

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3403
LOUISVILLE AND NASHVILLE RAILROAD COMPANY
IN RE ACCIDENT
NEAR HEMATITE, TENN., ON
JUNE 7, 1951

SUMMARY

Date: June 7, 1951

Railroad: Louisville and Nashville

Location: Hematite; Tenn.

Kind of accident: Head-end collision

Trains involved: Passenger : Passenger

Train numbers: 198 : 103

Engine numbers: Diesel-electric unit 502 : Diesel-electric unit 501

Consists: 5 cars : 5 cars

Estimated speeds: 50 m. p. h. : 55 m. p. h.

Operation: Timetable and train orders

Track: Single; 1° curve; 0.12 percent descending grade northward

Weather: Raining

Time: 12:23 p. m.

Casualties: 6 killed; 27 injured

Cause: Failure to obey meet order

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3403

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

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

July 20, 1951

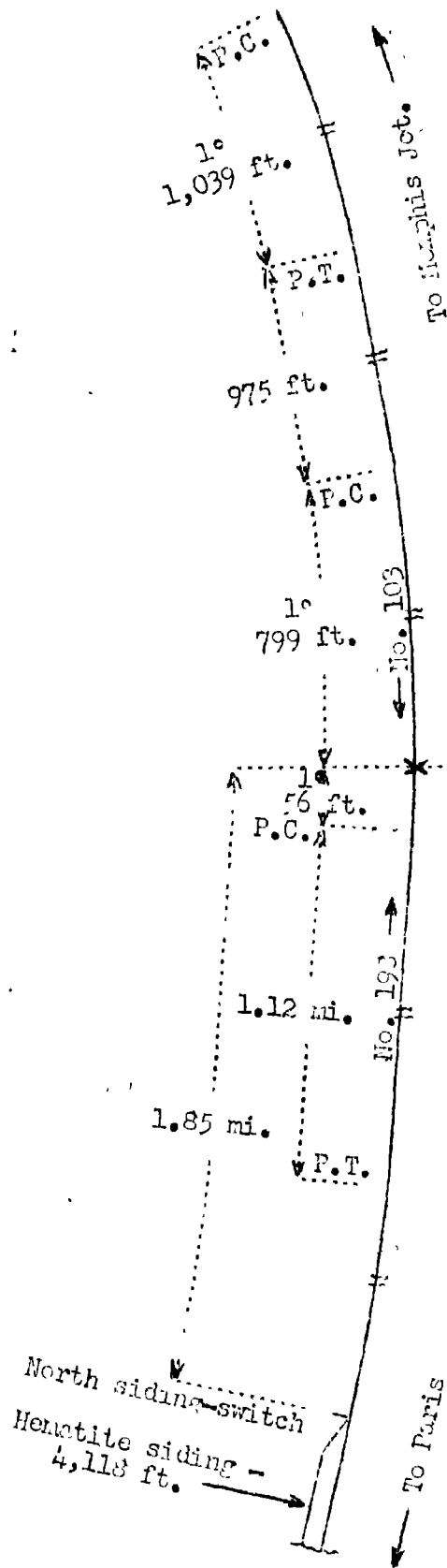
Accident near Hematite, Tenn., on June 7, 1951, caused by
failure to obey a meet order.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On June 7, 1951, there was a head-end collision between two passenger trains on the Louisville and Nashville Railroad near Hematite, Tenn., which resulted in the death of 5 train-service employees and 1 railway-express messenger, and the injury of 19 passengers, 3 train-service employees, 2 train porters, 2 dining-car employees, and 1 employee not on duty.

¹ 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.



○ Memphis Jct., Ky.	45.90 mi.
○ Guthrie, Ky.	14.12 mi.
○ Clarksville Freight Station	5.92 mi.
X Point of accident	1.85 mi.
○ Henatite, Tenn.	19.70 mi.
○ Erin	4.71 mi.
○ Tennessee Ridge	14.49 mi.
○ Faxon	21.59 mi.
○ Paris, Tenn.	

Point of accident

Report No. 3403
 Louisville and Nashville Railroad
 Henatite, Tenn.
 June 7, 1951

Location of Accident and Method of Operation

This accident occurred on that part of the Louisville Division extending between Paris, Tenn., and Memphis, Jct., Ky., 128.28 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Hematite, 60.49 miles north of Paris, a siding 4,118 feet in length parallels the main track on the west. The accident occurred at a point 1.85 miles north of the north siding-switch at Hematite. From the south there are, in succession, a tangent 1.12 miles in length and a 1° curve to the left 56 feet to the point of accident and 799 feet northward. From the north there are, in succession, a 1° curve to the right 1,039 feet in length, a tangent 975 feet, and the curve on which the accident occurred. The grade is 0.12 percent descending northward at the point of accident.

This carrier's 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
* * *	
(n) — — o	Approaching meeting or waiting points. See Rule S-90*.
* * *	

*For single track.

S-88. At meeting points between trains of the same class, the inferior train must clear the main track * * *

* * *

Trains must pull into the siding when practicable * * *

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.

* * *

210. When a "31" train order has been transmitted
* * *

Those to whom the order is addressed, except enginemen, must read it to the operator and then sign it * * *. The copy for each engineman must be delivered to him personally by the conductor who will take receipt on Clearance Form A. The engineman will then read the order to the conductor before proceeding.

Enginemen must promptly show train orders to firemen * * *. Conductors must promptly show train orders to flagmen, and when practicable to other trainmen.

Enginemen and conductors must satisfy themselves that orders are understood by firemen and trainmen.

Should the engineman fail to show orders to fireman, or the conductor fail to show orders to flagman, the fireman or flagman, and when practicable other trainmen, must ask for the orders without delay. Fireman and trainmen must read and return them, and should there be occasion to do so, remind enginemen or conductors of their contents.

FORMS OF TRAIN ORDERS.

S-A.

FIXING MEETING POINTS FOR OPPOSING TRAINS.

(1). No 1 Eng 400 meet No 2 Eng 401 at B.
* * *

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

Under timetable special instructions, train No. 198 is superior by direction to train No. 103.

The maximum authorized speed for passenger trains was 55 miles per hour.

Description of Accident

No. 198, a north-bound first-class passenger train, consisted of Diesel-electric unit 502, one combination baggage-coach, two coaches, one sleeping car, and one dining car, in the order named. All cars were of all-steel construction. At Paris the crew received copies of train order No. 50, Form 31, reading as follows:

No 198 Eng 502 meet
No 103 Eng 501 at Hematite

This train departed from Paris at 11 a. m., 8 minutes late, departed from Erin, 40.79 miles north of Paris and the last open office, at 11:54 a. m., on time, passed the north siding-switch at Hematite, where it was required to wait unless No. 103 was into clear on the siding, and while moving at an estimated speed of 50 miles per hour it collided with No. 103 at a point 1.85 miles north of the north siding-switch.

No. 103, a south-bound first-class passenger train, consisted of Diesel-electric unit 501, two baggage cars, one baggage-mail car, and two coaches, in the order named. The second car was of steel-underframe construction, and the other cars were of all-steel construction. At Guthrie, 21.89 miles north of Hematite, the crew received copies of train order No. 50. This train departed from Guthrie at 11:24 a. m., 2 hours 4 minutes late, passed Clarksville Freight Station, 7.77 miles north of Hematite and the last open office, at 12:15 p. m., 2 hours 20 minutes late, and while moving at an estimated speed of 55 miles per hour it collided with No. 198.

The Diesel-electric unit of each train, the first, second, and third cars of No. 103, and the first and second cars, and the front truck of the third car of No. 198 were derailed. The superstructure of each Diesel-electric unit was demolished, the trucks were torn from each unit and the two units stopped on the track structure, approximately in line with the track, and immediately south of the point of impact. The first car of No. 103 stopped with its front end 38 feet south of the point of impact and 36 feet west of the track and with its rear end on the track structure. The center

sills were bent and twisted, the ends and sides were destroyed, and the roof was cut and bent. The second car stopped at an angle of about 60 degrees to the track, with its front end about 75 feet east of the track and 30 feet south of the point of impact. It was demolished. The third car stopped in line with the track, with its front end against the rear end of the first car. The center sills were bent and twisted, and the superstructure was badly damaged. The first car of No. 198 stopped on top of the first car of No. 103, with its front end against the side of the third car of No. 103 and 42 feet north of the point of impact and its rear end 24 feet west of the track. The ends were destroyed, and the sides and the roof were badly damaged. The second car stopped upright and approximately in line with the track, with its front end on top of the wreckage of the Diesel-electric units and about 20 feet south of the point of impact. The center sills were bent and twisted, and the vestibules, sides, and roof were bent and cut. The third car stopped upright and in line with the track. It was slightly damaged.

The engineer and the fireman of No. 198, the engineer and the fireman of No. 103, and another fireman, who was instructing the fireman of No. 103 in the operation of the Diesel-electric unit, were killed. The conductor of No. 198 and the conductor and the baggageman of No. 103 were injured.

It was raining at the time of the accident, which occurred about 12:23 p. m.

The Diesel-electric unit of each train was equipped with a speed indicating and recording device, but neither unit was provided with a recording tape. Neither unit was equipped with a safety-control feature.

During the 30-day period preceding the day of the accident, the average daily movement on this line was 12 trains.

Discussion

Train order No. 50 established Hematite as the meeting point between No. 198 and No. 103. Under the rules No. 103 was required to enter the siding at the north siding-switch, and No. 198 was required to stop clear of this switch unless No. 103 was into clear on the siding. Surviving members of the crews of both trains so understood.

The conductor of No. 198 received copies of train order No. 50 at Paris. He delivered a copy of the order to the engineer and obtained the signature of the engineer on Clearance Form A. He said that the engineer read the train order to him and understood that their train was to meet No. 103 at Hematite. Before the train departed from Paris the conductor informed the baggageman, who also was performing the duties of the front brakeman, of the provision of the train order. He then showed the order to the flagman and discussed the provision with him. As the train was approaching Hematite the enginemen were on the Diesel-electric unit, the conductor and the baggageman were seated in the second car, and the flagman was in the rear car. The brakes of the train had been tested at Paris and had functioned properly when used en route. None of the members of the train crew noticed whether the meeting-point whistle signal prescribed by rule 14 (n) was sounded. The train approached Hematite at a speed of about 50 miles per hour and passed the north siding-switch at that speed. The brakes were applied in emergency when the train was about 1.8 miles north of the north siding-switch. The collision occurred immediately afterward and before the speed of the train had been reduced.

The conductor and the baggageman said that they overlooked the fact that their train was required to wait at Hematite until No. 103 arrived. The conductor said that there had been no unusual occurrence on the trip before the train passed Hematite, except that the air-conditioning equipment on one of the cars was not functioning properly. The flagman said that he entered the rear vestibule of the fourth car when the train was in the vicinity of Hematite. He was confused as to the exact location of the train and was not aware that the train was passing Hematite until he opened the vestibule door. At this time the train was approaching the north siding-switch. Because of rain on his glasses, he was unable to look back along the side of the rear car to ascertain whether No. 103 was on the siding. Since there was no reduction in the speed of the train as it passed the north siding-switch, he assumed that the other members of the crew had seen No. 103 on the siding and that train order No. 50 had been fulfilled. The engineer and the fireman were killed in the accident, and it could not be determined why they did not take action to stop the train at Hematite. Members of the train crew said that there was nothing unusual in the handling of the train between Paris and Hematite. An electrician who was in the control compartment of the Diesel-

electric unit for several minutes while the train was in the vicinity of Tennessee Ridge, 24.41 miles south of Hematite, said that the enginemen were in their customary positions at that time. The speed of the train was reduced in compliance with a speed restriction at a point about 5 miles south of Hematite, and was then increased in the usual manner. Because of track curvature and vegetation along the track neither train was visible to the enginemen of the other train until the trains were about 1,600 feet apart. The fact that the brakes of No. 198 were applied before the collision occurred indicates that the enginemen of that train were maintaining a lookout ahead and observed No. 103 immediately after it came within their range of vision.

The crew of No. 103 received copies of train order No. 50 at Guthrie. As this train was approaching the point where the accident occurred the speed was about 55 miles per hour. The enginemen were on the Diesel-electric unit, the baggageman was in the third car, and the conductor and the flagman were in the rear car. The brakes of this train had been tested and had functioned properly when used en route. Members of the train crew said that there was an emergency application of the brakes as the train was closely approaching the point where the accident occurred. The collision occurred immediately afterward and before the speed of the train had been reduced.

Cause

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

Dated at Washington, D. C., this twentieth day of July, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.