to the rail length and are maintained in good condition.

The Hayes derailer is on the east rail of the storage track and is operated by means of an unweighted ground-throw level; this level is supplied with a hasp to which it may be locked when the derailer is closed; the derailer can not be locked when it is open. There is no target on the derailer by which its position may be distinguished.

The weather was cloudy at the time of the accident, which occurred at about 1.13 a.m.

Description

Northbound third-class freight train No. 83 consisted of 22 cars and a caboose, hauled by engine 6268, and was in charge of Conductor Nitzschke and Engineman Tucker. It departed from Oakdale at 8.40 p.m., March 2, and arrived at Helenwood at about 10.30 p.m., at which point engine 6268 became disabled. The disabled engine and train stood on the northbound main track, fouling the crossover leading from the north end of the passing track to the main track, while the north switch of the storage track and the south switch of the passing track were not obstructed, and in order that other northbound trains might pass it was necessary to remove stored cars from the storage track and divert trains from the northbound track to the passing track and thence by way of the storage track back to the northbound track. Using the engine of northbound freight train extra 6262, which arrived at Helenwood soon after engine 6268 became disabled, Conductor Nitzschke cleared the storage track and after opening the south switch of the passing track instructed his flagman to open the switch and derailer at the north end of the storage track to permit train No. 6 to pass.

Northbound passenger train No. 6 consisted of one mail car, one combination car, one coach, and nine Pullman sleeping cars, in the order named, hauled by engine 6495, and was in charge of Conductor Summers and Engineman Catchings. It departed from Oakdale at 11.33 p.m., 10 minutes late, passed New River at 12.39 a.m., March 3, 10 minutes late, and at about 1.10 a.m. was diverted from the northbound track at Helenwood to the passing track and thence to the storage track and was derailed at the north end of the storage track while moving at a speed of about 10 miles an hour.

Engine 6495 swerved to the right and came to rest on its right side parallel with the main tracks, having moved forward a distance of about 125 feet after leaving the rails; the tender and the mail car were also derailed. The employees killed were the engineman and fireman.

Summary of evidence

Conductor Nitzschke, of train No. 82 said that after clearing the storage track, extra 6262 was crossed over to the southbound main track so that northbound passenger train No. 6, then due, might be run around his train, while he directed Flagman Clarkson to open the derailer and switch at the north end of the storage track. Conductor Nitzschke said he opened the south switch to the passing track and when train No. 6 arrived he boarded the engine and explained the situation, telling Engineman Catchings he had sent a flagman to the north end of the storage track and cautioning the engineman about being certain that the derailer and switch were set properly before passing them. Upon hearing Engineman Catchings twice call for a signal before reaching the point of accident he felt satisfied that the movement was being made in a satisfactory manner.

Flagman Clarkson, of train No. 82, said Conductor Nitzschke instructed him to open the north switch and the derailer on the storage track for train No. 6 and on his way to stop at his own engine and to inform the engineman of the intended movement. He stopped at the engine long enough to inform the engineman of the conductor's instructions and then proceeded to the derailer on the storage track. He said the lock to the derailer was missing. His first attempt to operate the derailer failed, but by taking hold of the operating level with both hands he moved the derailer from the rail and then turned and flashed his light on it to assure himself that it was in proper position. Not knowing how soon train No. 6 would arrive he at once went to the switch, opened it, and waited at that point until the train arrived, about 15 minutes later. He said the engineman called for a signal and was given a proceed signal, and the train moved forward at a speed of about 10 miles an hour; when it reached the derailer the engine left the rails and turned over. Flagman Clarkson said he did not leave the switch after opening it until train No. 6 approached and then only moved back from the switch stand in order to comply with the rule which forbade his being nearer than 20 feet to the switch as the train approached it.

Brakeman Jones, of train No. 82, said he inspected the derailer some time after the accident occurred, and at that time it appeared to have been torn out and moved toward the center of the track, about two feet from its normal location; it also bore wheel marks. The operating level lay pointing toward the track, in the open position. At the time of this examination the truck of the combination car stood in such a position that the derailer could not have been moved from the rails after the cars came to rest.

Conductor Foster, of extra 6262, said he heard Conductor Nitzschke direct Flagman Clarkson to line up the derailer and the switch. Conductor Foster looked at the derailer after the accident occurred, finding it shoved around to one side and out of place, there was also a mark on the derailer which appeared to have been made by a wheel flange.

Conductor Summers, of train No. 6, said his train moved through the passing track at a speed of about 10 miles an hour; Engineman Catchings twice called for a signal, then answered by two short blasts of the whistle, and had proceeded but a short distance when the train was derailed. Later, Conductor Summers met a stranger at Helenwood station, this man told him that he lived about 3 miles from Helenwood and that he was employed at Stearns, 33.7 miles distant, and had intended to ride between the cars of train No. 6 to the coal chute at Stearns, but that he would ride a freight train instead as he had learned that train No. 6 no longer stopped at that point.

Flagman Meachum, of train No. 6, said he examined the track and equipment in an effort to ascertain the cause of the derailment and upon finding a broken rail he concluded without further inspection that it was the cause of the derailment.

Track Supervisor Johnson arrived at the scene of the accident at about 4.40 a.m. He first noted the position of the derailed equipment and then made a careful examination of the track. The derailer had been torn from the ties and the throw-lever broken, while the throw-rod, which connects the throw lever to the derailer, was bent and torn loose from the derailer. The derailer bore the imprint of wheel flanges, while the receiving end was broken. The second tie north of the derailer bore a wheel mark which continued northward a distance of 36 ties; there were also marks on the 32nd tie north of the derailer, while there were no marks on the track south of the derailer. Mr. Johnson was of the opinion that the accident was caused by the engine running over the derailer in the closed position.

Master Mechanic Wilking said he inspected engine 6268 while it lay on its side at the point of derailment and found nothing which would have caused or contributed to the cause of the derailment. Flange marks on the derailer led Mr. Wilking to believe that the derailer was on the rail when encountered by engine 6268.

Examination of the derailer showed that a section about 10 inches long was broken from its receiving end. Two deep flange marks traversed the derailer lengthwise, these marks apparently being made by the driving wheels. A sharp, deep indentation on the extreme receiving end of the shorter section probably indicated the path of an engine truck-wheel flange, while a deep mark on the shorter section prooably was made by a driving wheel after the derailer was displaced, secured at only one corner, with the receiving end of the derailer across the rail and the delivering end pointing toward the center of the track.

Superintendent Woodall said local inhabitants sometimes tamper with the automatic block signals, causing them to be set in stop position, by opening derails, cutting bond wires, etc., in order to ride trains, and it is possible there was an attempt of this kind on the part of the stranger who was seen in the vicinity of Helenwood prior to the time of the arrival of train No. 6, and who later talked with Conductor Summers. As a matter of fact, this man has since been identified and the police department of the railroad sought to locate him in order that he might be questioned as to his knowledge of the accident, but at the time of this investigation he had not been found and his relatives expressed the belief that he had left the state.

Conclusions

This accident was caused by the engine of train No. 6, running over a derailer which was in the closed position.

The evidence clearly indicated that the derailer was on the rail when it was encountered by the engine of train No. 6, approximately 15 or 20 minutes after the time Flagman Clarkson is said to have opened it. The derailer may have been restored to the closed position by some unknown person or persons between the time at which it was opened and the time at which train No. 6 approached, during which period the flagman was waiting at the switch stand, 220 feet distant, but at the time of this investigation the evidence in this respect was indefinite and it is possible Flagman Clarkson proceeded directly to the switch, overlooking the derailer.

Had the derailer involved in this accident been connected to the main-track switch by pipe or other approved installation, so arranged that it could not be operated except in conjunction with the main-track switch, the accident would not have occurred.

All of the employees involved in this accident were experienced men; 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,

W. P. BORLAND
Director.