

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE EVANSVILLE AND OHIO VALLEY RAILWAY AT CLAY,  
IND., ON SEPTEMBER 7, 1927.

October 21, 1927.

To the Commission:

On September 7, 1927, there was a collision between a passenger train and a standing car on the Evansville and Ohio Valley Railway at Clay, Ind., which resulted in the death of 3 passengers and 1 employee, and the injury of 58 passengers.

Location and method of operation

This accident occurred on the Evansville and Henderson Division, which extends between Evansville, Ind., and Henderson, Ky., a distance of 103 miles and is a single-track electric line over which trains are operated by time-table, train orders and an automatic block-signal system. At the time of the accident trains were being operated by a special arrangement, intended to facilitate the movement of trains between Dade Park and Evansville, which superseded the time-table rules. The accident occurred on the siding at Clay, which consists of a spur track 850 feet in length, approaching the spur-track switch from the south there are about 2 miles of tangent track, the switch being located on this tangent at a point 3,986 feet from its southern end. The grade in the vicinity is practically level.

The signals consist of boxes equipped with a 4-inch red lens and operated by means of a lever which extends upward into the housing. They are so connected that when a northbound train is ready to leave Dade Park the movement of the lever causes the display of a stop indication at Clay for southbound trains, and when a southbound train is ready to leave Kentucky Avenue the movement of the lever at that point causes the display of a stop indication at Clay for northbound trains. There are two signal boxes at Clay, working in conjunction with those at Dade Park and Kentucky Avenue. When the signal are "dark," that is, when no indication is displayed, it shows that the block is clear.

The siding at Clay is used both as an industrial track and as a passing track. The switch is a facing-point switch for northbound trains, leading off the main track to the right, and it is operated by an Elliot type high switch stand which is located on the east or right side of the track, as is also the case with the two signal boxes. It is equipped with a metal target with a green disc to indicate when the switch is closed and a red arrow to indicate when it is open. In addition it has a switch lamp of the ordinary type which displays lights corresponding in color to those displayed by the target. On account of the switch stand being located in line with the power poles, together with the two signal boxes, which are about the same height as the switch stand, the view of the switch signals from an approaching northbound train is restricted to approximately 400 feet, while the lights displayed by the signal boxes are considerably brighter than those displayed by the switch lamp, and when contrasted the latter are almost indiscernable. On the day of the accident, and for several days prior thereto, there was a switchtender on duty at Clay for the purpose of operating the block and also to handle the switch when the siding was used for meeting and passing trains.

The weather was clear at the time of the accident, which occurred at about 5 20 p.m.

#### Description

On the day of the accident southbound motor car 117, in charge of Motorman-Conductor Brown, departed from Evansville, 3.05 miles north of Clay, at 4 p.m. and upon arrival at Clay it entered the siding at that point for the purpose of meeting a northbound car. After the opposing car had passed, car 117 headed out on the main track and proceeded to Dale Park, 3.5 miles south of Clay. Shortly afterwards this car started northward on its return trip and while it was approaching Clay the switchtender at that point adjusted the block signal and signaled Motorman Brown to proceed. The switch was open, however, and the car entered the siding and collided with a loaded freight car while traveling at a speed estimated to have been about 40 miles per hour.

The freight car was driven ahead against a cut of two cars standing a short distance beyond, forcing the leading car of the cut off the end of the track, none of the other equipment was derailed. Car 117 was considerably damaged while the car with which it collided was slightly damaged. The employee killed was the motorman-conductor.

### Summary of evidence

Switchtender Lloyd, who is regularly employed as a section foreman but who had been temporarily assigned three days prior to the accident to operate the signals and switch at Clay during the racing season at Dade Park, stated that when car 117 arrived on its southbound trip he opened the switch and instructed the motorman to back in on the siding for the purpose of meeting another car. After an interval of several minutes, during which time he conversed with Motorman Brown, the opposing car passed and he then opened the switch and permitted car 117 to return to the main track. Switchtender Lloyd said he closed the switch but did not lock it and adjusted the trolley, after which the car departed southward and he then noted that the points were lined for a main-track movement. He emphatically maintained that he closed the switch, stating that in doing so he placed the switch lever in the socket on the west side of the switch stand, further stating that when the lever is set in the socket on the south side of the stand the switch is open; although as a matter of fact the switch is open when the lever is on the west side of the stand. Between the time at which car 117 left Clay, and its return about 30 minutes later, he was absent and out of sight of the switch for a period of from five to eight minutes. Just prior to his departure he saw three men walking towards him, about six pole-lengths distant, but upon his return he observed no one in the vicinity and he did not again notice the position of the switch. When car 117 whistled for the curve south of Clay, on the return trip from Dade Park, he communicated by telephone with the block operator at Kentucky Avenue and then operated the signals and gave the motorman of the approaching car a proceed signal, assuming that the switch was still closed. He said that before the car had reached him he began looking towards the south for the purpose of observing following cars, and his first knowledge of anything wrong was when he heard the crash. Switchtender Lloyd could not account for the fact that the car entered the siding as when he observed the position of the switch a short time after the occurrence of the accident he found it set for the main track.

W. R. Southwood, a passenger on car 117 at the time of the accident, said he was riding in the front compartment of the car as it was approaching the switch at Clay and that when it had reached a point from 80 to 100 feet from the switch he noticed the target was displaying a red indication, he immediately called to other passengers that the car was about to enter an open switch. He stated that when the car entered the switch the lurch

caused the motorman to fall, but that he immediately arose and started to operate the controls at about the time the collision occurred. He further stated that he did not see the switchtender give any signals while the car was approaching, nor did the motorman indicate by word or gesture that he realized the switch was set for the siding.

Motorman Voiles, who reached the scene of the accident on the following car about 5 or 10 minutes after its occurrence, stated that upon his arrival he stopped his car south of the switch, which was then open, and that he requested a bystander to close it in order for him to proceed. He also said that during the morning, while acting as an inspector, he had inspected car 117 and found it to be in good condition.

Master Mechanic Burke said car 117 was last given a general inspection on August 26 and at that time it was found in good condition and since then no defects had been reported. He estimated that a car of the type involved, traveling at a speed of 40 miles per hour, could be brought to a stop within a distance of 400 feet by reversing the motor and applying the brakes in emergency.

Superintendent of Transportation Moore stated that both Switchtender Lloyd and Motorman Brown had passed the prescribed examinations and were considered competent for the duties assigned to them.

#### Conclusions

This accident was caused by an open switch, for which Switchtender Lloyd was responsible.

Switchtender Lloyd insisted that he closed the switch after car 117 left Clay on its southbound trip, and when it returned on the northbound trip he gave the motorman a proceed signal without noticing that the switch was open. It seems apparent either that some one opened the unlocked switch while Switchtender Lloyd was temporarily absent from his post or else that he failed to close the switch following the departure of car 117 on its southbound trip. In either event, it was incumbent on him to know that the switch was in proper position before giving a clear signal to an approaching train, he had been placed at this point for the particular purpose of handling the switch and operating the block system, and there is no excuse for his failure properly to attend to this duty.

According to the evidence available, Motorman Brown apparently accepted the proceed signal given by Switch-tender Lloyd as an indication that everything was in readiness for the train to continue on its way, and the fact that he was thrown from his seat by the lurch of the car as it entered the switch, would seem to indicate that he had no prior knowledge of the fact that the switch was open. The view of the switch stand signal indications from the motorman's post on a northbound car is obscured by the block-signal boxes, and a very material improvement in this respect could be effected by raising or lowering these boxes on the pole on which they are mounted, which is the first pole south of the switch stand.

An adequate automatic train stop or train control device would have prevented this accident.

The employees involved were experienced men, 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. SCRLAND,

Director.