

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING  
AN ACCIDENT WHICH OCCURRED ON THE CENTRAL OF GEORGIA  
RAILWAY AT GIRARD, ALA., ON JUNE 2, 1932.

July 25, 1932.

To the Commission.

On June 2, 1932, there was a derailment of a passenger train on the Central of Georgia Railway at Girard, Ala., which resulted in the death of one employee and the injury of one employee.

#### Location and method of operation

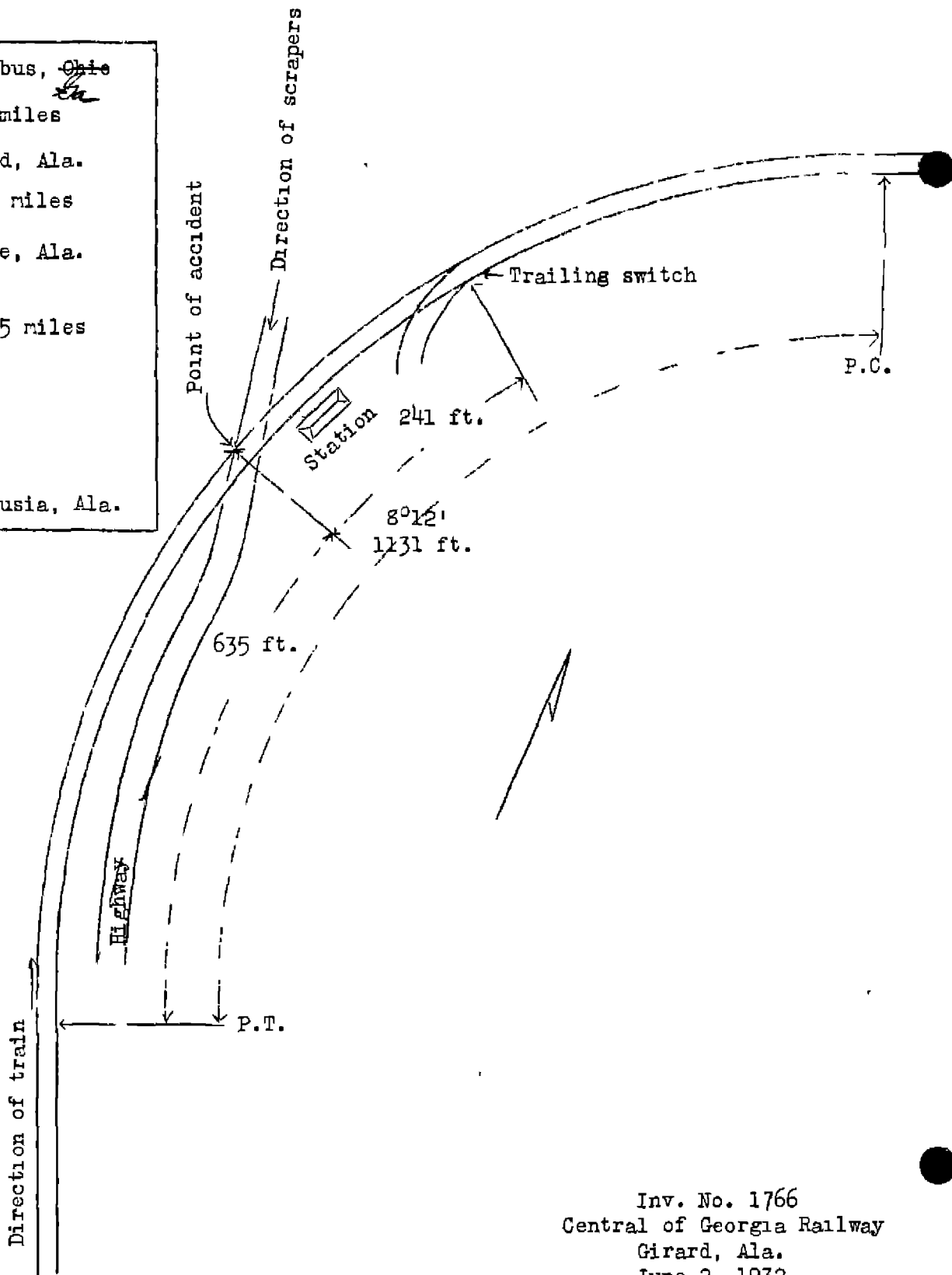
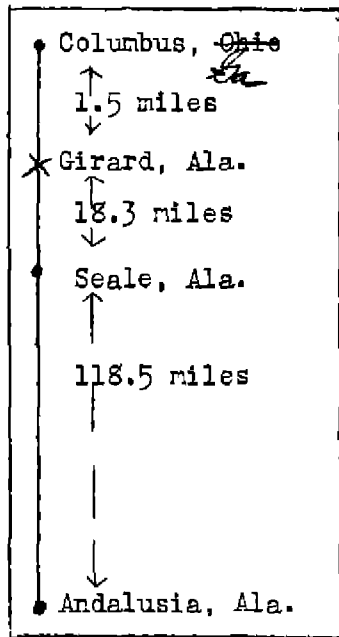
This accident occurred on the Andalusia District, which extends between Andalusia, Ala., and Columbus, Ga., a distance of 138.3 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a highway crossing located just west of the station at Girard; approaching this point from the west, the track is tangent for a considerable distance, followed by an  $8^{\circ} 12'$  curve to the right 1,131 feet in length, the accident occurring on this curve at a point 635 feet from its western end. The grade at the point of accident is 0.70 per cent descending for eastbound trains.

The track is laid with 80-pound rails, 33 feet in length, with an average of 18 ties to the rail-length, fully tie-plated and double-spiked, and is ballasted with gravel west of the station and with cinders east of the station, to a depth of about 4 inches. The highway involved crosses the track diagonally and is approximately 41 feet in width. It is descending toward the track from both directions and consists of a gravel and clay mixture covered with a surface layer of loose dirt. The crossing is not planked.

The weather was clear at the time of the accident, which occurred about 11.12 a. m.

#### Description

Eastbound passenger train No. 24 consisted of one mail and baggage car and three coaches, all of steel construction, hauled by engine 409, and was in charge of Conductor Grider and Engineman Davis. This train departed from Seale, 18.3 miles west of Girard, at 10.44 a.m., 25 minutes late, and was derailed at Girard while traveling at a speed variously estimated to have been between 6 and 20 miles per hour.



Inv. No. 1766  
Central of Georgia Railway  
Girard, Ala.  
June 2, 1932

The engine and tender were derailed to the left, the engine being stopped bottom up and practically reversed at the foot of a fill, with the forward end 303 feet from the initial point of derailment and 28 feet from the center line of the track. The tender cistern was torn from its frame and stopped on its right side opposite the rear end of the engine and with its head end resting on the rear wheels of the engine, the frame remained coupled to the engine. Both the engine and tender were badly damaged and the leading car sustained slight damage, although it had only one pair of wheels derailed. The employce killed was the engineman and the employce injured was the fireman.

#### Summary of evidence

Fireman Coleman stated that he noticed nothing unusual about the engine during the trip and that it appeared to have been riding well. While the train was approaching Girard, which is a flag stop, the engineman applied the brakes reducing the speed to 5 or 6 miles per hour. When the engine reached the crossing at that point he heard a peculiar rattling sound, followed by a bump and then the engine began swaying, indicating that it was derailed, and on looking towards the engineman he saw the latter apply the brakes just about the time the engine turned over and slid down the embankment. Approaching the point of accident the fireman was riding on his own seatbox and as he was on the outside of the curve he could not see the crossing ahead and did not know what caused the accident. After the accident he assisted in removing the engineman from the wreckage, but the engineman although still alive made no statement concerning the derailment.

Conductor Grider stated that the last application of the brakes was made while the train was rounding the curve west of Girard, and when speed had been reduced to 15 or 20 miles per hour the brakes were released and the train permitted to drift at about the same speed. His first intimation of anything wrong was when the glass of a vestibule door of the car in which he was riding was broken; upon looking out he saw the tender overturn; the brakes were then applied in emergency, bringing the balance of the train to a stop. After the accident he inspected the equipment but found nothing that could have contributed to the cause of the accident, at the highway crossing he found dirt on the rails and in the flangeways, and this dirt showed evidence of wheels having run over it. He did not examine the track at any other point, as he felt satisfied that the dirt at the highway crossing was what caused the train to be derailed.

The statements of Flagman Davis were to the effect that the train was traveling at the usual rate of speed, about 20 miles per hour, at the time it was derailed. He made no inspection of the track after the accident and did not at-

tempt to determine the cause of the accident.

Agent Mabry stated that he was on duty at Girard on the day of the accident and during the morning he observed a road scraper passing over the crossing. He did not remember the time at which this scraper passed, but he noticed that the blade was down and the thought occurred to him that this was strange in view of the fact that it was passing over the hard surface of the track. Afterwards he was engaged in station work and had no opportunity to inspect the crossing. As train No. 24 approached he took a position alongside the track about 20 feet east of the station preparatory to passing mail to the train, but when the train reached the crossing a great cloud of dust appeared around the train which was so dense that he could not see the wheels or track, and the train passed him through considerable dust and smoke before he had time to signal the train crew.

Engineman Young stated that he operated westbound train No. 15 from Columbus on the morning of June 2 but did not remember whether the train stopped at Girard, at which point the scheduled time of that train is 7.38 a. m. When his engine passed over the crossing at Girard he did not notice any dirt on the track, neither did he feel anything unusual in the riding of the engine.

Assistant Engineer Benson, Yardmaster Young and Master Mechanic McCafferty, who arrived at the scene of accident shortly after its occurrence, found dirt on the high rail of the curve at the west side of the crossing, the pile of dirt extending diagonally across the rail for a distance of approximately 3 feet. The dirt on top of the rail was crushed to a depth of about  $\frac{1}{4}$  inch and the dirt on each side of the rail was lying loose and was about 3 inches above the top of the rail, indicating that this pile of dirt had been run through by a train, there was no dirt or other obstruction on the low rail of the curve. Just east of where this pile of dirt was located, flange marks appeared on the crossing between the rails and on the outside of the high rail; these marks gradually swerved away from the rails until they ran off the ends of the ties on the outside of the curve. The marks indicated that the engine truck was the first to be derailed and that it was followed by the driving wheels as the engine reached the frog of a trailing-point switch, 200 feet distant. Beginning at the crossing and moving westward for a distance of 100 feet, the elevation ranged from 2 inches to  $2\frac{3}{4}$  inches, and the gauge within this distance averaged between 4 feet 9 inches and 4 feet  $9\frac{1}{8}$  inches, while there were no marks on the track to indicate that anything had been dragging. An examination of the highway showed fresh scraper marks on the extreme west edge of the crossing, on both sides of the track, but no scraper marks appeared

between the rails. It was the opinion of these witnesses, judging from the scraper marks adjacent to the track and the position of the dirt piled on the high rail of the curve, which was of the same general appearance as the surface of the highway, that the dirt had been deposited on the track by a road-scraping machine while passing over the highway, and that this dirt resulted in the derailment of the train.

Section Foreman Hydrick stated that he inspected the crossing at 6.55 a. m. on the day of the accident and at that time there was no dirt on the rails. He watches this particular crossing very closely, as scraping machines pass over it quite frequently and in some instances leave sufficient dirt on the track to cause an unsafe condition which necessitates his removing it from the track. He further stated that the crossing is maintained in good condition and he thought trains could be operated over it safely at a speed of 25 or 30 miles per hour.

General Foreman Homer stated that he last inspected engine 409 on June 1 and at that time it was in perfect mechanical condition, having been out of the shop only about 10 days after undergoing heavy repairs. Machinist Bryant stated that he inspected engine 409 on its arrival at the roundhouse from its previous trip, and again after it was made ready for departure on train No 24 on the morning of June 2, and found it to be in safe and serviceable condition.

Tractor Operator Wright and Scraper Operators Estes and Smith stated that they were operating the scraping outfit that worked in the vicinity of Girard on the morning of June 2. This outfit consisted of a tractor hauling two scraping machines with Operator Estes, who was in charge of the crew, handling the leading machine and Operator Smith handling the second machine. They said that the scrapers had been in use while approaching the crossing but that upon reaching a curve in the highway a short distance from the crossing the blade of the rear scraper was raised, and when the outfit reached a point about 20 or 25 feet from the crossing it was stopped and the blade of the leading scraper was raised as much as 10 or 12 inches above the surface of the road. The outfit then moved over the crossing, at about 7 a.m., without having deposited any dirt on the track, and when the rear scraper was about 6 or 8 feet beyond the crossing the blades were again lowered and the movement continued without stopping. No other movement was made over this crossing on the day of the accident and the scraping outfit was about 3 miles distant when the accident occurred. Operators Estes and Smith were positive in their statements that no dirt was left on the track when the machines passed over the crossing. Operator Estes also said that his instructions are to raise scraper blades more than 3 feet from railroad crossings and bridges and if any dirt is deposited at these points it must

be removed before departing.

Superintendent of Streets Cobb stated that he was located on the highway near Girard station at the time the road-scraping outfit passed him, between 9 and 9.30 a. m., and before it passed over the crossing. At about 10 a. m. he went over the crossing but paid no attention to its condition, although about 10 or 15 minutes after the accident he returned to the crossing and saw the pile of dirt on the track. He did not see any other scrapers in that vicinity, and said that while the city owns some scraping machines, none of them had been used for a week prior to the accident. George Smith, a local resident, stated that he saw the road-scraping machines pass over the crossing, but did not know the time, although he noticed that the leading machine scraped dirt on the track. He made no attempt to remove this dirt as he did not think it was dangerous, and also because he expected the machines to return within a short time. Other local residents said that the road-scraping outfit did not pass over the crossing until after train No. 15, due at 7.38 a. m., had gone.

An examination of the track by the Commission's inspectors about 24 hours after the occurrence of the accident disclosed that the first mark of derailment was a flange mark between the rails 3 inches from the inside or south rail and about 8 inches from the west side of the crossing. The next marks appeared on the surface of the road 5 inches outside of the outside or north rail, 19 feet east of the first mark. These marks were followed by a mark on an angle-bar bolt on the north rail 36 feet beyond, and from that point other marks were found on the ties which extended to a trailing-point switch, a distance of 186 feet; from this latter point repairs had been made to the track. Scraper marks were clearly visible on the highway on both sides of the highway and there was a pile of dirt located on the west side of the highway to the north of the track which resembled the dirt still remaining on the track at the initial point of derailment.

#### Conclusions

This accident was caused by dirt having been scraped on the track at a highway grade crossing.

A road-scraping outfit passed over the crossing during the morning, and the crew operating this outfit said that no dirt was deposited on the track. Not only is there direct evidence to the contrary, but after the accident scraper marks were noted on the west side of the highway close to the track and there was a pile of dirt, of the same appearance as the surface of the highway, which covered the outside rail of the curve, and this dirt showed evidence of having been run over by the wheels of a train.

This crossing is not planked and there is considerable loose dirt on the highway, some of it undoubtedly the result of the work done by the road scraper. Motor traffic, as well as heavy rains, can cause enough of this dirt to lodge on the crossing to permit a dangerous condition to arise, and consideration should be given to removing this loose dirt from the highway on each side of the crossing.

While there is no evidence that track maintenance had anything to do with the occurrence of the accident, it is noted that the elevation of the outer rail approaching the point of accident was quite irregular, and at one point it varied from 2 inches to  $3\frac{1}{2}$  inches within a distance of 60 feet, the elevation was 2 inches at the point where the dirt was on the rail. Not only should the elevation be better maintained, but it should be increased if passenger trains are to be operated at the maximum permissible speed of 45 miles per hour, although in this connection it should be stated that their usual speed at this point was not over 20 or 25 miles per hour.

The employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.