

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
BALTIMORE AND OHIO RAILROAD AND THE NEW YORK,
CHICAGO AND ST. LOUIS RAILWAY NEAR PAINESVILLE,
OHIO, ON AUGUST 30, 1927.

October 24, 1927.

To the Commission:

On August 30, 1927, there was a side collision between a Baltimore and Ohio Railroad passenger train and a New York, Chicago and St. Louis Railway freight train at the intersection of the tracks of these railroads near Painesville, Ohio, which resulted in the death of two employees and the injury of three passengers and one employee.

Location and method of operation

At the point of accident the Lake Sub-division of the Baltimore and Ohio Railroad and the Cleveland Division of the New York, Chicago and St. Louis Railway, hereinafter referred to as the Nickel Plate, cross each other at right angles. Each is a single-track line, train movements over the Baltimore and Ohio being governed by time-table and train orders, while on the Nickel Plate trains are operated by time-table, train orders and an automatic block-signal system. Approaching the point of accident on the Baltimore and Ohio Railroad from the south, which by time-table direction is east, the track is tangent for a distance of about $2\frac{1}{4}$ miles; the grade is undulating but generally descending for a distance of approximately 10 miles, being 1.16 per cent descending at the point of accident. Approaching on the Nickel Plate from the west the track is tangent for a distance of approximately $2\frac{3}{4}$ miles extending to the point of accident and for a considerable distance beyond; the grade is 0.195 per cent ascending for east-bound trains.

There is no interlocking device at this crossing, train movements being governed by a signal in the form of a board on each end of which there is a red light. This signal is mounted on a mast located in the southwestern angle of the crossing, and it is operated by the operator

in the Nickel Plate office nearby. When in the horizontal position this signal indicates that trains on the Baltimore and Ohio Railroad may proceed, and when in the vertical position it authorizes Nickel Plate trains to use the crossing. Its normal position is diagonal, requiring trains of each road to stop. In addition, on the Baltimore and Ohio Railroad there is a stop board located 800 feet south of the crossing, with a similar board on the Nickel Plate located about 280 feet west of the crossing.

The weather was clear at the time of the accident, which occurred at about 12.54 p.m.

Description

Westbound Baltimore and Ohio passenger train No. 49 consisted of gas-electric motor 6008 and one baggage car, and was in charge of Conductor Bradley and Pilot Elwell, with Student Engineer Ludt operating the motor. It stopped just south of the crossing at about 12.53 p.m., on time, and after standing at that point for a brief interval it had started towards the crossing when the Nickel Plate train was seen approaching and it was again brought to a stop, this time with the forward end of the motor blocking the crossing, and almost immediately afterwards it was struck by Nickel Plate train second No. 58.

Eastbound Nickel Plate freight train second No. 58 consisted of 67 cars and a caboose, hauled by engine 669, and was in charge of Conductor Terwilliger and Engineman Koelliker. This train, which was several hours late on its schedule, was brought to a stop at a point variously estimated to have been from 15 to 30 car-lengths west of the crossing. The signal being in the vertical or proceed position it immediately started ahead and had attained a speed of from 6 to 10 miles per hour when it collided with Baltimore and Ohio passenger train No. 49 on the crossing.

Motor 6008 was derailed and badly damaged and the forward end of the baggage car of train No. 49 was pulled from its truck, engine 669 sustained only slight damage. The employees killed were the pilot and the student engineman of train No. 49.

Summary of evidence

Instructor Lee, of the Brill Motor Car Company, who was riding on train No. 49 at the time of the accident, stated that the train was stopped about 75 yards south of

the crossing, at which time he was standing in the doorway between the smoking compartment and the engine room near the forward end of the car while Pilot Elwell was riding in the smoking compartment, with Student Engineman Ludt operating the train. After standing at that point a few seconds Student Engineman Ludt, while apparently looking at the crossing signal, opened the throttle and the train proceeded towards the crossing. It had attained a speed of 4 or 5 miles per hour when Pilot Elwell called Instructor Lee's attention to the approaching Nickel Plate freight train, shouted to Engineman Ludt to stop the train, and at the same time ran into the engine room; the brakes were applied in emergency bringing the train to a stop with the motor over the crossing, but he was unable to say which one of the two men applied the brakes. Instructor Lee said he did not observe the position of the signal prior to the accident but about 15 minutes later he noticed it in the vertical position.

Conductor Bradley, of train No. 49, stated that his train made the safety stop near the crossing, started moving slowly ahead, and upon reaching a point about two car-lengths from the crossing, while traveling at a speed of about 5 miles per hour, he noticed the Nickel Plate train approaching, it then being about 250 feet from the crossing. He was located near the center of the motor car and immediately pulled the whistle cord, the conductor's emergency valve being located at the rear of the car. Pilot Elwell, who was riding in the smoking compartment, observed the approaching train at about the same time and immediately rushed into the engine room, but Conductor Bradley could not say what action was taken by him toward bringing the train to a stop. He further stated he did not notice the signal while his train approached the crossing, but about seven or eight minutes after the accident had occurred he observed that it was set against his train. Conductor Bradley also said that Engineman Ludt was receiving instructions in the operation of the motor and was handling it at the time of the accident, but that this was his fifth trip as a student, which was the maximum time assigned for such instructions. The statements of Brakeman Eddy, of train No. 49, brought out nothing additional of importance and he was not in position to observe the indication of the signal prior to the occurrence of the accident. Baggage-master Broughton had gone forward into the motor car to get a drink of water, heard some one call a warning of danger, saw a collision was about to occur and jumped off. He immediately looked at the signal and saw that it was set for the Nickel Plate train to proceed.

Engineman Koelliker, of train second No. 58, stated that the air brakes on his train had worked properly up until the time he made a service application preparatory

to bringing his train to a stop for the Baltimore and Ohio crossing. A defective triple valve then developed which stopped his train a little sooner than he had expected, with the engine about 20 car-lengths west of the crossing. He noticed the crossing signal was in the vertical or proceed position, which he acknowledged by two short blasts of the whistle and then started ahead. His train had attained a speed of from 6 to 8 miles per hour when he observed train No. 49 approaching about one and one-half car-lengths distant from the crossing. At first he said the Baltimore and Ohio train seemed to be drifting, with the intention of stopping close to the crossing, and that his own train was within two car-lengths of the crossing when he realized the Baltimore and Ohio train was not going to stop; later on he stated that his own train was within two car-lengths of the crossing when he first saw the Baltimore and Ohio train and that he immediately applied the air brakes in emergency. In either event, however, he was unable to bring his train to a stop before reaching the crossing. Engineman Koelliker said he was familiar with the rules requiring trains to stop within a distance of 200 to 800 feet from the crossing and estimated that his train was brought to a stop within the prescribed distance.

Fireman Hinkle, of train second No. 58, stated his train was brought to a stop about 20 car-lengths from the crossing, that the signal was in the vertical position and remained in that position until after the accident, and that he called its indication to the engineman who repeated it. After two blasts of the whistle were sounded the train proceeded, but when it had reached a point from one to two car-lengths from the crossing, traveling at a speed of from 5 to 10 miles per hour, when the engineman applied the air brakes, at which time Fireman Hinkle jumped off without waiting to ascertain the nature of the trouble.

Conductor Terwilliger and Brakeman Holland, of train second No. 58, were riding in the caboose and their statements brought out no additional facts. Brakeman Clements was riding on the 15th car in the train and when the brakes were applied approaching the crossing he looked ahead and saw the signal in the vertical position, with the Baltimore and Ohio train nearly fouling the crossing.

Operator Hulse, stationed at the Nickel Plate office and in charge of the operation of the signal, stated that train second No. 58 stopped about 28 or 30 car-lengths west of the crossing, at which time train No. 49 was not in sight. The signal was then in the vertical position, having been left in that position since an eastbound Nickel Plate yard engine passed over the crossing about 20 minutes prior to that time. Shortly afterwards train No. 49

whistled for the crossing, but in the meantime train second No. 58 had started and on account of the speed that train was then making he decided it was too late to change the indication of the signal, although ordinarily the preference is given to first-class trains. Train No. 49 came to a stop approximately 350 feet from the crossing; he then heard its motor start and realizing that something was about to happen he watched it as it approached the crossing. It proceeded at a speed of about 2 miles per hour, was brought almost to a stop about two rail-lengths from the crossing, and then seemed to drift until it fouled the crossing. He also said the brakes were applied on train second No. 58 when it had reached a point about 85 feet west of the crossing, at which time its speed was about 20 miles per hour, and he thought its speed had been reduced to about 8 miles per hour at the time of the accident. Operator Hulse further stated the rules provide that the signal be set in a neutral position, or at an angle of 45°, when not in use, but that on account of the volume of traffic being much greater on the Nickel Plate than it is on the Baltimore and Ohio Railroad, together with the amount of work required at the telegraph office, the signal is usually left in the vertical position.

The statements of Yard Conductor Roth, of the Nickel Plate, who was in the telegraph office at the time the trains involved made the safety stop, practically corroborated those of Operator Hulse, except that he estimated train second No. 58 approached the crossing at a speed of approximately 8 miles and train No. 49 at a speed of about 4 miles per hour. He also stated that when the Nickel Plate train had reached a point about 75 feet, and the Baltimore and Ohio train about 50 feet, from the crossing he left the office and gave both trains a slow signal and then a stop signal, at this time the signal governing the crossing still was in the vertical position. He heard a sound from the Baltimore and Ohio train like the grating of gears out of adjustment and thought the train would stop but suddenly it seemed to lurch ahead toward the crossing.

Conclusions.

This accident was caused primarily by the failure of Student Engineman Ludt, of train No. 49, properly to obey the indication of the signal governing train movements over the crossing. A contributing cause was the failure of Pilot Elwell, of the same train, to be in a position properly to supervise the movement of his train.

The evidence indicates that Engineman Ludt brought his train to a stop within the distance proscribed by the rules, that the train then started and moved slowly towards the crossing, due either to an application of power or to the fact that he permitted it to drift on the descending grade, and that he failed to again bring the train to a stop before reaching the crossing, although the signal governing the movement was set against his train at the time the safety stop was made and remained in that position until after the accident had occurred. The reason for his failure to be governed by the indication of the crossing signal could not be ascertained.

Pilot Elwell contributed to the cause of the accident by reason of the fact that as his train approached the crossing he was riding in the smoking compartment instead of the engine room where he should have been located in order to supervise the operation of the motor.

Engineman Ludt had had more than 20 years' experience in engine service and this was his fifth and final trip in learning the operation of gasoline motor cars. Until he had been properly qualified in this service, however, it was incumbent on Pilot Elwell to remain in position to take immediate charge of the operation of the motor, particularly when approaching junctions, crossings and other similar points of possible danger. Had he remained in his proper position the accident probably would not have occurred.

While the testimony is somewhat conflicting as to the location of train second No. 58 when it was first brought to a stop, attention is called to the fact that statements made by the members of the crew as to their location with respect to switches, road crossings, etc., indicated that the engine must have been nearly 1,375 feet from the crossing, whereas the state law requires trains to stop not less than 200 feet nor more than 800 feet from such a crossing, while the Nickel Plate stop board is located 280 feet from the crossing.

All of the employees involved were experienced men, except as to Engineman Ludt's knowledge of the operation of gasoline motor cars, and 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.