

INTERSTATE ~~COMMISSION~~ COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHICAGO, ROCK ISLAND & PACIFIC RAILWAY NEAR JENNINGS,
KANSAS, ON SEPTEMBER 28, 1930.

November 17, 1930.

To the Commission.

On September 28, 1930, there was a head-end collision between two freight trains on the Chicago, Rock Island & Pacific Railway near Jennings, Kansas, which resulted in the death of two employees and the injury of four employees. This investigation was made in conjunction with a representative of the Public Service Commission of Kansas.

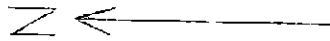
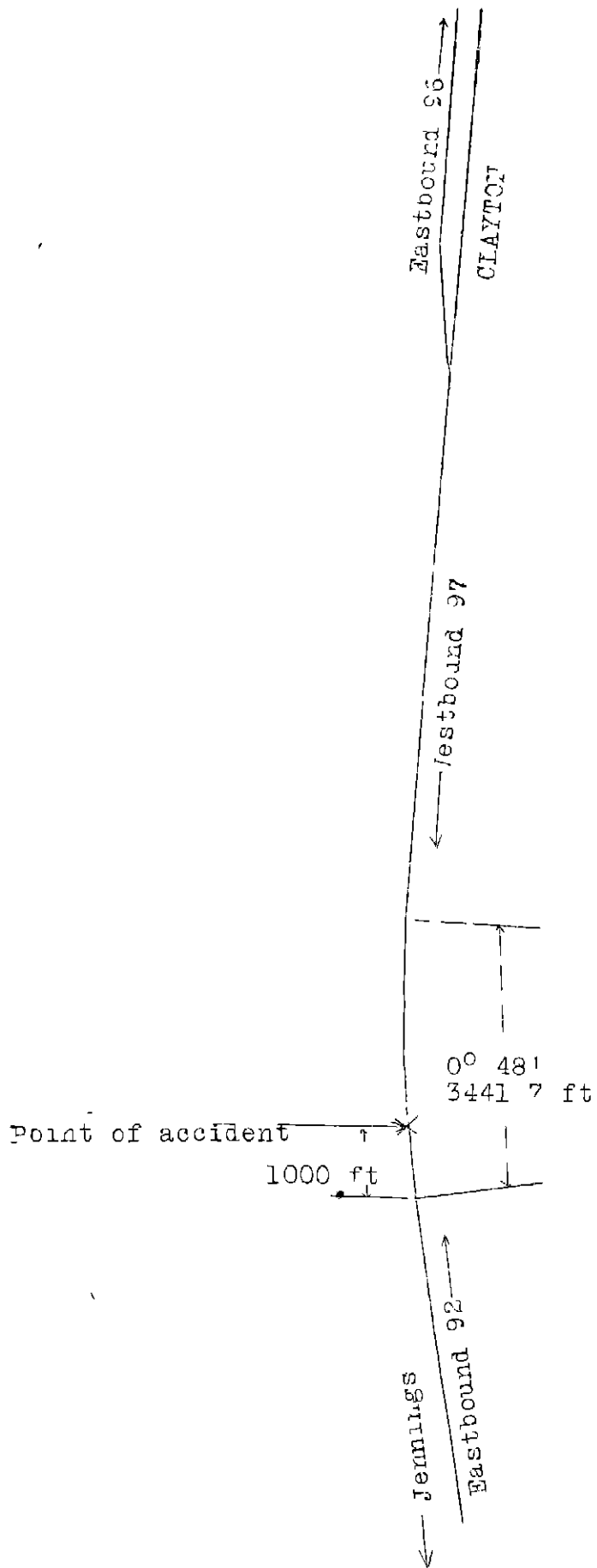
Location and method of operation

This accident occurred on Sub-division 8 of the Nebraska-Colorado Division, extending between Phillipsburg and Goodland, Kansas, a distance of 139.9 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred at a point about half way between Jennings and Clayton, Kansas, Clayton being located 7.4 miles east of Jennings. Approaching the point of accident from the west, the track is tangent for a distance of 2,207.8 feet, followed by a $0^{\circ} 48'$ curve to the right 3,441.7 feet in length, the accident occurring on this curve at a point approximately 1,000 feet from its western end, approaching from the east, the track is tangent for a distance of 2,703.7 feet, followed by the curve on which the accident occurred. The grade is 0.7 per cent ascending for west-bound trains at the point of accident. On account of trees near the eastern end of this curve and an embankment at the western end, all on the inside of the curve, the view across the curve was restricted to about 1,900 feet.

The weather was clear at the time of the accident, which occurred about 8.33 p.m.

Description

Westbound freight train second No. 97 consisted of 37 cars and a caboose, hauled by engine 2550, and was in charge of Conductor Stowell and Engineman Lasley. This train departed from Phillipsburg, 58.5 miles east of Jennings, at 6.20 p.m., the crew having received a copy of train order No. 36, Form 19, reading as follows:



Inv. No. 1666
 Chicago, Rock Island & Pacific Ry.
 Jennings, Kans.
 Sept. 28, 1930.

"First and ~~second~~ 97 engs 2057-1756 coupled and ~~engine~~ 2550 have right over No. 96 eng 1781 Phillipsburg to Rexford and wait at Norton until six forty 6.40 p.m. Dellvale six fifty five 6.55 p.m. Clayton seven ten 7.10 p.m. for No. 96 engine 1781 Order to No. 96 at Rexford."

Upon arrival at Prairie View, 14.4 miles beyond Phillipsburg, the crew of train second No. 97 received a copy of train order No. 41, Form 19, reading as follows:

"Second No. 97 eng 2550 wait at Dellvale until eight naught one 8.01 p.m. Clayton until eight twenty 8.20 p.m. for No. 96 eng 1781."

At Norton, 24.4 miles east of Jennings, the crew received copies of train orders Nos. 43 and 47, Forms 19, as follows:

No.43. - "No.92 engine 2500 meet first 97 engs 2057-1756 coupled at Dresden and second 97 eng 2550 at Jennings."

No.47. - "Second 97 eng 2550 meet No. 92 eng 2500 at Clayton instead of Jennings."

The crew also received a clearance card calling attention to the orders received at this point. Train second No. 97 departed from Norton, the last open office, at 7.53 p.m., passed Clayton, where it should have met train No. 92 and where train No. 96 was standing on the siding, having reached that point on wait order No. 41, and collided with train No. 92 at a point 4.3 miles beyond while traveling at a speed estimated to have been between 35 and 40 miles per hour.

Eastbound freight train No. 92 consisted of 41 cars and a capoose, hauled by engine 2500, and was in charge of Conductor Moden and Engineman Hill. This train departed from Goodland, 31.4 miles west of Jennings, at 5.40 p.m., and at Seldon, 17.8 miles west of Jennings, the crew of this train received a copy of train order No. 43, Form 19, providing for the meet with train second No. 97 at Jennings. Upon arrival at Jennings, the crew received a copy of train order No. 47, Form 19, providing for the meet with train second No. 97 at Clayton instead of Jennings, together with a clearance card. Train No. 92 then departed from Jennings, the last open office, at 8.20 p.m., and collided with train second No. 97 while traveling at a speed estimated to have been about 30 miles per hour.

Eastbound freight train No. 96 consisted of 53 cars and a caboosc, hauled by engine 1781, and was in charge of Conductor King and Engineman Harper. This train departed from Goodland at 1 p.m., received train orders No. 36 on Form 31, and No. 41 on Form 19, previously quoted, en route, departed from Jennings at 6.54 p.m., according to the train sheet, and was into clear on the passing track at Clayton at 7.10 p.m., according to the statements of the members of the crew, and remained there until after the passage of train second No. 97 about 8.25 p.m.

As a result of the collision between trains Nos. 92 and second No. 97, both engines were derailed and considerably damaged, and 16 cars were derailed, 11 of these cars being destroyed while 5 were considerably damaged. The employees killed were the enginemen of both trains and those injured were the firemen and head brakemen of both trains.

Summary of evidence

Fireman Williams, of train second No. 97, stated that all the train orders received at Phillipsburg and points en route were read and understood by both the engineman and himself, and it was understood that their train was to meet train No. 92 at Clayton and was also to wait at Clayton until 8.20 p.m. for train No. 96. Engineman Lasley sounded all whistle signals en route from Phillipsburg to the point of accident, as required by the rules, sounding the whistles for the station, the meet, and for several highway crossings at Clayton. Fireman Williams said that he looked at his watch as they passed the mile board east of Clayton and it was then between 8.22 and 8.23 p.m. As their train passed through Clayton, both he and the head brakeman remained on their seat boxes, and as they passed the train on the siding, which was on the engineman's side, Engineman Lasley called "No. 92 engine 2500", which call was repeated by the brakeman. Fireman Williams said he then asked the engineman if the engine on the siding was 2500 and the engineman replied that it was. The train proceeded westward, and when Fireman Williams first saw the headlight of an approaching train, he thought it was an automobile on the highway, and it was only about one town block distant, when he realized that it was the headlight of a train. The engineman was then sitting on his seat box and the brakeman was standing in the gangway, Fireman Williams called to them and the brakeman jumped off the engine, Fireman Williams following him, and as he did so he saw that the engineman was standing by his seat box; the fireman heard the brakes apply just before he jumped off. Fireman Williams stated that the reason he did not leave his seat box to identify the train on the siding at Clayton was because of a bad crossing which he wanted to protect, further stating that usually he and the engineman remain on their respective seat boxes and the engine number is called by the one on whose side the train is passed. He said that

bulletins had been posted to the effect that firemen should keep sharp lookout at all highway crossings, especially when approaching stations and at the most important crossings, so that they may be in position to call an engine-man's attention to the approaching of automobiles from the fireman's side. He understood, however, that the bulletins did not relieve him from performing his duty of identifying trains on sidings where a meet is to be made. Fireman Williams estimated the speed of his train while passing through Clayton, and also at the time of the accident, to have been 37 or 38 miles per hour. The statements of Head Brakeman Walker practically corroborated those of Fireman Williams.

Conductor Stowell, of train second No. 97, stated that he conversed with the engineman before departing from Phillipsburg and noticed nothing unusual in his manner; he appeared to be normal in every respect. Both the conductor and the rear brakeman understood the orders, and mentioned the possibility of meeting train No. 96, as well as train No. 92, at Clayton. Upon approaching Clayton, he heard the engineman sound the station whistle, followed by the meeting point whistle, he then went to the rear platform of the caboose, and while he was unable to identify the engine on the siding, he believed it to have been an engine of the 2500 type and that it was the engine of train No. 92, but due to the fact that the headlight of that engine was turned on just before he reached it, the glare blinded him to such an extent as to make identification impossible. Conductor Stowell estimated the speed of his train while passing through Clayton to have been 40 miles per hour, and he did not remember giving a proceed signal as it departed from that point. He further stated that he felt the application of the air brake in emergency just before the collision occurred.

The statements of Rear Brakeman Galbreth, of train second No. 97, practically corroborated those of Conductor Stowell. Rear Brakeman Galbreth was riding in the cupola on the left side approaching Clayton and when they reached the east passing-track switch he went back to the rear end of the caboose, and while he said he noticed the headlight on the train on the passing track was lighted, he made no attempt to identify the train; he stood on the steps on the left side looking toward the head end of his own train until the rear end of his train had passed the passing track, and he then looked back and saw two green markers on the caboose, which was the only time that he had seen that train.

Conductor Moden, of train No. 92, stated that the train orders governing their movement from Goodland to the point of accident were understood by the crew of his train, the last order received at Jennings being to the effect that they were to meet train second No. 97 at Clayton instead of at Jennings. After departing from Jennings, his train had attained a speed of about 30 miles per hour and the

first intimation of danger he had was when he felt the air brakes apply in emergency. The statements of Rear Brakeman Stringham brought out no additional information of importance. Statements were not obtained from the fireman or the head brakemen on account of their injuries.

The members of the crew of train No. 96 stated that while their train was standing on the passing track at Clayton, trains first and second No. 97 passed, and none of them had any difficulty in identifying each of those trains by the engine number. Train second No. 97 passed about 8.25 p.m., at a speed of approximately 35 miles per hour. The passing track is located north of the main track and they stated that they saw the engineer in the cab, and also saw one standing at the rear end of the caboose with a white lantern. Engineer Harper, of train No. 96, stated that he had turned off the headlight on his own engine on his arrival at the passing track, and did not turn it on again until the rear end of train second No. 97 was about three car-lengths west of his engine. Head Brakeman Gillen, who was standing about three car-lengths east of his engine when train second No. 97 approached, stated that he heard the station whistle sounded by that train, followed immediately by the meeting point signal, and it appeared to him that the caboose of that train had passed his own engine before the headlight was turned on. Conductor King stated that a short time after their arrival at Clayton, he received information from the dispatcher through the agent, although this was a closed station at that time, that train No. 92 was to meet train second No. 97 at Clayton and that he had better let train No. 92 by at that point. About 50 minutes later, however, when train second No. 97 passed without stopping, he concluded the meet with train No. 92 had been changed. Conductor King further stated that he observed several proceed signals delivered from the rear of the caboose of train second No. 97 just after it had passed the rear of his own train.

Conductor Suggs, of train first No. 97, stated that when his train passed train No. 96 at Clayton, he was standing on the rear platform of the caboose, and he had no difficulty in identifying train No. 96 by the engine number, it being 1781. At that time it was 8 p.m., and the weather was clear and dark.

Dispatcher Price, who was handling the train orders on the sub-division on which this accident occurred, stated that although Clayton was a closed station at the time he had been in touch with the conductor of train No. 96, he had instructed him that train No. 92 was to meet train second No. 97 at Clayton and that he had better let train No. 92 by at that point. He stated that it was the practice to consider Form E orders, such as was used between train No. 96 and train second No. 97, as meet orders, within the meaning of rule 381, which reads as follows:

"When trains are to meet or pass at intermediate sidings, train orders to that effect must be given them."

He also stated that such orders were considered as sufficient authority to establish meeting points for opposing trains at intermediate sidings, Clayton being an intermediate siding in this instance. He later modified that statement as far as first-class trains were concerned, saying that he would give them positive meet orders.

Conclusions

This accident was caused by the failure of the crew of train second No. 97 properly to identify a train on a siding, with the result that they failed to obey a meet order governing another train.

The investigation disclosed that the crew of train second No. 97 received the train orders directing them to wait at Clayton until 8.30 p.m. for train No. 96 and to meet train No. 92 at Clayton. Train second No. 97 passed Clayton, where train No. 96 was into clear, in accordance with the wait order at 8.25 p.m., or five minutes after the expiration of the wait, and apparently the crew mistakenly assumed the train on the passing track to be train No. 92. The engineer was killed in the accident and no reason can be given for his failure properly to identify train No. 96. The testimony shows, however, that he had understood his orders and was attending to his duties, as he sounded the meeting-point signal after the station signal, and called "92 engine 2500" to the fireman and head brakeman as he passed train No. 96; this train, however, was hauled by engine 1781. Fireman Williams and Head Brakeman Walker made no effort to identify the train, the fireman giving as his excuse that he remained on his seat box to watch for automobiles at the crossings, bulletins having been issued to the effect that firemen must keep sharp lookout for automobiles at all highway crossings.

Conductor Stowell stated that, due to the glare of the headlight on train No. 96, he was blinded and unable properly to identify that train, although the engineer of train No. 96 stated that he did not turn on the headlight until after the passage of the caboose. Rear Brakeman Galbreth made no effort to identify the train at any time. It is quite evident that the duty of properly identifying this train was left entirely to the engineer. Regardless of any circumstances which may have made identification difficult, or the fact that it may have been reasonable to assume that the train on the passing track was train No. 92, it was the duty of the crew of train second No. 97 positively to identify and actually to meet the train named at the place named in their order.

In connection with the investigation of this accident, it was developed that ~~train~~ No. 96, the train mistaken for train No. 92, entered the block at Jennings and proceeded as far as Clayton, the next time-table station, by virtue of the authority contained in train orders Nos. 36 and 41, which required the two sections of train No. 97 to wait for train No. 96. Clayton, however, was an intermediate siding, and under the requirements of rule 381, of the manual block rules, when trains are to meet at an intermediate siding, train orders to that effect must be given them. This rule is expressed with sufficient clearness to make it readily understood; it makes no exceptions as between trains of different classes and it does not leave it optional with the dispatcher as to what he will do. A train must have an order to meet at an intermediate siding, and the only way this provision can be complied with is by the issuance of a positive meet order. If the supervising officials do not desire to enforce the provisions of the rule as it stands in the book, regardless of the class of train involved, then they should modify the rule to agree with the practice in effect, or else the rule should be eliminated entirely.

All of the employees involved in this accident 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 BORLAND,

Director.