INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LOUISVILLE & NASHVILLE RAILROAD AT HENDERSONVILLE, TENN., ON NOVEMBER 16, 1926.

December 20, 1926.

To the Commission:

On November 16, 1926, a passenger train struck an automobile at a grade crossing on the Louisville and Nashville Railroad at Hendersonville, Tenn., resulting in the derailment of the train and the death of the 2 occupants of the automobile, and the injury of 12 passengers and 4 dining car employees.

Location and method of operation

This accident occurred on that part of the Nashville Division extending between Nashville, Tenn., and Bowling Green, Ky., a distance of 73.03 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at a highway crossing which crosses the tracks at an angle of about 59°, the center of the highway being 43 feet north of the north passing-track switch. Approaching this point from the north there is a 1° curve to the right 3,598 feet in length, following which the track is tangent to the point of accident, a distance of about 300 feet, and for a considerable distance beyond that point. The grade for southbound trains at the point of accident is 1.013 per cent ascending. North of the point of accident the track extends through a cut with walls 16 feet in height, the southern end of this cut being about 400 feet north of the crossing. The station is located on the west side of the track just north of the crossing, while a track known as the house track parallels the main track on the west side and extends across the crossing to a point some distance north of the station.

Approaching from the west on the highway the opportunity of seeing an approaching southbound train is restricted by the cut and also by the station. The view was further restricted at the time of the accident by four freight cars standing on the northern end of the house track between the cut and the station. The crossing is protected, however, by a warning signal located just east of the tracks on the north side of the highway,

this signal is of the wigwag type, and is equipped with two arms and an electrically-lighted red disc, when in operation at night it gives the appearance of a swinging red light. This signal is actuated by trains approaching the crossing from either direction, the control circuits extending for a distance of about 1,900 feet from the crossing, and was working at the time of the accident. The laws of the state also provide that all vehicles must come to a stop before passing over a railroad crossing at grade.

The weather was clear and it was dark at the time of the accident, which occurred at about 5.47 p.m.

Description

The automobile was traveling east on the highway at the time of the accident and had nearly crossed the tracks when it was struck by train No. 99. It was thrown to the south and struck the high switch stand at the north end of the passing track, breaking off the stand at its base and permitting the switch points to be loosened.

Southbound passenger train No. 99 consisted of one combination club and baggage car, one dining car, four Pullman sleeping cars and one Pullman observation car, hauled by engine 406, and was in charge of Conductor McCullom and Engineman Bain. This train passed Avondale, 4.08 miles north of Hendersonville, at 5.43 p.m., one hour and eight minutes late, and while traveling at an estimated speed of 45 to 55 miles an hour it collided with the automobile on the highway crossing at Hendersonville, and was derailed upon encountering the loosened switch points at the northern end of the passing track.

The engine and tender were not derailed and came to rest with the front end of the engine 1,320 feet south of the point of accident. The first car was derailed, but remained coupled to the engine and stopped practically parallel with the track. The balance of the cars became detached from the head end of the train and came to rest in a zig-zag position in general line with the track. All of the equipment remained upright. The automobile was demolished.

Summary of evidence

Engineman Bain stated that he sounded one long blast on the whistle when about one-half mile north of Hendersonville, that when passing the whistling board he sounded a road-crossing whistle signal, and that he sounded the road-crossing whistle signal again when entering the cut, the last blast of this signal occurring about 90 feet north of the crossing, the engine bell was also ringing continuously. When about 15 or 20 feet from the crossing the automobile suddenly appeared directly in front of the engine and he immediately made an application of the air brakes, from his examination of the engine afterwards he concluded that the automobile was passing over the left rail when the accident occurred. He also said that the engine was equipped with an electric headlight, which was burning brightly, and he estimated the speed of his train to have been about 45 miles per hour at the time of the accident.

The statements of Fireman Wilson practically corroborated those of Engineman Bain, except that he did not see the automobile approaching the crossing, as it approached on the engineman's side of the engine.

Conductor McCollum, who was riding in the third car of the train, stated that the whistle was sounded for the station and shortly afterwards he heard the road-crossing whistle signal sounded. The first knowledge he had of anything wrong was when the air brakes were applied. After the train came to a stop he returned to the point of derailment and found the switch stand at the northern end of the passing track had been broken off at the base and upon examining it found that the switch points apparently had been jarred open. He estimated the speed of the train at the time of the accident at from 50 to 55 miles per hour.

Section Laborer Coley, who lives at Hendersonville, said that as he left a house located about 75 yards from the crossing he heard several blasts on the whistle sounded by the engineman of the approaching train and also heard the crossing bell begin to ring. After walking along the road a short distance he again heard the engineman sound a whistle signal, which he identified as a road-crossing whistle signal, the train then was within a short distance of the crossing, while he noticed an automobile approaching the crossing with its lights turned on, and at the same time noted that the wig-wag signal was operating. The automobile was within a short distance

of the crossing and he thought it was going to be brought to a stop. He then turned around and proceeded along the road, but after taking a few steps he heard the crash occasioned by the engine striking the automobile.

Examination of the track showed that the first marks of derailment were on a brace between the right main-track rail and the switch point, 12 feet 4 inches south of the point, followed by marks on the ties. The first marks found near the left or east main-track rail were flange marks on the ties, beginning 23 feet 6 inches south of the switch point. The track was entirely torn out for a distance of 452 feet, beginning at a point about 100 feet south of the switch.

Conclusions

This accident was caused by the driver of an automobile proceeding upon a railroad crossing at grade directly in front of a passenger train which was approaching at high speed.

The evidence indicates that the proper warning signals had been given by the engineman of train No. 99, but that the driver of the automobile did not use the precautions necessary before proceeding over the crossing at a point where the view was materially obscured, or comply with the state law requiring a stop to be made before passing over a crossing at grade. There was also an automatic warning signal located near the crossing which was in operation at the time of the accident but apparently was unheeded by the driver. The occupants of the automobile lived in the vicinity and presumably were familiar with existing conditions at the crossing on which the accident occurred.

The employees involved 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 submitted,

W. P. BORLAND.

Director.