

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE CHESAPEAKE AND OHIO RAILWAY AT SOUTH
RICHMOND, IND., ON OCTOBER 25, 1933.

January 15, 1934.

To the Commission:

On October 25, 1933, there was a collision between a freight train and a yard engine with a cut of cars on the Chesapeake and Ohio Railway at South Richmond, Ind., which resulted in the death of 1 employee and the injury of 2 employees. The investigation of this accident was made in conjunction with a representative of the Public Service Commission of Indiana.

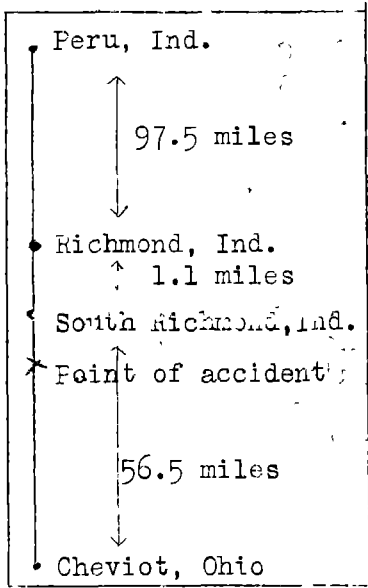
Location and method of operation

This accident occurred on the Miami Sub-division of the Chicago Division, which extends between Cheviot, Ohio, and Peru, Ind., a distance of 155.1 miles, and is a single-track line over which trains are operated by time table, train orders, and a manual block-signal system. The accident occurred within yard limits, at the frog of the switch leading from the main track to storage track 1, on the north side of the main track, 3,015 feet west of the east yard-limit board. Approaching this switch from the east, there is a 4°20' curve to the left 1,181 feet in length, tangent track for a distance of 185 feet, and then a 3°58' curve to the right 1,729 feet in length, followed by 605 feet of tangent track to the switch. The grade for west-bound trains is 0.84 percent descending for a distance of 1,400 feet to the point of accident.

The switch involved was a facing-point switch for west-bound trains; the switch stand was of the intermediate type, 8 feet in height, with a lamp at the top and 12 by 24-inch banners below the lamp, painted red and green. When the switch is set for the main track the green banner is displayed; when set for storage track 1 the red banner is displayed, with the corresponding color indications displayed by the lamp. At the time of the accident this switch was set for the storage track.

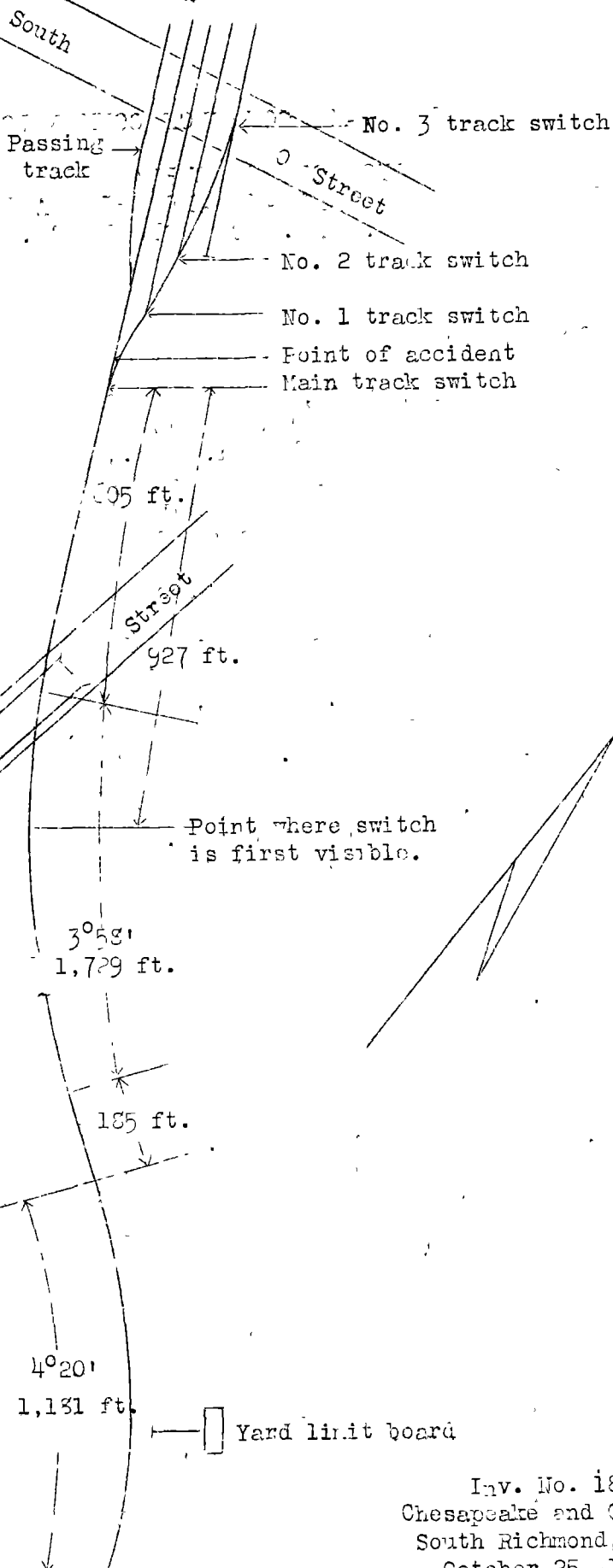
Under rule 93, the main track may be used within yard limits, protecting against third, fourth and fifth-class trains and extras, which are required to move within yard limits prepared to stop unless the main track is seen or known to be clear. The crews of yard engines are furnished with a line-up of train movements by the operator at Richmond, 1.1 miles west of the point of accident. The yard is equipped with telephones for convenient communication and they are connected with the operator at Richmond and when desired can be connected by him with the dispatcher.

East of the storage-track switch the track is laid in a cut



Overhead bridge

South 9th



Inv. No. 1862
 Chesapeake and Ohio Ry.
 South Richmond, Ind.
 October 25, 1933.

1,837 feet in length and there is an overhead bridge located about 605 feet east of the switch, or at the leaving end of the last curve. The embankment is about 15 feet in height and due to this embankment and supports of the overhead bridge, the switch can not be seen by the engineman of a west-bound train until he is within 927 feet of it. Beginning about 5 miles east of South Richmond, there are slow boards restricting speed to 20 and 25 miles per hour until the east yard-limit board is reached.

The weather was clear at the time of the accident, which occurred shortly after 1 p.m.

Description

Yard engine 974, headed west and pulling 9 empty coal cars, was in charge of Conductor Flood and Engineman Dillon. It proceeded eastward from Richmond passenger station about 12:35 p.m., according to the conductor's statement, arrived at South Richmond about 12:45 p.m., pulled by the switch leading to storage track 1, and then shoved the 9 cars in on that track to be coupled to 11 cars which were standing there. The coupling had been made but on account of 5 of the 11 cars having hand brakes set the engine was unable to move them, and while standing at that point, with the rear truck of the tender on the frog of the switch, the tender was struck by train no. 67.

West-bound fourth-class freight train no. 67 consisted of 13 cars and 2 cabooses, hauled by engines 1180 and 1201, and was in charge of Conductor McComas and Enginemen Dixon and Kinsella. This train departed from Cheviot, 56.5 miles from South Richmond, at 11:25 a.m., according to the train sheet, 3 hours late, passed Boston, the last open office, 7 miles south of South Richmond, at 12:50 p.m., 2 hours and 15 minutes late, entered the open switch leading to storage track 1, and collided with yard engine 974 while traveling at a speed variously estimated to have been between 4 and 15 miles per hour.

Engine 974 and its tender were driven ahead a distance of 150 feet, being derailed and considerably damaged, while the first car ahead of the engine was derailed and badly damaged; the bodies of the next three cars were shoved off their trucks and landed in various positions on the tracks without being materially damaged. Both engines, the first car and the front truck of the second car in train no. 67 were derailed but remained upright on the road bed. The employee killed was the fireman of engine 974 and those injured were the engineman of engine 974 and fireman of the lead engine of train no. 67.

Summary of evidence

Engineman Dillon, of yard engine 974, stated that before leaving for South Richmond he received a copy of the line-up which showed train no. 67 as leaving Cheviot at 11:25 a.m. and the conductor informed him that the operator said it would be at Boston

about 1:15 p.m. He proceeded to South Richmond where he shoved the cars in on the storage track, no flag protection being afforded against train no. 67 as the men were on the cars at the different street crossings and also because he figured that they would have time to clear the main track, and while there were telephones at which he could have called, he did not think that was necessary. Engineman Dillon's first information of anything wrong was when he received a washout signal to come ahead and then the fireman said that train no. 67 was approaching; however, he could not move the engine on account of hand brakes being set on the cars they were picking up.

Conductor Flood, of yard engine 974, stated that when he received the line-up from the operator he figured that train no. 67 would arrive at Boston about 1:30 p.m. while the operator figured it would be about 1:15 p.m. and he gave the latter figure to his engineman and Switchman Carroll. His engine left Richmond about 12:35 p.m. and arrived at the storage-track switch about 10 minutes later, pulled by the switch and headed in on the storage track. Conductor Flood made the coupling and had given the engineman a signal when he saw train no. 67 approaching, apparently traveling at a speed of 20 or 25 miles per hour. While there were telephones which he used frequently in order to obtain further information relative to the movement of trains, Conductor Flood did not make any further inquiries on this occasion as he figured that they had time enough to get into clear, and for that same reason he did not order out a flag.

Switchman Carroll, of yard engine 974, knew that the information which Conductor Flood gave him relative to train no. 67 arriving at Boston about 1:15 p.m. was verbal information obtained from the operator, not contained in the line-up, and stated that the conductor should have instructed him to provide flag protection, although he admitted that he should have gone out to flag of his own accord; at the same time, however, he said had he gone out to flag he could not have reached the overhead bridge before the arrival of train no. 67.

Engineman Dixon, of the lead engine of train no. 67, stated that on descending what is known as Richmond Hill he reduced speed according to the two slow boards restricting the speed to 20 and 25 miles per hour. On passing Dirks, 1.6 miles east of South Richmond, he shut off steam and was traveling at a speed of about 25 or 27 miles per hour, and at the yard-limit board he made a service application of the air brakes, drew off some more, and then went into emergency and opened the sanders, but he did not think that he got the full benefit of the emergency application. The air brakes had been tested at Cheviot and had functioned properly en route. Engineman Dixon said the yard engine appeared to be heading in on the side track when he first saw it from a point about 900 feet distant, and that he did not see the red switch target until he had proceeded a little farther around the curve. Engineman Dixon understood that under the rules he should have been moving within yard limits prepared to stop within his

range of vision, and admitted that he was operating his train at too high a rate of speed to stop before striking the yard engine; he estimated the speed of his train to have been between 4 and 8 miles per hour at the time of the accident.

Engineman Kinsella, of the second engine, stated that the brakes functioned properly en route and that the speed was about 25 miles per hour on passing the east yard-limit board; he then heard the lead engineman sound several short blasts on the whistle, accompanied by an application of the brakes, and on looking out he saw the yard engine. Engineman Kinsella jumped from the steps when the lead engine was about four or five car lengths from the yard engine, and at that time the speed was about 18 or 20 miles per hour and he thought it might have been reduced to 15 miles per hour at the time of the accident. Engineman Kinsella stated that he had remarked to the fireman that the lead engineman was using good judgment in reducing the speed on Miami and Richmond hills and he did not think that the speed was excessive on entering the yard limits and therefore did not think it was necessary for him to take any action to reduce speed.

Head Brakeman Bauman, who was riding on the left side of the lead engine, thought the speed was between 18 and 20 miles per hour on passing the yard-limit board, and said that when the engineman sounded the short blasts on the whistle and applied the brakes in emergency the cab of the engine was under the overhead bridge.

Conductor McComas, of train no. 67, did not think his train was being operated at an excessive rate of speed approaching South Richmond, although he admitted that it was not handled in accordance with the yard rules. The estimates as to speed which were made by the crew deadheading on this train varied from 8 to 15 miles per hour at the time of the accident.

Operator Moore, on duty at Richmond at the time of the accident, stated that he made copies of the line-up he received from the dispatcher and placed in the window enough copies for the crew of yard engine 974. Conductor Flood came to the window about 12:01 p.m. and got the line-up, but they had no conversation relative to the time of train no. 67.

Conclusions

This accident was caused by the failure of the crew of yard engine 974 to provide flag protection and by the failure of train no. 67 to be operated under proper control within yard limits.

The evidence indicates that each member of the yard crew saw the line-up obtained by the conductor before leaving Richmond, but all this line-up told them was that train no. 67 left Cheviot, 56.5 miles distant, at 11:25 a.m. and the subsequent conversation between Conductor Flood and Operator Moore represented at best only an exchange of individual opinion as to when train no. 67

would reach Boston. The operator denied that they discussed this question but the conductor said the operator figured the time would be 1:15 p.m. and he therefore informed his engineman and flagman accordingly, with the result they did not think it necessary to provide flag protection, notwithstanding the requirement of the rules and no effort was made to ascertain the location of train no. 67 subsequent to its departure from Cheviot. Under the rules, yard engine 974 should have been protected by flag and Conductor Flood and Engineman Dillon should have seen to it that such protection was provided.

Engineman Dixon, on the lead engine of train no. 67, should have operated his train under control on entering yard limits and especially at points where his view was restricted. The evidence indicates that on passing the east yard-limit board the speed of his train was about 25 miles per hour and this speed should have been very materially reduced before rounding the curve just east of the point of accident; as it was, the speed was too high to enable Engineman Dixon to comply with the rule requiring him to be prepared to stop unless the main track was seen or known to be clear. Neither Engineman Kinsella, of the second engine, nor Conductor McComas took any steps toward having the speed reduced so that their train would be under proper control within yard limits.

Respectfully submitted,

W. P. BORLAND

Director.