INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3575

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

IN RE ACCIDENT

NEAR CORNERSVILLE, TENN., ON

MAY 28, 1954

SUMMARY

Date:	May 28, 1954	
Railroad:	Louisville and Nashville	
Location:	Cornersville, Tenn.	
Kind of accident:	Head-end collision	
Equipment involved:	Track motor-car 5620 and trailer	Maintenance-of-way service train
Train number:		Work Extra 99
Engine number:		Diesel-electric unit 99
Consist:		4 cars, caboose
Estimated speeds:	30 m. p. h.	35 m. p. h.
Operation:	Signal indications	
Track.	Single; 2° curve; 0.40 percent ascending grade southward	
Weather:	Clear	
Time:	1:46 p. m.	
Casualties:	2 killed; 2 injured	
Cause	Failure to provide adequate protection for movement of track motor-car	
Recommendation:	That the Louisville and Nashville Railroad Company provide adequate protection for movement of track motor-cars on its line	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3575

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

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

July 13, 1954

Accident near Cornersville, Tenn., on May 28, 1954, caused by failure to provide adequate protection for the movement of a track motor-car.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner:

On May 28, 1954, there was a head-end collision between a track motor-car and trailer and a maintenance-of-way service train on the Louisville and Nashville Railroad near Cornersville, Tenn., which resulted in the death of two maintenance-of-way employees, and the injury of two maintenance-of-way employees.

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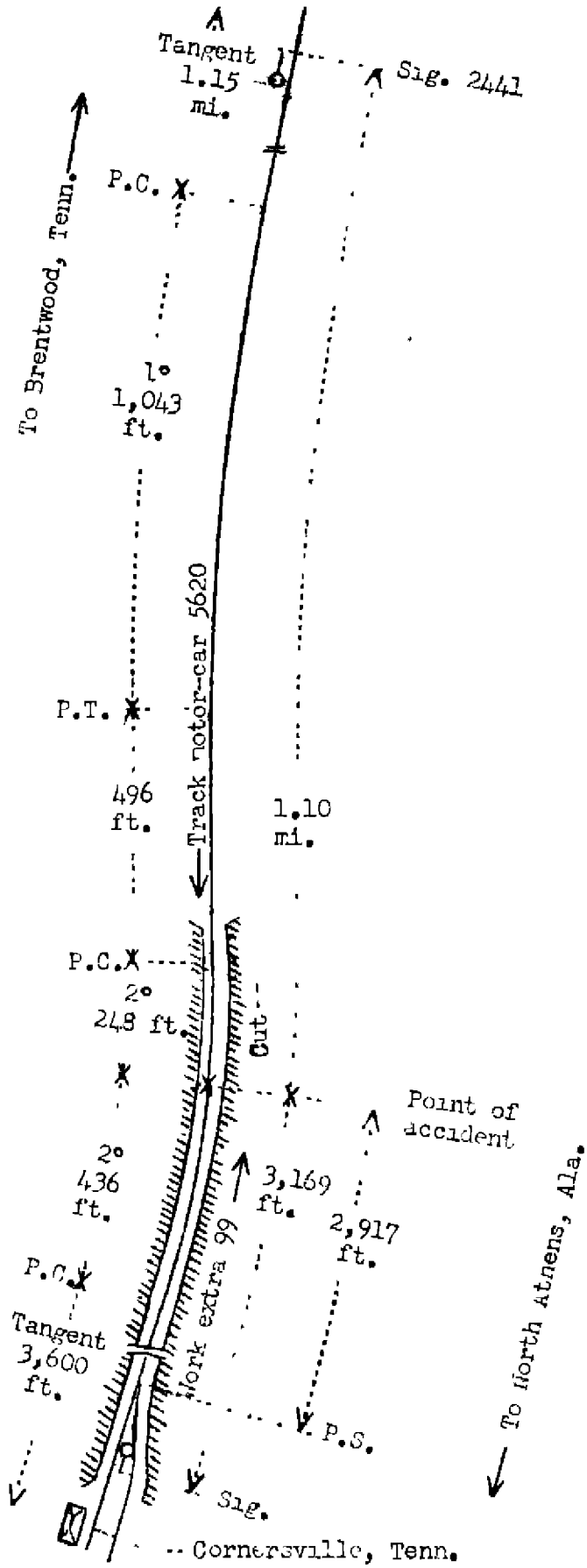
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Brentwood, Tenn.
42.04 mi.
Lewisburg
6.18 mi.
Point of accident
1.26 mi.
Cornersville
14.37 mi.
Woodrow
6.67 mi.
Wheelerton, Tenn.
7.60 mi.
Ardmore, Ala.
14.32 mi.
North Athens, Ala.

Report No. 3575
Louisville and Nashville Railroad
Cornersville, Tenn.
May 28,1954

Location of Accident and Method of Operation

This accident occurred on that part of the Birmingham Division extending between Brentwood, Tenn., and North Athens, Ala., 92.44 miles, a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 48.22 miles south of Brentwood and 2,917 feet north of the north siding-switch at Cornersville, Tenn. From the north there are in succession, a tangent 1.15 miles in length, a 1° curve to the left 1,043 feet, a tangent 496 feet, and a 2° curve to the right 248 feet to the point of accident and 436 feet southward. From the south there are, in succession, a tangent 3,600 feet in length and the curve on which the accident occurred. The grade is 0.40 percent ascending southward at the point of accident.

Between points 315 feet north and 4,125 feet south of the point of accident the track is laid in a cut. The walls of the cut rise to a maximum height of approximately 40 feet above the level of the tops of the rails at a point 320 feet south of the point of accident. On the curve on which the accident occurred the range of vision between opposing movements is restricted by the wall of the cut to a distance of approximately 450 feet.

Automatic signal 2441, governing south-bound movements, is located 1.10 miles north of the point of accident. A controlled signal governing north-bound movements is located immediately south of the north siding-switch at Cornersville. These signals are of the searchlight type and are approach lighted. They form part of a traffic-control system which extends between Brentwood and North Athens. The control machine is located at North Athens. It is operated by an employee designated as a train controller under the direction and supervision of the train dispatcher.

This carrier's rules and instructions for the government of maintenance-of-way employees read in part as follows:

> 126. Keeping Clear of Trains.--Track cars should be clear of main track ten minutes before trains are due, using time table and lineups to determine location of trains. * * *

Foremen and operators must use the utmost care in running their cars over the road. When possible they must have a written lineup showing movement of trains, and must read the lineup to other occupants of the car. They * * * shall operate car at all times prepared to stop in less than one-half (½) range of vision, * * * When no lineup can be secured, curves, tunnels and dangerous places must be flagged and constant lookout must be kept.

* * *

Safety rules read in part as follows:

37. The authorized employe in charge of car, when calling operator or train dispatcher, must first identify himself and give his location. Any information obtained respecting the movement of trains must not be construed as covering the position and movement of other motor cars. The person in charge of the operation of the car must, when practicable, procure information as to movements of trains. Dispatcher or operator will make memorandum of information given foreman or others in charge of car and have such person repeat the information given. Before trip is started, employe in charge of car shall read lineup on which movement is being made to other men on car and when information concerning train movements is not available motor car movement must be made under flag protection, using torpedoes and fusees either until a location is reached where information on trains can be secured, or until car reaches its destination. In addition to complying with these rules all other possible precautions must be taken to prevent collisions. * * *

Bulletin special instructions read in part as follows:

INSTRUCTIONS TO DISPATCHERS

When line-ups or other information is given to foremen through telegraph operators it must be transmitted in the form of a message, addressed to the foreman or other interested party, and telegraph operator must repeat it, * * *

* * *

When Dispatchers give information to motor car operators with respect to train movements, such information must be absolutely clear so that there will be no possibility of a misunderstanding * * *

INSTRUCTIONS TO TELEGRAPH OPERATORS

As a general practice, those desiring line-ups will receive them thru telegraph operators instead of train dispatchers. When telegraph operators request line-ups for motor car operation, thatfact must be clearly indicated to the dispatcher. Train dispatchers will continue to issue the line-ups in the manner described above to telegraph operators. Telegraph operators will issue the line-ups to the motor car operators and others requiring them, in writing where possible, but if that is not possible, the telegraph operator will transmit the information orally from the telegram received from the Dispatcher, and the party receiving it must be required to repeat his understanding. * * *

INSTRUCTIONS TO MOTOR CAR OPERATORS

When possible, the Foreman or man in charge of motor car must have a written line-up. As a general practice, line-ups must be secured through telegraph operators. When a motor car operator is at a point where no telegraph operator is on duty, he must contact a telegraph operator and have the telegraph operator secure the line-up. * * *

The motor car operator must identify himself, give his location, and state the limits between which he wishes to move, and the time he will start his motor car trip. * * *

* * *

Track motor cars must be clear of main track ten minutes before passenger trains are due. * * *

* * *

GENERAL INSTRUCTIONS

In no case is a motor car line-up to be considered good for more than one and a half ($1\frac{1}{2}$) hours from the time it is issued.

No train will be permitted to depart from its initial terminal ahead of time called to depart.

* * *

The maximum authorized speeds are 20 miles per hour for track motor-cars while pulling other cars and 50 miles per hour for freight trains.

Description of Accident

Track motor-car 5620, towing a trailer, departed southbound from Lewisburg, 7.44 miles north of Cornersville, about 1:30 p. m. The track motor-car was occupied by a section foreman and three sectionmen, and the trailer was occupied by two sectionmen. While the track motor-car was moving at an estimated speed of 30 miles per hour, it collided with Work Extra 99 at a point 2,917 feet north of the north siding-switch at Cornersville.

Work Extra 99, a north-bound maintenance-of-way service train, consisted of Diesel-electric unit 99, four cars, and a caboose. This train passed Wheelerton, Tenn., 21.04 miles south of Cornersville, at 1 07 p. m., passed Cornersville at 1:45 p. m., and while moving at an estimated speed of 35 miles per hour it collided with track motor-car 5620.

Work Extra 99 stopped with the front of the locomotive 1,170 feet north of the point of accident. The front end of the locomotive was slightly damaged. Track motor-car 5620 was moved northward to the point at which the locomotive stopped. The trailer stopped west of the track and 429 feet north of the point of accident. Both the track motor-car and the trailer were demolished.

The section foreman who was on the track motor-car and a sectionman who was on the trailer were killed. One sectionman who was on the track motor-car and one sectionman who was on the trailer were injured.

The weather was clear at the time of the accident, which occurred at 1:46 p. m.

Track motor-car 5620 was powered by a four-cylinder, 8 to 13 horsepower engine and was equipped with a two-speed transmission, a combination belt and chain drive, and four-wheel brakes. It was provided with safety railings at each end, a top, and side curtains. It weighed 1,140 pounds and had seating capacity for eight persons. Both the track motor-car and the trailer were insulated to prevent the shunting of track circuits.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 16.23 trains.

Discussion

On the day of the accident a section force stationed at Lewisburg performed work at that station during the forenoon. They were to perform work in the vicinity of the north siding-switch at Cornersville during the afternoon. There is no operator at Lewisburg, and when the members of the force returned from lunch, soon after 1 p. m., the foreman called the operator at Cornersville and requested a line-up. He identified himself to the operator and gave his location, but did not advise the operator that he intended to operate his track motor-car from Lewisburg to Cornersville. After ascertaining from the train dispatcher that a line-up had been issued to the operator at Ardmore, Ala., 28.64 miles south of Cornersville, the operator at Cornersville called this operator and requested a copy. The operator at Ardmore then transmitted a line-up which the dispatcher had issued at 12:33 p. m. and which read as follows:

> 12:30 p. m. Line-up
> Extra 412 North Lewisburg 12:28 p. m.
> Extra 836 North Woodrow 12:17 p. m.
> 23, Eng 437, arrived Ardmore 12:22 p. m.
> Work Extra 99 working between Wheelerton and Ardmore, ties up at Radnor.

Woodrow and Radnor are located, respectively, 21.81 miles south and 49.62 miles north of Lewisburg. Both the operator at Cornersville and the section foreman at Lewisburg copied the line-up as it was transmitted, and both operators said that the section foreman repeated the entire line-up after it had been transmitted. The operator at Cornersville noted on his copy that the line-up had been transmitted to the section foreman at 1:25 p. m.

Members of the section force said that when the foreman returned from the telephone booth he informed them that Work Extra 99 was between Ardmore and Wheelerton but did not mention the fact that the train would later proceed from Wheelerton to Radnor. At this time Extra 836 North had passed Lewisburg. After the track motor-car and trailer were placed on the track and tools were loaded on the trailer, the section force proceeded to the south siding-switch, stopped at that

point for several minutes, and then proceeded southward. Surviving members of the force said they estimated that the track motor-car approached the point where the accident occurred at a speed of between 25 and 35 miles per hour. Because of curvature of the track and the wall of the cut, these employees could not see the train until it was closely approaching. They said that after the train became visible to them there was only sufficient time for them to call a warning and to alight from the cars before the collision occurred. They did not know what action, if any, was taken by the foreman. After the accident occurred it was found that the foreman had in his possession a copy of the line-up which he had received from the operator at Ardmore. This copy, which was somewhat abbreviated, did not contain the information that the line-up had been issued at 12:30 p. m. or that Work Extra 99 would tie up at Radnor. However, the operators said that the foreman repeated the entire line-up after he received it, and from this it appears that he heard these portions of the line-up as it was transmitted.

Before Work Extra 99 started the north-bound trip, the conductor had received permission from the train dispatcher to occupy the main track between Ardmore and Wheelerton until 1:15 p. m. The crew was engaged in ditching operations, and the conductor informed the dispatcher that when this portion of the work was completed the train would be ready to proceed to Radnor. The train controller, on instructions from the train dispatcher, lined the route for the train to proceed northward through Wheelerton, and the train passed that point at 1:07 p. m. As this train was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout ahead from the control compartment of the locomotive. The conductor, the swing brakeman, and the flagman were in the caboose. The brakes of the train had been tested and had functioned properly when used. The signal at the north end of the siding at Cornersville indicated Proceed, and the crew had no knowledge that the track ahead was occupied by a track motor-car. The train approached the curve on which the accident occurred at a speed of about 35 miles per hour, as estimated by the engineer. The employees on the locomotive said that the track motor-car became visible to all of them at approximately the same time and that the engineer immediately made an emergency application of the brakes. The collision occurred almost immediately afterward and before the speed of the train had been appreciably reduced.

The rules of this carrier require the operator of a track motor-car to obtain a line-up of train movements before operating his track motor-car on a main track, or, if unable to obtain a line-up, to operate the track motor-car only under protection of a flagman. In the instant case the operator at Ardrore received a line-up from the train dispatcher at 12:33 p. m. When he received a request for a copy of the line-up from the section foreman at Lewisburg, he transmitted it, as was the custom, without the knowledge of the train dispatcher. This line-up, which was received by the section foreman approximately 52 minutes after it was issued by the dispatcher, indicated only the locations of trains at the time it was issued. Work Extra 99 had passed Wheelerton en route to Radnor approximately 18 minutes before the section foreman received the line-up, and this train was shown on the line-up as working between Wheelerton and Ardrore. Track motor-cars are required to be clear of the main track not less than 10 minutes before trains are due, but trains are not restricted by the issuance of line-ups and the responsibility for computing the running times of trains and determining the times and places at which the track should be cleared for trains is placed on the operators of the track motor-cars. This method of operation does not provide adequate protection for the movement of track motor-cars.

The signals in the vicinity of the point of accident are approach lighted, and, except when the approach circuits are occupied, do not convey information to the occupants of track motor-cars as to the locations of trains.

Since January 1, 1944, the Commission has investigated 50 collisions, including the present case, which were caused by failure to provide adequate protection for the movement of track motor-cars These accidents resulted in the death of 87 persons and the injury of 146 persons. In the reports covering the investigations of these accidents, the Commission repeatedly has recommended that the carriers take measures to provide adequate protection for the movement of track motor-cars on their lines.

Cause

This accident was caused by failure to provide adequate protection for the movement of a track motor-car.

Recommendation

It is recommended that the Louisville and Nashville Railroad Company provide adequate protection for the movement of track motor-cars on its line.

Dated at Washington, D. C., this thirteenth day of July, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.