

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 AT HOWCOTT, LA., ON SEPTEMBER,
5, 1924.

October 24, 1924.

To the Commission:

On September 5, 1924, there was a head-end collision between two freight trains on the Missouri Pacific Railroad at Howcott, La., which resulted in the death of three employees and two trespassers, and the injury of five employees.

Location and method of operation

This accident occurred on the Monroe District of the Louisiana Division, which extends between Monroe Yard and Alexandria, La., a distance of 98.59 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 collision occurred at a point 4,112 feet south of the south passing-track switch at Howcott, approaching this point from the south there are 2,120 feet of tangent and then a 30° curve to the left 1,883 feet in length, the collision occurring on this curve at a point 135 feet from its northern end. The grade for about a mile is generally 0.5 per cent descending for north-bound trains, 0.45 per cent ascending for 1,100 feet, and is then 0.04 per cent ascending to the point of accident, 870 feet distant. Approaching from the north the track is tangent for more than a mile to the curve on which the collision occurred, while the grade is descending for approximately 3,100 feet, varying from 0.7 to 0.04 per cent, being 0.04 per cent at the point of collision.

Trees bordering the right-of-way on the inside of the curve on which the accident occurred restricted the range of vision to about 1,300 feet. The weather was clear at the time of the accident, which occurred about 11.06 a.m.

Description

Southbound second-class freight train second No. 361 consisted of 37 cars and a caboose, hauled by engine 10, and was in charge of Conductor Kelly and Engineman Fullington. At Riverton, 43.14 miles north of Howcott, train order No. 39, Form 19, was received which provided in part that:

"2/361 Eng 10 wait at Howcott until 1110 am * * * * for all trains ***." This train departed from Riverton at 9.10 a.m., according to the train sheet, and at Georgetown, 7.8 miles north of Howcott, a clearance card and block-signal permissive card, letter N, were received, the permissive card reading as follows:

"Conductor and Engineman No. 2/361
Proceed under control from Georgetown to Antonia
Expecting to find train 1-361 in the block
Train 2-361 and train Extra 1805-25
Will meet at Howcott
As per Train Order No. 39."

This train departed from Georgetown at 10.50 a.m., according to the train sheet, passed Howcott and collided with extra 1805-25 while traveling at an estimated speed of about 18 miles an hour.

Northbound freight train extra 1805-25 consisted of 35 cars and 2 cabooses, hauled by engines 1805 and 25, coupled, and was in charge of Conductor Griffin and Enginemen Groff and Schaedel. This train left Alexandria at 9.30 a.m., according to the train sheet, after having received a copy of train order No. 39, on Form 19, previously referred to. At Antonia, 7.5 miles south of Howcott and the last open block station, a clearance card and block-signal permissive card were received, the permissive card reading:

"Conductor and Engineman No. 1805-25 c
Approach first switch at first siding at Howcott
Under control expecting to find train 2-361
In block at Howcott
Train 2-361 and Train X1805-25 c
Will meet at Howcott
As per Train Order No. 39."

This train left Antonia at 10.55 a.m., according to the train sheet, and collided with train second No. 361 while traveling at a speed of about 12 miles an hour.

Immediately following the collision the boiler of engine 10 exploded, the explosion hurling the boiler eastward a distance of about 125 feet. Two box cars immediately behind engine 10 were demolished and the wreckage destroyed by fire. The following seven tank cars were derailed, as well as the forward truck of the eighth tank car; the ninth tank car was not derailed but the box car immediately behind it was derailed and then destroyed by the fire. Engines 1805 and 25, with their tenders were derailed but remained upright on the roadbed. The first four cars in this train were derailed and the wreckage destroyed by the fire. The employees killed were the fireman of train second No. 361 and two car men who were riding in a tool car next to the tender of engine 25.

Summary of evidence

Conductor Kelly, of train second No. 361, stated that as his train approached Howcott he heard the engineman sound the meeting-point whistle signal and as soon as the caboose was where he could see ahead on straight track he called the attention of Brakeman Franklin to the fact that the other train had not arrived, the brakeman said their train was to wait in any event, whereupon Conductor Kelly looked at his watch and noted that it was then 11.05 a.m. As it became evident that his train was not going to stop, Conductor Kelly said he hurriedly re-read train order No. 39, thinking that possibly he had misread the time in the wait order, and by the time he had read down to that part calling for a wait at Howcott until 11.10 a.m., the caboose was about opposite the south passing-track switch, it was opposite the north switch when he reached for the orders. He immediately opened the conductor's brake valve, at which time the gauge showed 70 pounds brake-pipe pressure, saw the opposing train as it appeared around the curve and jumped just before the impact. He could not account for the distance the train ran after he had applied the brakes in emergency, and did not know whether an air-brake test had been made before his train departed from Monroe, but said the car inspectors at that point had reported the train as being ready, which he took to mean that the air-brake test had been made.

Rear Brakeman Franklin, of train second No. 361, stated that when the engineman sounded the meeting-point whistle signal approaching Howcott he looked at his watch, noted that it was 11.02 a.m., and remarked to the conductor that they had a wait at this station. While the conductor was reading the order he got out of the cupola and was looking out when he felt the brakes being applied lightly but was of the opinion that they did not check the speed of the train as should have been the case with an emergency application. He afterwards noticed that the conductor's valve was open.

Engineman Fullington, of train second No. 361, stated that after taking water at Riverton, the conductor and head brakeman got on the engine as the train was leaving and one of them handed him train order No. 39, which he read, the fireman and head brakeman also read the order at this time. Upon receipt of the caution card at Georgetown, Engineman Fullington said he re-read the order, and through error read the time specified for train first No. 361 to wait at Simms, which was 11.05 a.m., as the time his own train was to wait at Howcott. When his train was about opposite the north passing-track switch at Howcott he looked at his watch, and as it was then 11.05 a.m. he proceeded past Howcott at a speed of about 25 or 30 miles

an hour, passing the south switch at 11.08 a.m. He first saw the opposing engine when they were about 300 feet distant and immediately applied the air brakes in emergency, shut off steam, opened the sanders, reversed the engine and jumped. Prior to this he had not felt the brakes being applied. Engineman Fullington admitted the accident was due to his oversight and had no complaint to make about the wording or writing of train order No. 39. He said he saw the car inspectors looking over the air brakes before his train left Monroe, and one of them gave him a "high ball" proceed signal which he understood to mean that the air was coupled through to the caboose and in proper working order. He said the air brakes had responded in the usual manner after leaving Monroe.

Head Brakeman Powell, of train second No. 361, said he read the order and knew it provided that his train should wait for extra 1805-25 at Howcott, but he did not remember the time specified. After passing Howcott he did not feel any application of the air brakes indicating that the Conductor's valve had been opened, and the first knowledge he had of anything wrong was when the engineman applied the air brakes in emergency.

Engineman Groff, of engine 1805, said his train departed from Antonia upon the arrival of train first No. 361, leaving at 10.52 or 10.53 a.m., with 17 or 18 minutes in which to reach Howcott for train second No. 361 by 11.10 a.m. He said he realized that there was not sufficient time to clear that train at Howcott the five minutes required by rule but thought there was ample time to arrive at the switch and protect by flag before 11.10 a.m., and he thought he was entitled to use all the time up to the last minute, saying that when freight trains were running on caution cards it was customary to use the full time, although this was never done in the case of passenger trains. As his train was approaching the point of accident, moving at a speed of 20 miles an hour, the head brakeman and fireman called a warning and he applied the air brakes in emergency.

Fireman Ogles, of engine 1805, said he was the one who applied the air brakes for the brake test before leaving Alexandria and a little later the car man gave a signal which he knew was not the correct indication to release the brakes but understood what the car man intended to convey. The operator at Antonia said he would close the switch and as soon as train first No. 361 had cleared, his own train departed, he looked at his watch as the caboose cleared the switch and it was then 10.53 a.m. As the train was rounding the curve Fireman Ogles saw train second No. 361 approaching, at that time being 30 or 35 car lengths distant, and he at once notified the engineman. Fireman Ogles was also of the opinion that his train could use all of the time up to 11.10 a.m., when the wait order would expire.

Engineman Schaedel, in charge of engine 25, said his train left Antonia at 10.55 a.m., and that his first knowledge of anything wrong was when his fireman told him to apply the air brakes and get off. Engineman Schaedel also said that at times he had used the last minute available under a wait order. Fireman Cutrer, of engine 25, said he thought train second No. 361 was about 20 or 25 car lengths distant when he first saw it.

Conductor Griffin, of extra 1805-25, said the operator at Antonia had told them he would close the switch and that his train cleared the switch at 10.54 a.m., which gave them 13 minutes in which to clear train second No. 361 at Howcott by 11.10 a.m., and that it was customary to use all the time on a wait order. It also appeared from his statement that at Antonia the operator said the dispatcher wanted to know if his train could reach Howcott for train second No. 361 and that he replied it would be close. The statements of Rear Brakeman Allen added nothing of importance, except he said it was 10.58 a.m. when his train was leaving Antonia.

Operator Floyd, at Antonia, stated that the dispatcher asked him to close the switch for extra 1805-25 to assist in getting that train to Howcott against train second No. 361, having previously asked the conductor if he could reach Howcott for that train. He closed the switch and estimated that the caboose passed out of the north end of the passing track at a speed of about 20 miles an hour, at 10.54 or 10.55 a.m.

Train Dispatcher Moffett said he issued the caution card to extra 1805-25 at Antonia at 10.38 a.m., and that at 10.50 a.m. the operator said train first No. 361 had arrived, that extra 1805-25 was ready to go, that he would close the switch, and that the train would be able to reach Howcott for train second No. 361.

Car Inspector Harvey stated that he examined the air brakes on extra 1805-25 before that train left Alexandria and that all the brakes were working properly. He did not know of any prescribed signal for applying and releasing brakes, and used an indication of his own.

Car Inspector J. R. Millis stated that after engine 10 coupled to train second No. 361 at Monroe he coupled the air hose between the engine and head car, then inspected the train and stopped leakage. There was no air-brake test made by applying the brakes because the train departed when he was about two car-lengths from the caboose. He gave the engine-man a signal to set the brakes out supposed he did not see it, and he then boarded the caboose as it was passing him and saw that the gauge registered 65 pounds pressure. He did not know how many brakes were working in the train as it left Monroe, but thought they were all right, as he and another inspector had made a test when train second No. 361

arrived at 7.15 a.m. and no cars with defective air brakes were found at that time. He further stated that the yardmaster had told him that some of the cars in the arriving train were set out but none had been picked up, which indicated that all cars in the departing train were tested on their arrival.

Master Mechanic Curley stated that he inspected the boiler of engine 10 after the collision, but was unable to find any evidence of low water and he was of the opinion that the explosion was a result of the collision and not due to low water.

Under the rules of the American Railway Association, cars containing inflammables are required to be placed at least five cars from the engine, if possible, and where this is not done the train and engine crews are to be informed accordingly. Yard Clerk Schulze said he knew that in train second No. 361 there were cars containing gasoline which were closer to the engine than allowed by the rule, and that he so notified Yardmaster Snell and also gave notice to the crew in the usual manner on form 6308, Yardmaster Snell said he did not know of it until after the train had departed.

Conclusions

This accident was caused by the failure of train second No. 361 to wait at Howcott until 11.10 a.m., as directed by train order No. 39, for which Engineman Fullington and Conductor Kelly are responsible, and by the operation of extra 1805-25 without sufficient time in which to reach Howcott and clear train second No. 361 as required by the rules.

Engineman Fullington had no complaint to make about the wording or writing of the wait order, and acknowledged full responsibility for his oversight, explaining that he read the time provided for a wait of train first No. 361 at Simms, 11.05 a.m., as the time specified for his own train to wait at Howcott for extra 1805-25. He looked at his watch when his train was in the vicinity of the north switch at Howcott and as it was then 11.05 a.m. he proceeded at a speed of about 25 or 30 miles an hour.

It should not have been necessary for Conductor Kelly to refer to his train orders when the caboose of his train was between the switches at Howcott in order to ascertain the time specified in the order. He should have been thoroughly familiar with the order sufficiently in advance of reaching Howcott to have acted promptly toward bringing his train to a stop at his first intimation that Engineman Fullington was not going to obey the order. It is also to be noted that if he had opened the conductor's valve when the caboose was at the south passing-track switch at Howcott, as he stated he did, his train should have been stopped before

reaching the point of collision, 4,113 feet distant.

While the testimony is conflicting as to the time at which extra 1805-25 left Antonia, and also as to the time at which the collision occurred, it is clearly apparent that Conductor Griffin and Engineman Groff, in charge of extra 1805-25, allowed their train to leave Antonia without sufficient time in which to clear train second No. 361 at Howcott, as required by rule 87, of the rules of the operating department, which provides in part as follows:

"Extra trains must clear the time of opposing regular trains not less than 5 minutes unless otherwise provided, and will be governed by train orders with respect to opposing extra trains "

The rules also provide, under Form E of the "Forms of Train Orders " which relates to wait orders, that "the train last named is required to run with respect to the time specified **** as before required to run with respect to the schedule time of the train first named," in other words, rule 87 still applies. The arrangement made whereby the operator at Antonia closed the switch after the departure of extra 1805-25, thereby saving the time which would otherwise be used in reducing speed so as to enable the flagman to close the switch and then board the train, undoubtedly encouraged the crew to attempt to make the run against train second No. 361 without sufficient time.

The investigation of this accident developed many undesirable features. An engineman misread an order, a head brakeman did not remember the time his train was to wait for the opposing train, a conductor forgot how the order read, the crew of the opposing train was running on short time and was practically encouraged to do so, employees did not know the rules and thought it was all right to occupy the main track up to the time named in a wait order, employees were careless about comparing time with standard clocks, cars containing gasoline were placed much closer to the engine than permissible under the regulations, neither the crews nor car inspectors seemed to pay any particular attention to the making of proper air-brake tests, and car inspectors did not know what signals to use for applying and releasing the brakes. The development of these facts indicates conditions that should not be tolerated, and it is incumbent on the responsible officials of this railroad to see that these conditions are promptly corrected in order that the operation of trains may be properly safeguarded.

This accident again calls attention to the inherent weakness of the human element in train operation. Had an adequate block-signal system been in use on this line this accident probably would not have occurred, an adequate automatic train stop or train control device would have prevented it.

None of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. EORLAND,

Director. .