

IN RE INVESTIGATION OF ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD NEAR HUSTON RUN, PA., ON JULY 13, 1921.

July 25, 1921.

On July 13, 1921, there was a derailment of a freight train on the Pennsylvania Railroad near Huston Run, Pa., the wreckage of which was struck by a passenger train, resulting in the death of 1 employee and the injury of 1 employee. After investigation of this accident the Chief of the Bureau of Safety reports as follows.

Location and method of operation.

This accident occurred on that part of the Monongahela Division extending between Dravosburg and West Brownsville Junction, Pa., a distance of 37.4 miles. This is a double-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred just south of Huston Run. Approaching this point from the north there is a compound curve to the east, or left, which is approximately 2 miles in length; the accident occurred on this curve at a point about 1/2 mile from its southern end, where the curvature is 1 degree. Although the engineman of a northbound train is on the inside of this curve, his view of the point of accident is restricted to about 700 feet. The grade varies slightly, being about 0.3 per cent ascending for northbound trains at the point of accident. The weather was clear at the time of the accident, which occurred at about 9.52 p. m.

Description.

Southbound freight train extra 2733 consisted of engine 2733, 94 empty steel coal cars, engine 815, and a caboose, in the order named, and was in charge of Conductor Livingston and Enginemen Lynch and Smith. This train left the yard at Shire Oaks, passed H Block Station, 0.4 mile from Shire Oaks, at 9.44 p. m., passed Huston Run, 1 mile from H Block Station, and at about 9.52 p. m., when the head end of the train was near Courtney, pulled out the coupler on the head end of the first car, causing an emergency application of the air brakes, and resulting in the buckling of the 64th, 65th, and 66th cars from the head end of the train. The 65th car fouled the northbound main track, at a point about 1,500 feet south of the station at Huston Run, and was struck by train No. 7731.

Northbound passenger train No. 7731 consisted of 1 steel combination car and 4 wooden coaches, hauled by engine 2435, and was in charge of Conductor Hess and Engineman George. This train passed MC Block Station, 3.8 miles from Huston Run and the last open office, at 9.43 p. m., on time, left Courtney, a non-telegraph station 0.9 mile from Huston Run, at 9.51 p. m., on time, and collided with the buckled portion of the train

of extra 2733 while traveling at a speed estimated to have been about 20 miles an hour.

Engine 2435 was derailed and turned over to the right, being considerably damaged. With the exception of the tender and the forward truck of the combination car, none of the other equipment in train No. 7731 was derailed. The 65th car of extra 2733 was demolished. The employee killed was the engineman of train No. 7731.

Summary of evidence.

Engineman Lynch, in charge of engine 2733, said he had shut off steam and that his train was moving slowly approaching the station at Courtney. He saw train No. 7731 departing from the station and shortly afterwards began to work steam. The statements of Engineman Lynch, as well as those of Fireman Coburn and Head Brakeman Eichner, were to the effect that train No. 7731 had passed their engine when the coupler was pulled out. Conductor Livingston and Flagman Solomon, both of whom were riding in the caboose, said that the first thing they felt was a severe shock, following which the train came to a stop. On inspecting his train after the accident, Conductor Livingston found that the pulling out of the coupler on the head end of the first car was due to the fact that the coupler key had worked out. The statements of the crew of helper engine 815 added nothing to those of the other members of the crew. Estimates of the various members of the crew of extra 2733 as to the speed of their train varied from 12 to 15 miles an hour.

Fireman Carr, of train No. 7731, had seen the freight train approaching at a moderate rate of speed when his own train was departing from Courtney, and after passing the head end of the freight train a distance estimated by him to have been 45 car-lengths he noticed by the noise it made that the freight train had stopped. After his train had passed an additional distance of about 20 car-lengths, he noticed dust arising ahead of his engine and at the same time saw Engineman George apply the air brakes in emergency just after which the engine started to turn over. The statements of the various members of the train crew of train No. 7731 indicated that they had noticed the freight train had stopped, and that the brakes on their train were applied very shortly afterwards.

After the accident, Foreman Car Repairer J. H. Long, located at Shire Oaks, examined the first car in the train of extra 2733, this being PRR steel gondola 187352. This car was equipped with a Westinghouse, friction-draft, key coupler, and Mr. Long said the coupler had been pulled out on account of the coupler key having worked out, due to the fact that the cotter key was missing. His statements also were to the effect that had the cars in the train of extra 2733 been inspected at Shire Oaks it was likely that the missing cotter

key, had it been missing at that time, would have been discovered by such inspection.

The cars making up the train of extra 2733 arrived at Shire Oaks in extra 3651. Yardmaster Laird, located at Shire Oaks, said he received instructions that extra 3651 would arrive at about 8.20 p.m. and that the train was to be relayed, which was done by having engines 2733 and 815 ready to take the train on its arrival. No air-brake or other inspection of the train was made, this being in line with the statement of Mr. Laird, as well as that of Mr. Long, to the effect that when trains are relayed through this point and the crews are waiting for the trains, no detailed inspections or terminal air-brakes tests are made.

Conclusions.

This accident was caused by the pulling out of the coupler on the head end of the first car of extra 2733 as a result of the working out of the coupler key; the working out of the coupler key was due to a missing cotter key.

The investigation developed that no inspection of the equipment, or inspection and terminal test of the air brakes, was made, only a road test of the air brakes being made before the train departed from the yard at Shire Oaks. Had an inspection of the equipment been made at this point, it is probable that if the cotter key were missing at that time its absence would have been discovered, in which event another cotter key could have been applied and the accident in that event would not have occurred.

The evidence indicates that train No. 7731 had passed the head end of extra 2733 before the coupler was pulled out, and that there was no opportunity of giving any warning to the crew of that train in order to prevent it from colliding with the wreckage which was fouling the northbound track.

All of the employees involved were experienced men. At time of the accident the crew of extra 2733 had been on duty about 11 hours, after 13 or more hours off duty. The crew of train No. 7731 had been on duty nearly 7 hours, after 15 hours or more off duty.