# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

LOUISVILLE & NASHVILLE RAILROAD

CASTLEBERRY, ALA.

DECEMBER 17, 1936.

INVESTIGATION NO. 2128

#### SUMMARY

## Inv-2128

Railroad: Louisville & Nashville

Date: December 17, 1936

Location: Castleberry, Ala.

Kind of accident: Head-end collision

Trains involved: Passenger : Passenger

Train numbers: No. 2 : No. 3

Engine numbers: 211 : 217

Consist: 6 cars : 7 cars

Speed: Standing : 30-50 m.p.h.

Track: Tangent; practically level except

short 0.74 percent grade ascending for south-bound trains on which

accident occurred.

Weather: Dense fog

Time: 5:11 a.m.

Casualties: 3 killed and 7 injured

Cause: Failure properly to observe and obey signal indications and to approach

a meeting point under control.

February 25, 1937.

To the Commission:

On December 17, 1936, there was a head-end collision between two passenger trains on the Louisville & Nashville Railroad at Castleberry, Ala., which resulted in the death of 3 employees and the injury of 2 passengers, 1 dining car employee and 4 employees.

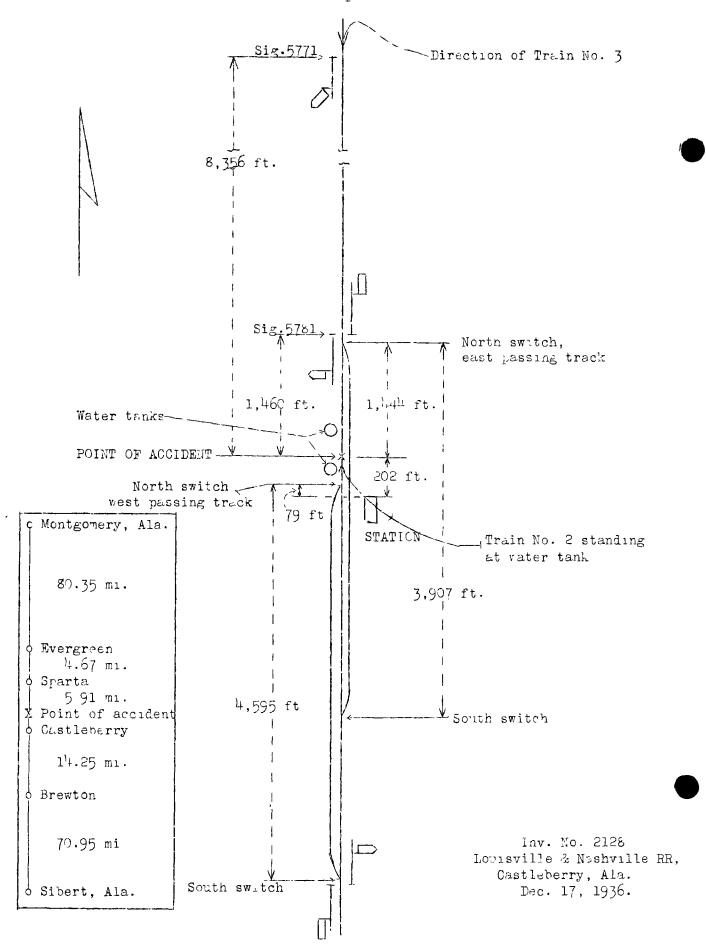
## Location and method of operation

This accident occurred on that part of the Montgomery & New Orleans Subdivision which extends between Montgomery and Siebert, Ala., a distance of 176.13 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and an automatic block-signal system. There is a passing track on each side of the main track at Castleberry, the north switch of the east passing track and the north switch of the west passing track being located 1,646 and 79 feet, respectively, north of the station. The accident occurred on the main track at a point 1,444 feet south of the north switch of the east passing track. Approaching this point from the north, the track is tangent for a distance of several miles, this tangent extending for practically 1 mile south thereof. The grade is practically level with the exception of 500 feet of 0.74 percent ascending grade for south-bound trains, on which grade the accident occurred.

Two water tanks are located on the west side of the main track 142 feet and 455 feet, respectively, north of the station. A train order signal is located at the station.

Automatic block signals involved, No. 5771 and No. 5781, are located 8,356 and 1,460 feet, respectively, north of the point of accident. These signals are of the 3-position, upper quadrant semaphore type, approach lighted, night indications being green, yellow, and red for "proceed," "approach," and "stop and proceed," respectively.

It was dark and a dense fog prevailed at the time of the accident, which occurred about 5:11 a.m.



## Description

Train No. 2, a north-bound passenger train, consisted of 1 express refrigerator car, 1 baggage and express car, 2 coaches, 1 dining car and 1 Pullman sleeping car, of all-steel construction with the exception of the first car which had steel underframe, hauled by engine 211, of the 4-6-2 type, and was in charge of Conductor Wilkins and Engineman Gorey. At Brewton, 14.25 miles from Castleberry, the crew received train order 63, form 19, directing them to meet Train No. 3 at Sparta, 5.91 miles north of Castleberry. This train departed from Brewton, the last open telegraph office, at 4:43 a.m., according to the train sheet, 40 minutes late. It was flagged by the operator at Castleberry, and stopped at that station at 5:09 a.m., where the crew received train order No. 71, form 19, reading as follows:

No. 2 eng 211 meet No. 3 eng 217 at Castleberry instead of Sparta No. 3 take siding No. 2 gets this at Castleberry.

Train No. 2 then proceeded to the water tank, 142 feet north of the station, and was preparing to take water when it was struck by south-bound Train No. 3.

Train No. 3, a south-bound passenger train, consisted of l baggage and express car, l express refrigerator car, l baggage and express car, 2 coaches and 2 Pullman sleeping cars, hauled by engine 217 of the 4-6-2 type, and was in charge of Conductor Gantt and Engineman Grizzard. All of the cars were of steel construction with the exception of the first car which had steel center sill and the second car which had a steel underframe. At Evergreen, 10.58 miles north of Castleberry, the crew received copies of train orders 63 and 71, forms 19, previously mentioned and also a copy of train order 64, form 19, reading as follows:

No. 38 eng 275 meet No. 3 eng 217 at West Siding Castleberry No. 3 take siding.

Train No. 3 departed from Evergreen, the last open telegraph office, at 4:54 a.m., 3 hours 21 minutes late, passed the north switch of the east passing track at Castleberry and struck Train No. 2 while traveling at a speed estimated to have been between 30 and 50 miles per hour.

Both engines were forced straight upward and fell on their sides on the west side of the track and were destroyed, together with the water tank. The first car in Train No. 3 was demolished, the second car badly damaged and the third car slightly damaged but only the front truck of the latter car was derailed. The first car in Train No. 2 was badly damaged and the second car slightly damaged. The employees killed were the engineman and fireman of Train No. 3 and the engineman of Train No. 2, and those injured were the fireman, baggageman, and flagman of Train No. 2 and the baggageman of Train No. 3.

## Summary of evidence

Conductor Gantt, of Train No. 3, stated that the air brakes had been tested before leaving Montgomery and functioned properly en route. Train orders 63, 64, and 71 were received at Evergreen and Conductor Gantt stated that it was clear to him that they would enter the north switch of the east passing track at Castleberry. On leaving Evergreen he sent the orders anead to the baggageman by the train porter and they were returned to him about 10 minutes later. Conductor Gantt then proceeded toward the rear of his train for the purpose of showing the orders to the flagman and also in order to be at the rear end of the train at the meeting point. Upon reaching the rear platform of the rear coach he stopped to check his tickets, and he heard two distinct blasts on the engine whistle, indicating to him that they were nearing the approach signal at Castleberry. He looked out to get his bearings, but due to the dense fog this was difficult, and he stepped into the vestibule of the sleeping car and sounded four blasts on the communicating whistle as a signal to reduce speed. Due to the noise in the vestibule he was unable to hear an answer although his signal had apparently reached the engineman because the smoke immediately settled down along the train making it impossible to identify his location. He waited about 35 seconds for an application of the brakes, and then started toward the emergency valve in the sleeping car when he felt a service application. He was still trying to ascertain his location when he recognized the concrete block supporting the home signal at Castleberry; he rushed toward the emergency valve and had just reached it when the collision occurred. He heard an indistinct whistle signal, just prior to the application of the brakes, which he took to be a meeting point signal. Normal speed of 40 or 45 miles per hour had been maintained between Evergreen and the point of accident except that while crossing a trestle near Sparta

the speed was reduced to 10 miles per hour in compliance with a slow order, and he thought that the speed had been reduced about 10 or 15 miles per hour by the service application of the brakes just prior to the accident, stating that the speed was between 30 and 40 miles per hour at the time of the accident. Conductor Gantt stated that he had known and worked with Engineman Grizzard for many years and they had worked together on this run for 10 weeks; he had always found the engineman to be careful and competent. On this trip the engineman appeared to be in good health and spirits. It was his opinion that, due to the dense fog, the engineman became confused in his location as visibility was limited to a very snort distance.

The statements of Baggageman Walker, of Train No. 3, who was in the third car from the engine, corroborated those of the conductor as to the whistle signals sounded approaching He estimated the speed to have been 45 or 50 Castleberry. miles per hour when he felt the service application which he thought was made about 3/4 mile from Castleberry as it was not more than 50 seconds or a minute later when the accident occurred, at which time the speed was about 30 miles per hour. Baggageman Walker saw the engineman at various stops en route and he was in good spirits. While pulling into the siding at Calhoun, 63.91 miles north of Castleberry, Engineman Grizzard had remarked that it was one of the worst nights he had ever experienced on the road - that the fog would swoop down and cover him and he would become lost. At one point the engine ran about 200 feet by the station, which was due to the dense fog as the brakes were functioning properly.

Train Porter May, of Train No. 3, stated that on approaching Castleberry he was in the first coach and the only whistle signal that he heard was two short blasts; the speed approaching Castleberry was a little faster than usual. Flagman Tucker, who was in the rear car, stated that he did not hear any whistle signals sounded approaching Castleberry.

Fireman Jenkins, of Train No. 2, stated that due to the dense fog it was necessary for his engineman to reluce speed considerably at several points en route in order to see the automatic block signals, and on approaching Castleberry he was able to see the signals at a distance of only 15 or 20 feet. Fireman Jenkins was handling the water spout preparatory to taking water when the accident occurred and he did not see or hear the approaching train.

Conductor Wilkins, of Train No. 2, stated that he was in the vestibule between the two coaches when his train stopped at the station at Castleberry. He heard a whistle signal sounded by Train No. 3, but he did not pay any particular attention to it. The operator handed him his orders and he had just finished reading them as his train pulled up to the water tank, and it had been standing there not more than 10 or 15 seconds when the collision occurred. He saw the reflection of the headlight of Train No. 3 just prior to the accident. He also stated that he had seen fog as dense in this vicinity on previous occasions, but he had never seen it any worse.

Night Marshall Martin, of Castleberry, who was standing about 80 feet from the point of accident and witnessed its occurrence, stated that he did not see any fire flying from the wheels of Train No. 3 to indicate that the brakes had been applied; the engine was working steam and the speed was so high that he did not think that it was Train No. 3 as he knew that train was to stop at Castleberry.

Operator Brooks, at Evergreen, stated that he delivered copies of the train orders, together with clearance form A, to Engineman Grizzard of Train No. 3, who met him a few steps from the engine, and in reply to the engineman's query he told him of their contents. Engineman Grizzard appeared to understand the orders and replied "we will do it," but as it was too dark he did not read the orders in his presence. Engineman Grizzard seemed to be in good spirits.

Operator James, at Castleberry, stated that Castleberry is a regular station stop for Train No. 3 and a flag stop for Train No. 2. After he flagged Train No. 2 and delivered copies of the orders to the crew of that train he returned to his office and as he entered it he heard one long blast of the whistle sounded by Train No. 3, which he thought was sounded about 1 minute prior to the accident and also thought that the train must be about 1 mile north of the station; the whistle signal is usually sounded at that point. He reported the approach of Train No. 3 to the dispatcher and in a short time he saw the reflection of the headlight of that train, although due to the dense fog it appeared to be very dim and he thought it was about 150 yards from the station when he first saw it. He estimated the speed of Train No. 3 to have been between 40 and 50 miles per hour at the time of the accident.

Dispatcher Coburn stated that there was nothing unusual about the train orders, as issued, in connection with the movements of Trains Nos. 3, 2, and 38. His object in putting Train No. 3 in the west siding at Castleberry for Train No. 38 was to permit Train No. 3 to do station work, and if not then advanced, it would be ready to depart upon the arrival Train No. 2 was delayed 15 or 18 minutes of Train No. 38. by a freight train at Brewton; he then issued train order 71, changing the meet from Sparta to Castleberry and directing Train No. 3 to take siding. This order was completed 33 minutes later than the order fixing the meet between Trains Nos. 3 and 38 at Castleberry. Dispatcher Coburn stated that he did not believe that the engineman of Train No. 3 could have been confused about the two orders. It is a common practice for a train to enter the first siding at a meeting point, when directed to take siding, unless a specific siding is designated.

Signal Maintainer Whitehouse stated that he arrived at Castleberry about 7:30 a.m. on the morning of the accident. Signal 5771 was displaying a caution indication and signal 5781 a stop indication. In company with Signal Supervisor Baker he made a test of the lights on signal 5781, and a slot test of signal 5771; the lights were burning properly and no irregularities were found.

Signal Supervisor Baker stated that he made a thorough check of the relays and mechanism of the signals involved and nothing wrong was noted and after repairs were made to the track and switches, the signals cleared properly.

#### Discussion

A dense fog prevailed on the night of the accident, making it almost impossible at times for the members of the crew to identify their location and at some points signal indications could not be seen at a distance greater than 15 or 20 feet. According to the practices on this line as stated by Dispatcher Coburn and understood by Conductor Gantt, under the train orders held by the crew of Train No. 3, this train should have entered the north switch of the east passing track, situated but 16 feet in advance of signal 5781. evidence indicates that Engineman Grizzard was in normal condition and apparently understood the orders when delivered to him by the operator at Evergreen. On approaching Castleberry whistle signals were sounded and a service application of the air brakes was made; two short blasts of the whistle and a meeting point whistle signal were heard by the conductor and the baggageman, while the operator at Castleberry stated that he heard one long blast of the whistle about 1 minute prior to the accident, and the conductor of Train No. 2 also heard a whistle signal prior to the accident. Engineman Grizzard may have been uncertain as to his location, due to the dense fog, the evidence indicates that he reduced the speed of his train at Sparta, only 5 miles north of Castleberry, in accordance with a slow order, and that he sounded a whistle signal of some kind on approaching Castleberry, and should have reduced his speed accordingly. more, Castleberry was a scheduled station stop for Train No. 3, and the fact that the accident occurred 202 feet north of the station and while the train was running at a speed of from 30 to 50 miles per hour with the engine still using steam, indicates that the train would not have been brought to a stop until it was a considerable distance beyond the station. together with the fact that the train passed signal 5771 apparently displaying a yellow indication, signal 5781 displaying a red indication, and collided with Train No. 2 while traveling at a high rate of speed, would indicate that the engineman either was not aware of his location or had become physically incapacitated just prior to the accident.

The evidence indicates that heavy fog is not uncommon on this sub-division, and it is believed that added protection, such as is provided by automatic train-control or cab signal systems, would have prevented the occurrence of this accident; the traffic density on this line warrants serious consideration of the need for the installation of such additional protective devices. A total of 733 trains were operated over this line during the thirty-day period prior to the accident, or a daily average of 25 trains.

In our report upon an accident which occurred on this same sub-division in February, 1931, involving a passenger train running off an open drawbridge, due to failure of the engineman properly to observe and obey signal indications, the following statement was made:

"During the 30-day period prior to the accident the draw span of this bridge was opened 211 times, resulting in delay to 32 trains for a total of 5 hours and 13 minutes. There are a number of drawbridges in this vicinity. The train movement for this 30-day period averaged approximately 23 trains daily. It is possible that had smash signals, automatic train con-

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trol, or automatic cab signals been in use on this line, this accident might have been prevented. In view of the circumstances surrounding this accident the carrier should give careful consideration to the question of whether additional protection should be provided on this line."

## Conclusion

This accident was caused by failure properly to observe and obey signal indications and to approach a meeting point under control.

## Recommendation

It is recommended that consideration be given to the need of additional protection on this line.

Respectfully submitted,

W. J. PATTERSON,

Director.