

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2553
THE LOUISVILLE & NASHVILLE RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR ST. FRANCIS, KY., ON
DECEMBER 20, 1941

SUMMARY

Railroad: Louisville & Nashville
Date: December 20, 1941
Location: St. Francis, Ky.
Kind of accident: Head-end collision
Trains involved: Passenger : Passenger
Train numbers: 22 : Second 21
Engine numbers: 244 : 198
Consist: 5 cars : 6 cars
Estimated speed: 20-40 m. p. h. : 25-35 m. p. h.
Operation: Timetable and train orders
Track: Single; 2° curve; vertical curve
Weather: Slightly cloudy
Time: About 9:59 p. m.
Casualties: 1 killed; 75 injured
Cause: Accident caused by failure to obey
meet order
Recommendation: That the Louisville & Nashville Rail-
road Company establish an adequate
block system on the line involved
in this accident

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2553

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

THE LOUISVILLE & NASHVILLE RAILROAD COMPANY

February 10, 1942

Accident near St. Francis, Ky., on December 20, 1941, caused
by failure to obey a meet order.

REPORT OF THE COMMISSION¹

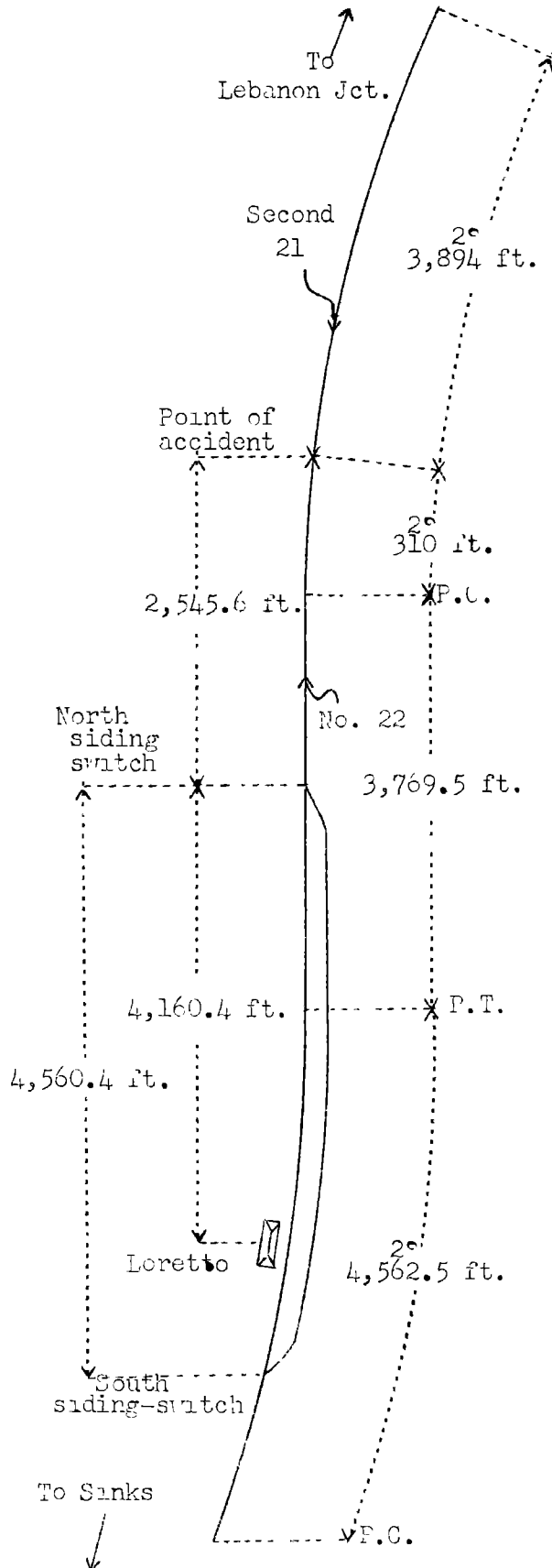
PATTERSON, Commissioner:

On December 20, 1941, there was a head-end collision between two passenger trains on the Louisville & Nashville Railroad near St. Francis, Ky., which resulted in the death of 1 employee, and the injury of 55 passengers, 12 railway-mail clerks and 8 employees.

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Under 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.

○	Lebanon Jct., Ky.	15.85 mi.
●	New Haven	9.46 mi.
○	St. Francis	0.16 mi.
⊠	Point of accident	1.23 mi.
○	Loretto	10.21 mi.
○	Lebanon	55.32 mi.
○	Brodhead	14.99 mi.
○	Sinks, Ky.	



Inv. No. 2553
 usville & Nashville Railroad,
 St. Francis, Ky.,
 December 20, 1941.

Location of Accident and Method of Operation

This accident occurred on that part of the Louisville Division which extends between Lebanon Jct. and Sinks, Ky., a distance of 107.22 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders. There is no block system in use. Time-table directions, which are north and south, are used in this report. At Loretto, 1.39 miles north of St. Francis, a siding 4,560.4 feet in length parallels the main track on the east. The north switch of this siding is located 4,160.4 feet north of the station. The accident occurred at a point 2,545.6 feet north of the north siding-switch. As the point of accident is approached from the south there are, in succession, a compound curve to the left 4,582.5 feet in length, the maximum curvature of which is 2°, a tangent 3,769.5 feet, and a 2° curve to the right 310 feet to the point of accident. As the point of accident is approached from the north there is a 2° curve to the left extending 3,894 feet to the point of accident. The grade for north-bound trains varies between 0.39 and 0.65 percent ascending 1,800 feet and then there is a vertical curve 300 feet to the point of accident. The grade for south-bound trains is 1.03 percent ascending 2,700 feet and then there is a vertical curve extending 800 feet to the point of accident.

On the curve involved the track is laid in a cut, the east bank of which rises to a height of about 10 feet.

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.* * *

* * *

(n) ___ ___ ° Approaching meeting or waiting points. See Rule S-90.

* * *

S-90. * * *

Train must stop clear of the switch used by the train to be met in going on the siding.

* * *

The engineman of each train will give signal 14 (n) at least one mile before reaching a meeting or waiting point. Should the engineman fail to give signal 14 (n) as herein prescribed, or fail to prepare to stop short of fouling point where required, the conductor must take immediate action to stop the train.

* * *

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 50 miles per hour.

Description of Accident

No. 22, a north-bound first-class passenger train, consisted of engine 244, one express-baggage car, one mail-baggage car and three coaches, in the order named. All cars were of steel construction. At Corbin, Ky., 117.18 miles south of St. Francis, a terminal air-brake test was made and the brakes functioned properly. This train departed from Sinks, 31.91 miles south of St. Francis, at 6:48 p. m., according to the dispatcher's record of movement of trains, 55 minutes late. At Brodhead, 66.92 miles south of St. Francis, the crew received copies of train order No. 459, Form 31, which read as follows:

No 22 Eng 244 meet First 21 Eng
1581 at St. Marys Second 21 Eng
198 at Loretto First 21 take
siding at St. Marys Second 21 take
siding at Loretto.

This train departed from Brodhead at 7:20 p. m., 59 minutes late, passed Lebanon, 11.6 miles south of St. Francis and the last open office, at 9:10 p. m., 1 hour 14 minutes late, stopped at the station at Loretto, 1.39 miles south of St. Francis, then departed and passed the north siding-switch, where it was required to wait unless Second 21 was on the siding, and while moving at an estimated speed of 20 to 40 miles per hour it collided with Second 21 at a point 2,545.6 feet north of the north siding-switch.

Second 21, a south-bound first-class passenger train, consisted of engine 198, one express-refrigerator car, one express car, one baggage-mail car, one storage mail car and two coaches, in the order named. The first car was of steel-underframe construction, the second to fifth cars, inclusive, were of all-steel construction, and the sixth car was of wooden construction. At Louisville, Ky., 55.02 miles north of St. Francis, the crew received copies of train order No. 459, Form 31, previously

quoted. A terminal air-brake test was made, and the brakes functioned properly en route. This train departed from Lebanon Jct., 25.31 miles north of St. Francis, at 8:50 p. m., according to the dispatcher's record of movement of trains, 28 minutes late, departed from New Haven, 9.46 miles north of St. Francis and the last open office, at 9:18 p. m., 33 minutes late, and while moving at an estimated speed of 25 to 35 miles per hour it collided with No. 22.

Because of the cut and track curvature the view of the point of accident from the right side of a north-bound engine and from the left side of a south-bound engine was restricted to a distance of about 600 feet.

Engine 244, of No. 22, was derailed to the right, continued forward about 90 feet, stopped at an angle of 45 degrees to the track, and leaned to the east at an angle of 30 degrees. Both cylinders were broken off, and the front end and the cab were demolished. The tender was derailed to the right and stopped upright to the rear of the engine. The rear truck of the first car was detached and derailed, and it moved forward under the car about 30 feet. The first and second cars were telescoped a distance of 6 feet and were badly damaged. Engine 198, of Second 21, was derailed to the left and stopped, reversed in direction, with its front end on the front end of engine 244, and at an angle of about 45 degrees to the track. This engine was practically destroyed. The tender became detached from the engine, was derailed and stopped upright on the roadbed. The cistern was torn from the frame and it telescoped the first car. The first car was practically demolished. The second car telescoped the first car a distance of about 5 feet.

The weather was slightly cloudy at the time of the accident, which occurred about 9:59 p. m.

The employee killed was the engineer of No. 22, and the employees injured were the fireman, the baggageman and the train porter of No. 22, and the engineer, the fireman, the conductor, the baggageman and the flagman of Second 21.

Data

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 17.1 trains.

Discussion

The rules governing operation on the line involved provide that at meeting points the superior train must stop clear of the switch to be used by the train entering the siding. The engineer of each train must sound the meeting-point whistle signal at least one mile in advance of the meeting point. If an engineer fails to sound the proper signal or fails to operate the train so as to be prepared to comply with the requirements of the train order, the conductor must take action immediately to stop the train. All surviving members of the crews involved understood these requirements.

The crews of both trains held copies of train order No. 459, which established Loretto as the meeting point between No. 22, a north-bound first-class passenger train, and Second 21, a south-bound first-class passenger train. Second 21 was required to enter the north siding-switch to meet No. 22 and No. 22 was required to stop on the main track short of the fouling point of the north siding-switch unless Second 21 was into clear on the siding. All surviving members of both crews involved understood the requirements of this order.

As Second 21 was approaching the point where the accident occurred, the headlight was lighted brightly, the speed was about 35 miles per hour, the throttle was partially closed, and the enginemen were maintaining a lookout ahead. The fireman reminded the engineer of the meeting point at Loretto and the engineer replied that he had not forgotten it. Soon afterward the engineer sounded the meeting-point whistle signal and made a 5-pound brake-pipe reduction in preparation for stopping at the north siding-switch. As Second 21 was moving on the curve to the left the fireman observed the headlight of No. 22 and at that time thought No. 22 was standing at the north siding-switch. Soon afterward he became aware that No. 22 was north of the switch and called a warning to his engineer, who immediately placed the brake valve in emergency position and sounded a stop signal on the whistle. According to the statement of the conductor of Second 21, the speed was reduced to about 50 miles per hour at the time of the collision.

All members of the crew of No. 22 except the baggageman had read train order No. 459 and understood that their train was required not to pass the fouling point of the north siding-switch unless Second 21 was into clear on the siding. According to the statement of the fireman of No. 22, as his train was approaching Loretto the engineer sounded the meeting-point whistle signal. While No. 22 was standing at the station at Loretto the engineer discussed the provisions of a train order affecting his train at a point 10.69 miles north of Loretto, but did not mention train

order No. 459, nor did the fireman remind the engineer concerning the meeting point with Second 21. After No. 22 departed from Loretto, the fireman observed that Second 21 was not on the siding and proceeded into the tender to open a stoker-conveyor slide. He expected to complete this work before his train reached the north siding-switch and did not observe the progress of his train until he returned to the cab. At that time the engineer was maintaining a lookout ahead, and the headlight was lighted brightly. The fireman observed that his train had passed the north siding-switch a considerable distance and he called a warning to the engineer, who immediately moved the brake valve to emergency position. The collision occurred immediately afterward. Since the engineer was killed in the accident it could not be determined why he failed to stop short of the fouling point. Had the fireman stayed in the cab until he was certain that his train would not pass the fouling point, he would have been in a position to avert the accident. Just before their train departed from the station at Loretto, both the conductor and the flagman of No. 22 observed that Second 21 was not on the siding, but after No. 22 departed from the station the conductor was engaged in clerical duties and failed to observe whether Second 21 had entered the siding, or whether his train was being operated prepared to stop. The conductor said that he was confident his engineer would operate the train prepared to stop at the north siding-switch. Furthermore, he depended upon his flagman to observe whether his train was being operated prepared to stop short of the fouling point if Second 21 was not into clear. A brakeman who was deadheading on No. 22 informed the conductor that Second 21 was not on the siding and that No. 22 had passed the north siding-switch. Before the conductor could take action to stop the train the collision occurred. The flagman of No. 22 said that when his train was departing from Loretto he was occupied in notifying passengers to be unloaded at St. Francis. He expected to complete this duty before his train reached the north siding-switch; however, before he became aware that his train had passed the north siding-switch the collision occurred. He said that it is not customary for his conductor to instruct him to observe if his train is being operated in compliance with the requirements of train orders affecting its movement, nor did the conductor instruct him to do so in this instance.

No member of the crew of No. 22 had been on duty more than 5 hours 15 minutes when the accident occurred. If the surviving members of the crew of No. 22 had not depended upon other members to comply with the provisions of the meet order, this accident would have been averted.

On the line involved trains are operated by timetable and train orders only.

On September 20, 1941, a head-end collision resulting in the death of 1 and the injury of 14 persons occurred on the line of this carrier near Harold, Florida. There was no block system in use on the line. The report of the Commission covering the investigation of that accident stated if an adequate block system had been in use on the line, the accident would not have occurred. In that case a rule to show cause why this carrier should not establish an adequate block-signal system on the line involved was served on this carrier. In the instant case, if an adequate block system had been in use on the line involved, the accident would not have occurred.

Cause

It is found that this accident was caused by failure to obey a meet order.

Recommendation

The Louisville & Nashville Railroad Company should establish an adequate block-signal system on the line involved in this accident. A rule to show cause why it should not do so will be served on said carrier.

Dated at Washington, D. C., this tenth day of February, 1942.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)