

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
ST. LOUIS-SAN FRANCISCO RAILWAY

PIERCE CITY, MO.

NOVEMBER 9, 1937.

INVESTIGATION NO. 2221

SUMMARY

Inv-2221

Railway: St. Louis-San Francisco
Date: November 9, 1937.
Location: Pierce City, Mo.
Kind of accident: Rear-end collision
Trains involved: Freight : Runaway cars
Train number: Extra 4163 West
Engine number: 4163
Consist: 34 cars, caboose : 6 loaded cars
Speed: 5-6 m.p.h. : undetermined
Track: Descending grade westward
Weather: Clear
Time: 4:15 a.m.; dark
Casualties: 1 killed; 1 injured
Cause: Runaway due to car rider falling
from cars before a hand brake was
applied.

December 14, 1937.

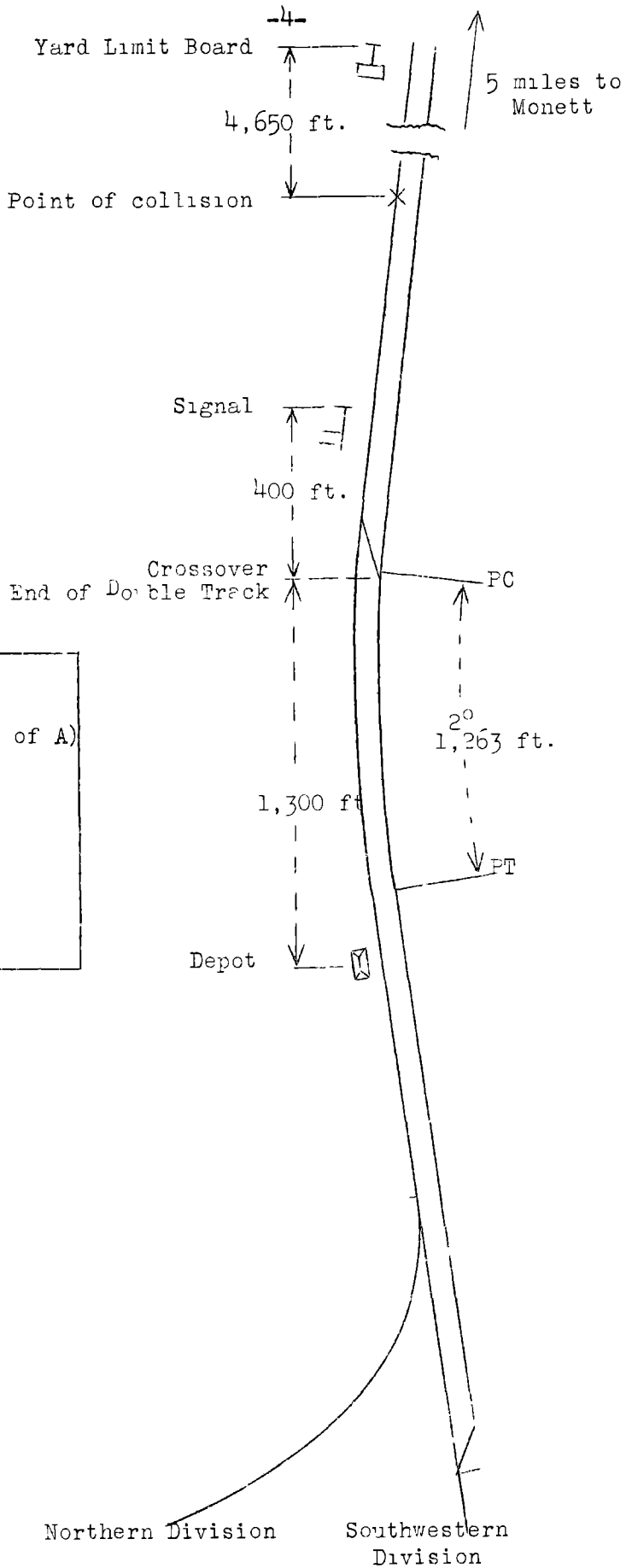
To the Commission:

On November 9, 1937, a runaway cut of freight cars collided with the rear end of a freight train on the St. Louis-San Francisco Railway at Pierce City, Mo., resulting in the death of one employee and the injury of one employee.

Location and method of operation

This accident occurred on the Cherokee Subdivision of the Southwestern Division, which extends between Monett, Mo., and Sapulpa, Okla., a distance of 155.2 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. The runaway started in Monett yard, and the collision occurred on the west-bound main track at a point approximately 5 miles farther west, within yard limits at Pierce City. Proceeding westward from the point where the cars started away at Monett, the track is composed of six stretches of tangent and five curves, the maximum curvature being 2°; the collision occurred on the last stretch of tangent at a point about 3,500 feet west of its eastern end. With the exception of two stretches of level track, 100 and 700 feet in length, the grade for this entire distance is descending westward, the maximum gradient being 0.76 percent; for a distance of 2,150 feet to the point of accident the grade is 0.41 percent descending.

Pierce City is at the west end of double-track, and the cross-over switch at the end of double-track is located 1,300 feet east of the depot. West of this point there is a continuation of the west-bound main track to a point about 1,300 feet west of the depot where a track diverges to the right to the line of the Northern Division. The grade at the entrance of the Northern Division is sharply ascending. The switches at Pierce City are operated by remote control, handled by operators located in the depot. A two-arm semaphore signal located 400 feet east of the end of double-track governs the movement of west-bound trains; one arm is for trains moving on to the Southwestern Division while the other arm is for trains entering the Northern Division. The east yard limit board at Pierce City is located 4,650 feet east of the point of accident.



o	Monett, Mo.
	5 miles
x	Pierce City (P of A)
	150.2 mi.
o	Sapulpa, Okla.

Inv. No. 2221
 St. Louis - San Francisco Ry.
 Pierce City, Mo.
 Nov. 9, 1937

The weather was clear at the time of the accident, which occurred about 4:15 a.m.

Description

Extra 4163 West, consisting of 34 freight cars and a caboose, hauled by engine 4163, was in charge of Conductor Turner and Engineman Lewers. This train left Monett at 3:52 a.m. and stopped within yard limits at the westward signal at Pierce City, at 4:07 a.m. to await the arrival of east-bound passenger train No. 8. After standing at that point several minutes it started to move along the extension of the westward main track and had proceeded about two car lengths when the rear end was struck by a runaway cut of cars.

The cut of cars which was running away consisted of 6 loaded freight cars, with tank car UTLX 76338 on the west end. This cut of cars was switched into the east end of track 1 in Monett yard about 4:00 a.m. by engine 835, in charge of Engine Foreman Taylor and Engineman Rauch. It passed through track 1 and out upon the westward main track, and continued westward down grade at an undetermined rate of speed until it struck the rear end of Extra 4163.

The caboose of Extra 4163, and the box car ahead of it, were derailed, the caboose being totally destroyed. Four tank cars in the runaway cut were derailed and damaged. The employee killed was the flagman and the employee injured was the conductor of Extra 4163.

Summary of evidence

Conductor Turner, of Extra 4163, stated that when his train stopped at Pierce City at 4:05 a.m. he remained inside the caboose. The flagman got off, but came back in a short time and told the conductor that it was 4:12 a.m. and that east-bound Train No. 8 was coming off the single-track territory. He vaguely recalled having heard his engine whistle sounded; then the train moved a short distance and the collision occurred, rendering him unconscious.

Engineman Lewers, of Extra 4163, stated that he stopped his train just short of the signal at Pierce City, with the caboose within yard limits. After standing there several minutes he saw the signal indication governing movements to the Northern Division change from stop to caution, but as

his train was for the Southwestern Division, he did not accept the signal. In a few minutes the indication was changed back to stop and the operator came to the engine and told him that a runaway cut of cars was coming down the hill. The operator directed him to pull around to the Northern Division track and keep ahead of the runaway cars if possible. Engineman Lowers immediately whistled out a flag for the purpose of warning the conductor and flagman at the rear that something was wrong. At the same time he started the train ahead, but after moving about three car lengths and attaining a speed of about 5 or 6 miles per hour the caboose was struck. The time of the collision was 4:14 a.m. He did not see any hand lantern signals given by the operator from the depot.

Statements of Fireman Pacaud and Head Brakeman Hartman corroborated that of Engineman Lowers.

Operator Stapp, at Pierce City, stated that Extra 4163 arrived at that point on the double-track line about 4:07 a.m. About 4:10 a.m., the dispatcher telephoned him about the runaway cars and instructed him to try to get Extra 4163 moving toward the Northern Division track and to let the runaway cars follow that train and stop of their own accord on the ascending grade at the entrance of that line; at the same time he was to set the eastward signal against No. 8. He immediately changed the indication of the westward signal for a movement to the Northern Division track, but as the engine crew did not accept the signal he went to the back platform of the depot and with a lighted white lantern gave signals to come ahead. These signals were either unseen or disregarded so he notified the dispatcher of his failure to get the extra to move and was then told to go to the engine of Extra 4163 as quickly as possible and have the engineman get his train in motion. Upon receipt of these instructions the engineman immediately sounded the whistle and started ahead, but it was then too late to avert the accident. On a previous occasion, about 8 or 9 years ago, it was reported that some cars had gotten away at Monett but in that instance the cars did not get as far as Pierce City.

Dispatcher Lee stated that the yardmaster at Monett telephoned him between 4:08 and 4:10 a.m. that a runaway cut of cars was moving down the hill toward Pierce City. He immediately telephoned Operator Stapp at Pierce City and after

ascertaining that no trains were approaching on the Northern Division told the operator what to do in regard to Extra 4163 West and No. 8 East.

Switch Tender Fleming, at Monett yard, stated that the runaway cars passed him near the depot about 4:05 a.m., moving about 25 miles per hour.

Engine Foreman Taylor, in charge of engine 835, stated that about 4:00 a.m. while switching a cut of cars at the east end of Monett yard the head 6 cars were dropped in on track 1 at a speed of about 4 miles per hour. Switchman Lloyd was on the extreme west end of the cut at the time. The engine foreman paid no further attention to the cut until he heard the blast of a locomotive whistle and realized that the cut was running away. Without delay he started his engine westward on a clear track and followed the runaway cars down the main track but was unable to catch the cars before they collided with Extra 4163. The cut of cars which had runaway consisted from west to east of 4 loaded tank cars and two loaded box cars. The brake on the leading car was at the west end. These cars had been standing on track 9 and in order to move them from that track it was necessary to release the hand brake on the rear car which was later the head car in the runaway cut. It is the practice in this yard to set enough brakes at the head end of a track to insure that the cars will not run away. Brakeman Lloyd, who was expected to ride these cars into track 1 and stop them with hand brakes was carrying a brake club and a lantern when last seen by him.

Engineman Rauch, of engine 835, stated that in following the runaway cut of cars his engine traveled at a rate of about 40 miles per hour; the indications of the block signals during the trip changed from red to yellow ahead of his engine and he therefore knew he was closely following the runaway cars.

The statements of Brakemen Shipley and Shuttles corroborated those of Engine Foreman Taylor and Engineman Rauch.

Yard Clerk Larrimer, at Monett, stated that when the cut of cars involved was switched to yard track 1 they were moving at the usual rate of speed for cars that are cut off. He was following them in order to check them when they stopped. He noticed that they were gaining speed, and although he had not noticed anyone on them he assumed that they were being ridden and would soon be stopped. He did not hear any noise such as is made when hand brakes are set, and when the cars had

passed the station platform he concluded that they were running away. He then notified Night Yardmaster Rook. After word of the accident was received a search was made from Switchman Lloyd and his body was found in the yard.

Night Yardmaster Rook stated that when he was notified about the runaway by the yard clerk, he passed the information on to the dispatcher. He could recall of about four instances in which cars had run away in Monett yard.

Car Inspectors May and Means, at Monett, stated that before the accident they had made a thorough inspection of both sides of the cars involved in the runaway and no defects were found.

Assistant Superintendent of Motive Power Spangler stated that all of the running boards and attachments, brake staff, brake step, sill steps, grab irons, etc., were either torn off, bent or broken on UTLX 76338 as a result of the collision, hence it was impossible to make a test of the hand brake on this car.

General Yardmaster Mayfield stated that bulletin instructions require that before cutting off cars in clear tracks it must be definitely determined that brakes are all right. In order to keep cars on yard tracks from running away the hand brakes on from 1 to 10 head cars on a track are applied. No protection is provided to prevent runaway cars from getting out upon the main tracks at Monett; skates, derails or other devices are not in use.

UTLX 76338, the tank car involved, was built in September, 1917; it was without end sills. According to the stencilling, it received repairs and was repainted in October, 1937. It was equipped with a regulation Plate A hand brake on the west or leading end of the car.

Discussion

The investigation established that at about 4 a.m. a cut of 6 loaded cars, consisting from west to east of 4 tank cars and 2 box cars, was switched into the east end of Monett yard track 1 at a speed of from 2 to 4 miles per hour. A switchman with a brake club and lantern was aboard the cut for the purpose of stopping it and anchoring it with hand brakes. In some unknown manner, and without the knowledge of the switch crew, the switchman fell off the leading car and was killed.

As a result, the hand brake was not applied and the cut of cars, without a rider, moved westward through yard track 1 and two cross-overs to the westbound main track, and then continued down hill to Pierce City, about 5 miles distant. The dispatcher was notified of the runaway about 4:08 a.m. and he immediately instructed the operator at Pierce City to endeavor to get Extra 4163, which was standing at that point, out of the way by routing it around the track of the Northern Division, and also to let the runaway cut of cars follow the extra so that it would stop of its own accord on the ascending grade at the entrance to that division. The operator gave Extra 4163 a signal indication for a movement to the Northern Division, but since the extra was a Southwestern Division train, the engineman did not accept the signal, nor did he accept come ahead signals given with a white lantern by the operator. The operator then ran to the engine and told the engineman about the runaway cars and the movements intended, whereupon the engineman immediately sounded the whistle to attract the attention of the conductor and flagman at the rear of the train, and at the same time he started the train moving down the hill. After moving a few car lengths and attaining a speed of about 5 or 6 miles per hour, the rear of this train was struck by the runaway cut of cars. In the meantime switch engine 835 had backed down the hill as fast as it could go in pursuit of the runaway cars but was unable to overtake them. The body of the switchman who was to have controlled the movement of the cars on track 1 was found a short distance from the frog of that switch; apparently he fell from the tank car before he had an opportunity to set the hand brake.

Owing to the descending grade in this yard considerable use is made of hand brakes. Bulletin instructions require that before cars are kicked into an empty yard track the hand brakes must be tested to see that they are efficient; the instructions also require that sufficient hand brakes be set on the cars at the end of a track to insure that they will not be moved by the shunting of other cars into the track. The evidence indicates that the hand brake involved on UTLX 76338 was in proper working order; however, as a result of the collision it was damaged to such an extent that it was impossible to make any test of it after the accident. Runaway cars had gotten out of this yard on several previous occasions.

Conclusion

This accident was caused by a cut of cars running away from a yard on a descending grade, due to the car rider falling from the car before a hand brake had been set.

Respectfully submitted,

W. J. PATTERSON,

Director.