INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE VIRGINIAN RAILWAY AT CIRTSVILLE, W. VA., ON MAY 22, 1934.

July 16, 1934.

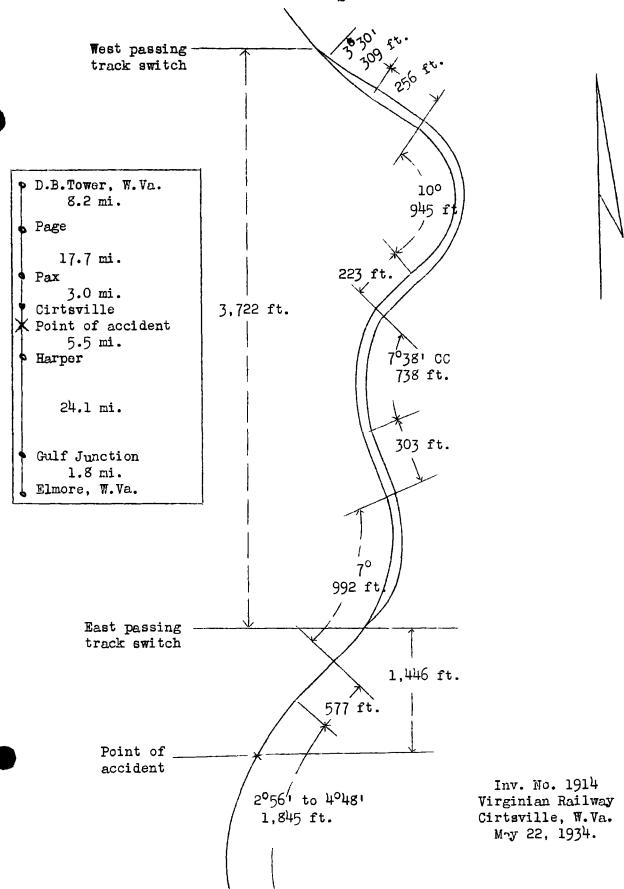
To the Commission:

On May 22, 1934, there was a head-end collision between two freight trains on the Virginian Railway at Cirtsville, W. Va., which resulted in the death of 2 employees and the injury of 1 employee.

Location and method of operation

This accident occurred on that part of the Fourth Subdivision of the New River Division which extends between Elmore
and D. B. Tower (Deepwater), W. Va., a distance of 60.3 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 form of block-signal system being in use. The passing
track at Cirtsville is 3,722 feet in length, paralleling the main
track on the north, and the accident occurred at a point
approximately 1,446 feet east of the east switch of this passing
track. Approaching the point of accident from the west, there
is a series of short curves and tangents, followed by a 7° curve
to the right 992 feet in length, tangent track for a distance
of 577 feet, and a compound curve to the left 1,845 feet in
length, the curvature varying from 2° 56' to 4° 48', the accident occurring on this compound curve at a point about 641
feet from its western end where the curvature is 3° 25'. Approaching from the east, the track is tangent for 582 feet
followed by the compound curve on which the accident occurred.
The grade for eastbound trains is ascending, it being 1.49 percent
at the point of accident.

In the vicinity of the point of accident the track is laid on a low fill 600 feet in length and the accident occurred at a point 130 feet from its eastern end; immediately west of the fill, the track runs through a cut 250 feet in length, the banks of which rise to a maximum height of about 20 feet above the track, restricting the view had by the engineman of an eastbound train approaching the point of accident to less than 300 feet. East of the fill there is a cut 350 feet in length, and due to the curvature and the banks of this cut the engineman of a westbound train could not see the point of accident at a distance of more than 600 feet.



Engines 722 and 718 were badly damaged but remained upright; engine 722 was partially derailed. Fourteen cars in Extra 718 were derailed and badly damaged, these cars being the first to third, inclusive, the eleventh to fifteenth, inclusive, and the forty-sixth to fiftieth cars, inclusive. The first four cars in Extra 722 were derailed and damaged. The engineman and head brakeman of Extra 718 were killed and the fireman of Extra 718 was injured,

Summary of evidence

Fireman Steele, of Extra 718, stated that he understood the order received at Oak Hill Junction directing them to meet Extra 718 at Harper. On arrival at Pax, Conductor Gott left the engine, went to the telegraph office, and returned with an order folded as the operator would have delivered it. The conductor handed the order to him from the ground without saying anything, and although Fireman Steele read the order yet it was firmly fixed in his mind that they were to meet Extra 722 at Harper and he thought that this was a middle order; a clearance card accompanied the order but he did not remember the order number indicated thereon. He then handed the order to the engineman but did not remember whether or not he said anything about the order and did not see the engineman read it. In a later statement, however, he said that possibly he remarked to the engineman that it was a middle order and that the engineman proceeded without reading it. is customary for the last member of the crew who reads the order to put it in his pocket and when the brakeman boarded the engine and asked for the order the fireman referred him to the engineman; the brakeman then walked over to the engineman and was still standing there when the accident occurred, although Fireman Steele did not know whether the brakeman saw the order. Before leaving Pax there had been some conversation relative to the meet with Extra 722 in connection with picking up cars at Harper, the brakeman remarking that the cars could not be picked up at that point until Extra 722 arrived. Fireman Steele stated that both the engineman and the brakeman had the same understanding of the order that he had, and no mention was made of the meet at Cirtsville instead of at Harper. Fireman Steele first saw the approaching train when it was about 8 car lengths distant and he estimated the speed of his train at that time to have been between 15 and 20 miles per hour; he shouted a warning to the engineman and jumped off.

Conductor Gott, of Extra 718, stated that on reading the order received at Pax, he remarked to the operator "Meet at Cirts-ville instead of Harper." He then delivered the order to the fireman on engine 718, which was standing near the station, but did not have any conversation either with the fireman or with the

engineman relative to the order. Cars were picked up and as the train pulled by he looked it over and boarded the caboose, after which he read and checked his copy of order 48 with Brakeman Johnson. When the caboose was within 30 to 40 car lengths of the west switch at Cirtsville the train was traveling at a speed of about 10 miles per hour. The speed then increased and he remarked to the brakeman that Extra 722 must be into clear and they both went out to the rear platform of the caboose, but as they approached the west switch nothing could be seen of a train on the siding. After proceeding about 20 car lengths farther Conductor Gott remarked to the brakeman that probably Extra 722 was a light engine and had remained at the east end of the siding; but about that time the brakes were applied in emergency, the speed of their train then being about 15 miles per hour. Conductor Gott stated that the enginemen of the helper engines were alert, and that he saw the engineman of the second helper engine signal to the engineman ahead to have the fireman look for a train on the passing track. Conductor Gott further stated that on leaving Page the air brakes were working on all of the cars with the exception of one hopper car, that the brakes were tested en route at points where cars were picked up, and that on leaving Page the gauge in the caboose showed a pressure between 70 and 75 pounds and the same pressure was shown on leaving Pax. ments of Flagman Johnson practically corroborated those of the conductor; he further stated that due to the curve he was unable to see along the passing track for a distance of more than 10 car lengths.

Engineman Hart, of the lead helper engine, stated that he received copies of the orders and understood that the meet with Extra 722 had been changed from Harper to Cirtsville. As they approached the meeting point he eased off on the throttle and went over to the fireman's side of the cab to register with the extra train but did not see it. He returned to his seat box and had just closed the throttle when the air brakes were applied in emergency. The speed of the train was between 12 and 15 miles per hour at the time of the accident and he thought the train traveled a distance of about 10 car lengths after the brakes were applied. The rear end of the train stopped in the vicinity of a road crossing which is located about 1,447 feet east of the west switch.

Fireman Bohon, of the lead helper engine, stated that after the accident when he went to the head end of the train, Engineman Gilkerson, who was fatally injured, asked him to look for the order the engineman received at Pax. Fireman Bohon found a copy of train order 48 in the engineman's pocket, showed it to him, and then replaced it in his pocket, but neither of them made any comment about the order.

Engineman Frazier, of the second helper engine, stated that as the speed increased on the level track near the siding he eased off on the throttle and he told his fireman to look for the opposing train, and he also sounded a whistle signal to the engineman of the lead helper engine. Fireman White stated that when he failed to see the expected train Engineman Frazier suggested that possibly Extra 722 has stopped east of the road crossing, but just as the lead helper engine reached the road crossing the air brakes were applied in emergency.

Engineman Lawson, of Extra 722, stated that approaching Cirtsville he was reducing the speed of his train for the purpose of entering the passing track. Due to the banks of the cut he was unable to see ahead to any extent but he did see smoke and at that time thought the eastbound train was at the passing track switch. He first saw it when it was about 5 or 6 car lengths distant, sounded the whistle, moved the brake-valve handle to the emergency position, and jumped off; the speed of his train at the time of the accident was about 6 or 8 miles per hour.

Fireman Gentry and Head Brakeman McKinney, of Extra 722, stated that when the engineman applied the brakes in emergency and sounded the whistle they went over to the right side of the cab and saw the approaching train, from one car length to an engine length distant; due to the curve they had been unable to see the approaching train from the left side of the engine.

Agent-Operator Thompson, on duty at Pax, stated that when he gave Conductor Gott the waybills he also gave him a copy of train order 48 for delivery to the head end of the train, but he did not remember whether or not he called the conductor's attention to the order, although it is his custom to do so. Copies of this order were delivered to the helper engines and the caboose, by hoop, as the train passed the station. This was the only order delivered to this train at Pax.

Division Claim Agent Goodwin stated that on the morning following the accident he went to the hospital at Beckley, W. Va., to see Engineman Gilkerson, of Extra 718. His train orders, which had been given to the doctor for safe-keeping, were brought out and the engineman picked out the order he received at Pax, read it, and handed it to the agent, saying "We all read it for a middle order; don't guess they will let me work for them anymore." Agent Goodwin made a copy of all the orders, which included order 48, directing Extra 718 east to meet Extra 722 west at Cirtsville instead of Harper, together with the clearance card issued by Operator Thompson at Pax to Extra 718, referring to order 48 on form 19.

Conclusions

This accident was caused by failure to obey a meet order.

Under the provisions of train order 48, Extra 718 was required to stop clear of the east switch of the passing track at Cirtsville and await the arrival of Extra 722. The meeting point with Extra 722 first had been fixed at Harper by train order 45, but at Pax, train order 48 was received changing the meet to Cirtsville. The conductor delivered the order to the fireman but had no understanding either with him or with the engineman as to the contents of this order, which restricted the rights of their train. The fireman read it and then handed it to the engineman, and it is apparent that both the engineman and fireman misread the order and erroneously assumed that it was a middle order and that the meeting point at Harper was unchanged. the practice on this railway to allow the use of orders on form 19 when restricting the rights of a superior train; when such a practice is in effect, however, care must be taken to guard against mistakes which experience has shown may arise under the trainorder method of operation. In this particular case the order changed the meeting point and was the most important order the crew had received, yet the conductor first and then the fireman and engineman passed it around without making sure that it was correctly read and understood.

During the 30-day period prior to the accident there was an average daily train movement on this sub-division of 13 trains, both directions included, and it is also to be noted that the Bureau of Safety investigated a head-end collision on another portion of this division at Rock, W. Va., on October 8, 1925, which accident was caused by a work extra moving against an opposing train on the main track without flag protection; a head-end collision at Rock on October 6, 1926, due to a dispatcher authorizing a line repair motor car to proceed, having forgotten an opposing train, and a head-end collision near Ingleside, W. Va., on May 24, 1927, caused by failure to obey a meet order; those three accidents, added to the one here in question, caused the death of 9 employees, and the injury of 36 employees, passengers This line has many curves and cuts, where the view and others. is very limited, with grades requiring helper engine service, and operates trains of unusually heavy tonnage; the carrier should give consideration to the question of providing the greater safety in train operation which would be afforded by some form of blocksignal system.

Respectfully submitted,
W. J. PATTERSON,
Director.