

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE ATCHISON, TOPEKA & SANTA FE RAILWAY, AT
FRONTENAC, KANS., ON FEBRUARY 27, 1923.

March 22, 1923.

To the Commission:

On February 27, 1923, there was a collision between a switch engine and a cut of empty cars on the Atchison, Topeka & Santa Fe Railway at Frontenac, Kans., resulting in the death of one employee.

Location and method of operation.

The Girard District of the Southern Kansas Division extends east and west, this accident occurred on No. 11 mine lead track, a track several miles long, extending from the main track in a northerly direction and leading to several mines in the vicinity. This track is within the yard limits of Frontenac. Trains are operated within yards limits in accordance with rule 93, which reads in part as follows:

"All trains and engines will have the right to work within such yard limits regardless of second and third class trains or extras, but will give way as soon as possible upon their approach. All except first class trains will approach yard limits under control. The responsibility for accidents at such points will rest with the approaching trains."

Approaching from the north the track is tangent for a distance of approximately 2,407 feet, followed by a 6-degree curve to the right, 407 feet in length, and a tangent of about 800 feet to a wye switch, the accident occurring on the leaving end of the curve, which is on a 10.5 foot hill, at a point about 808 feet north of the wye switch. The grade from the north is 0.57 per cent descending for about one half mile, followed by a 0.6 per cent ascending grade for about 1,300 feet to the point of accident. The accident occurred at about 11.20 p.m., at which time the weather was clear.

Description.

Westbound freight train extra 3111 consisted of 61 cars and a caboose, hauled by engine 3111, and was in charge of Conductor Sutton and Engineman Switzer. This train arrived at Frontenac at about 10.45 p.m., and after disposing of its cars, leaving 11 cars standing on No. 11 mine lead track, the engine and caboose moved around the wye to the water tank to prepare for the return trip to Chanute. The cars stood on No. 11 mine lead track out a short time before they were struck by switch engine 741.

Switch engine 741 left Frontenac about 8 p.m., to work several mine tracks located on No. 11 mine lead track, and on returning southbound, the engine which was backing up and pulling 16 cars, collided with the cut of 11 empty cars while traveling at a speed of about 10 miles an hour.

The first two cars of the cut of empty cars were derailed and overturned to the right of the track. None of the cars hauled by engine 741 was derailed, but the tender was overturned and came to rest down an embankment, while the left rear corner of the cab was driven forward over the rear driving wheels which were derailed. The employee killed was the fireman.

Summary of evidence.

Conductor Sutton, of extra 3111, said his train arrived at Frontenac at about 10.45 p.m., and in accordance with instructions from Night Yardmaster Chapman, disposed of the cars of that train, leaving 11 cars on No. 11 mine lead track. The engine then coupled to the caboose and moved over the wye to the water tank to prepare for the return trip to Chanute. Conductor Sutton said he then went to the depot and did not see the collision. Brakeman Cathers said he rode the rear end of the 11 cars in on No. 11 mine lead track and set the hand brakes before he got off. The statements of the other members of the crew added nothing of importance.

Switch Foreman McGregor, of engine 741, said his engine went north on No. 11 mine lead track at about 8 p.m., to work the mine tracks. After placing empty cars at the various mines and taking out the loaded cars, the engine left the last point, 2½ or 3 miles north of Frontenac, backing up, with 16 cars attached to the head end of the engine. He said that all of the members of the crew, consisting of the engineman, fireman, foreman, and two switchmen, were riding in the cab of the engine, and the first intimation he had of anything wrong was when Switchman Platt, who was riding on the fireman's side,

shouted as the engine was rounding the curve, while traveling at a speed of about 10 miles an hour, the collision following very shortly afterwards. Switchman Piatt said he was looking out the window on the fireman's side of the cab and as the engine rounded the curve leading to the straight track, the reflection of the headlight brought into view a string of cars standing on the track, only one or two car lengths away, and he shouted and the engineman applied the air brakes and reversed the engine; he estimated the speed to have been about 10 miles an hour. This was his first trip on this mine lead track, and he knew nothing about the curvature, and had received no instructions of any kind either from the engineman or foreman. Switchman Kirk estimated the speed at the foot of the grade to have been 25 miles an hour, and 10 miles an hour at the time of the accident.

Engineman Provorse said he made an application of the air brakes at the bottom of the descending grade, at which time the speed was about 12 or 14 miles an hour. He did not again work steam, and he said he saw the standing cars when about four car lengths from them, at about the same time one of the switchmen called to him, and he applied the air brakes in emergency and reversed the engine, colliding with the standing cars at a speed he estimated to have been about 10 miles an hour. He further stated that the air brakes on the train were coupled and working properly, also that as it was a clear night he could see a distance of about 25 car lengths.

Conclusions.

This accident was caused by the failure of switch engine 741 to be operated within yard limits under control, as required by the rules, for which Engineman Provorse and Foreman McGregor are responsible.

It is apparent from the testimony of Engineman Provorse that the train was not being operated under proper control. He had made a service application of the air brakes, released them, drifted up a grade of 0.6 per cent, made an emergency application of the air brakes four car lengths from the standing cars, and collided with the cars at a speed of 10 miles an hour. It is obvious that his estimate of the speed at the time the brakes were applied, 12 or 14 miles an hour, is too low. Switchman Kirk estimated that the speed was 25 miles an hour at the foot of the grade.

While the members of the crew of engine 741 were experienced men, some of them were inexperienced in this locality. Only one of the five men on the engine

was maintaining a proper lookout, and he was making his first trip on this mine lead track and did not know the location of the curves, of the others, the engineman and foreman were on the right side of the engine, the fireman was on the deck of the engine, while the remaining switchman was riding facing the boiler. Foreman McGregor should have seen to it that proper precautions were taken for the safe operation of the engine, but apparently he was paying little attention to the matter, and for such neglect of duty he is equally responsible with Engineman Provorse.

The crew of engine 741 had been on duty 4 hours and 20 minutes, after 15 1/2 hours off duty.

Respectfully submitted.

W. P. BORLAND.

Director.