

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE KANSAS CITY SOUTHERN RAILWAY AT GRAND VIEW,
MO., ON JANUARY 22, 1923.

February 8, 1923.

To the Commission:

On January 23, 1923, there was a side collision between a freight train and a light engine on the Kansas City Southern Railway at Grand View, Mo., resulting in the death of one employee.

Location and method of operation.

At Grand View there is a wye, the St. Louis-San Francisco house track and main line forming the east leg, and the Kansas City Southern southbound passing track and main line forming the west leg, while the south leg, which is a compound curve 1,040 feet in length, varying from 7-degrees 30-minutes to 17-degrees, connects these two tracks. The accident occurred within yard limits, just south of the Kansas City Southern station, at the junction of the south leg with the west leg. This is a trailing-point switch for southbound trains, and there is a derail located on the south leg of the wye at a point 206 feet from its western end. Approaching the point of accident on this curve the grade is approximately 2 per cent descending for about 800 feet. On account of buildings, and the sharp curve, vision is limited considerably. The weather was cloudy at the time of the accident, which occurred at about 2.50 a.m.

Description.

Southbound Kansas City Southern freight train extra 559 consisted of 50 cars and a caboose, hauled by engine 559, and was in charge of Conductor Strecker and Engineman Dennis. This train was standing on the west leg of the wye, blocking the switch, when it was struck between the seventeenth and eighteenth cars from the caboose by light engine 593.

St. Louis-San Francisco light engine 593, hauling 12 cars and a caboose, departed from Kansas City, Mo., as train No. 59, and was in charge of Conductor Mahan and Engineman Flora. The air pump on the engine became inoperative en route, and upon arrival at the east leg of the wye at Grand View, at 3.15 a. m., the cars were placed on

the house track and a movement was made over the south leg of the wye, for the purpose of turning the engine to return to Kansas City. While making this movement the left rear corner of the tender of light engine 593 collided with extra 559 while traveling at a speed estimated to have been about 3 or 4 miles an hour.

The impact moved the tender cistern forward on the frame, against the engine cab. The employee killed was the engineman of light engine 593.

Summary of evidence.

The air brakes were tested on train No. 59 before leaving Kansas City, and worked properly until Dodson was reached, a distance of 16 miles. At this point trouble developed with the engine pump, and it was decided to proceed to Grand View, 37 miles distant and the first open telegraph office, and report this condition to the dispatcher, which was done. Instructions were then received to set the cars out and bring the light engine back to Kansas City to be repaired. After the hand brakes were set on the cars, Head Brakeman Stevens walked toward the west switch of the south leg of the wye, lining the derail for the intended movement as he went. However, on finding that extra 559 was blocking the switch connecting with the west leg, and hearing the light engine rounding the curve, he hurried back, giving violent stop signals as he went, passed the derail without returning it to its normal position, and on reaching a point about three rail lengths east of this point boarded the engine and informed Engineman Flora of the conditions, after which he immediately got off the engine and again went forward for the purpose of lining the derail against the engine, but he did not reach it in time to accomplish this. Head Brakeman Stevens estimated speed at the time of the accident to have been about 4 miles an hour. He further stated the driving wheels were slipping due to the frost on the rails. Fireman Eib stated that steam was worked slightly after starting to back around the wye track, after which the engine was placed in forward motion, and steam was worked but the driving wheels slipped. When Head Brakeman Stevens boarded the engine Fireman Eib heard Engineman Flora instruct him to line the derail against them, and on reaching a point about 30 feet from extra 559 he jumped. After the accident light engine 559 moved forward several rail lengths and Fireman Eib got aboard and brought it to a stop, while Conductor Mahan blocked the wheels.

Conductor Mahan stated that on reaching Holmes, 46 miles north of Grand View, the sand supply on the engine had become exhausted. On starting around the wye at Grand View, he was riding on the pilot sill step and when about

half way around the curve saw Head Brakeman Stevens violently giving stop signals. He then found that the engine was not under the control of Engineer Ilora, as the driving wheels were slipping, and realizing the wye was blocked, also thinking the derail was lined against them, he jumped when about 30 feet east of this point.

None of the members of the crew of extra 558 was aware of anything wrong until the accident occurred.

A test made of the air pump on engine 583 subsequent to the accident disclosed it to be inoperative due to the high pressure air piston lock nut working off, thereby preventing the piston from completing the up stroke and making a reverse movement. This pump failure was caused by the failure to insert a dowel pin in piston nuts or rivet the piston rod over the lock nut.

Conclusions.

This accident was caused by the failure of the crew of light engine 583 to use proper precaution in making the movement around the south leg of the wye.

The members of this crew were fully aware of the condition of the air brakes on the engine, and taking into consideration the sharp curve, extent to which vision was limited, the heavy descending grade, frosty rail, and exhausted sand supply, including the possibility of the wye being blocked, it was incumbent on all concerned to have known that everything was clear before attempting this move. Had Head Brakeman Stevens been on the alert and lined the derail against the light engine this accident would have been averted.

All of the employees involved were experienced men. At the time of the accident they had been on duty less than six hours, previous to which they had been off duty more than forty hours.

Respectfully submitted,

W. P. Dorland,

Director.