INTERSTATE COLLEGOE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE IN-VESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE MISSOURI PACIFIC RAILROAD NEAR CARLTON, KANSAS, ON JANUARY 17, 1931.

February 18, 1931.

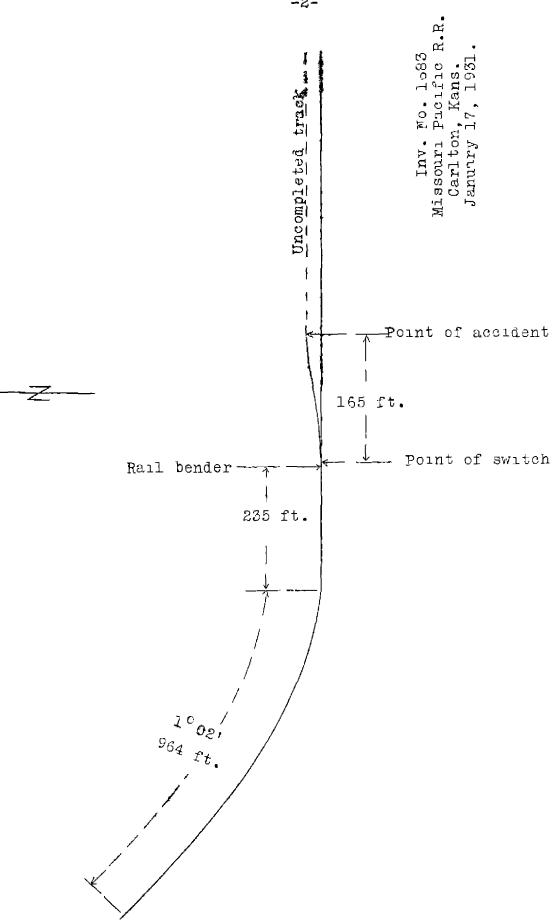
To the Commission:

On January 17, 1931, there was a derailment of a freight train on the Missouri Pacific Railroad near Carlton, Kans., which resulted in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on the Council Grove District of the Central Kansas Division, which extends between Hoisington and Council Grove, Kans., a distance In the vicinity of the point of accident of 134.2 miles. this is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system_ This accident occurred on a spur track that was under construction, at a point about 165 feet east of the main-track switch, this switch being located 4,346 feet west of the station at Carlton. Approaching the switch from the west, there were 1,988 feet of tangent track and a 10 02' curve to the left 964 feet in length, followed by tangent track to and beyond the station, the switch being located on this latter tangent at a point 235 feet from its western end. The grade at the point of accident is 1.25 per cent descending for eastbound trains.

The main track was laid with 90-pound rails, 33 feet in length, with an average of 20 ties to the raillength, single-spiked, 90 per cent fie-plated, and ballasted with chatt to a depth of 6 inches. The track The spur track parallels the main was well maintained. track on the north; the switch is a facing-point switch for eastbound trains and leads off the main track through a No. 10 turnout. There is a single red target standing 6 feet 1 inch above the tops of the ties and it is displayed only when the switch is open. At the time of the accident the switch had been completely installed, the stock rail had been bent, but the rail bender had not been removed, and about 165 feet of the spur track had been completed; both rails had been spiked, although the



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track had not been ballasted. The right rail had been spiked for an additional distance of 235 feet, the ties had been distributed and spaced, and the rails laid on top of the ties on the balance of the track.

Due to the curve just west of the switch, a clear view could not be had for any great distance, a clear view of the switch from the fireman's side of an eastbound train could be had for a distance of about 700 feet.

The weather was cloudy at the time of the accident, which occurred about 4.20 p.m.

Description

Eastbound freight train extra 1468 consisted only of a caboose, hauled by engine 1468, and was in charge of Conductor Richter and Engineman Holthouse. This train departed from Gypsum Gity, 7.21 riles west of Carlton, at 4.10 p.m., according to the train sheet, and was traveling at a speed estimated to have been between 30 and 35 miles per hour when it passed over the rail bender, entered the open switch, and was derailed when it reached the uncompleted portion of the spur track.

The engine, tender and caboose remained coupled and came to rest on their left sides, parallel to the track, considerably damaged, the front end of the engine was 300 feet east of the switch. The employee killed was the engineman, and those injured were the fireman and a brakeman.

Summary of evidence

Fireman Clary stated that when the train had reached a point about one pole from the switch, he saw the red target, but caught only a glimpse of it as the smoke and steam were blowing over on his side of the engine; he called to the engineman, who immediately applied the air brakes in emergency. He estimated the speed of the train to have been about 30 or 35 miles per hour. Fireman Clary did not know of the installation of this switch, and said they had not been flagged at any point between Gypsum City and the point of accident.

Conductor Richter stated that after they left Gypsum City he was riding on the left side in the cupola of the caboose, with the two brakemen on the right side, and as the train rounded the curve just west of the point of accident Brakeman Huffman called a warning to them. The conductor heard the air brakes apply, saw that they were headed towards the left, and braced himself as the

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caboose turned over. In also stated that he held to orders in connection with the installation of the switch in question.

Brakeman Huffman stated that the train was traveling at a speed of 30 or 35 miles per nour when he heard the air brakes apply in emergency and also heard one long blast of the whistle. He looked out of the cupola window, saw some men giving stop signals, and called to the others in the caboose that they were turning over. The statements of Brakeman Taylor practically corroborated those of Brakeman Huffman, and apparently neither of them knew a switch was being installed at the point of accident.

Extra Gang Foreman Boyt, in charge of a gang of six men working on the construction of this spur track, stated that a snort time before extra 1468 was seen approaching, he told the men to remove the rail bender, as the rail had been bent sufficiently, and at the same time he sent one of the men out after the flagman. He then welked back to the frog, where he supervised some work at that point, and while there he heard some one say that He ran toward the train and as a train was approaching. he ran by the switch the men were trying to get the rail bender off the rail, and he called to the section foreman, who was a short distance ahead of him, to flag the train. Foreman Boyt said that he was octween three and four telegraph poles west of the switch when extra 1468 passed As he ran by the switch he saw that the iail bender hım_ was loose but he did not notice how the switch was lined. stating that when the bending of the rail had been completed the switch was lined for the main track; after the accident, however, he saw that it was lined for the spur track, and he was of the opinion that in their endeavors to get the rail bender off the rail, the switch had been thrown. He later made a statement, however, that Laborer Sharp unlocked the switch, this being necessary so that the rail bender could be used, and was told that the key had been borrowed from Section Foreman Shane.

Laborer Sharp, in charge of bending the rail, stated that he and some of the other laborers were instructed to bend the rail, but they were unable to place the rail bender on the rail with the switch locked, so he went to Foreman Boyt and notified him of the fact. Foreman Boyt told him to get a key from the other foreman, who was standing nearby at the time. This was done, the spike was pulled and the switch opened, the rail was bent, and they were attempting to loosen the pressure screw of the rail bender when extra 1468 appeared. Laborer Miller theo stated that while they were working with the rail bender they found that the switch point interfered, so the switch was opened and remained open while they bent the rail. The statements of Laborer Emerson corroborated those of Laborer Miller. Laborer Emerson further stated that they had finished bending the rail but had not been able to loosen the rail bender sufficiently for its removal before the train appeared, stating that the pressure screw had not been loosened enough to turn by hand as the thread had caught on the switch point. The statements of Laborers Green, Taylor, and Scott, who were assisting in this work, brought out nothing additional of importance.

Laborer Pennington stated that Foreman Boyt sent him out to tell the flagman to return; he met the flagman about one quarter of a mile west of the switch and after he told the flagman to return the flagman picked up his torpedoes and they returned immediately.

Laborer Anderson, who was acting as a flagman to protect the switch, stated that he went out to flag about 1 p.m., with instructions to flag all trains after the passage of train No. 31. He proceeded westward about $1\frac{1}{2}$ miles, placed torpedoes on the tangent track west of the second curve west of the switch, and then stood about 10 telegraph poles from the torpedoes. He was walking toward the torpedoes when one of the laborers came out to tell him to return, he took up the torpedoes and they proceeded back to the switch, and had almost reached it when extra 1468 passed them.

Section Foreman Snane stated that he was walking westward and was about two telegraph poles west of the switch when he heard Foreman Boyt call to him and saw the foreman running toward him. Extra 1468 was then around the curve and had almost reached him, but the engineman answered his signals with two short blasts of The section foreman was unable to say the whistle. whether the brakes were applied at that time. Section Foreman Shane further stated that he loaned his keys to Foreman Boyt and when he asked him for them that evening at Carlton, Foreman Boyt said that he did not have them, but Laborer Anderson said that he had found some keys at the wreck and they proved to be his keys. Section Foreman Shane denied loaning his keys to any of the laborers in Foreman Boyt's gang.

Roadmaster main-track switch was not procedure in installing a main-track switch was not followed in this instance, the switch being completely installed with the exception of bending the rail, and this latter operation was done the last thing, after the rail bender arrived about 3.30 p.m. on train No. 31. He further stated that it was necessary to open the switch in order to bend the rail properly with the rail bender of the type used, which was a Sampson rail bender.

Conclusions

This accident was caused by an open switch.

The investigation disclosed that the installation of the switch involved was just being completed when extra 1468 arrived. The bending of the rail was the last thing that was done and it was necessary to have the switch open during this process. The rail had been bent and Foreman Boyt had given instructions to have the rail bender removed and at the same time sent one of the laborers to have the flagman return. Foreman Boyt then supervised some other work, not noticing that the switch was open, and paid no more attention to the removal of the rail bender until he heard some one say that the train was approaching, at which time the laborers still were engaged in trying to remove the rail bender. Foreman Boyt is responsible for the occurrence of this accident in not seeing that the rail bender had been removed, and the switch lined for the main track, before he sent for the flagman to return.

Extra Gang Foreman Boyt was an experienced employee, as was also the case with the engineman and fireman of extra 1468, the latter employees having been on duty at the time of the accident 8 hours and 20 minutes.

Respectfully submitted,

W. P. BORLAND,

Director.

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