

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE CENTRAL RAILROAD OF NEW JERSEY AT CRANFORD,  
N. J., ON AUGUST 21, 1924.

September 19, 1924.

To the Commission:

On August 21, 1924, a passenger train on the Central Railroad of New Jersey struck an automobile truck and was derailed at Cranford, N. J., resulting in the death of 1 passenger, 1 employee on duty, 1 employee off duty, and the driver of the truck, and the injury of 25 passengers and 1 employee

Location and method of operation

This accident occurred on that part of the Central Division extending between Jersey City and Somerville, N. J., a distance of 34.64 miles; in the vicinity of the point of accident this is a six-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at Lincoln Avenue, which crosses the tracks at an angle of 42° from northwest to southeast, at a point 2,445 feet west of Cranford station. From north to south the tracks are numbered 6, 4, 2, 1, 3, and 5. The accident occurred on track 1, which is the eastbound passenger track. The tracks are tangent for a considerable distance in each direction from the point of accident, while the grade is 0.6 per cent ascending for eastbound trains to within about 300 feet of the crossing, from which point it is level.

Approaching the railroad from the south on Lincoln Avenue, the view of the tracks to the west is nearly obscured until a vehicle reaches a point 40 feet south of the south rail of track 1, or just before reaching the outside rail of track 5. The grade from the south on the highway is level until a point 12 feet from the outside rail of the tracks is reached, then it ascends to track 3, being level across track 1. A crossing sign is located on the east side of the highway about 11 feet south of the tracks, reading "RAILROAD CROSSING. LOOK OUT for the LOCOMOTIVE." There is also an automatic crossing bell, located in a partially screened enclosure on top of the mast supporting the crossing sign. There

is a similar sign and bell at the north approach of the crossing, on the west side of the highway. These bells ring when a train approaches the crossing, the control circuit operated by eastbound trains beginning at a point 3,502 feet west of the crossing, the bells continue to ring until the train passes the crossing. The hammer strikes the bells at the rate of 90 strokes to the minute. The bell at the southern approach can be heard faintly in an automobile with the engine running in low speed at a point 75 feet from the outside rail and about 65 feet from the bell. The weather was clear at the time of the accident, which occurred at about 9.29 a. m.

#### Description

Eastbound passenger train No. 604, operated jointly by the Central Railroad of New Jersey and the Reading Company, consisted of one combination car, two coaches, and one Pullman parlor car, of all-steel construction, in the order named, hauled by engine 346, and was in charge of Conductor Wolfinger and Enginemen Gilbert. This train passed Westfield, 2.33 miles from Cranford, at 9.27 a. m., one minute late, and at Lincoln Avenue struck the automobile truck while traveling at a speed estimated to have been between 55 and 60 miles an hour.

The automobile truck was proceeding northward on Lincoln Avenue. It crossed tracks 5 and 3, and proceeded upon track 1 directly in front of the approaching train at a good rate of speed and had almost gotten across when its rear end was struck by train No. 604.

The remains of the truck chassis came to rest across tracks 4 and 6, upright, 87 feet east of the crossing. Engine 346 also came to rest across tracks 4 and 6, on its left side headed northeast, its forward end being 707 feet east of the crossing. The tender was on its left side on track 1, its head end being 945 feet from the crossing. All of the cars were derailed except the rear truck of the rear car, the first two being overturned, these cars stretched across track 3 and fouled track 5. The first car was opposite the tender, and the last car was on track 1 opposite the engine. The track was badly damaged. The employee on duty killed was the fireman.

#### Summary of evidence.

Engineman Gilbert stated that the speed of the train was about 55 miles an hour approaching Lincoln Avenue, and that the automatic engine bell, operated by air, was ringing. He sounded the engine whistle for the

crossing and just after finishing this signal, when a short distance west of the crossing, the truck suddenly appeared from the south, traveling at a good rate of speed, and proceeded upon the track directly in front of the engine, he applied the air brakes in emergency just about the time the engine struck the truck. The air brakes were tested and worked properly en route. Engineman Gilbert further stated that he had seen several narrow escapes from collisions between automobiles and trains at this particular crossing. The first intimation other members of the crew had of anything wrong was when the accident occurred; in other respects their testimony practically corroborated that of Engineman Gilbert. Conductor Wolfinger also stated that he heard the highway crossing bell ringing after the accident.

A number of witnesses testified to the effect that the highway crossing bell was ringing and that the engine whistle was sounded properly as the train approached Lincoln Avenue, but that the truck approached the crossing at a good rate of speed and continued upon the tracks, without reducing the speed materially, directly in front of the train. Efforts were made by a mail carrier and a nearby resident to attract the attention of the driver of the truck in time to avert the accident, but to no avail. He was seen to look to the right and then to the left, at which time he apparently saw the train for the first time, too late to stop the truck.

The automobile truck involved in this accident was a five-ton Mack truck having a light weight of 14,400 pounds and a loaded weight of 24,400 pounds. It was owned and operated by the Newark Paving Company and was being driven by Harry Thompson, who held New Jersey driver's license No. 181264. He was 26 years of age and had been in the employ of the paving company for about two and one-half years, he was said to have been considered a careful driver, having a good record both as an employee and as a driver.

According to the records the last fatal accident to occur at this crossing happened on September 21, 1923, at which time a pedestrian, 11 years of age, was killed while crossing track 1. About 188 train movements are made over this crossing per day, while there is much switching in the vicinity, causing the bells to ring a great deal. With the exception of the highway crossing bells and sign posts, no protection is afforded vehicular traffic at this crossing. There is, however, a foot bridge for the use of pedestrians

### Conclusions

This accident was caused by the driver of an automobile truck proceeding upon a railroad crossing at grade directly in front of an approaching passenger train.

The investigation indicates that the proper warning signals were sounded by the engineer of train No. 604, and that the highway crossing bells were ringing as the train approached the crossing, also that efforts were made by persons to attract the attention of the driver of the truck in time to avert the accident, but that he did not use the precaution necessary before proceeding over the railroad crossing at a point where the view of approaching eastbound trains is nearly obscured. There was no other train in the immediate vicinity of the crossing at the time of the accident. Had the driver of the truck approached the crossing under proper control and definitely ascertained that the way was clear before proceeding across the tracks, this accident would not have occurred.

This crossing is not protected by a flagman or gates, while the highway crossing bells can not be heard distinctly for any material distance. In view of the large number of train movements and the various switching operations in this vicinity, as well as the fact that this is a six-track crossing, the distance over the crossing along the center of the roadway from the outside rails of the tracks being 95.4 feet, it is believed that the crossing may well be considered as dangerous and that some form of protection for vehicular highway traffic, in addition to the crossing signs and bells, is necessary.

All of the railroad employees involved were experienced men. 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.