

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE PENNSYLVANIA RAILROAD AT KEATING, PA , ON
JANUARY 12, 1925

February 28, 1925

To the Commission

On January 12, 1925, there was a derailment of a passenger train on the Pennsylvania Railroad at Keating, Pa , which resulted in the death of two employees and the injury of four passengers and one employee. The investigation of this accident was made in conjunction with a representative of the Public Service Commission of the State of Pennsylvania.

Location and method of operation

This accident occurred on that part of the Renovo Division extending between Renovo and Emporium Junction, Pa , a distance of 45.2 miles. In the vicinity of the point of accident there is a double-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred at a point about 200 feet east of the station at Keating, approaching this point from the east there is a long curve to the right, 520 feet of tangent, and then a curve of 60° 30' to the right 1,250 feet in length, the accident occurring on the last-mentioned curve at a point about 450 feet from its eastern end. The grade is practically level for some distance. The track is laid with 130-lb rails, 33 feet in length, with about 19 ties to the rail-length, tie-plated, double-spiked, and ballasted with from 14 to 18 inches of cinders and crushed slag. The track is maintained in good condition.

The weather was clear at the time of the accident, which occurred at about 3.50 p m.

Description

Eastbound passenger train No. 571 consisted of one baggage car, three coaches, one dining car, and two Pullman parlor cars, hauled by engine 758, and was in charge of Conductor Mulroy and Engineman O'Brien. The baggage car was of wooden construction, while the others were of all-steel construction. Train No. 571 left Ren-

ovo at 3 33 p m , according to the train sheet, 13 minutes late, passed CT Block Station, 0.5 mile from Keating, at 3.49 p m , according to the train sheet, still 13 minutes late, and was derailed near the station at Keating while traveling at a speed estimated to have been about 40 miles an hour

The engine and tender turned over to the left and came to rest on their left sides across the tracks at a point about 500 feet beyond the first marks of derailment. The baggage car was diagonally across the tracks to the right of the engine, in an upright position, while the first coach went down a slight embankment to the right. All the remaining cars were derailed but remained upright and sustained only slight damage. The employees killed were the engineer and fireman

Summary of evidence

The statements of Conductor Mulroy, Head Brake-man Hayes, and Flagman Kirtland were to the effect that they had noticed nothing wrong in the operation of the train up to the point of derailment and their statements indicate that the air brakes applied in emergency at about the time the derailment occurred

Baggagemaster Witherall said that when he relieved Baggagemaster Steltzer at Renovo the latter told him that the baggage car rode hard, that he had refused to receive express matter at Williamsport on account of the fact that the head end of the car was loaded to its capacity, and that he would not ride in the car. Baggagemaster Witherall did not notice anything unusual in its riding qualities except that there was considerable up-and-down motion in the center of the car. When approaching Keating the head end of the car began to lurch and the third time it made this movement it sounded as though the wheels were on the ties, there was no running-in of slack which might indicate that the engine or tender had been the first to be derailed. He tried to reach the emergency cord but was thrown to one side and rendered unconscious. Baggagemaster Witherall further stated that he had not noticed any indication of anything dragging under the car nor did he notice any application of the air brakes prior to the accident.

Baggagemaster Steltzer, who had been relieved at Renovo, said he took charge of the car at Harrisburg, where it originated, and that the express had already been loaded when he took the car. He rode most of the distance in the coach immediately behind the baggage car for the reason that the baggage car was of wooden construction, and on account of the fact that all the remaining

cars were of steel construction he felt that the steel coach was a safer place in which to ride, and when he turned the car over to Baggage-master Witherall at Renovo he told the latter that he had not been riding in the car. He said he had not noticed that it rode roughly. It further appeared from the statements of both of the baggage-masters that it was quite a common occurrence for wooden baggage cars to be placed in these trains directly behind the engine, while the other cars were usually of steel construction.

The station at Keating is located on the outside of the curve. Station Agent Irwin, on duty at that point, stated that he was watching train No. 571 as it approached, saw sparks flying from the forward truck of the baggage car and a second later that end of the car seemed to rise and then to become derailed, apparently pulling the tender off the rails. He thought the train travelled a distance of from 50 to 80 feet between the time he saw the sparks flying from under the car and the time it was derailed. He had not noticed anything wrong with the engine and said he thought it was not derailed until it was about opposite the station.

Operator Russell, on duty at CT Block Station, said he did not notice anything wrong when the train passed that point, moving at a speed of about 40 miles an hour. Assistant Supervisor Oyler was also in CT Block Station when train No. 571 passed and he noticed nothing unusual. Shortly afterwards Operator Russell notified him that the train had been derailed at Keating and he at once proceeded to the point of accident. The first marks on the track that he noticed consisted of a gouged spot about 3 feet in length in the space between the two main tracks, while the first mark of actual derailment was at a point about 30 feet farther west, where there was another gouged spot, the first displaced rails were located an additional distance of 40 feet to the westward. There was no corresponding mark opposite the first gouged spot to indicate that it might have been made by a pair of wheels, neither were there any marks on the rails to indicate that any of the wheels had mounted the rails. Assistant Supervisor Oyler also said that he measured the gauge and elevation of the track on the curve and found them to be well maintained, while the examination of track as far back as CT Block Station showed no indication of dragging equipment or any pieces of broken equipment.

Examination of the engine and tender failed to disclose anything which could have contributed to the occurrence of the accident. The trucks of the baggage car were badly damaged in the accident. The examination

of the forward truck, however, disclosed that two 1-1/8" spring-plank hanger-bolts had been broken off at their upper ends, at about the end of the thread, these bolts being on the west side of the spring plank. The fractures appeared to have been more in the nature of breaks due to strain being placed upon them rather than the result of shearing, while on the surface of one of the fractures there was a slight spot which looked as though it might have been an old defect. This was so located, however, that it could not have been easily discovered by inspection. Train No. 571 had received the usual inspection at Renovo without anything in the way of defective equipment being discovered.

The weight of the lading in the forward end of the baggage car could not be obtained. This lading was roughly described by Baggage-master Witherall as consisting of 18 crates of strawberries weighing from 800 to 900 pounds each, 3 or 4 truck loads of small express matter, 175 sacks and much of mail, 5 cans of milk, 20 bundles of papers, 4 trunks and several suit cases. The mail and some of the other articles reached back toward the center of the car but the bulk of this lading was in the forward end. This baggage car was a 60-foot car, equipped with six-wheel trucks, and having a capacity of 50,000 pounds. It was built in December, 1903, and had received class B repairs in November, 1924.

Conclusions

The cause of this accident was not definitely ascertained.

Apparently some part of the forward truck of the baggage car became defective, resulting in the derailment of the train. The fractures of the spring-plank hanger-bolts in the forward truck of this car were of such a nature as to indicate that they occurred as a result of strain placed upon them rather than as a result of having been sheared off.

The employees involved were experienced men. At the time of the accident the engine crew had been on duty about 1 hour after more than 11 hours off duty, the train crew had been on duty about 7 hours after from 34 to 49 hours off duty.

Respectfully submitted,

W. F. BORLAND

Director