# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2673

THE LOUISVILLE & NASHVILLE RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR PANA, ALA., ON

FEBRUARY 11, 1943

## SUMMARY

Railroad: Louisville & Nashville

Date: February 11, 1943

Location: Pana, Ala.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: Work Extra 1267 : 92

Engine numbers: 1267 : 1550

Consist: 4 cars, 2 auxil- : 18 cars, caboose

iary water cars

Estimated speed: 8 m. p. h. : 8 m. p. h.

Operation: Timetable and train orders

Track: Single: 3°30' curve; vertical curve

Weather: Clear

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Time: About 12:50 p. m.

Casualties: 1 killed; 1 injured

Cause: Accident caused by failure properly

to control speed of No. 92 in accordance with flagging instructions

cordance with flagging instruction

Recommendation: That the Louisville & Nashville Rail-

road Company install an adequate block system on the line on which

this accident occurred

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO 2673

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

THE LOUISVILLE & NASHVILLE RAILROAD COMPANY

March 17, 1943.

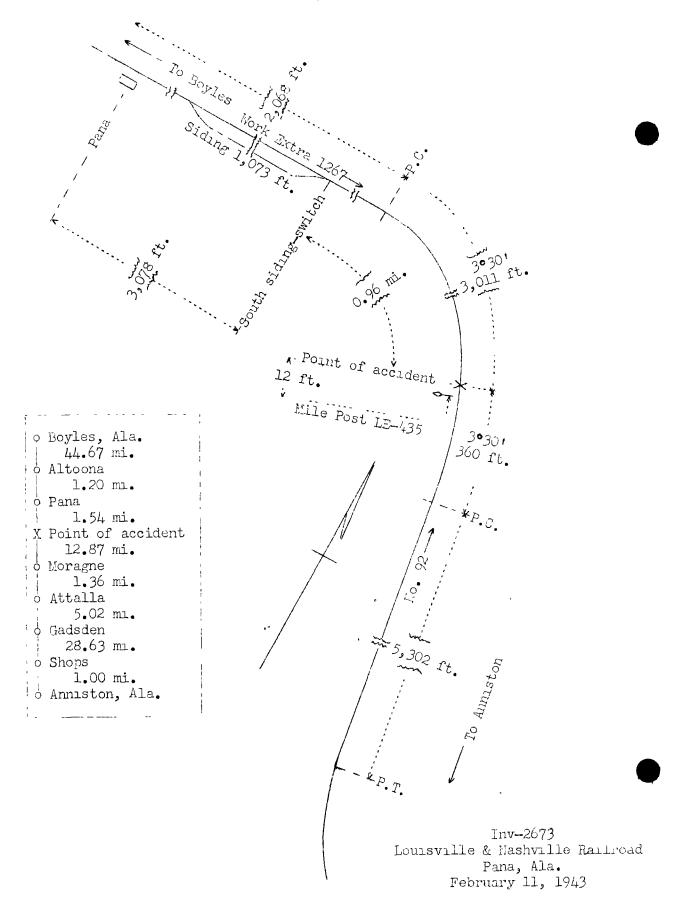
Accident near Pana, Ala., on February 11, 1943, caused by foilure properly to control speed of No. C2 in accordance with flagging instructions.

REPORT OF THE COMMISSION

## PATTERSON, Commissioner:

On February 11, 1943, there was a head-end collision between a work train and a freight train on the Louisville & Nashville Railroad near Pana, Ala., which resulted in the death of one employee and the injury of one employee.

<sup>&</sup>lt;sup>1</sup>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.



## Location of Accident and Method of Operation

This accident occurred on that part of the Birmingham Division which extends between Boyles and Anniston, Ala., a distance of 96.29 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. At Pana a siding 1,073 feet in length parallels the main track on the west. The south switch of this siding is 3,078 feet south of the station. The accident occurred on the main track at a point 0.96 mile south of the south siding-switch. Approaching from the north there is a tangent 2,058 feet in length, which is followed by a 3030' curve to the right 3.011 feet to the point of accident and 360 feet beyond. Approaching from the south there is a tangent 5,302 feet in length, which is followed by the curve on which the accident occurred. The grade for south-bound trains is 0.557 percent descending 1,500 feet, then there are, in succession, a vertical curve 400 feet, a 1.26 percent descending grade 800 feet, and a vertical curve 388 feet to the point of accident. The grade for north-bound trains is 0.967 percent descending 2,400 feet, then there are, in succession, a vertical curve 400 feet, level track 400 feet, and a vertical curve 12 feet to the point of accident.

#### DEFINITIONS.

\* \* \*

Regular Train. -- A train authorized by a time-table schedule.

\* \* \*

Extra Train. -- A train not authorized by a time-table schedule. It may be designated as--

\* \* \*

Work Extra--for work train extra.

Operating rules read in part as follows:

97 (a). When a work extra is working under protection of signals and the flagman is instructed to notify approaching trains to look out for such work extra at a certain point or points, the conductor of the work extra must write and sign two copies of instructions for each train signaled; the flagman of the work extra must deliver one copy each to the engineman and conductor of all trains signaled. \* \* \*.

## FORMS OF TRAIN ORDERS.

\* \* \*

S-H.

#### WORK EXTRA.

- (1). Eng 292 works extra 6 45 six forty five a m until 5 45 five forty five p m between D and E.
  - \* \* \*
- (3). Not protecting against extra trains.
  - \* \* \*
- (4). Work Extra 292 clears, or protects against, Extra 76 north between D and E after 2 10 two ten p m.
  - \* \* \*

The work extra may work upon the time of the train or trains mentioned in the order, and must protect itself against such train or trains. The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

(6). \* \* \*

\* \* \*. Should the working order instruct a work extra to not protect against extra trains in one or both directions, extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

In the vicinity of the point of accident, the maximum authorized speed for freight trains is 35 miles per nour, and for the work train involved, 15 miles per nour.

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## Description of Accident

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At Gadsden, 20.79 miles south of Pana, the crew of Work Extra 1267 received colles of three train orders, of which one was train order No. 321, Form 31, reading in part as follows:

Eng. 1267 works extra 701 Seven 0 One AM until 710 Seven Ten PM between Moregne and Altoona protecting against second class trains, not protecting against Extra trains, except protect against extra 1505 North after 1010 Ten Ten AM. Eng. 1267 run extra Gadsden to Moragne.

Moragne and Altoona are, respectively, 14.41 miles south and 1.20 miles north of Pana. Work Extra 1267, consisting of one auxiliary water car, engine 1267 neaded northward, one spreader, one air-dump car, one ditcher, one air-dump car and one auxiliary water car, in the order named, departed southward from Pana about 12:45 p. m., and while moving at an estimated speed of 8 miles per hour it collided with No. 92 at a point 1.54 miles south of the station at Pana.

No. 92, a north-bound second-class freight train, consisted of engine 1550, 2 loaded and 16 empty cars and a caboose. At Shops, 49.42 miles south of Pana, a terminal air-brake test was made and the brakes functioned properly en route. At Gadsden the crew received copies of two train orders, of which one was train order No. 321, Form 31, previously quoted. This train departed from Gadsden at 11:38 a.m., according to the dispatcher's record of movement of trains, 1 hour 33 minutes 1ste, departed from Moragne, the last open office, at 12:20 p.m., 1 hour 15 minutes late, stopped in response to the signals of the work-train flagman at a point about 2 miles south of the point where the accident occurred, then proceeded, and while moving at an estimated speed of 8 miles per hour it collided with Work Extra 1267.

From an engine moving in either direction, in the vicinity of the point of accident, a train approaching from the opposite direction can be seen only a distance of approximately 125 feet, because of an embankment on the west side of the track and track curvature.

The auxiliary water cannot the south end of Work Extra 1267, the tender and the engine cab were demolished. The first and second cars behind the engine were slightly damaged. The front end of engine 1550, of No. 92, was badly damaged,

and the minth car and the caboose were slightly damaged.

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It was elear at the time of the accident, which occurred about 12:50 o.m.

The employee killed was the engineer of Work Extra 1267. The employee injured was the conductor of Mo. 92.

#### Dath

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 16.5 trains.

## Discussion

The rules governing operation on the line involved provide that when a work extra is authorized by train order to work on the time of regular trains, the work extra must protect itself against such trains. Regular trains receiving the train order will run expecting to find the work extra protecting itself. Then a flagman is sent out with instructions affecting the authority of other trains to proceed, the instructions must be in writing and the flagman must deliver a copy of the instructions to the engineers and the conductors of the trains affected. All the surviving encloyees involved understood those requirements.

The crews of both trains held copies of train order No. 321, unich authorized Work Extra 1267 to work between Moragne and Altoons, and on the time of second-class trains. Under the rules, the work extra was required to provide flag protection against No. 92, which was a north-bound second-class train, and No. 92 was required to proceed in accordance with written flagging instructions issued by the work-train conductor.

Work Extra 1267 departed from Moragne about 7:15 a.m. and operated ditching machines northward from a point about 10 miles north of Moragne until about 12:10 p.m. To protect his train, the conductor gave the flagman written instructions, which read as follows:

All Second Class Trains North

Work Ex 1267 is working Near Mile Post LE-435 Come on under control Will let you by at Pana. - 9 **-** 2673

Mile post LE-435 is located 5,090 feet south of the south siding-switch at Pana. The flagman was stationed at a point about 2 miles south of mile post LE-435. Work Extra 1267 departed from the point of work about 12:10 p.m. and arrived at Pana about 12:20 p.m. About 12:45 p.m. the work extra departed from the south siding-switch at Pana and was moving southward with the engine in backward motion at a speed of about 8 miles per nour as it approached the point where the coident occurred. When the engine was about 100 feet north of this point, the fireman saw the engine of No. 92 and called a warning. The engineer of Work Extra 1267 immediately moved the brake valve to emergency position but the collision occurred before the brakes became effective. The point where the work train was to resume work was about 1/4 mile south of mile post LE-435.

No. 92 was stopped in response to signals given by the flagman of Work Extra 1267. The flagman gave the engineer of No. 92 a copy of the written instructions and No. 92 then proceeded at a speed of about 20 miles per hour. The enginemen and the front brakeman were maintaining a lookout anead. Because the view of the track ahead was obscured by the embankment and track curvature, the engineer made a 10-pound brake-pipe reduction about 1,000 feet south of the south end of the curve on which the accident occurred, and the speed was reduced to about 8 miles per nour. When the engine reached a point about 125 feet south of mile post LE-435, the fireman saw the engine of the work extra and called a warning. The engineer of No. 92 immediately moved the brake valve to emergency position but the collision occurred before the brakes became effective.

At the time Work Extra 1267 departed from Pana No. 92 was The conductor of the work extra said that before he authorized his train to proceed southward from Pana he asked the train dispatcher for information regarding the movement of Extra 1505 North and was advised that it was passing Attalla, 15.77 miles south of Pana. Because he had received information previously that No. 92 was behind Extra 1505 prior to the arrival of these trains at Gadsden, 20.79 miles south of Pana, ne did not ask the train dispatcher for information regarding No. 92. He said that if he had known No. 92 was sheed of Extra 1505 his train would not have been permitted to depart from Pana until after No. 92 and Extra 1505 had passed. The conductor of the work extra indicated that, although his train was required to protect against Extra 1505 North after 10:10 a. m., his train proceeded toward the point of work without definite flag protection against Extra 1505 because the work extra had only 1.25 miles to move while the other train had 14.5 miles to move in reaching the point of work.

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The engineer of No. 92 said that he was not expecting the work extra to be moving southward and that he would not have permitted his train to proceed north of the south end of the curve on which the accident occurred without flag protection if he had anticipated such movement. Since he did not see the work train on the tangent south of mile post LE-435, he assumed that it had proceeded to Pana for the crew to est lunch.

The accident occurred 12 feet north of mile post LE-435 in territory where the members of the crew who were on the engine of No. 92 did not have a clear view of the track phase. Under the rules, regardless of whether the work extra was standing or moving, the written flagging instructions issued by the conductor of the work extra required the speed of No. 92 to be so controlled that it could be stopped short of Work Extra 1267 in the vicinity of mile post LE-435.

On this line trains are operated by timetable and train orders only. If an adequate block system and been in use, each crew would have received information of the approach of the opposing train, and this accident would have been everte.

## Cruse

It is found that this accident was crused by failure properly to control the speed of No. 92 in accordance with flagging instructions.

## Recommendation

It is recommended that the Louisville & Masaville Raila Company install an adequate block system on the line on which this accident occurred.

Dated at Wasnington, D. C., this seventeenth day of March, 1943.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.