

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2674
THE LOUISVILLE & NASHVILLE RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT HENDERSON, KY., ON
FEBRUARY 13, 1943

SUMMARY

Railroad: Louisville & Nashville
Date: February 13, 1943
Location: Henderson, Ky.
Kind of accident: Derailment
Train involved: Engine and cars
Engine number: 1540
Consist: 13 cars
Estimated speed: 8 m. p. h.
Operation: Auxiliary track
Track: Single; 8° curve; level
Weather: Snowing
Time: About 5 a. m.
Casualties: 1 killed
Cause: Accident caused by failure properly to control speed of cut of cars moving on auxiliary track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2674

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

THE LOUISVILLE & NASHVILLE RAILROAD COMPANY

March 23, 1943.

Accident at Henderson, Ky., on February 13, 1943, caused
by failure properly to control speed of cut of cars
moving on auxiliary track.

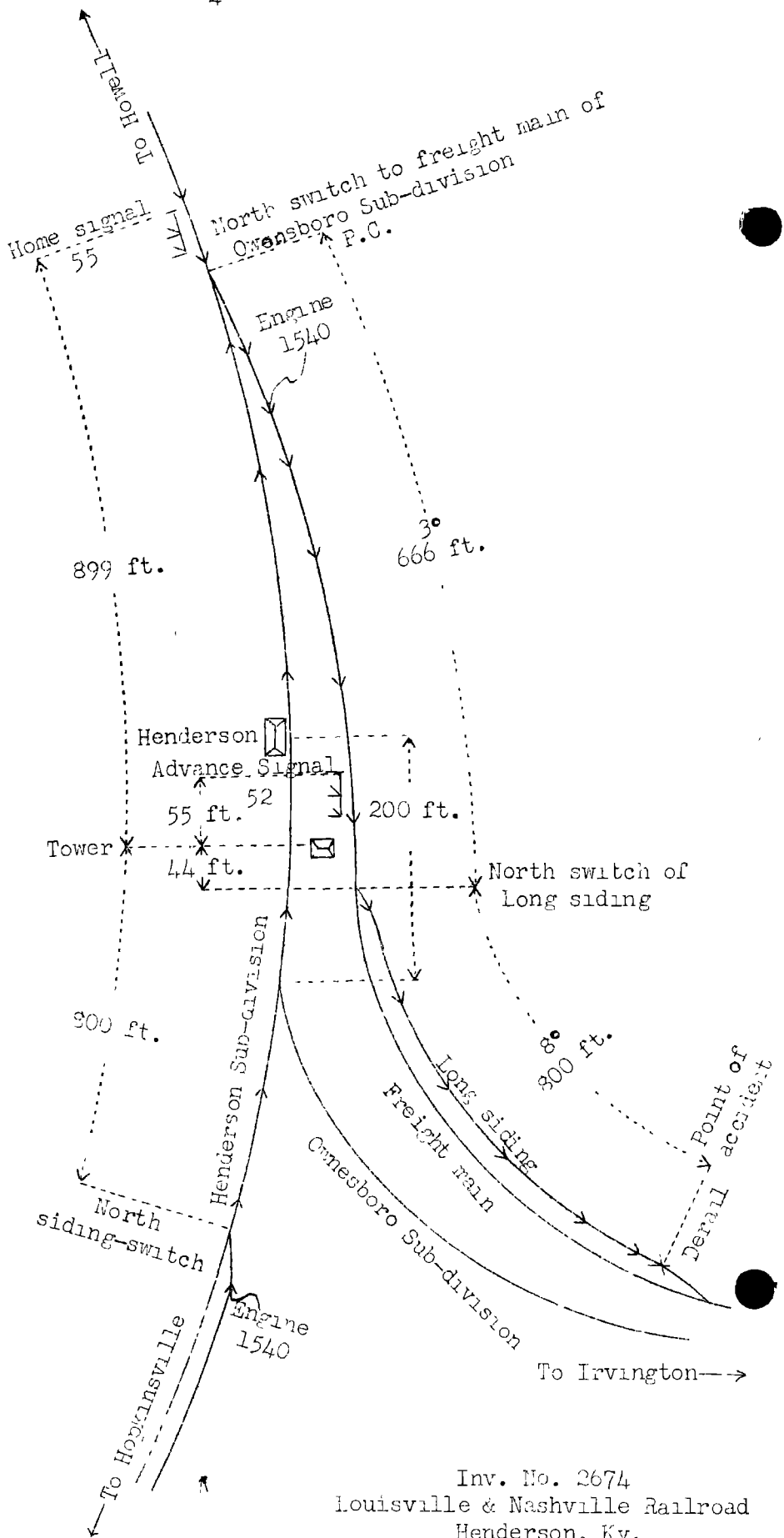
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On February 13, 1943, there was a derailment of a cut
of cars on the Louisville & Nashville Railroad at Henderson,
Ky., which resulted in the death of one employee.

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

- Henderson Sub-division
- o Howell, Ind. 10.20 mi.
 - X Henderson, Ky. (Point of accident) 73.29 mi.
 - o Hopkinsville, Ky.
- Owensboro Sub-division
- X Henderson, Ky. (Point of accident) 29.40 mi.
 - o Owensboro 64.60 mi.
 - o Irvington, Ky.



Inv. No. 2674
 Louisville & Nashville Railroad
 Henderson, Ky.
 February 13, 1943

Location of Accident and Method of Operation

Henderson is located on that part of the Evansville Division designated as the Henderson Sub-division and extending between Hopkinsville and Henderson, Ky., 73.29 miles, and on that part designated as the Owensboro Sub-division and extending between Henderson and Irvington, Ky., 106.4 miles. The Henderson Sub-division extends northward and southward, and the Owensboro Sub-division extends southeastward from Henderson. Time-table directions on both lines are north and south. The junction switch at the intersection of these lines and several other switches in this vicinity are controlled from an interlocking tower located about 200 feet north of the junction switch. An auxiliary track of the Owensboro Sub-division designated as the freight-main track lies east of the Henderson Sub-division main track and the Owensboro Sub-division main track, and connects with the Henderson Sub-division main track at a point 665 feet north of the tower. An auxiliary track, about 1,000 feet long and designated as the long siding, parallels the freight main track on the east, and its north switch is located 44 feet south of the tower. Two large buildings are located east of the long siding about 300 feet south of the tower. The accident occurred on the long siding at a hand-operated derail located about 800 feet south of the tower. From the north end of the freight main track to the north switch of the long siding there is a 3° curve to the right 665 feet in length, then on the long siding there is an 8° curve to the left 800 feet to the point of accident. The grade for south-bound movements is 0.5 percent descending 1,270 feet, and then is level 200 feet to the point of accident.

The interlocking machine is of the mechanical type and consists of 50 working levers in a 56-lever frame. Detector locking is provided. Home signal 55 and advance signal 52, governing southward movements from the Henderson Sub-division main track to the freight main track and then to the long siding, are located, respectively, 865 and 55 feet north of the tower. These signals are of the two-arm, lower-quadrant, semaphore type. The involved night aspects and corresponding indications and names of these signals are as follows:

<u>Signal</u>	<u>Night Aspect</u>	<u>Indication</u>	<u>Name</u>
55	Green-over-red	Proceed	Clear
52	Red-over-green	Proceed at not exceeding medium speed	Clear-Medium

All trains or engines using the long siding are required to be operated at restricted speed.

DEFINITIONS.

* * *

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

Operating rules read in part as follows:

34. All members of train and engine crews must keep a close lookout for signals and, when practicable, communicate to each other by its name the indication of all signals affecting the movement of their train.

103. When cars are pushed by an engine, except when shifting or making up trains in yards, a trainman must take a conspicuous position on the front of the leading car, * * *.

164. Restricted speed must be observed by trains and engines when using side tracks and defined yard tracks.

1011. * * *

If, in switching, the signals are lost to view, stop must be made until signals can again be seen.

Description of Accident

Second 84, a north-bound second-class freight train, consisting of engine 1540, 26 loaded and 38 empty cars and a caboose, was en route from Hopkinsville to Howell, Ind., 10.2 miles north of Henderson. It entered the northward siding at Henderson and stopped into clear at 3:35 a. m. About 4:55 a. m. engine 1540 with 13 cars entered the Henderson Sub-division main track at the switch located about 800 feet south of the tower, proceeded northward beyond signal 55, then engine 1540 in backward motion and pushing the cars proceeded southward, passed home signal 55, which displayed green-over-red, entered the freight main track, passed advance signal 52, which displayed red-over-green, entered the long siding, and while moving at an estimated speed of 8 miles per hour the first two

cars and the front truck of the third car were derailed at a derail 800 feet south of the tower.

The first two cars were badly damaged. Two cars, which were standing on an adjacent track, were struck by the derailed cars and were considerably damaged.

It was snowing at the time of the accident, which occurred about 5 a. m.

The employee killed was the front brakeman.

Discussion

The rules governing switching movements on this line require that when cars are being pushed by an engine, a trainman must take a conspicuous position on the forward car and, if signals from the trainman cannot be seen by the enginemen, movement must be stopped immediately. When trains or engines are moving on yard tracks or on sidings, they must be operated prepared to stop short of a train or an obstruction. In addition, all members of train and engine crews must, when practicable, communicate to each other by its name the indication of all signals affecting the movement of their train.

About 3:35 a. m. Seccord 84 entered the siding on the Henderson Sub-division at Henderson. The operator-leverman instructed the front brakeman by telephone that 13 cars to be set off on the Owensboro Sub-division should be placed on a track connected to the freight main track about 1/2 mile south of the tower. Some time later, the operator-leverman learned that the long siding was clear of cars. About 4:55 a. m. the operator-leverman lined the switch for engine 1540 with 13 cars to move from the siding to the main track and, immediately afterward, he lined the north switch of the long siding for entrance to that track. Engine 1540 proceeded northward on the Henderson Sub-division and stopped with the rear of the cut of cars north of home signal 55. The operator-leverman then placed the signal levers in position for signal 55 to display green-over-red and signal 52 to display red-over-green. Engine 1540, in backward motion and pushing the cut of cars, passed signals 55 and 52, entered the long siding, and the first two cars were derailed at the hand-throw derail located 600 feet south of the tower.

According to the statement of the engineer, the front brakeman had informed him that the cars were to be set off about 1/2 mile south of the tower and that this movement would be made over the freight main track. Soon after the engine

stopped north of signal 55, the fireman told the engineer that signal 55 displayed green, and the front brakeman, who was on the first car, was giving a lantern signal to continue the backward movement. As the cut of cars proceeded southward, the fireman called to the engineer that signal 52 displayed green and the front brakeman again gave a back-up signal. The engineer did not ask the fireman if it was the upper or lower aspect of signal 52 that was displaying green, nor did the fireman inform the engineer as to this matter. Both the engineer and the fireman were maintaining a lookout toward the rear. Because of the curve to the right, the engineer, who was on the left side in the direction of movement, was unable to see either signal 55 or signal 52, which were to the right of the route being traversed. When the engine passed the tower the speed was about 8 miles per hour. At that point the engineer was able to see for a short distance the brakeman's lantern on the first car, then buildings obscured his view. He applied the engine and tender brakes, and the speed was reduced slightly on the 0.5 percent descending grade. Then he released the brakes and immediately afterward the automatic air-brakes became applied in emergency. At this time the engineer first became aware that the engine and cars were on the long siding instead of the freight main track. The operator-leverman said that although he had changed the plans for setting off the cars after talking to the front brakeman by telephone, the fact that signal 52 displayed red-over-green was sufficient information that the movement was being diverted to a track other than the freight main track; however, because he thought the speed was too fast for a movement on the long siding, when the first car passed the tower he shouted a warning to the front brakeman. At that time the front brakeman, who was standing on the car with his back toward the engine, was giving a stop signal with his lantern in front of his body, but both engineers said they did not observe these stop signals. When the engine passed the tower the operator-leverman shouted a warning to the fireman, but it was not heard. The conductor was providing flag protection at a highway grade crossing some distance from the tower and the flagman had proceeded about 1/2 mile south of the tower to line switches at that point, and neither was aware that the cars were to be placed on the long siding. The front brakeman was killed in the accident and it could not be determined when he first became aware that the cars were moving on the long siding.

Engine 1540 and the cut of cars were required to be operated in such manner that movement could be stopped short of any obstruction, and, when signals are lost to view, movement must be stopped. The engineer said that he expected the

movement to be made on the freight main track and if he had known that the movement was on the long siding he would have stopped the movement. Buildings obscured the view on the curve and there was not a sufficient number of persons available to transmit signals so that they would be in view of the engineer at all times. In this territory it has not been customary for movement to be stopped when signals are lost to view. If the plans for setting off the cars had not been changed by the operator-leverman without advising the crew, or if engine 1540 and the cut of cars had been operated so that movement could be stopped short of an obstruction, or if the movement had been stopped when signals were lost to view, this accident would have been averted.

The investigation of this accident disclosed that the indications of signals 55 and 52 were communicated by their aspects instead of by their names. In fact only one aspect of each of the two-unit signals was called. If the fireman had communicated to the engineer the name of the indication displayed by signal 52 instead of calling the color of only one of the lights, the engineer would have had definite knowledge that the route was lined for the long siding instead of the freight main track. Safe operation depends upon the members of a crew communicating to each other the indications displayed by signals. A uniform practice of calling such indications by name instead of by aspect would have prevented confusion and misunderstanding regarding signal indications displayed.

Cause

It is found that this accident was caused by failure properly to control speed of cut of cars moving on an auxiliary track.

Dated at Washington, D. C., this twenty-ninth day of March, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.