BUREAU OF SAFETY

REPORT NO. 1987

Railroad:	Chesapeake and Ohio.
Date:	May 29, 1935.
Location:	Gulfco, Ky.
Kind of accident:	Derailment.
Train involved:	Freight.
Train number:	No. 73.
Engine number:	2313.
Consist:	28 cars and caboose.
Speed:	25-30 m.p.h.
Track:	4° curve to the left; descending grade.
Weather:	Clear.
Time:	3:40 a.m.
Casualties:	2 killed and 1 injured.
Cause:	Open switch.

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE CHESAPEAKE AND OHIO RAILWAY AT GULFCO, KY., ON MAY 29, 1935.

July 5, 1935.

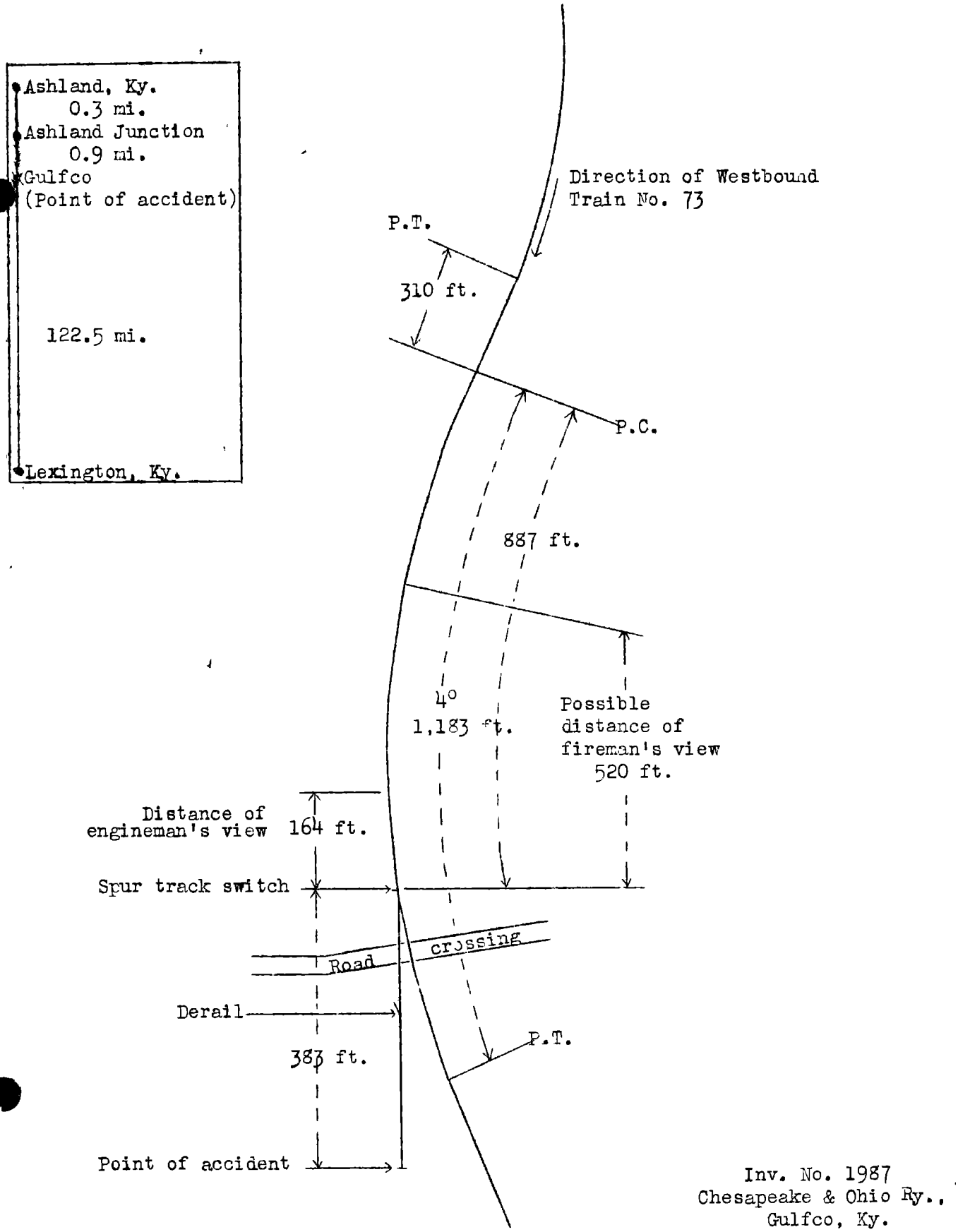
To the Commission:

On May 29, 1935, there was a derailment of a freight train on the Chesapeake and Ohio Railway at Gulfco, Ky., which resulted in the death of 2 employees and the injury of 1 employee.

Location and method of operation

This accident occurred on the Lexington Sub-division of the Ashland Division which extends between Ashland and Lexington, Ky., a distance of 123.7 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by time table, train orders, and a manual block-signal system. The accident occurred at the end of a spur track known as Gulfco, located approximately 0.9 mile west of Ashland Junction. Approaching the point of accident from the east, there is a series of curves and tangents, followed by a 3° 30' curve to the right 1,698 feet in length, tangent track for a distance of 310 feet, and then a 4° curve to the left 1,183 feet in length, the spur track leading off to the right from this latter curve at a point 296 feet from its leaving end. The spur track, 383 feet in length, is tangent. The grade for west-bound trains is 0.85 percent descending for a distance of approximately 1,656 feet to the point of accident.

The spur track has a facing-point switch for west-bound trains, with a No. 10 turnout. The switch stand, located on the north side of the track, is of the Star high type with the center of the lens of the switch lamp 8 feet 6 inches above the ties, and displays a green indication when the switch is lined for the main track and a red indication when lined for the spur track. The stand also is equipped with banners located below the lamp, providing the same color indications. A switch-point derail is located on the spur track 198 feet west of the switch; at the time



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of the accident the derail was in open position and locked, and there were no cars on the spur track.

The main track runs through a cut at the eastern end of the curve on which the accident occurred, the cut being 45 feet deep on the inside of the curve; the view of the switch to be had by the engineman of a west-bound train is restricted to 164 feet and by the fireman to 520 feet.

The main track is laid with 100-pound rails, 39 feet in length, with an average of 22 treated ties to the rail length, fully spiked and tieplated, and is ballasted with slag and gravel to a depth of about 12 inches; the track is well maintained. The spur track is laid with 90-pound rails, and is fully spiked and tieplated. The maximum speed limit for freight trains of the class involved in this accident is 40 miles per hour on the main track.

The weather was clear at the time of the accident, which occurred about 2:40 a.m.

Description

Train No. 95, operating as Train No. 73, a west-bound third-class freight train, consisted of 28 cars and a caboose, hauled by engine 2013, and was in charge of Conductor Strother and Engineman Nichols. This train passed Ashland Junction, the last open telegraph office, at 2:37 a.m., according to the train sheet, entered the open switch leading to the spur track at Gulfco while traveling at a speed estimated to have been between 25 and 30 miles per hour, and was derailed at the end of this spur track.

The engine headed down a 25-foot embankment and stopped with its front end buried approximately 8 feet in the soft earth, while the tender remained coupled to the engine and was leaning to the right at an angle of about 30°. The first two cars stopped on the left side of the engine while the front end of the third car rested on top of the tender and engine cab, with its rear end on the top of the embankment. The remaining equipment was not derailed or damaged.

The employees killed were the engineman and head brakeman, and the employee injured was the fireman.

Summary of evidence

Fireman Barker stated that after passing Ashland Junction he and Head Brakeman Holder were working with the stoker, as the coal was wet and would choke up in the barrels. After passing through the tunnel, located 1,656 feet east of Gulfco switch, he and the engineman opened their cab windows and after looking ahead for a short time the fireman resumed his work on the stoker. When the engineman sounded the whistle for the road crossing at Gulfco the fireman got up on his seat box and looked out to see if any automobiles were approaching the crossing from the south or left side of the track, and as they reached the road crossing he saw that the train had entered the spur track. He immediately called a warning and got ready to jump, but there was no response from the engineman and the fireman was unable to say whether or not the engineman applied the air brakes. The speed at that time was about 30 miles per hour; the headlight on the engine was burning, but so far as he knew, no one saw the switch light.

Conductor Strother stated that his train was traveling at a speed of about 25 miles per hour when the air brakes were applied in emergency; there were three distinct shocks and he thought that the train might have traveled 10 or 12 car lengths before stopping. An examination of the switch disclosed it to be open and locked, with the switch lamp displaying a red indication, and it had not been damaged in any way. The derail had been run through, however, and was open about 1 inch, with the rod broken off close to the stand; the target displayed yellow, the indication displayed when the derail switch is in derailing position.

Trackwalker Dixon stated that when patrolling the track on the day prior to the accident he had stopped at Gulfco about noon, filled the switch lamp with oil, trimmed the wick, and greased the switch, which was properly locked. He stated that he does not have a switch key in his possession, and that he never had found any evidence in the past that any one had tampered with the lock or switch at this point.

Section Foreman Sorrell stated that he passed through Gulfco on his motor car on the afternoon prior to the occurrence of the accident, at which time the switch was properly lined and displaying the proper indication. He did not use the switch on this occasion and had last inspected it on May 25, at which time both the switch and lock were in good condition.

Supervisor of Track Amburgey stated that he passed through Gulfco on an east-bound motor car about 4:25 p.m. on the afternoon before the occurrence of the accident, and observed that the switch point fitted properly against the stock rail; his examination of the switch and lock after the accident disclosed no indication that either of them had been tampered with.

Conductor Sweet, of Train No. 68, an east-bound freight train, stated that his train stopped at Gulfco about 1:45 p.m. on the afternoon before the accident to pick up a car on the spur track, and as the caboose passed the switch he saw that the switch and derail were in the proper position. Head Brakeman James stated that he operated the switch and derail when the car was picked up at Gulfco, and after closing the switch and placing the derail in derailing position he locked them both; he also said that he always made it a practice to test the switch locks after closing them by jerking on the lock chain to make certain that the locks are securely closed, and was quite sure that he did so on this occasion.

The members of the crew of Train No. 34, an east-bound passenger train which passed through Gulfco about 11:38 p.m., stated they noticed no unusual noise or motion of the train as it passed over the switch. Engineman Ginn of that train stated that he sounded the crossing whistle signal for the crossing located near the spur-track switch, but he did not recall seeing the switch target. Fireman Johnson, however, stated that he was watching for the crossing and saw the switch lamp displaying a green indication.

The switch had been last used about 1:50 p.m. on the afternoon before the accident, when a car was picked up by Train No. 68, and subsequent to that time 1 motor car and 3 east-bound trains passed over it in trailing position and 1 west-bound train and 1 motor car in facing position, indicating that the switch must have been in proper position at those times.

Examination by the Commission's inspectors indicated that the accident was not caused by any faulty condition of the switch, track or equipment. The switch and lock were in good condition and there was nothing about them to indicate that they had been tampered with in any way.

Discussion

After the accident the switch was found lined for the spur track and locked, with the switch light displaying a red

indication There was no evidence of the switch having been tampered with, and at the time of the investigation it could not be determined how it became open. Subsequent to the time the switch had last been used, more than 13 hours prior to the occurrence of the accident, there had been six movements over this switch, both directions included, the last movement having been a trailing movement about 3 hours before the accident occurred, and the fireman of that train stated that he saw the switch light displaying a green indication.

The view to be had of this switch light when approaching from the east is very much restricted, and it is quite evident that no one on the train involved saw the switch light and that the engine was on the spur track before any of them were aware the train had been diverted from the main track, the fireman being the first to discover it. His view of the switch light, which was the most favorable, was only 520 feet, but he had been working on the stoker practically up to the time the engine reached the switch.

Conclusions

This accident was caused by an open switch.

Respectfully submitted,

W. J. PATTERSON,

Director.