

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE  
NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY NEAR  
CHICKAMAUGA, TENN., ON SEPTEMBER 24, 1925.

October 24, 1925.

To the Commission:

On September 24, 1925, there was a head-end collision between two passenger trains on the Nashville, Chattanooga & St. Louis Railway near Chickamauga, Tenn., which resulted in the death of 1 passenger, and the injury of 35 passengers 18 employees, and 3 Pullman porters.

Location and method of operation

This accident occurred on that part of the Atlanta Division extending between Junta, Ga., and Chattanooga, Tenn., a distance of 88.70 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 approximately 8,000 feet south of the south switch of the passing track at Chickamauga, on a fill about 25 feet in height; approaching this point from the north there are 5,137 feet of tangent, followed by a compound curve to the left 2,665 feet in length. The accident occurred on this curve at a point 1,199 feet from its northern end, where the curvature is slightly more than 2°. Approaching from the south there are 443 feet of tangent, followed by the curve on which the accident occurred. The grade at the point of accident is 0.62 per cent ascending for southbound trains. Owing to the embankment of a cut on the east side of the track about 20 feet in height, just south of the fill on which the accident occurred, the view of the point of accident from the engineman's side of the cab of a northbound train is restricted to about 700 feet.

The weather was clear at the time of the accident, which occurred at about 3.21 p.m.

Description

Passenger train second No. 95, the Dixie Flyer southbound, consisted of one express car, one baggage car, two coaches, one dining car, and four Pullman sleeping cars, in the order named, hauled by engine 558, and was in charge of Conductor Davis and Engineman Green. The cars were of

all-steel construction with the exception of the first and fifth cars, which had steel-underframes. Before departing from Chattanooga the crew received, among others, a copy of train order No. 567, Form 31, reading in part as follows:

"C&E \*\*\* 2nd \*\*\* No. 95.

Third No. 94 Eng 562 will \*\*\* hold  
main track meet Second No. 95 Eng. 558  
at Chickamauga \*\*\*."

Train second No. 95 departed from Chattanooga, 10.79 miles north of Chickamauga, at 2.57 p.m., 10 minutes late, passed Boyce, the last open office, 4.79 miles distant, at 3.11 p.m., 13 minutes late, and then passed Chickamauga, the meeting point. Shortly afterwards the conductor's attention was called to the fact that the meeting point had been passed, the air brakes were applied by the train porter by means of the conductor's emergency valve in the sixth car in the train, and the train was brought to a stop at a point approximately 8,000 feet south of the south switch of the passing track at Chickamauga; immediately after coming to a stop it was struck by train third No. 94.

Passenger train third No. 94, the Dixie Flyer north-bound, consisted of one baggage car, three Pullman sleeping cars, one dining car, and four Pullman sleeping cars, in the order named, of all-steel construction, hauled by engine 562, and was in charge of Conductor Baldwin and Engineman Hamby. At Dalton, 26.93 miles south of Chickamauga, a copy of train order No. 567, Form 19, previously quoted, was received. The train departed from Dalton at 2.37 p.m. left Graysville, 5.74 miles south of Chickamauga and the last open office, at 3.15 p.m., 3 hours late, and collided with train second No. 95 on reaching a point about 4 miles beyond Graysville while traveling at a speed estimated to have been about 35 miles an hour.

Both engines, together with their tenders, and the first car in each train were entirely derailed; the forward truck of the second car in train second No. 95 was also derailed. None of the other equipment in either train was derailed or materially damaged. Engine 558, together with its tender and the baggage car, rolled down the embankment, on the outside of the curve and came to rest in an upright position parallel to, and 50 feet west of, the track. Engine 562 also went down the embankment on the outside of the curve and came to rest bottom up, with its head end 25 feet and its rear end 10 feet west of the track; the tender was also bottom up, parallel to and just west of the engine. The first car in this train was on its left side, also down the embankment. Both engines were considerably damaged, while the forward end of the first car in train third No. 94 was considerably crushed.

### Summary of evidence

Conductor Davis, of train second No. 95, stated that at Chattanooga he received copy of train order No. 567, together with a clearance card, Form "A", properly made out; the clearance card called for three train orders, which were received accordingly. The conductor said that when he was on his way to deliver a set of the orders to Engineman Green he informed Flagman Smith of the meet with train third No. 94 at Chickamauga, and that as he started away the flagman repeated "Chickamauga?", and he replied, "Yes " Conductor Davis said that he also informed Train Porter Fielding of the meet order. On arriving at the engine he delivered the orders to Engineman Green and said they were to meet train third No. 94 at Chickamauga, and the engineman made some reply which the conductor did not understand; this was all the conversation he had with the engineman. While collecting tickets in the day coaches he had the train porter follow him and when he finished he placed the tickets in the porter's cap and had him take them forward and put them in the conductor's train box, telling him to stay there and head the train in at Chickamauga for train third No. 94. Conductor Davis then started toward the rear of the train, to be in a better position to see that the switches were handled properly at Chickamauga. On reaching the first Pullman car, this being the sixth car in the train, he met the Pullman conductor and engaged him in conversation relative to the number of passengers that had boarded the train at Chattanooga. One of the passengers in this car made a complaint about paying an extra fare, and he said that just before he had finished making explanations to this passenger he remembered about the meet at Chickamauga, and about this time the train porter entered the car and yelled "Did you say meet third 94 at Chickamauga?" to which Conductor Davis replied "Stop him!" Train Porter Fielding, being near the conductor's emergency valve, opened it and brought the train to a stop, the collision occurring about five seconds afterwards. He further stated that he did not compare train orders with Engineman Green as he should have done; that he was trying to get away from Chattanooga on time and probably hurried away from the engineman too quickly, and that Flagman Smith did not personally read the orders but was informed of their contents, and he was positive that the flagman thoroughly understood them. Conductor Davis also stated that he did not hear the station whistle signal sounded for Chickamauga from his position in the train, being in the sixth car from the engine and that the time had elapsed so quickly that he did not realize the meeting point had been passed until the train was in the vicinity of Whorley's crossing, located 5,951 feet south of the south switch at Chickamauga.

Engineman Green, of train second No. 95, stated that it was his custom to oil the engine at Chattanooga and that his hands got dirty and greasy, and almost invariably when Conductor Davis arrived with the orders he would ask the conductor to place them in a pocket of his overalls, which he said was the case in this instance. Conductor Davis then left without saying anything, after which Engineman Green set the oil can in the gangway, and read the clearance card and two of the orders - the running order and slow order - while standing beside the engine. About this time he received a proceed signal, put the orders in his pocket, got up on his seat box and started, Traveling Engineer Austin, who was on the engine, and Fireman Brown were busy filling oil cans down on the deck of the engine at this time. Engineman Green said that just after starting he informed Fireman Brown of the running order and the slow order, saying they were all the orders he had, but did not show the orders to the fireman. He sounded the station whistle signal when approaching Chickamauga, and on reaching Whorley's crossing, about 1 mile south of Chickamauga, he heard one blast sounded on the communicating air whistle; this was a signal he and Conductor Davis had agreed should be used when the conductor wanted to transmit hand signals, and when he looked back and did not see any hand signals he did not pay any further attention to the matter. Shortly afterwards another blast was sounded and then the air brakes were applied from the rear of the train. After the train came to a stop those on the engine looked back in an endeavor to ascertain the trouble and while they were so engaged the collision occurred. Engineman Green said he might have had the meet order, but if he did have it he did not see it, and that he did not remove the orders from his pocket after boarding the engine at Chattanooga, being so engrossed in making a hurried departure behind the first section of the train that he forgot to show the orders to the fireman. He further stated that when he read the clearance card he did not have on his glasses, and while the operator's figure on the clearance card, showing the number of orders held for train second No. 95, was a plain 3, he said he must have read it for a 2, and he did not check the orders against the clearance card as the rules required. It further appeared that Engineman Green had operated train second No. 94 in to Chattanooga, displaying signals for the following section, train third No. 94, but when he departed from Chattanooga on train second No. 95, southbound, he did not know whether or not train third No. 94 had arrived as he had not checked the train register.

Fireman Brown, of train second No. 95, stated that Engineman Green told him there were two train orders, a running order and a slow order, but the orders were not shown to him nor did he ask to see them as he was busy at

Chattanooga and forgot to ask for them after the train started. The station whistle signal was sounded approaching Chickamauga and at about Whorley's crossing one blast was received on the communicating air whistle signal, but the first he knew of anything wrong was when the air brakes were applied from the rear, the collision occurring just after the train came to a stop.

Traveling Engineer Austin stated that he rode on the engine of train second No. 94 on the northbound trip, from Atlanta to Chattanooga, with Engineman Green; he also rode on the engine on the return trip on train second No. 95. He did not hear any conversation between Engineman Green and Fireman Brown as to what orders they held, nor did he see or inquire of the engineman as to the orders. He knew that train second No. 94 displayed signals for train third No. 94 on the northbound trip, but he did not know whether or not train third No. 94 had reached Chattanooga at the time train second No. 95 departed.

Flagman Smith, of train second No. 95, stated that while he was assisting passengers on the train at Chattanooga, Conductor Davis came up behind him and said something but he did not know what it was; he maintained that he knew nothing whatever of the train orders received at Chattanooga, and that the first intimation he had of anything wrong was when the train came to a stop. He was aware the conductor received orders before leaving Chattanooga, and he said the rules require flagmen to read, understand, and assist in executing orders; however, he did not ask Conductor Davis to let him see the orders at Chattanooga as he was busy getting the passengers aboard and trying to get the train away on time, and after the train departed he did not see the conductor again prior to the time of the collision. Flagman Smith further stated that in view of recent instructions relative to the operation of trains Nos. 94 and 95 in sections, instructing flagmen to remain on the rear of these trains at all times except when it is necessary to leave the rear of the train for the purpose of protecting the same, he was afraid to leave the rear of the train after departing from Chattanooga owing to the fact that there was a following section. Train Porter Fielding said that in conversation with Flagman Smith after the accident the flagman admitted he knew of the meet, having been told of it by the conductor before the train left Chattanooga. Conductor Davis also made a statement that he asked the flagman why he did not stop the train and that Flagman Smith said he did not know why he had not done so, that he left the rear end and went forward through three cars in search of the conductor, and then returned to the rear end. Both of these conversations were denied by Flagman Smith.

Baggagemaster Maddox, of train second No. 95, also stated that he knew nothing whatever about the train orders held leaving Chattanooga. At about the south switch at Chickamauga, Train Porter Fielding opened the baggage car door and inquired as to whether or not the conductor had informed the baggagemaster where they were supposed to meet train third No. 94, to which the baggagemaster replied in the negative, then the porter said "Chickamauga". Baggagemaster Maddox said that he immediately started working his way through the baggage, the car being heavily loaded with it, in an endeavor to reach the conductor's emergency valve, which he said was located in the center of this car, with a cord leading from it toward each end of the car, on looking up he did not at first see the cord but shortly afterwards he saw that it was tied to a bracket near the rear door, but the air brakes were applied before he had reached it. He did not recall having heard the meeting-point whistle signal sounded when approaching Chickamauga. The Commission's inspectors were afterwards informed by the superintendent's office that when further questioned the baggagemaster admitted that he became confused when he realized that a collision was imminent and made no attempt to stop the train.

Train Porter Fielding, of train second No. 95, stated that ordinarily Conductor Davis gave him the train orders to read but on this occasion he only told him of the meet at Chickamauga with train third No. 94. When the train did not slow down approaching the north switch he hesitated about taking immediate steps toward bringing it to a stop as Engineer Green had always been very particular in regard to complying with orders, furthermore, he was not positive as to the meet at Chickamauga, and did not want to cause any unnecessary delay by opening the conductor's emergency valve, or subject himself to a reprimand for bringing the train to a stop in the event there was no meet arranged for at this point. Therefore, he said he sounded two blasts on the communicating whistle, just after the train passed over the north switch, at which time he was riding in the third car, to call the engineer's attention to the meet, then went to the baggage car and inquired of Baggagemaster Maddox as to the meet at Chickamauga, but the baggagemaster knew nothing about what orders had been received. Porter Fielding then ran through the cars toward the rear of the train and on locating Conductor Davis in the sixth car asked about the meet at Chickamauga, and the conductor shouted "Stop him!" Train Porter Fielding immediately opened the conductor's emergency valve, the collision occurring just after the train came to a stop. He also said the station whistle signal was sounded approaching Chickamauga but the meeting-point signal was not sounded.

Passenger Car Inspector Long stated that after testing the air brakes on train second No. 95 at Chattanooga he reported to Engineman Green that they were in proper working order; at the time this report was made the engineman was along the left side of the engine holding three orders and a clearance card in his hand, two Form 31 orders and one Form 19 order.

Engineman Hamby, of train third No. 94, stated that he was unaware of anything wrong until after passing through the cut while rounding the curve at a speed of about 40 or 45 miles an hour, and on seeing train second No. 95 a short distance away he immediately applied the air brakes in emergency, shouted to the fireman, closed the throttle, and reversed the engine. The statements of Fireman Cooper practically corroborated those of Engineman Hamby. None of the other members of the crew was aware of anything wrong until the air brakes were applied in emergency just prior to the accident, Conductor Balavin estimated the speed to have been about 38 or 40 miles an hour at the time of the accident.

#### Conclusions

This accident was caused by the failure of train second No. 95 to comply with the requirements of a train order and meet train third No. 94 at Chickamauga, for which Engineman Green and Conductor Davis are primarily responsible.

Rules 83 and 211a, respectively, of the Rules Governing the Operating Department read in part as follows:

83 - "A train must not leave its initial station on any division \*\*\* until it has been ascertained whether all trains due \*\*\* of the same class have arrived or left.

"Conductors and enginemen must consult train registers."

211A - " \*\*\* On passenger trains, conductors must show all train orders to flagmen, and enginemen must show to firemen. \*\*\*".

In addition there are printed instructions at the bottom of the clearance card requiring conductors and enginemen to see that the total number of orders received corresponds with the number inserted on the clearance card.

Engineman Green admitted that he did not check the train register before departing from Chattanooga, leaving without knowing whether or not train third No. 94 had

arrived, although on the northbound trip he operated the second section of train No. 94 into Chattanooga and at that time signals were displayed for the third section of that train, this being the train with which train second No. 95 collided. Furthermore, he admitted that he did not show the orders to the fireman, also that the figure on the clearance card, showing the number of orders, was a plain 3, and that had he checked the orders against the clearance card the meet order would not have been overlooked.

Conductor Davis admitted that he did not properly compare the train orders with the engineman, as he was engrossed in making a hurried departure from Chattanooga, nor did he show the orders to the flagman, as required by the rules. Had either of these employees paid proper attention to the handling of the orders received this accident would have been averted.

The rules also require firemen and flagmen to read train orders, yet neither of these employees made any effort to ascertain the contents of the train orders received at Chattanooga. Had they made themselves familiar with the orders as required by the rules this accident might have been prevented. There was a dispute as to whether or not Flagman Smith knew of the meet with train third No. 94; if he had this information, he is equally at fault with the conductor and engineman for the occurrence of this accident.

An automatic block-signal system is now being installed on this division. Had this system been in operation this accident probably would not have occurred; an adequate automatic train stop or train control device would have prevented it.

All of the employees involved were experienced men; 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.