

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHESAPEAKE & OHIO RAILWAY NEAR WESTHAM, VA , ON
DECEMBER 1, 1924

December 20, 1924

To the Commission

On December 1, 1924, there was a derailment of a freight train on the Chesapeake & Ohio Railway near Westham, Va , the wreckage of which was struck by another freight train running on an adjoining track, resulting in the death of two employees and the injury of three employees

Location and method of operation

This accident occurred on the Rivanna District of the Richmond Division, extending between Fulton, near Richmond, and Gladstone, Va , a distance of 121.3 miles, which in the vicinity of the point of accident is a double-track line over which trains are operated by timetable, train orders, and a manual block-signal system. The point of accident was at a switch known as College Switch, located about 4,400 feet east of the station at Westham, this switch leads to the right from the westbound track to a spur track and is a facing-point switch for westbound trains. Approaching this switch from the east there is a 30° curve to the left 858 feet in length, followed by about 1 mile of tangent, the switch being located on the tangent 723 feet beyond the end of the curve. The switch stand is on the engineman's side of the track, and is equipped with a lamp which is about 14 feet above the ground. The night indications are red and green, depending on whether the switch is open or closed.

The weather was clear at the time of the accident, which occurred at 9:42 P M.

Description

Westbound third-class freight train No 95 consisted of 56 cars and a caboose, hauled by engine 1246, and was

in charge of Conductor Spears and Engineman Foster. It left Fulton Yard, in Richmond, about 8 miles from the point of accident, at 9 10 P M, and was derailed at College Switch while traveling at a speed estimated to have been between 20 and 25 miles an hour.

Eastbound fourth-class freight train second No. 74 consisted of 67 cars and a caboose, hauled by engine 1249, and was in charge of Conductor Boltz and Engineman J. A. Ladd. It passed Westham at 9.44 P M, and was traveling at a speed thought to have been about 25 miles an hour when it collided with the wreckage of train No. 95.

The engine and first nine cars of train No. 95 were derailed, the engine coming to rest on its right side about 220 feet beyond the switch, with some of the cars fouling the eastbound track. The engine and first eight cars of train second No. 74 were also derailed, the engine coming to rest on its right side 100 feet west of the switch. Eight of the total of 17 derailed cars were destroyed. The employees killed were the engineman and fireman of train second No. 74.

Summary of evidence

The statements of Engineman Foster, Fireman W. N. Ladd and Head Brakeman Trevillian, of train No. 95, were to the effect that their train was approaching the switch at a speed of 20 or 25 miles an hour, that the lamp was displaying a green indication, and that their first knowledge of anything wrong was when the engine was derailed, the fireman and head brakeman saying that at the same time they noticed fire flying from under the wheels. The accident caused the lights on the engine to be extinguished, while the flagging equipment was destroyed, and knowing that train second No. 74 was approaching, Head Brakeman Trevillian obtained the lamp from the switch stand for the purpose of flagging that train but in trying to get around the wreckage he ran into an obstruction, causing the light to go out, and before it could be relighted train second No. 74 had collided with the derailed cars. Engineman Foster did not examine the switch but Head Brakeman Trevillian said that when he first examined it about 25 minutes after the occurrence of the accident the points were up against the stock rail while the switch rods were bent. Later his attention was called to it by Conductor Spears and at that time he noted that the switch lever was out of its socket and had been moved partly around. He further stated that just before train

second No. 74 collided with the wreckage the engineman of that train sounded one short blast on the whistle

Conductor Spears said he examined the switch within an hour after the occurrence of the accident, at which time the points fitted properly against the stock rail, while the lock was missing and the lever out of but close to its socket. When asked how he could account for the points being up against the stock rail after the accident he said he thought it might have been due to pressure of some kind against the inside of the opposite point, or to its having been pulled back by the flange of a wheel with a wide tread. Practically the same conditions as described by Conductor Spears were also observed by Flagman Points after he had been relieved of flagging.

The only members of the crew of train second No. 74 on the engine at the time of the accident were the engineman and fireman, both of whom were killed, the head brakeman having gone back to the caboose in order to eat. The statements of this head brakeman, and also of the conductor and flagman, indicated that they felt no application of the air brakes prior to the occurrence of the accident, and they also stated that they did not make any examination of the switch.

Section Foreman Graves reached the point of accident at about 11 P. M., at which time the rear of train No. 95 had been pulled back from the wreckage. On examining the switch he found the lock to be missing and the switch partly open, the points however were in good condition. He also said that the lock had not been chained to the stand. Trackwalker Brown also examined it and found the handle out of the socket and the points open about one-quarter of an inch. He said that at this time the cars were in the position in which they had stopped at the time of the accident, none of them having been pulled back over the switch.

On December 5, Sectionman Taliaferro saw a switch lock in the shallow water of a canal at a point about 300 feet from the switch, which lock was later removed by Chief Special Agent Welch of the Chesapeake & Ohio Railway. Examination of this lock by Road Foreman of Engines Larsen showed that it was in the locked position, that it had not been battered or hammered in any way, and that there was grease on the hasp indicating that it had not been in the water a long time, while on being tested with a switch key it was found that it could be locked and

unlocked without difficulty. In this connection it might be stated that the switch locks used by this railway must be locked before the key can be removed.

This switch was last used on the day of the accident by the crew of westbound freight train No. 57, which moved an empty car from the spur track, after which it was locked and the train proceeded over it enroute westward at about 7.50 A. M. Between that time and the time of the derailment two passenger trains and two freight trains had passed over it in safety. Section Foreman Grant had passed over it at about 4 P. M., followed within a few minutes by Trackwalker Brown on a speeder. Section Foreman Grant did not notice the lock but Trackwalker Brown said he noted that it was in place and properly locked.

Examination of the track showed that the first marks of derailment were on the ties 19 feet west of the point of the switch, these marks consisting of flange marks where the wheel or wheels had dropped off the rails and cut off spike heads and track bolts on the right main and side track rails.

The investigation further developed that train No. 95 had also been derailed at this switch on January 30, 1924, and the switch lock was also found to be missing while there was no evidence on the stand to indicate that force had been used in removing the lock. The canal was drained at that time in an endeavor to locate the lock but it could not be found.

Conclusions

This accident was caused by a cocked or partly open switch, due to malicious tampering.

The three members of the crew of train No. 95, who were riding on the engine said that a clear indication was displayed as their train approached the switch. The statements as to the exact conditions prevailing after the accident did not agree, possibly due to the fact that the switch lever may have been moved by some of those who examined the switch, but it appears that a green signal indication was still displayed, that the points were closed or nearly so, with the lever out of its socket, while the lock, which had not been chained to the stand, was missing. A lock of the same type was found in the water of a canal about 300 feet from the switch stand, it had not been in the water a long time, while there were

no marks upon it to indicate that it had been battered or forced in any way and it worked properly when locked and unlocked with a switch key. Apparently some one in possession of a switch key removed this lock, took the lever out of its socket and turned it far enough to open the switch points slightly, sufficient to cause the derailment but not enough to cause a stop indication to be displayed by the switch lamp.

The employees involved were experienced men. At the time of the accident the crew of train No 95 had been on duty 2 hours and the crew of train second No 74 about 7 hours, previous to which they had been off duty approximately 17 and 20 hours, respectively.

Respectfully submitted,

W P Borland,
Director