

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
ATLANTA JOINT TERMINALS

ATLANTA, GA.

APRIL 22, 1936

INVESTIGATION NO. 2058

SUMMARY

Railroad: Atlanta Joint Terminals
Date: April 22, 1936
Location: Atlanta, Ga.
Kind of accident: Derailment
Train involved: Switch engine
Engine number: 709
Consist: 16 cars
Speed: 5-6 miles per hour
Track: 2° 20' curve to left; grade slightly descending for eastward trains
Weather: Cloudy and light rain
Time: 2:15 p.m.
Casualties: 1 killed
Cause: Damaged switch; switch had been run through by same engine while moving in the opposite direction.

June 4, 1936

To the Commission:

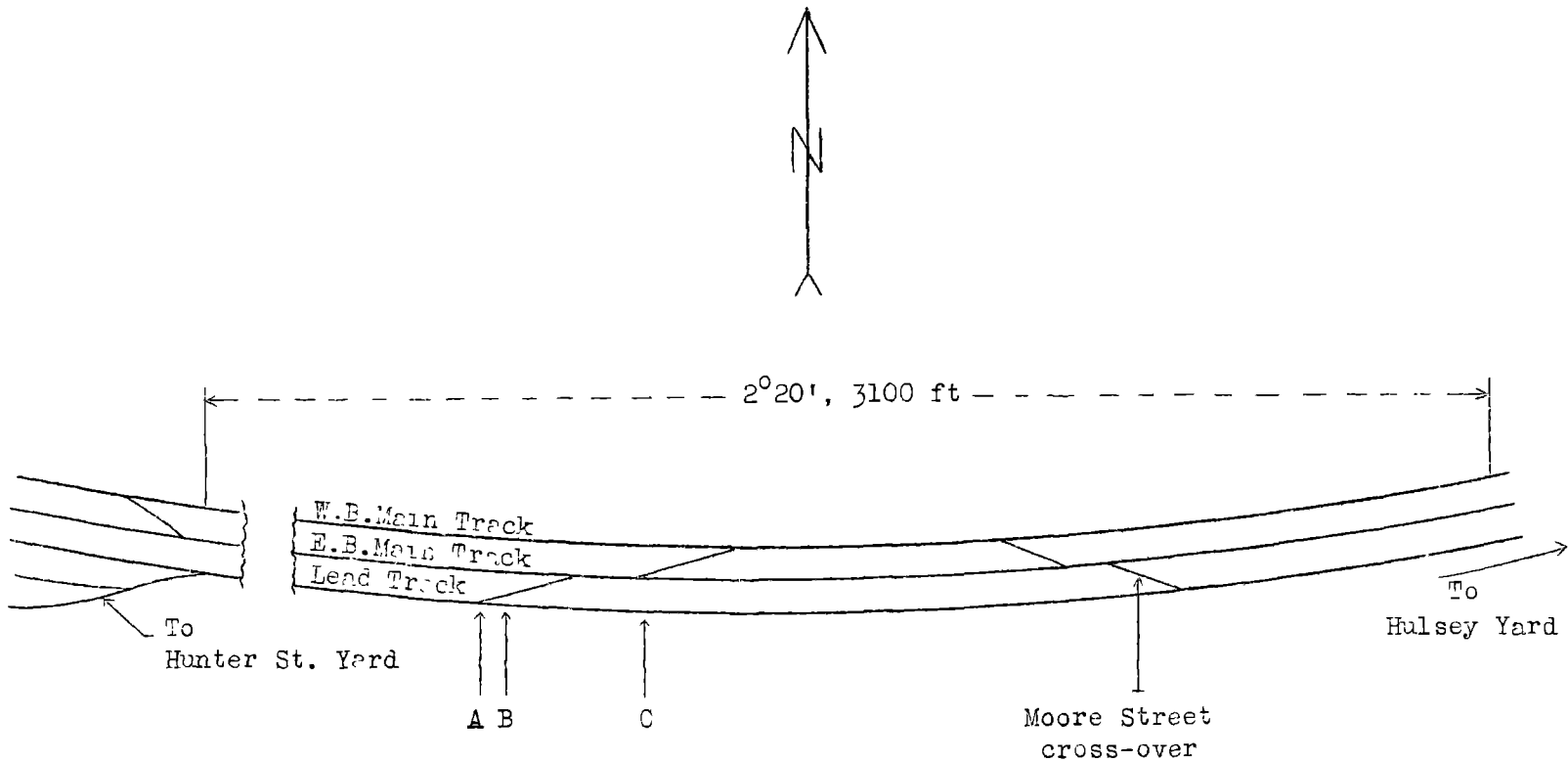
On April 22, 1936, there was a derailment of a switch engine on the Atlanta Joint Terminals at Atlanta, Ga., which resulted in the death of one employee.

Location and method of operation

The Atlanta Joint Terminals performs switching operations and handles trains for three railroads entering Atlanta; movements are made under yard-limit rules and are governed by transportation and time-table rules in effect on the Georgia Railroad. No form of block-signal system is used. Two main tracks extend between Hulsey yard and Hunter street yard, a distance of $\frac{3}{4}$ mile, the track to the north being the west-bound main and the track to the south the east-bound main; paralleling these tracks on the south is a track known as the lead track. A cross-over connects the lead track and the east-bound main track at Moore street and there is a similar connection known as the house cross-over located 500 feet farther west; the former has a trailing point and the latter a facing point switch for trains moving eastward on the lead track. Yard switches, except those on the main track, have no normal position but are left in the position last used; main track switches are required to be set for a main track movement.

The accident occurred at the west switch of the house cross-over. Approaching this point from Hulsey yard the track is tangent for a short distance, followed by a compound curve to the right 3100 feet in length with maximum curvature of $2^{\circ} 20'$, the accident occurring near the point of maximum curvature; in this immediate vicinity the grade is slightly ascending westward, varying from 0.03 percent to 0.20 percent. The switch involved is a No. 8 turnout with a rigid frog; a New Century adjustable ground-throw switch stand, mounted on two head block ties, is located on the north side of the lead track four feet from the stock rail; the switch stand has no targets but the lamp is left on it continuously, the light being extinguished during the daytime; the center of the lens is 14 inches above the rail and the lamp is not equipped with metal discs.

The lead track is laid with 80 pound rail, 33 feet in length, with an average of 13 ties to the rail length and is ballasted with cinders and is well maintained.



- A - Lead track switch of House cross-over.
- B - Initial point of derailment.
- C - Point where tender stopped.

Distance from A to B, 15' 9"
 Distance from B to C, 103' 5"
 Distance from A to C, 119' 2"

Inv. No. 2058
 Atlanta Joint Terminals
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The weather was cloudy and a light rain was falling at the time of the accident, which occurred at 2:15 p.m.

Description

Switch engine 709, headed west, in charge of Foreman Durden and Engineman Thompson, was pulling 16 cars eastward over the lead track and upon encountering the west switch of the house cross-over, while moving at a speed of 5 or 6 miles per hour, the tender wheels split the point and followed the lead track until the gauge became wide enough to permit them to drop off the rails, while the driving wheels engaged the switch point and followed the cross-over. The initial point of derailment was 15 feet 9 inches east of the switch point and the tender traveled 105 feet 5 inches after being derailed; all wheels of the first car and one pair of wheels of the second car were also derailed but all of the equipment remained upright and sustained only slight damage. The crank foot of the switch stand was broken, the tie rods were slightly bent and the stock rail of the lead track was tipped outward at an angle of about 30°. The employee killed was a switchman who was thrown from the footboard of the tender.

Summary of evidence

Switch Foreman Durden stated that his engine had moved eastward with a cut of cars, from Hunter street yard to Moore street, over the lead track and after making various switching movements had again entered the lead track from the east-bound main, at the house cross-over. He was at Hunter street yard office when the latter move was made and was unable to see the position of the cross-over switches from his location but he assumed that before the switches were set for the cross-over movement the inside switch was lined for the lead track as that was its position when his engine passed over it while en route to Moore street a short time before and the switch had not been used since that time; Switchman Morris handled the house cross-over switches and if he failed to throw both switches when he lined the route for the movement from the east-bound main to the lead track it would result in the inside switch being run through; no other movement was made over the switch between the time of this cross-over movement and the time of the accident. After entering the lead track, the engine proceeded to Hunter street yard where 16 cars were picked up for movement behind the engine to Hulsey yard. Leaving Hunter street yard Foreman Durden was on the north footboard of the tender and Switchman Morris was standing next to him near the outer edge of the footboard; approaching the lead track switch of the house cross-over Foreman Durden saw that the switch points

were lined for a cross-over movement to the east-bound main and as this was the route he wished to follow he called to Track Foreman Gowder who was near the main track switch of the cross-over and had him line that switch to complete the set-up. The lead track switch stand was not equipped with a target and Foreman Durden was unable to identify its position by the switch lamp, but as the position of the switch points indicated that they were lined for a cross-over movement there was no occasion for doubt as to the position of the switch. He said that had there been a target on the switch stand he would have known there was something wrong with the switch. As the tender wheels moved over the switch point on the lead track at a speed of 5 or 6 miles per hour, he felt them become derailed, and saw Switchman Morris fall off the footboard. After the accident Foreman Durden examined the switch and found the point open and the lug broken off the crank shaft of the switch stand, which indicated to him that the switch had been run through. He stated that bulletin instructions issued 4 or 5 years ago require the air brakes to be coupled and in use when making main track movements in the yard but that the train line was not coupled in this instance and that for some time in the past it has been the practice not to couple the air when making similar movements; he thought the engine moved about 50 feet before coming to a stop after the derailment and said that had the air brakes been in use on the 16 cars, he believed a stop could have been made in time to avert the death of Switchman Morris. He said the accident occurred at 2:15 p.m.

The statements of Switchman Williams and Fireman Westmorland corroborated those of Foreman Durden regarding the movements made by their engine prior to the accident but added nothing further of importance; Switchman Williams stated that the switch involved was lined for the lead track when they passed over it while en route to Moore street and that he did not change its position after that time; he was in the vicinity of Hunter street yard when the cross-over movement was made from the east-bound main to the lead track but was unable to see the position of the cross-over switches from that location.

Engineman Thompson stated that when the cross-over movement was made from the east-bound main to the lead track, Switchman Morris got off at the main track switch, lined it for the cross-over, gave him a proceed signal, and after the engine had cleared the switch Switchman Morris restored it to normal position and got on the rear footboard of the engine. Approaching the inside switch when returning eastward from Hunter street yard, Engineman Thompson saw the switch points lined for the cross-over and also saw Track Foreman Gowder set the main track switch to complete the line-up. The train was moving at a speed of about 6 miles per hour and just as the back of the tender passed over the lead

track switch points he realized that the tender was derailed; he immediately applied the air brakes and then saw Switchman Morris fall off the footboard. Engineman Thompson said that sometimes the air is coupled when making moves between Hunter street yard and Hulsey yard but that the train line was not coupled on this occasion; he thought he could have stopped the train within a distance of 30 feet if the air had been in service on the 16 cars of the train; he also thought that if there had been a target on the switch stand he probably would have noticed there was something wrong with the switch.

Track Foreman Gowder stated that he was near the house cross-over as engine 709 was approaching eastward on the lead track and upon being requested to do so by Foreman Durden, he threw the main track switch of the cross-over; before doing this he noticed that the points of the inside switch appeared to be lined for the cross-over. Immediately after the accident he examined the switch and found that the crank foot had been newly broken; the ball-throw lever was set and latched in position for the lead track but the switch points were lined for a cross-over movement. He said that all main track switches in the yard are equipped with switch targets but that some of the yard track switches, including the one involved, are not so equipped.

Master Mechanic Douglas stated that he arrived upon the scene about 12 or 15 minutes after the accident occurred and made an inspection of engine 709 and its tender but found nothing about them that might have contributed in any way to the cause of the accident; the flanges of the tender wheels showed but slight wear and were well within the gauge and the footboards were of proper height. He also examined the switch involved in the accident in the presence of Foreman Gowder, and found indications that the tender wheels had passed between the switch point and the stock rail and followed the lead track until the gauge became wide enough to allow the wheels to drop off the rail; the driving wheels evidently caught the other switch point and followed the cross-over; the switch points were not damaged but the crank foot of the switch stand was newly broken.

Discussion

Engine 709 had made a movement between Hunter street yard and Moore street on the lead track a short time prior to the accident, passing over the lead track switch of the house cross-over en route; later a movement was made from the east-bound main to the lead track through the house cross-over, this being the first movement over the lead track switch after the engine had

passed over it when en route to Moore street and Switchman Morris handled the switches for the latter movement.

Foreman Durden was on the leading footboard of the engine as it approached the switch on the return from Hunter street yard and both he and Engineman Thompson saw the switch points lined for the cross-over. The switch stand is not equipped with a target nor the switch lamp with metal discs; switch lights in this yard are extinguished during the daytime and as a result, the only way in which Foreman Durden and Engineman Thompson could identify the position of the switch, was by observing the position of the switch points.

Engineman Thompson realized that the leading wheels of the tender were derailed about the time the rear wheels reached the switch point and he immediately applied the air brakes on the engine, but as the train line was not coupled on the cars, the engine moved about 50 feet before stopping; Engineman Thompson said he thought he could have stopped it within 30 feet if the air brakes had been in use on the train.

After the accident the ball-throw lever of the switch stand was found latched in position for a lead track movement and the crank foot was newly broken; in view of the position of the switch points immediately prior to the derailment, this condition indicates that the switch had been run through, and as engine 709 was the last to use the switch prior to the accident it appears that Switchman Morris failed to line the inside switch when the movement was made from the east-bound track to the lead track, resulting in the switch being damaged at that time.

Bulletin instructions of the Atlanta Joint Terminals, dated August 29, 1929, require the air brakes to be coupled and in use when making main track movements between Hunter street yard and Hulsey yard; engine 709 was making such a movement, about half of which was to be made over the east-bound main track, yet the air brakes were not coupled nor has it been the custom to couple them for some time in the past, when making these movements.

This is the second fatal yard accident investigated by this Bureau, occurring within the ten week period immediately preceding the date of the accident covered by this investigation, in each of which a fatality might have been averted had the air brakes been in operation on the cars being handled. Reports have also been issued covering investigations of 4 accidents, which occurred in the daytime and resulted in the death of 8 persons and the injury of 9 persons, in which switch stands not equipped with targets were involved.

Conclusion

This accident was caused by the damaged condition of a facing point switch which had been run through by the same engine when moving in the opposite direction.

Respectfully submitted,

W. J. PATTERSON,

Director.