

**RAILROAD ACCIDENT INVESTIGATION**

**Report No 3788**

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LOUISVILLE AND NASHVILLE RAILROAD COMPANY

CLANTON, ALA

OCTOBER 26, 1957

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**INTERSTATE COMMERCE COMMISSION**

**Washington**

## SUMMARY

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DATE	October 26, 1957	
RAILROAD	Louisville and Nashville	
LOCATION	Clanton, Ala	
KIND OF ACCIDENT	Head-end collision	
EQUIPMENT INVOLVED	Freight	Freight
TRAIN NUMBER	Extra 811 South	Extra 437 North
LOCOMOTIVE NUMBERS	Diesel-electric units 811, 511, and 432	Diesel-electric units 437, 514, and 416
CONSISTS	108 cars, caboose	107 cars, caboose
ESTIMATED SPEEDS	5 m p h	24 m p h
OPERATION	Signal indications	
TRACK	Single, tangent, 0 80 percent descending grade northward	
WEATHER	Clear	
TIME	9.35 a m	
CASUALTIES	4 injured	
CAUSE	Failure to operate northbound train in accordance with signal indications	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3788

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

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

May 23, 1958

Accident at Clanton, Ala , on October 26, 1957, caused by failure to operate the northbound train in accordance with signal indications

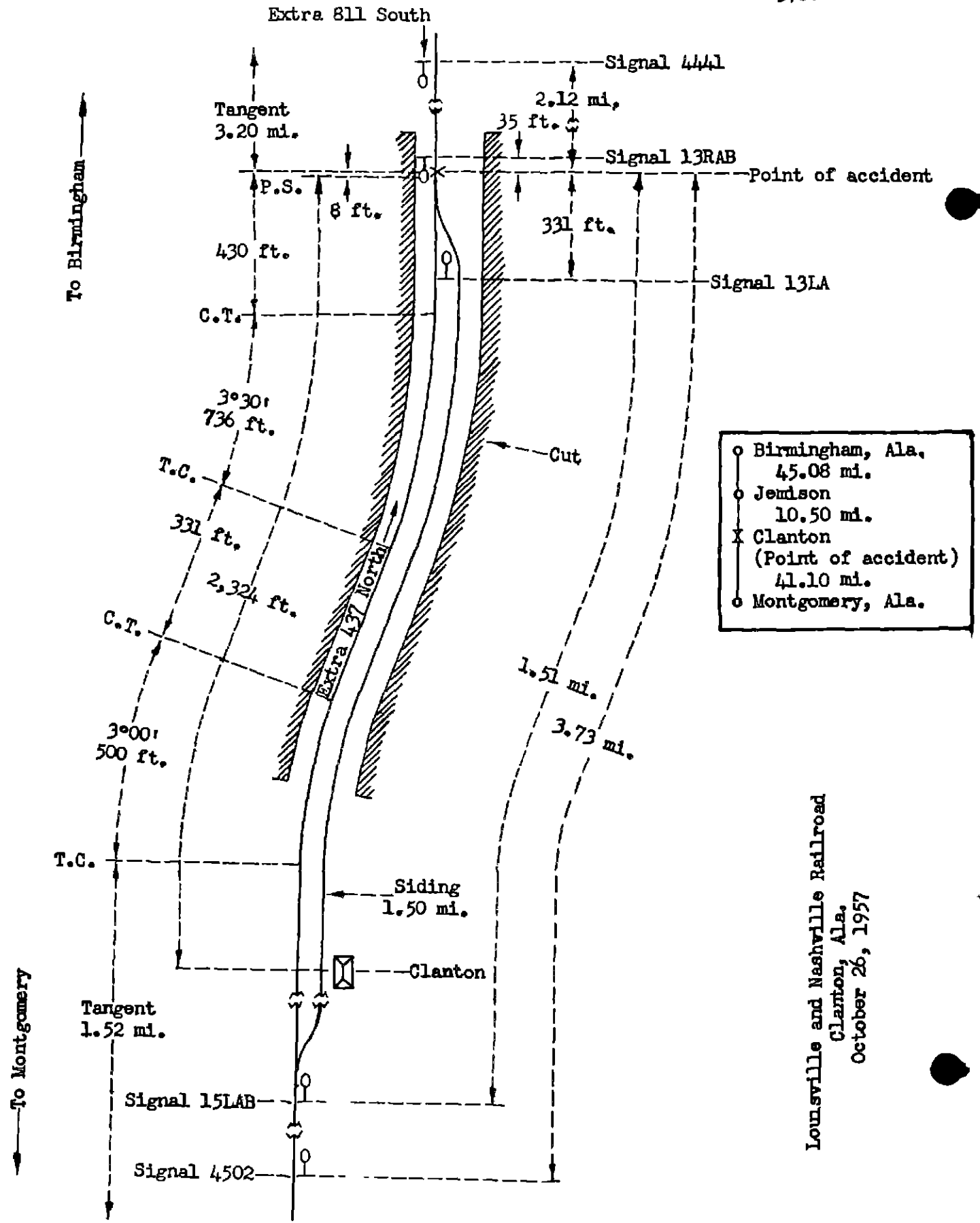
REPORT OF THE COMMISSION<sup>1</sup>

*TUGGLE, Commissioner*

On October 26, 1957, there was a head-end collision between two freight trains on the Louisville and Nashville Railroad at Clanton, Ala , which resulted in the injury of four train-service employees. This accident was investigated in conjunction with representatives of the Alabama Public Service Commission.

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<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 Tuggle for consideration and disposition.



- |   |                  |                     |
|---|------------------|---------------------|
| ○ | Birmingham, Ala. | 45.08 mi.           |
| ○ | Jemison          | 10.50 mi.           |
| X | Clanton          | (Point of accident) |
|   |                  | 41.10 mi.           |
| ○ | Montgomery, Ala. |                     |

Louisville and Nashville Railroad  
 Clanton, Ala.  
 October 26, 1957

### Location of Accident and Method of Operation

This accident occurred on that part of the Birmingham Division extending between Montgomery and Birmingham Ala., 96.68 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by signal indications. At Clanton, 55.58 miles south of Birmingham, a siding 1.50 miles in length parallels the main track on the east. The north switch of this siding is 2,324 feet north of the station. The accident occurred on the main track at a point 8 feet north of the north siding-switch. From the north on the main track there is a tangent 3.20 miles in length to the point of accident and 430 feet southward. From the south there are, in succession a tangent 1.52 miles in length, a 3°00' curve to the right 500 feet, a tangent 331 feet, a 3°30' curve to the left 736 feet, and the tangent on which the accident occurred. The grade for northbound trains is 0.80 percent descending at the point of accident.

In the vicinity of the point of accident the main track and the siding are laid in a cut extending southward from a point 120 feet north of the point of accident throughout a distance of 1,897 feet. The west wall of the cut is approximately 22 feet west of the main track and rises to a height of approximately 28 feet. The range of vision is materially restricted in the vicinity of the point of accident because of the cut and curvature of the track.

Automatic signal 4441 and semi-automatic signal 13RAB, governing southbound movements, are located, respectively, 2.12 miles and 35 feet north of the point of accident. Automatic signal 4502, and semi-automatic signals 15LAB and 13LA, governing northbound movements, are located, respectively, 3.73 miles, 1.51 miles, and 331 feet south of the point of accident. These signals which are of the searchlight type, form part of a centralized traffic control system. Controlled signals are controlled by a train controller at Birmingham. Signals 4441 and 4502 are approach lighted. Signals 13RAB, 15LAB, and 13LA are normally approach lighted but are also lighted when the train controller lines a route involving these signals, and each signal will then remain lighted until the movement involved passes the signal, when it again becomes approach lighted.

Signal	Aspect	Indication	Name
4441 4502	Yellow	PREPARE TO STOP AT NEXT SIGNAL TRAIN EXCEEDING MEDIUM SPEED MUST AT ONCE REDUCE TO THAT SPEED	APPROACH
13RAB	Red-over- yellow	PROCEED AT RESTRICTED SPEED	RESTRICTING
15LAB	Yellow- over-red	PREPARE TO STOP AT NEXT SIGNAL TRAIN EXCEEDING MEDIUM SPEED MUST AT ONCE REDUCE TO THAT SPEED	APPROACH
13LA	Red-with- letter "A"	STOP	STOP

The controlling circuits are so arranged that when routes are lined for a southbound movement to take siding and for a northbound movement to hold the main track, signals 4441, 4502, and 15LAB will indicate Prepare-to-stop-at-next-signal, provided the blocks of the signals are unoccupied, signal 13RAB will indicate Proceed-at-restricted-speed, and signal 13LA will indicate Stop

This carrier's operating rules read in part as follows

#### DEFINITIONS

**RESTRICTED SPEED** --Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced but not exceeding 15 miles per hour

**MEDIUM SPEED** --One-half maximum authorized speed at point involved, not exceeding thirty miles per hour.

#### TRAIN RULES

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

The maximum authorized speed for freight trains in the vicinity of the point of accident is 50 miles per hour

#### Description of Accident

Extra 811 South, a southbound freight train, consisted of diesel-electric units 811, 511, and 432, coupled in multiple-unit control, 108 cars, and a caboose. This train departed from Birmingham at 4 55 a m, departed from Jemison, 45 08 miles south of Birmingham, at 9 17 a m, passed signal 4441, which indicated Prepare-to-stop-at-next-signal, passed signal 13RAB, which indicated Proceed-at-restricted-speed, and while moving at an estimated speed of 5 miles per hour it collided with Extra 437 North at a point 8 feet north of the north siding-switch at Clanton

Extra 437 North, a northbound freight train, consisted of diesel-electric units 437, 514, and 416, coupled in multiple-unit control, 107 cars, and a caboose. This train departed from S & N Yard Montgomery, at 7 20 a m, departed from Elmore, 12 55 miles north of Montgomery, at 8 25 a m, passed signals 4502 and 15LAB, which indicated Prepare-to-stop-at-next-signal, passed signal 13LA, which indicated Stop, and while moving at an estimated speed of about 24 miles per hour it collided with Extra 811 South

The locomotive and the 1st to 3rd cars, inclusive, of Extra 811 South were derailed. The 1st diesel-electric unit stopped immediately west of the track structure near the point of collision. The control compartment was torn from the unit and the other portion of the superstructure was torn from the underframe. The other derailed equipment stopped upright on the track structure with the front end of the 2nd diesel-electric unit against the front end of the 1st diesel-electric unit of Extra 437 North, 17 feet north of the point of collision. The 2nd and 3rd diesel-electric units were heavily damaged. The 1st car was demolished, the 2nd car was slightly damaged, and the 7th car was heavily damaged. The locomotive, the 1st and 2nd cars, the 44th to the 46th cars, inclusive,

and the front truck of the 47th car of Extra 437 North were derailed. The locomotive slipped upright on the track structure, and the other derailed equipment stopped on or near the track structure. The diesel-electric units were heavily damaged. The 1st car was demolished. The 2nd car, and the 44th to the 46th cars, inclusive, were heavily damaged.

The engineer and the fireman of Extra 811 South, and the engineer and the fireman of Extra 437 North were injured.

The weather was clear at the time of the accident, which occurred about 9:35 a. m.

The first diesel-electric unit of Extra 811 South was of the road type. The other diesel-electric units involved in the accident were of the road-switcher type.

### Discussion

On the day of the accident No. 1, a southbound first-class passenger train, departed from Birmingham at 7:59 a. m. and passed Extra 811 South at Jemison at 9:14 a. m. The train controller lined routes for entry of No. 1 to the siding at the north switch at Clanton and for movement of Extra 437 North on the main track to signal 13LA. After No. 1 entered the siding the train controller lined the route for entry of Extra 811 South to the siding at the north switch.

As Extra 811 South was approaching the point where the accident occurred the speed was about 45 miles per hour. The enginemen and the front brakeman were in the control compartment of the first diesel-electric unit and were maintaining a lookout ahead. The conductor and the flagman were in the caboose. Signal 4441 indicated Prepare-to-stop-at-next-signal, and signal 13RAB indicated Proceed-at-restricted-speed. The engineer initiated a service brake application to comply with the indication of signal 4441 and the speed of the train was reduced to about 18 miles per hour. Shortly after the engineer released the brakes the fireman observed Extra 437 North approaching at a distance of approximately 900 feet and called a warning. The engineer immediately initiated a service brake application. He said that when he first observed Extra 437 North he thought it was moving at a speed that would permit it to be stopped short of signal 13LA. He then became aware that Extra 437 North was not stopping and he applied the brakes in emergency. The speed of Extra 811 South was about 5 miles per hour when the collision occurred.

As Extra 437 North was approaching the point where the accident occurred the enginemen and the front brakeman were in the control compartment of the first diesel-electric unit and were maintaining a lookout ahead. The conductor and the flagman were in the caboose. The brakes of this train had been tested at Montgomery. Signals 4502 and 15LAB indicated Prepare-to-stop-at-next-signal. As the train was approaching signal 15LAB the members of the crew in the control compartment observed that No. 1 was on the siding. The fireman and the front brakeman said that they called the indication of signal 15LAB and that the engineer replied. The speed of the train was about 12 miles per hour when it passed signal 15LAB. After the train passed the signal the speed was gradually increased. The fireman and the front brakeman said they were aware that the speed was increasing but thought that the engineer could stop the train short of signal 13LA. Signal 13LA came into view when the train was approximately 740 feet south of the signal and the fireman and the front brakeman observed that it indicated Stop. They called a warning to the engineer and he immediately initiated an emergency brake application. The speed of the train was reduced from about 27 miles per hour to about 24 miles per hour when the collision occurred.

The engineer of Extra 437 North said that he did not remember the fireman and the front brakeman calling the indication of signal 15LAB. He said he was aware that signal 15LAB required the train to be operated in such manner that it could be stopped before passing signal 13LA. He was unable to explain why he increased the speed of the train after passing signal 15LAB. He said that when he observed No. 1 on the siding he apparently assumed that the main track was clear and that signal 13LA would display a Proceed aspect.

Examination of the brake equipment of Extra 437 North after the accident occurred disclosed that the brakes of 2 cars were inoperative and that 9 cars had piston travel in excess of 10 inches.

#### Cause

This accident was caused by failure to operate the northbound train in accordance with signal indications.

Dated at Washington, D. C., this twenty-third day of May 1958.

By the Commission, Commissioner Tuggle

(SEAL)

HAROLD D. McCOY,

Secretary