

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3029
LOUISVILLE AND NASHVILLE RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR RUSSELLVILLE, KY., CN
OCTOBER 15, 1946

SUMMARY

Railroad: Louisville and Nashville
Date: October 15, 1946
Location: Russellville, Ky.
Kind of accident: Collision
Equipment involved: Passenger train : Motor-truck
Train number: 199 :
Engine number: 249 :
Consist: 5 cars :
Estimated speeds: 65 m. p. h. : Unknown
Operation: Timetable and train orders
Track: Single; 1° curve; 1.11 percent descending grade southward
Highway: Tangent; crosses track at angle of 34°; 3.9 percent ascending grade toward the crossing from both directions.
Weather: Clear
Time: 2:56 p. m.
Casualties: 2 killed; 11 injured
Cause: Failure to operate motor-truck approaching railroad crossing at grade in accordance with requirements of law

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3029

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

November 25, 1946

Accident near Russellville, Ky., on October 15, 1946, caused by failure to operate a motor-truck approaching a railroad crossing at grade in accordance with requirements of law.

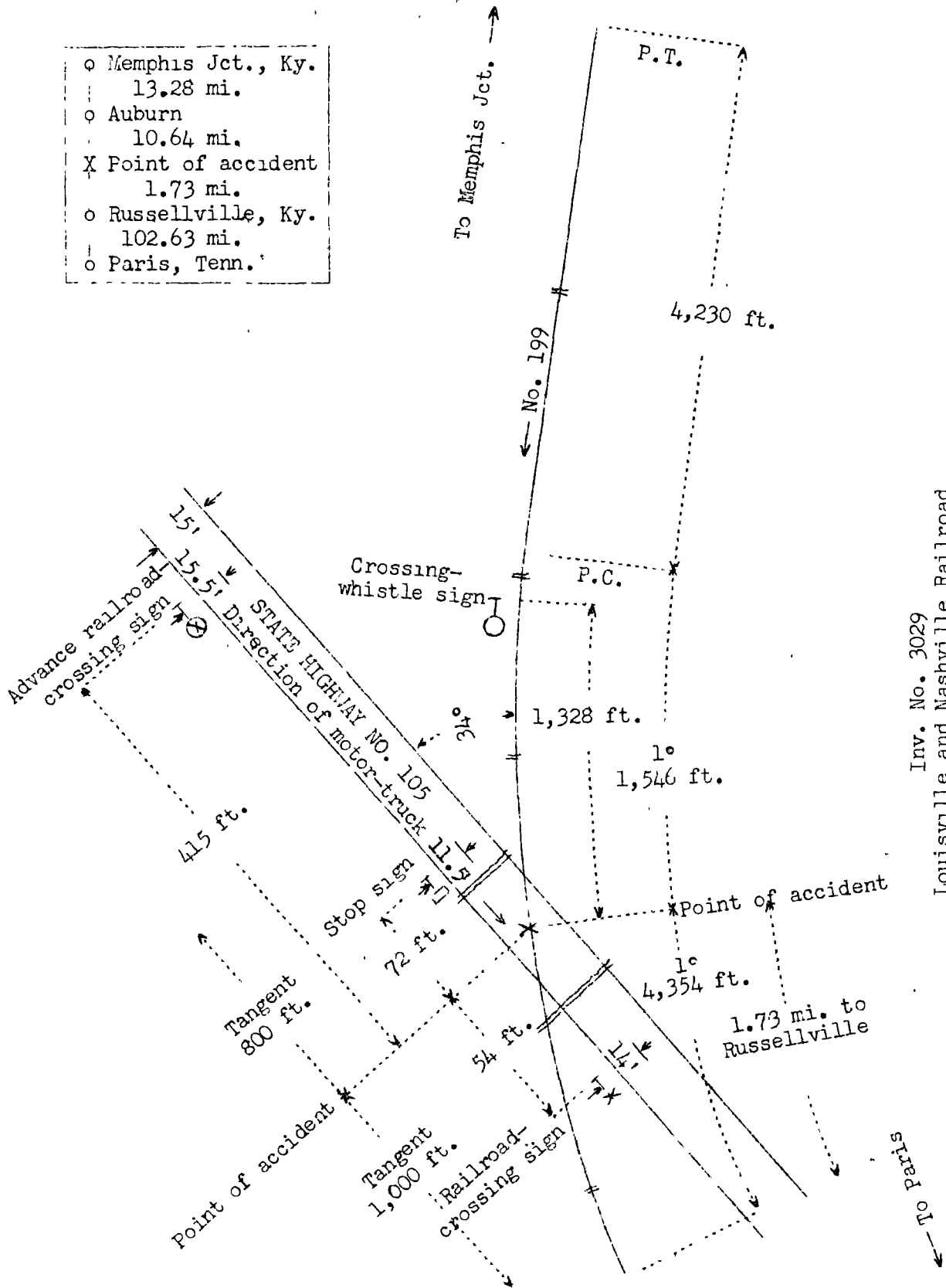
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On October 15, 1946, there was a collision between a passenger train on the Louisville and Nashville Railroad and a motor-truck at a highway grade crossing near Russellville, Ky., which resulted in the death of 2 train-service employees, and the injury of 11 passengers.

¹Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.

- o Memphis Jct., Ky.
13.28 mi.
- o Auburn
10.64 mi.
- X Point of accident
1.73 mi.
- o Russellville, Ky.
102.63 mi.
- o Paris, Tenn.



Inv. No. 3029
 Louisville and Nashville Railroad
 Russellville, Ky.
 October 15, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the Louisville Division extending between Memphis Jct., Ky., and Paris, Tenn., 123.28 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred 23.92 miles south of Memphis Jct. and 1.73 miles north of the station at Russellville, where the railroad is crossed at grade by State Highway No. 105. From the north on the railroad there is a tangent 4,230 feet in length, which is followed by a 1° curve to the left 1,543 feet to the point of accident and 4,354 feet southward. At the point of accident the grade is 1.11 percent descending southward.

State Highway No. 105 intersects the railroad at an angle of 34°, and is surfaced with asphaltum and concrete to a width of 15 feet. The highway is tangent throughout a distance of more than 800 feet immediately west of the crossing and about 1,000 feet eastward. The grade for eastbound vehicles is 3.9 percent ascending 100 feet, then it is 3.9 percent descending 6 feet to the crossing and about 100 feet eastward. The crossing is 15 feet wide and is surfaced with crushed stone and screenings. The level of the surface of the crossing is about 1-1/4 inches below the level of the tops of the rails. Flangeways about 2-1/2 inches wide are provided.

An advance railroad-crossing sign is located 415 feet west of the crossing and 15.5 feet south of the centerline of the highway. This sign is a disc 30 inches in diameter and is mounted on a mast 4 feet above the level of the highway. It bears two diagonal lines intersecting at right angles at its center, and bears the letters "R P" in black and in colorless reflector buttons on a yellow background. A rectangular-shape sign 30 inches by 18 inches, which bears the words "STOP--KEN-TUCKY LAW" in black on a white background, is mounted on a mast 5 feet above the level of the highway, 72 feet west of the crossing and 11.5 feet south of the centerline of the highway. A standard cross-buck railroad-crossing sign is located to the right of the direction of east-bound traffic, 54 feet east of the crossing and 11 feet south of the centerline of the highway. This sign is mounted on a mast 12 feet above the level of the highway, and bears the words "RAILROAD CROSSING" in black on a white background. There are two diagonal lines in white intersecting at right angles and the letters "R.P." in white on the surface of the eastward lane of the highway, 352 feet west of the crossing. A crossing-whistle sign for south-bound trains is located 1,323 feet north of the crossing.

Operating rules read in part as follows:

14. Engine Whistle Signals.

Note.--The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. * * *

Sound	Indication
* * *	
(1) — — o —	Approaching public road crossings at grade. The last sound must end as engine enters crossing. * * *
* * *	

30 (a). The engine bell must be rung from whistling posts to public road crossings at grade. * * *

Section 189-560, of the Revised Statutes of Kentucky, reads in part as follows:

* * *

(2) Whenever the tracks of any railroad * * * over which regularly scheduled trains or cars are operated cross a highway at grade the department may designate that crossing as "unsafe" and no operator of any vehicle shall cross the crossing without first bringing his vehicle to a full stop at not less than ten feet, nor more than thirty feet, from the nearest rail of the tracks.

(3) At crossings designated "unsafe" the department shall place and maintain on each side of the tracks, on the right side of the highway, not more than one hundred feet from the track, a signboard not less than six feet from the ground, eighteen by thirty-six inches, with the inscription "Stop--Kentucky Law". * * *

The maximum authorized speed for the train involved was 70 miles per hour.

Description of Accident

No. 109, a south-bound first-class passenger train, consisted of engine 240, a 4-6-2 type, one passenger-baggage car, three coaches and one Pullman sleeping car, in the order named.

All cars were of steel construction. This train passed Auburn, the last open office, 12.37 miles north of Russellville, at 2:46 p. m., 1 minute late, and while moving at an estimated speed of 65 miles per hour it struck a motor-truck on a highway grade crossing 1.73 miles north of the station at Russellville. The engine and the first four cars were derailed.

The motor-truck involved was a tractor and semi-trailer, owned and operated by W. L. Hailey and Company, Nashville, Tenn. The driver, who was the sole occupant, held Tennessee chauffeur's license No. 59362. The tractor was a 1944 GOMA Federal model, and bore Tennessee license No. 1 ^P Z059. It weighed 28,000 pounds, was equipped with dual tires on the rear wheels, air brakes on all wheels, and was provided with an enclosed steel cab. The gear ratio of the tractor was 7.08 to 1. The tractor was hauling a heavy-duty drop-frame type semi-trailer, which was designed for transporting heavy machinery. It was provided with two assemblies of 4 wheels each at the rear end, and was equipped with vacuum operated brakes. The light-weight of the semi-trailer was 14,100 pounds. At the time of the accident the cargo consisted of a power-driven excavator weighing about 21 tons. The overall length of the tractor and semi-trailer was 43 feet. This vehicle was moving eastward on the highway at an unknown speed when it entered upon the crossing and was struck by No. 199.

The semi-trailer was torn loose from the tractor, and stopped upright across the highway and about 78 feet east of the crossing. The tractor stopped upside down, about 176 feet east of the crossing and 14 feet south of the highway. The engine of No. 199 stopped on its left side and down an embankment, with the front end of the engine 273 feet south of the crossing, 59 feet west of the track and at an angle of about 20 degrees to it. The tender, remaining coupled, stopped on its left side and at right angles to the engine. The first car became separated from the tender and the second car and stopped upright on the roadbed, with its front end 293 feet south of the crossing. The second car stopped with its front end down the embankment end against the tender of the engine, and leaned to the west at an angle of about 45 degrees. The third and fourth cars stopped upright and in line with the track. The cab of the engine was demolished, steam pipes within the cab were broken and the engine was otherwise badly damaged. The derailed cars were slightly damaged.

The weather was clear at the time of the accident, which occurred about 2:56 p. m.

The engineer and the fireman were killed.

During the 24-hour period beginning at 8:01 a. m.,

October 22, 275 automobiles, 152 trucks, 12 buses, 7 tractors, 2 horse-drawn vehicles, 12 trains and 4 track-motor cars passed over the crossing.

Discussion

No. 199 was approaching the crossing at a speed of about 65 miles per hour, in territory where the maximum authorized speed was 70 miles per hour. The brakes of this train had been tested and had functioned properly en route. The members of the train crew were in various locations throughout the cars of the train. The first they knew of anything being wrong was when the brakes were applied in emergency just before the collision occurred. It could not be determined when the engineer and the fireman first became aware that the motor-truck had entered upon the crossing as they were killed in the accident. Apparently a lookout was being maintained as several persons in the vicinity of the crossing heard the engine whistle signal sounded for the crossing. The last blast of the whistle was prolonged until the collision occurred. Examination of the engine after the accident disclosed that the throttle lever was in closed position and the automatic brake valve was in emergency position.

The driver of the motor-truck was an experienced driver and had made several trips over the crossing prior to the accident. The driver was not available during the investigation, therefore, it could not be determined when he first became aware of the approaching train. A witness who was about 150 feet west of the crossing at the time of the accident said that the motor-truck was moving at a slow rate of speed and that it proceeded, without stopping, upon the crossing immediately in front of the approaching train. Examination of the tractor after the accident disclosed that there was no condition of the cab that would have obscured the driver's vision.

The laws of the state of Kentucky governing the operation of motor vehicles require that when a crossing has been designated as "unsafe" by the state highway department and such crossing is protected by signs properly located and bearing the words "Stop--Kentucky Law", all vehicles must, before proceeding upon such crossing, stop not more than 30 feet nor less than 10 feet from the nearest railroad track. The crossing involved was protected by the prescribed stop sign and, in addition, it was protected by an advance railroad-crossing sign and a standard cross-buck railroad crossing sign. At the time of the accident visibility was not impaired by weather conditions, and the driver of the motor-truck could have seen the approaching train throughout a considerable distance north of the crossing.

Cause

It is found that this accident was caused by failure to operate a motor-truck approaching a railroad crossing at grade in accordance with requirements of law.

Dated at Washington, D. C., this twenty-fifth day of November, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.