

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE MISSOURI PACIFIC RAILROAD NEAR WARING, KANS.,
ON AUGUST 20, 1928

November 6, 1928.

To the Commission

On August 20, 1928, there was a head-end collision between a passenger train and a freight train on the Missouri Pacific Railroad near Waring, Kans., which resulted in the death of 3 employees and the injury of 32 passengers, 3 employees and 1 trespasser.

Location and method of operation

This accident occurred on the Hoisington District of the Colorado Division, extending between Hoisington and Norace, Kans., a distance of 172.06 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a point 1,873 feet west of the west passing-track switch at Waring, approaching this point from the west the track is tangent for a distance of 3.6 miles, followed by a $1^{\circ} 14'$ curve to the right 390 feet in length and then tangent track for a distance of 4,672 feet, the accident occurring on this latter tangent at a point 3,619 feet from its eastern end. Approaching from the east the track is tangent for a distance of 5,900 feet, followed by a $2^{\circ} 01'$ curve to the right 521 feet in length and then the tangent on which the accident occurred. The grade at the point of accident is 0.33 per cent ascending for westbound trains.

The weather was clear at the time of the accident which occurred at about 9.32 or 9.33 p.m.

Description

Westbound passenger train No. 13 consisted of two baggage cars, one coach, one chair car and one Pullman sleeping car, hauled by engine 5521, and was in charge of Conductor Davis and Enginemen Young. The first car was of wooden construction, the fourth was of steel-underframe construction, and the others were of all-steel construction. At Hoisington, 51.6 miles east of Waring, the crew in charge received a copy of train order No. 89, Form 19, providing for a wait at McCracken until 9.27 p.m. and at Waring until 9.37 p.m. for eastbound extra 1500. Train No. 13 departed from Hoisington at 7.53 p.m., eight minutes late, left McCracken, the last open office, 5.12 miles east of Waring, at 9.25 p.m., according to the train sheet, still eight minutes late, and instead of complying with the wait order at Waring it continued beyond that point and collided with extra 1500 while traveling at a speed variously estimated at from 5 to 15 miles per hour.

Eastbound freight train extra 1500 consisted of 49 cars and a caboose, hauled by engine 1500, and was in charge of Conductor Boxwell and Enginemen Pough. This train passed Utica, 29.9 miles west of Waring, at 8.40 p.m., the crew having received at that point a copy of train order No. 89, Form 19, previously mentioned, stopped at Osrood, 11.76 miles from Waring, and was approaching Waring when it collided with train No. 13 while traveling at a speed estimated to have been between 18 and 25 miles per hour.

The impact drove train No. 13 backward a distance of 138 feet and derailed the engine truck and drivers of engine 5521. The first car in train No. 13 was telescoped a distance of 50 feet by the second car in the train, both cars remaining in an upright position, none of the other equipment in this train was derailed or damaged. Engine 1500 was partly derailed and considerably damaged, the first eight cars in this train and the forward truck of the ninth car were derailed, three of these cars being demolished and the others damaged to some extent. The employees killed were the engineman of train No. 13, and both brakemen of extra 1500, who were riding on engine 1500 at the time of the accident.

Summary of evidence

Fireman Triplette, of train No. 13, stated that all train orders received at Hoisington were read by him to the engineman, who also read them, and it was understood that their train was to wait at McCracken until 9.27 p.m. and at Waring until 9.37 p.m. for extra 1500. He did not know the time at which his train left either the station at McCracken or the coal chute, where a stop for coal was made which required five or six minutes, but after taking coal he mentioned the wait at Waring to the engineman and received an affirmative reply. He said the engineman did not sound the station whistle signal, the wait-order signal nor a road-crossing signal approaching Waring, neither was there a communication signal sounded from the train, and that on account of his being engaged in putting in a fire he did not know when his train passed Waring. His first knowledge of an approaching train was when he observed the headlight of that train when his own train was about at the west switch of the passing track and he immediately warned the engineman, who made an emergency application of the brakes. Fireman Triplette estimated the speed of his train at 10 to 15 miles per hour at the time of the accident. He further stated that he did not know the time at which the accident occurred, although shortly afterwards the fireman of the freight train displayed his watch, which had stopped at 9.31.

Conductor Davis, of train No. 13 stated that he delivered to the engineman the orders received at Hoisington but did not read them to him nor were they discussed in any manner, he did, however, compare time with the engineman, and there was a difference of five seconds between their watches. In addition to train order No. 89, they held another order to wait for a train at Bison and as the train approached this point a wait-order whistle signal was sounded. No such signal was sounded while approaching McCracken, however, but the conductor said he made no attempt to stop the train as is required under such circumstances because he was confident that the station work and the taking of coal, as well as the time needed in reaching the west switch at that point, would consume the time as stated in the wait order. His train left McCracken station at 9.25 p.m., but did not depart from the coal chute until about 9.31 p.m., while he did not know the time at which it passed the west switch. He said that no whistle signal of any kind was sounded as the train approached Waring and as he was busy with his reports, depending on the engineman to sound the required signals, he paid little attention to the location of his train and his first warning of anything unusual was when the brakes were ap-

plied in emergency, he then got down on the steps of the coach in which he was riding in order to ascertain the location of his train, the collision occurring immediately afterwards. He fixed the time of the accident at 9 35 p m , and estimated the speed of his train to have been about 5 miles per hour when the accident occurred. Conductor Davis could not account for his train having traveled from McCracken to Waring, a distance of 5.12 miles, between 9 31 and 9.35 p.m., as he noticed no excessive speed, although he said it might have been excessive without his having noticed it due to the fact that the rails had just been renewed between these points and he was unable to hear the train passing over the joints. The statements of Brakeman Hardesty, of train No 13, practically corroborated those of Conductor Davis, and he was positive his train did not pass the west switch at McCracken before 9.27 p m , the time named in the wait order.

Engineman Peugh, of extra 1500, stated that he compared time with the conductor before departing from Horace, there being a difference of 10 or 12 seconds. He read and understood the contents of train order No. 89, received at Utica, which he thought was at about 8.35 p m . A stop was made at Osgood to take water, the train departing from that point at 9.12 p.m., and as it passed the mile board west of Brownell, at 9.22 p m , he sounded the station whistle signal and looked back for a proceed signal but he said he could not recall whether or not he received such a signal. He did not again consult his watch until he whistled for Waring, it was then 9.30 p m while he expected to arrive at the west switch at Waring by 9.32 p m., which would give him sufficient time to provide protection in compliance with the rules. He further stated that his first knowledge that train No. 13 had passed the west switch was when his own train entered the tangent on which the accident occurred, and he immediately applied the brakes in emergency. Engineman Peugh estimated the speed to have been 18 or 20 miles per hour at the time of the accident, which he thought occurred at about 9 31 p m

Fireman Mall, of extra 1500, stated that train order No. 89 was handed to the head brakeman by the operator at Utica and that the brakeman, as well as himself, read the order to the engineman and all understood that train No. 13 was to wait at Waring until 9.37 p.m. He noted the time as 9 12 p m. when his train departed from Osgood and at about the same time the engineman made a remark about meeting train No. 13 at Waring. He

that his train passed Brownell at 9.31 p.m., and as it was approaching Waring, he observed the reflection of the headlight of train No. 13 but could not determine its exact location although he thought it was then in the vicinity of McCracken. Fireman Hall said he realized that flag protection might be necessary and as the brakeman was a new employe of the railroad became engaged in procuring a fusee and did not again notice the opposing train until the brakeman shouted a warning,, shortly after which Fireman Hall jumped from the engine, which was then moving at a speed of about 20 miles per hour. It also appeared from the Fireman's statements that his water was damaged as a result of falling at the time he jumped off the engine, causing it to stop at 9.31 p.m.

Conductor Boxwell, of extra 1500, stated that as his train was passing Otter, at 9.08 p.m., the operator handed him a copy of two train orders, one of which was order No. 89. The conductor read and understood the orders and he said the flagman also read the orders and that it was decided to proceed to Waring for train No. 13. A stop was made at Osgood at 9.08 p.m., and at that point the flagman was instructed to proceed to the head end of the train to assist in providing protection at Waring, in case it became necessary, this action being taken in view of the fact that the head brakeman was a student. The train departed from Osgood at 9.13 p.m., and when it passed the last switch at Brownell he noted the time to be 9.24 p.m. and he said it was his intention to use the full time shown on order No. 89, or as much of it as possible, to clear for train No. 13 at Waring, although he was aware that the rules required his train to clear the superior train at least five minutes, unless otherwise provided. While the train was descending the grade west of Waring, he observed train No. 13 approaching and when the engine of his own train was passing the mile board he noticed that the opposing train was not coming to a stop and that a collision was inevitable. He said the brakes were applied in emergency just prior to the collision and estimated the speed at the time of the accident at 20 or 25 miles per hour. Conductor Boxwell further stated that the impact caused him to be thrown from the cupola of the caboose but that as soon as he recovered himself he observed a lighted fusee on the rear of the caboose and started forward, out after reaching a point four or five car-lengths from the caboose he again looked at his watch and noted it was then 9.32.20 p.m. As soon as he reached the head end of the train he saw the watch of Fireman Hall and noticed that it had stopped at 9.31 p.m., which in his opinion was the time at which the accident occurred.

Conductor Boxwell admitted that he did not expect to be into clear at Waring as required by the rules, but figured that his train would reach that point in ample time to provide protection.

Operator West, on duty at McCracken at the time of the accident, stated that as nearly as he could remember train No. 13 arrived at the station at 9 19 p.m. and departed from the coal chute at 9.25 p.m., the latter time being reported to the dispatcher as the departing time. He held no conversation with any member of the crew while the train was at his station, and had no knowledge that they held a wait order at that point.

Operator Sieber, on duty at Hoisington, stated that his duties required him to keep a record of any interruptions to the telephone and telegraph wires, and that at 9.30 p.m. the telegraph wire between St. Louis and Denver was disturbed while the telephone circuit with the dispatcher also failed at the same time. He immediately made an attempt to locate the trouble and while doing so, or at about 9.33 p.m., the dispatcher complained of wire trouble, at 9.35 p.m. Operator Sieber located the wire trouble as being between McCracken and Brownell.

Dispatcher Beam, who was handling train orders on the Hoisington District at the time of the accident, stated that all orders are transmitted by telegraph and therefore he would have no knowledge of the failure of the telephone circuit unless so informed by the dispatcher handling orders on the Horace District. He noticed an interruption of the telegraph line at 9.35 p.m., while the dispatcher of the Horace District later informed him that the telephone line failed at 9:34 p.m. He said that he received a clearance of train No. 13 from the operator at McCracken at 9.26 or 9.27 p.m. and that he did not question the operator regarding the wait order, as he thought the train had departed from the station at that time and not from the coal chute. Dispatcher Beam was familiar with the requirements of the rules that when a Form 19 order restricting the rights of a superior train is issued it must, when practicable, include the operator at the meeting or waiting point, except in automatic or manual block territory, but he said that he did not transmit order No. 89 to the operator at McCracken as he was of the opinion that when more than one wait is mentioned in an order it is not necessary to put out a middle order, although he knew of no rule to this effect. It was his practice, however, to use the middle order at points where there was continuous

service, and as there was no telegraph office at Waring it was impossible for him to have placed a middle order at that point. General Superintendent Kirk said that when several waits are named in an order, a copy of the order should be addressed to all the waiting points where there are open offices.

Dispatcher Sawyer stated that train orders governing movements between Horace and Pueblo, which constitutes the Horace District, are transmitted by telephone and that he first became aware of wire trouble by hearing a disturbance in his head set. At that time he was calculating a train movement which he completed before noting the time and it was then 9.33.20 p.m., which he estimated as having been 20 or 25 seconds after he heard the disturbance. This time was noted from his watch which had not been compared during that day but he felt confident it was not more than 20 seconds fast.

Operator Dillon, on duty at Pueblo, stated that he is scheduled to work by telegraph with the general manager at St. Louis at 9.30 p.m. The operator at that point began calling at that time but was not answered until 9.33 p.m., the operator then started sending a message but had not completed it when the circuit was broken, and Operator Dillon said this occurred between 9.33 and 9.34 p.m. Operator Douglas, on duty at St. Louis, corroborated the statements of Operator Dillon.

Lineman Wise stated that he arrived at the scene of accident at about 1 a.m., during the night of its occurrence and found that a telegraph pole had been broken off by the wreckage and the wires which it had supported were not broken but rested against a steel beam of one of the cars resulting in their being grounded.

Express Agent Snodgrass stated that after the bodies of the employees killed in the accident were removed from the wreckage they were taken to McCracken and at that point the watches of the brakemen were removed from their clothing. The crystal on one of them was broken and the watch had stopped at 9.34, while the other watch was still running. The statements of Telephone Maintainer Allen and Undertaker Ragan, who also saw these watches, substantiated those of Agent Snodgrass. Agent Kirkle stated that he was present when the watch of Engineman Young was removed from his clothing by another engineman and he noticed it was running. A comparison was then made between the watch of Engineman Young and that of the other engineman which showed a difference in time of five seconds.

Conclusions

This accident was caused by failure to obey a wait order, for which Engineman Young and Conductor Davis, being in charge of train No. 13 were responsible. A contributing cause was the failure of the crew of extra 1500 properly to protect their train when running on short time against train No. 13.

According to the statements of Fireman Triplette, he called Engineman Young's attention to the wait order at the time their train departed from McCracken and he said the engineman indicated that he understood. The engineman, however, failed to sound the station whistle signal, the wait-order signal, and the road-crossing signal as the train approached Waring, and the first knowledge Fireman Triplette had that his train was failing to comply with the wait order was when he returned to his seat box after shoveling coal, at which time his train was in the vicinity of the west switch at Waring. At the same time he observed the headlight of the opposing train and called the engineman's attention to the fact, the engineman immediately applied the brakes in emergency. No reason can be assigned for the failure of Engineman Young to obey the wait order. Fireman Triplette, however, was familiar with the contents of the order and was in position to know what was transpiring, had he made it his business to know when his train was approaching Waring he could have called the wait order to the engineman's attention and probably would thus have prevented the accident.

Conductor Davis said he was depending on the engineman to sound the required signals and therefore paid no attention to the location of his train after departing from McCracken until the brakes were applied in emergency just prior to the accident. Had he been on the alert and personally attended to the fulfillment of order No. 89, undoubtedly he could have brought his train to a stop when it was ascertained that the engineman was failing to do so.

Extra 1500 departed from Osgood not later than 9.13 p.m., and as there was only 19 minutes in which to reach Waring, a time-table distance of 11.76 miles, and clear the time of train No. 13 by five minutes, it would have been necessary to operate somewhat in excess of the maximum speed of 35 miles per hour permitted for freight trains. Conductor Boxwell, however, stated that it was not until 9.24 p.m. that his train passed the east switch at Brownell and he admitted that the train could not then reach Waring and be into clear by 9.32 p.m., but he

said he expected to use as much of the time up to the time named in the wait order, 9.37 p.m., as might be necessary. Engineman Pough, on the other hand, said that when he sounded the station whistle signal at the mile board west of Waring it was 9.30 p.m. and that he expected to reach the west switch by 9.32 p.m., which would give him sufficient time to provide flag protection. The best evidence indicated, however, that the accident occurred at 9.32 or 9.23 p.m., or at a time when extra 1500 should have been into clear or else be protected by flag.

When train order No. 89 was issued by Dispatcher Beam, he failed to issue a copy to the operator at McCracken as required by the rules. He admitted that had the order been placed with the operator it would have provided additional protection for the trains involved. On account of the fact that there is no telegraph office at Waring it was impossible to have placed the order at that point.

Fireman Triplette entered the service as fireman on July 24, 1928, and Brakeman Cotton entered the service on July 22, 1928, the other employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BURLAND,

Director.