

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE LINE OF THE READING COMPANY AT BLANDON, PA.,
ON JANUARY 25, 1934.

March 15, 1934.

To the Commission:

On January 25, 1934, there was a derailment of a passenger train on the line of the Reading Company at Blandon, Pa., which resulted in the death of two employees.

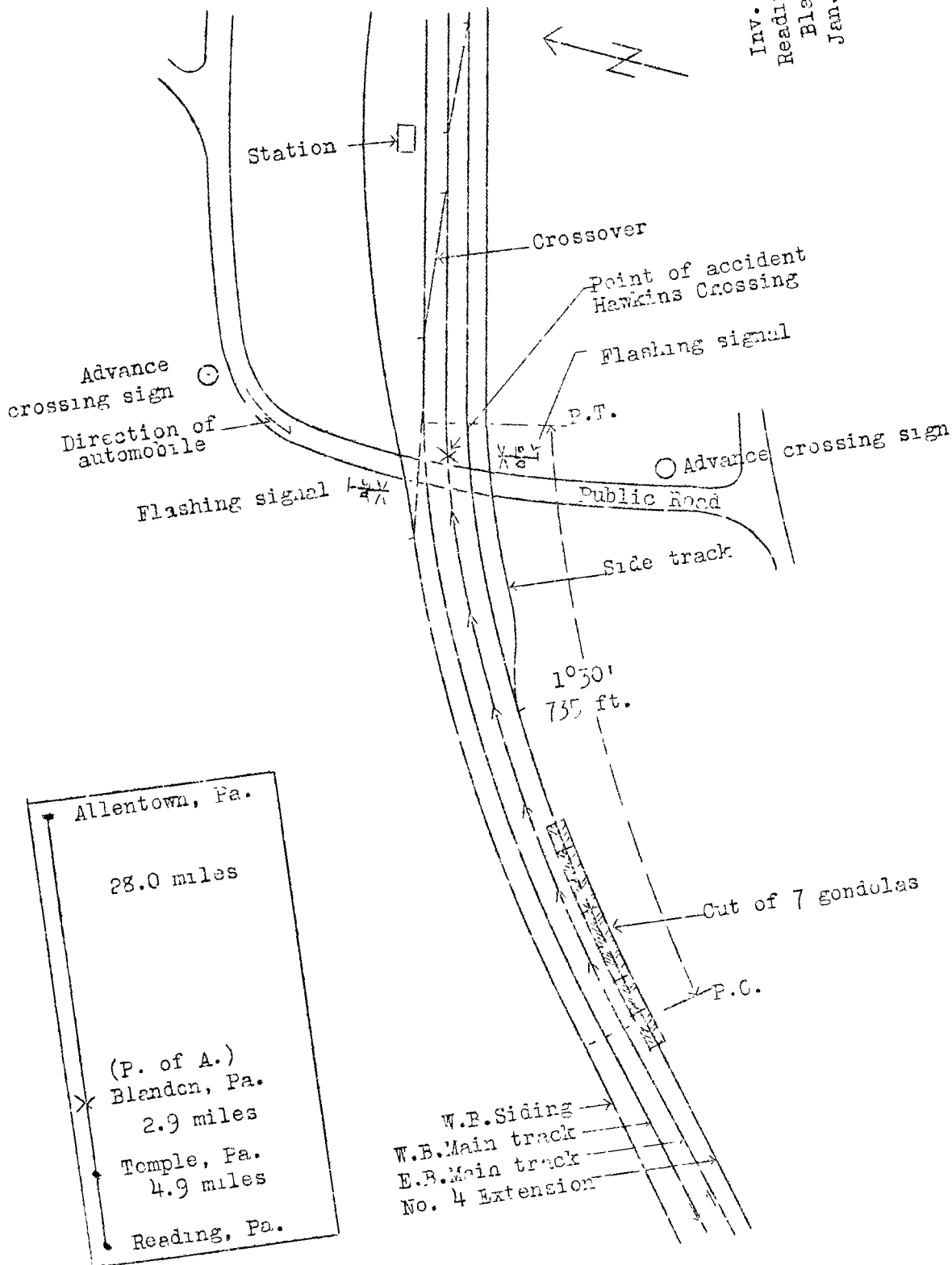
Location and method of operation

This accident occurred on the East Pennsylvania Branch of the Reading Division, extending between Reading and Allentown, Pa., a distance of 35.8 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 accident occurred at a highway grade crossing, known as Hawkins Crossing, located 350 feet west of the station at Blandon; approaching this point from the west, the track is tangent for a distance of 1,113 feet, followed by a 1° 30' curve to the right 735 feet in length, the crossing being located on this curve about 40 feet from its eastern end. The grade for east-bound trains is 0.43 percent descending at the crossing.

The highway crosses the tracks at an angle, and, from north to south, it first passes over the westbound siding, then the westbound main track, the eastbound main track, and two more side tracks; the accident occurred on the east-bound main track at a point 10 feet east of the crossing, where the automobile involved had run off the side of the highway and become stalled on the track.

The crossing is protected on each side of the tracks by an advance crossing sign and also by a flashing light signal; on the north side of the tracks the advance crossing sign is located on the west side of the highway about 150 feet from the nearest track, while the flashing light signal and cross-bar sign, located on the same east, is also on the west side of the highway and immediately north of the tracks. The grade for south-bound vehicular traffic is slightly ascending toward the railroad.

Inv. No. 1886
Reading Company,
Blendon, Pa.
Jan. 25, 1934



The highway is fairly wide where it crosses the tracks and the surface is maintained in reasonably good condition, but the edges are uneven, not being in a straight line from one side to the other side of the right of way.

At the time of the accident a cut of seven gondola cars stood on the curve on the side track next to the east-bound main track, with the east end of the east car about 540 feet west of the crossing.

The weather was clear at the time of the accident, which occurred about 6:25 p.m.

Description

East-bound passenger Train No. 194 consisted of 1 baggage car, 1 mail car, 1 baggage car, 1 combination car, 1 coach, 1 cafe-chair car, and 1 Pullman parlor car, in the order named, hauled by Central Railroad of New Jersey engine 855, and was in charge of Conductor Cassel and Engineman Sweigert. This train passed Temple, the last open office, 2.9 miles west of Blandon, at 6:23 p.m., according to the train sheet, 2 minutes late, and was approaching the station at Blandon at a speed estimated to have been between 45 and 55 miles per hour when it struck an automobile stalled on the track on the east side of Hawkins Crossing.

The automobile involved was a 1930 Ford coupe, operated by Sylvester B. Hess, age 31, of Reading, Pa., who was accompanied by his stepfather, Harry L. Machemer, also of Reading. The automobile was moving southward over the crossing when it went off the left side of the highway and stopped on the east-bound track about 10 feet from the crossing; it was standing at this point when it was struck by Train No. 194.

The automobile was demolished and the wreckage strewn along the track for a distance of 216 feet, at which point the initial mark of derailment of the train appeared. Engine 835, together with its tender, the first five cars and the forward truck of the sixth car, were derailed. The engine and tender stopped on their left sides parallel to the tracks, with the front end of the engine 453 feet east of the initial mark of derailment or 679 feet east of the crossing; the first two cars stopped behind the tender at right angles to and across all the tracks; the remaining derailed cars stopped upright and practically in line with the track. The employees killed were the engineman and fireman..

Summary of evidence

Conductor Cassell stated that he was riding in the fourth car and estimated the speed to have been between 50 and 55 miles per hour; he heard the crossing whistle signal and afterwards felt the air brakes applied in emergency, then there was a jar as though the train had struck something, followed by a second and harder jar, and the train stop. Shortly afterwards he talked to the driver of the automobile and was told by those present that the automobile went off the crossing and then became stalled on the east-bound track with the front wheels outside of the south rail and the rear wheels between the rails; that several men tried to lift the automobile from the track but were unable to do so; that some of them realized Train No. 104 was due and the passenger in the automobile, Mr. Macherer, was given a lighted white lantern and told to go out and flag the approaching train, which he started to do, but that he did not get very far west of the crossing before the train passed him. Subsequently the conductor observed that the flashing light signals were operating properly, and he also said that the air brakes had been tested and worked properly en route, and that before leaving Harrisburg he had talked with Engineer Sweigert and the engineman appeared normal in every respect.

Immediately after the accident Baggage Master Mast went east to protect, while Flagman Lawver went west. The rear car in the train stopped about 150 feet east of the crossing and Flagman Lawver said that on his way back to flag he met a man carrying a lighted white lantern right on the crossing. Flagman Lawver estimated the speed approaching Elandon to have been 45 or 50 miles per hour and said he heard the crossing signal sounded and felt the air brakes applied prior to the accident.

Sylvester B. Hess, owner and driver of the automobile involved, stated that he was employed by an insurance company in Reading, Pa., and purchased the car on January 13, 1934, only 12 days prior to the accident, as a used car. On the day of the accident he was proceeding southward on the highway involved and was passing over the crossing, which he thought was straight when the front wheels struck a rough spot and changed the course of his car, the rear wheels going off the highway and becoming caught in the rails. He tried to back the automobile and also to go ahead, but to no avail, and then three men came over and assisted him and his stepfather in an attempt to lift the car off the track, at which time the train was not yet in sight. One of the men said that the express was due in about 2 minutes; his stepfather took a lighted white lantern and started westward to flag, but how far his stepfather went he could not say.

In the meantime Mr. Hess focused a spot light, with which the automobile was equipped, toward the approaching train but when he saw the reflection from the headlight of the engine he got out of the way. Mr. Hess further stated that he had often made collections at Blandon but that he did not consider himself familiar with the approach to this particular crossing. The headlights of his car were inspected at the time he purchased it, the lights were focused, and about a week prior to the accident new bulbs had been installed; the headlights were in good condition and were not flickering when he approached the crossing. Mr. Hess could not understand how his car happened to get stalled in the position it was occupying at the time of the accident, and he felt he had done all within his power to prevent the accident. The majority of the above statements by Mr. Hess were made to a representative of the railroad and subsequent effort to have him give a better explanation as to how he came to drive off the left side of the crossing was of no avail, his attorney advising him not to answer further questions.

Harry L. Machemer, the passenger in the automobile involved, stated that the flashing light signals were not operating before the automobile started over the crossing. His statements concerning the stalling of the car and the subsequent efforts to get it off the track were similar to those of Mr. Hess. Mr. Machemer further stated that some one then came along with a lantern and said that the train was due in 5 minutes. Mr. Machemer started westward to flag the train with the lantern, and he said he walked about four city blocks or a half mile from the crossing, on the engineman's side of the approaching train. When he saw the reflection from the headlight he started to swing the lantern across the track, following which the engine whistle was sounded once or twice and then the train passed him. He then started walking toward the crossing and met the flagman of the train coming back.

Assistant Superintendent Haldeman arrived at the scene of the accident about $1\frac{1}{2}$ hours after its occurrence. East of the crossing there is a trailing-point cross-over connecting the two main tracks and it was Mr. Haldeman's opinion that the derailment of the train occurred when the hub of a rear wheel of the automobile became wedged between the lead rail of the cross-over and the south rail of the east-bound main track. In the position in which it was found after the accident, this hub extended about 3 or 4 inches above the top of the rail and was wedged in the flangeway between the rails so tightly that he thought it would have been impossible for the wheels of the engine or cars to pass over it without being derailed, confirmation of this

opinion being found in the fact that all of the wheels east of this obstruction were derailed while those west of it were not derailed. There were indications of flange marks on the nub and Mr. Haldeman said it could not be removed from its wedged position with a bar, necessitating that it be driven out with a heavy hammer. Subsequently it was weighed and including the portion of an axle, brake drum, etc., attached to it, this weight was found to be 51 pounds.

Superintendent of Signals Rentschler, who arrived at the scene of the accident less than 1 hour after its occurrence, said that both the automatic block signals and the highway crossing flashing light signals were operating properly.

Isaac Weitzel, employed by the state highway department, was en route to his home, carrying a white lantern, and on reaching the railroad crossing he saw that an automobile had run off the crossing and was across the tracks, with the running boards on the rail. Several attempts were made to remove it from the track and then he gave his lantern to Mr. Macherer and told him to go as fast as he could in order to flag the approaching train, this being about 3 minutes before its arrival. Mr. Weitzel could not say whether Mr. Macherer ran or walked, nor did he know how far Mr. Macherer went from the crossing. As the train approached he heard the engine whistle sounded and the air brakes were applied before the automobile was struck; it had not been on the track more than 5 minutes prior to the accident.

Henry F. Sweitzer, resident of Blandon, was walking on the highway and when he reached the crossing he saw the automobile starting over the tracks and also saw that it was getting off the crossing. It was very dark, and on getting on the crossing Mr. Sweitzer saw that the automobile had turned to the left, run off the crossing, and was across the track. Mr. Sweitzer said the train arrived about 3 minutes after Mr. Macherer started out to flag, but that Mr. Macherer came back and was immediately sent out again, about 1 minute being lost, and he did not think that Mr. Macherer could have gotten out more than 200 or 300 feet. The headlight on the engine was burning properly and the engine whistle was sounded. Mr. Sweitzer also said that to his knowledge this was about the fourth automobile that had run off the crossing, and on measuring the distance from a mark he made on the rail it was found that the automobile had been 10 feet 9 inches from the east side of the crossing.

Conclusions

This accident was caused by Train No. 194 striking an automobile which had run off the highway at a grade crossing and had become stalled across the track.

The driver of the automobile involved said he purchased the car 12 days prior to the accident, that it had been inspected at that time, and that the headlights were in good condition and properly focused. On reaching the crossing, however, he thought that the highway was straight and then the front wheels of his car hit a rough spot, causing the car to change its course and the rear wheels to leave the road, resulting in the automobile running off the highway crossing and becoming stalled across the track. Efforts to get the automobile off the track were unavailing, consequently the passenger in the automobile was given a lantern and sent out to flag the approaching train; the evidence is conflicting as to how far he went from the crossing, and one witness said that after starting out he returned and was then sent out again, but in any event the evidence indicates that he did not get very far west of the crossing before the train passed him, and the flagman met him at the crossing immediately afterwards. The evidence further indicates that the engineman whistled for the crossing and then applied the brakes in emergency and that after the automobile had been struck the hub of one of the rear wheels was dragged and finally became tightly wedged in the flange-way between the lead rail of a cross-over and the south rail of the east-bound main track, resulting in the derailment of the train.

The driver of the automobile felt that he had done all within his power to prevent an accident. Possibly he did do all he could reasonably be expected to do, after he was in danger. Where he failed, however, was in exercising proper care when attempting to proceed over the crossing. ^{1. The first of} the investigations made by this bureau of various railroad grade crossing accidents indicate that in most cases this has been the fundamental fault. In this particular case the edges or shoulders of the highway were uneven where the highway passed over the crossing, but had this driver been paying proper attention or even had he used only that degree of care which was necessary to make sure of staying on the road, there is no reason why the conditions which resulted in this accident should not have been avoided.

Respectfully submitted,

V. J. PATTERSON,

Director.