

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT WHICH OCCURRED ON THE INTERSTATE RAILROAD NEAR
JOSEPHINE, VA., ON DECEMBER 1, 1932.

January 6, 1933.

To the Commission:

On December 1, 1932, there was a derailment of a freight train on the Interstate Railroad near Josephine, Va., which resulted in the death of one employee and the injury of three employees.

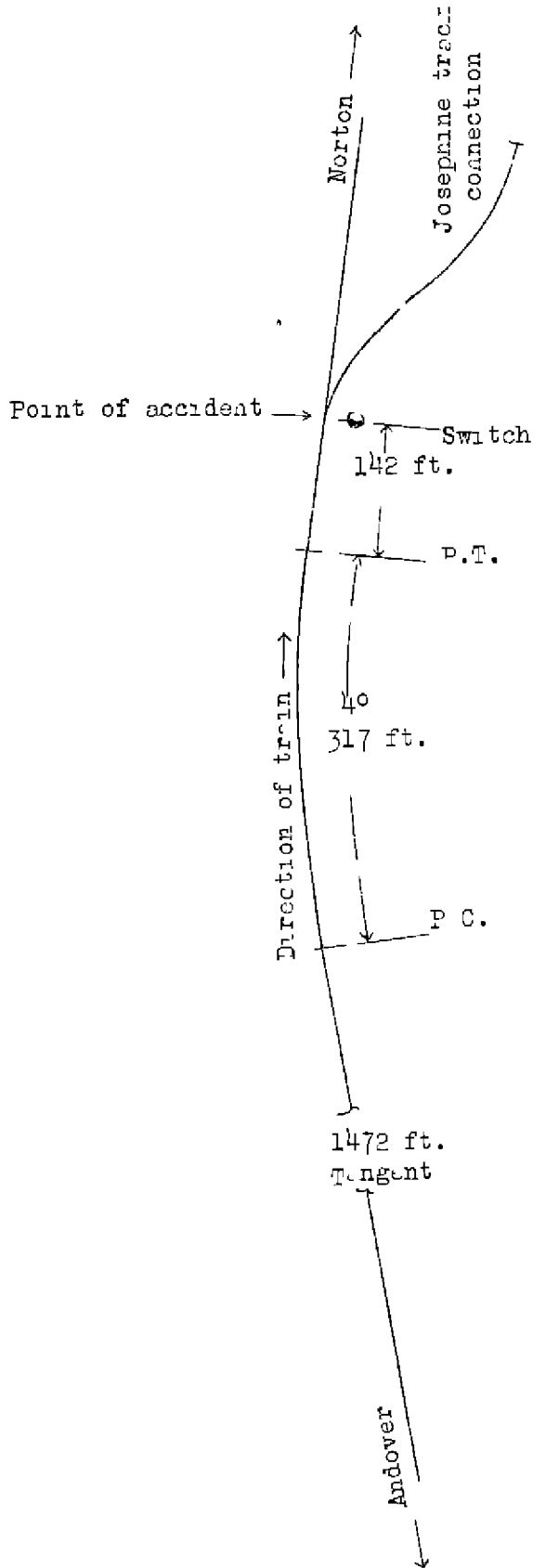
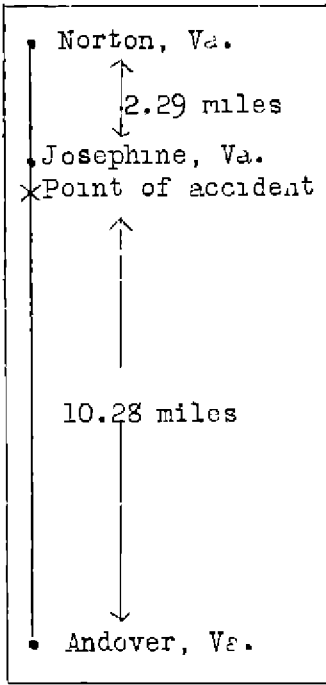
Location and method of operation

This accident occurred on that part of the line extending between Andover and Norton, Va., a distance of 12.57 miles; in the vicinity of the point of accident this is a single-track line over which freight trains are operated by book of rules, train orders, and a special instruction table; no time-table or block-signal system is in use. Josephine is located 10.28 miles east of Andover and the accident occurred at the switch leading to a spur track, known as the Josephine track connection, this spur track is about 900 feet in length and leads off the main track towards the southeast. Approaching the switch from the west, the track is tangent for a distance of 1,472 feet and then there is a 4° curve to the right 317 feet in length, followed by 142 feet of tangent to the switch, this tangent extending for a considerable distance beyond the switch. The grade for eastbound trains is 0.48 per cent ascending.

The switch involved is a facing-point switch for eastbound trains, with a No. 8 turnout. The switch stand, located on the south or engineman's side of an eastbound engine, is of the standard Weir main line lever-throw type, the centers of the target blades are 6½ feet above the ties and the switch lamp is mounted above the targets. Night indications are white when the switch is closed and red when it is open; the colors of the target blades correspond with the switch lamp indications. The view of the switch from the engineman's side of the cab is unobstructed for a distance of about 1,000 feet.

The track is laid with 90-pound rails, 33 feet in length with 18 ties to the rail-length, fully tie-plated and spiked, and ballasted with cinders to a depth of 15 inches; the track is well maintained.

The weather was clear and it was dark at the time of the accident, which occurred about 6.40 p.m.



Inv. No. 1795
 Interstate Railroad
 Josephine, Va.
 Dec. 1, 1932



Description

Eastbound freight train extra 20 consisted, at the time of the accident, of 29 loaded coal cars and a caboose, hauled by engine 20, of the 2-8-8-2 type, and shoved by pusher engine 6, of the 2-8-0 type, which was located in the train ~~ahead of the~~ caboose, and was in charge of Conductor Collier and Engineman Jarvis. This train left Andover at 5.55 p.m., according to the train sheet, did some work at Kent Junction, 4.58 miles west of Josephine, and was approaching Josephine when it was derailed at the connection switch while traveling at a speed estimated to have been about 20 miles per hour.

Engine 20 was derailed to the south and stopped on its right side with its front end about 190 feet east of the point of switch. The tender remained coupled to the engine, but was turned across the main track, with the first four cars jammed against it, the next two cars and the forward truck of the seventh car were also derailed, while the eleventh car telescoped the twelfth car. About 100 feet of main track and spur track were torn out east of the switch points. The employee killed was the fireman of engine 20, while the employees injured were both enginemen and the head brakeman.

Summary of evidence.

Engineman Jarvis stated that his train approached Josephine at a speed of about 20 miles per hour, and when about 12 or 15 car-lengths from the switch he could plainly see a white indication displayed by the switch lamp, indicating that the switch was closed. When the engine reached the switch, however, an unusual metallic noise occurred and then he saw fire flying from the front end of the engine, so he immediately applied the air brakes in emergency and closed the throttle. The air brakes ~~had~~ been tested and worked properly and the headlight was burning brightly. Engineman Jarvis further stated that prior to the accident and after about 1.30 p.m., his engine had passed through Josephine four times, twice westbound and twice eastbound, and on none of these occasions had he noticed anything unusual in passing over the switch. He had inspected the engine twice during the day, while oiling around it, and found it to be in good condition, and in his opinion there was nothing about the condition of the engine that would have caused or contributed to the accident.

Conductor Collier was riding in the caboose, behind the pusher engine, immediately after the accident the conductor and Engineman Stout, of pusher engine 6, proceeded to the head end of the train. The switch points were found to be partly open, a red indication was displayed by the target, and the switch lamp was not burning, one bridle bar was broken and the switch lock was hanging in the nasp for the main line, unlocked and damaged, as though it had been struck by a rock, and the switch lever was partly thrown over toward the spur track, the indications being that the switch had been tampered with maliciously. The switch had not been used by this or any other

train during the day. Conductor Collier said that about two or three weeks prior to the accident, while making one of their return trips light from Norton, it was observed that a red indication was displayed by the switch lamp at Dorchester Junction, located 0.44 mile east of Josephine, and on stopping the engine it was found that the switch lamp had been reversed, apparently due to tampering. Engineman Stout's examination also convinced him that the accident was due to malicious tampering with the switch. He further stated that the air brakes were cut through the pusher engine and into the caboose behind, and that his brake valve was cut out. He had just previously exchanged places with Fireman Smith, and was working on the fire when the train came to a sudden stop, the fireman immediately closing the throttle on the pusher engine.

Superintendent McKenzie arrived at the scene of the accident about 25 minutes after its occurrence and found the switch to be in the condition previously described. He took the switch lamp off the stand and examined it, the lamp was not then burning, but on feeling it with his hand he found that it was still warm, indicating that it had not been out for any considerable length of time. Examination of the track disclosed the first flange marks on the ties to be about 14 or 15 feet from the point of switch; there was no indication of dragging equipment. Superintendent McKenzie stated that the switch could have been cocked just enough for the switch lamp to have displayed a white indication to the engineman, and that the lamp could have been extinguished as a result of the derailment. In his opinion the switch was tampered with and left in a cocked position.

Master mechanic Smith arrived at the scene of the accident about 40 minutes after its occurrence and on making a thorough examination of engine 20 he found no defect that would have caused or contributed to the accident.

Roadmaster Wright arrived about two hours after the accident and on examining the track found the switch points to be undamaged and in good condition, there were marks on the web of the switch point and on the switch plates, and flange marks appeared at a point about 12 feet east of the switch point. West of the switch the track was not disturbed. All indications were to the effect that the switch had been tampered with.

Section Foreman McCracken stated that about four years ago he found this same switch cocked and the lock broken, as well as the lock broken on the spur track derail, and that about three or four weeks preceding this accident he found the lenses broken in the switch lamp, he had had to lock the top of the lamp so as to prevent the theft of oil from the fount.

Associate Counsel Camblos, of the railroad company, stated that he had been informed that Sheriff Adams, of Wise County, Va., had learned that some small boys had broken the switch lock and cocked the switch. Later, in company with the sheriff and Mayor Fuller, of Norton, he went to the jail at Norton where three small boys, all under 10 years of age, were being temporarily held in custody and interrogated two of them. One of them admitted that he had been near the switch along with other boys and that some of them had tampered with the switch, cocking it and placing a piece of iron between the switch point and the main rail, but gave no motive for so doing. The authorities also were questioning other small boys in connection with the accident, but no positive information had been developed as to where the responsibility lay.

Conclusions

This accident was caused by a cocked or partly-opened switch, due to tampering.

Examination of the switch and its appurtenances after the accident indicated that it had been tampered with, mischievously or otherwise, and that it was partly opened, or cocked, but not far enough to cause the switch lamp to display a red indication, with the result that no warning of danger was given to the engineer. There was also evidence to the effect that the switch had been tampered with on previous occasions. No defective condition was found about the track or equipment which would have caused the accident, while the crew involved had passed over the switch twice in each direction within less than five hours before the occurrence of the accident, and the switch had not been used by any train during that time. There was evidence that some small boys around 10 years of age had tampered with the switch, probably only a very short time prior to the occurrence of the accident, but at the time of this investigation it had not been definitely determined by whom the tampering was done.

Respectfully submitted,

W. P. BORLAND,

Director.