

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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REPORT OF THE DIRECTOR

BUREAU OF SAFETY

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ACCIDENT ON THE  
MISSOURI PACIFIC RAILROAD

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LONE TREE, MO.

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JANUARY 4, 1936

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INVESTIGATION NO. 2030

SUMMARY

Railroad: Missouri Pacific  
Date: January 4, 1936  
Location: Lone Tree, Mo.  
Kind of accident: Rear-end collision  
Trains involved: Freight : Passenger  
Train numbers: Extra 1444 : No. 221  
Engine numbers: 1444 : 6517  
Consist: 56 cars and : 2 cars  
2 cabooses :  
Speed: Slow : 35 miles per hour  
Track: 2°56' curve to the right; 0.3 percent  
ascending grade  
Weather: Partly cloudy; moonlight  
Time: 6:56 p.m.  
Casualties: 1 killed and 6 injured  
Cause: Operation of extra train on time of  
following superior train without  
authority and without adequate  
flag protection.

February 26, 1936.

To the Commission:

On January 4, 1936, there was a rear-end collision between a freight train and a passenger train on the Missouri Pacific Railroad at Lone Tree, Mo., which resulted in the death of 1 employee, and the injury of 5 passengers and 1 dining-car employee.

#### Location and method of operation

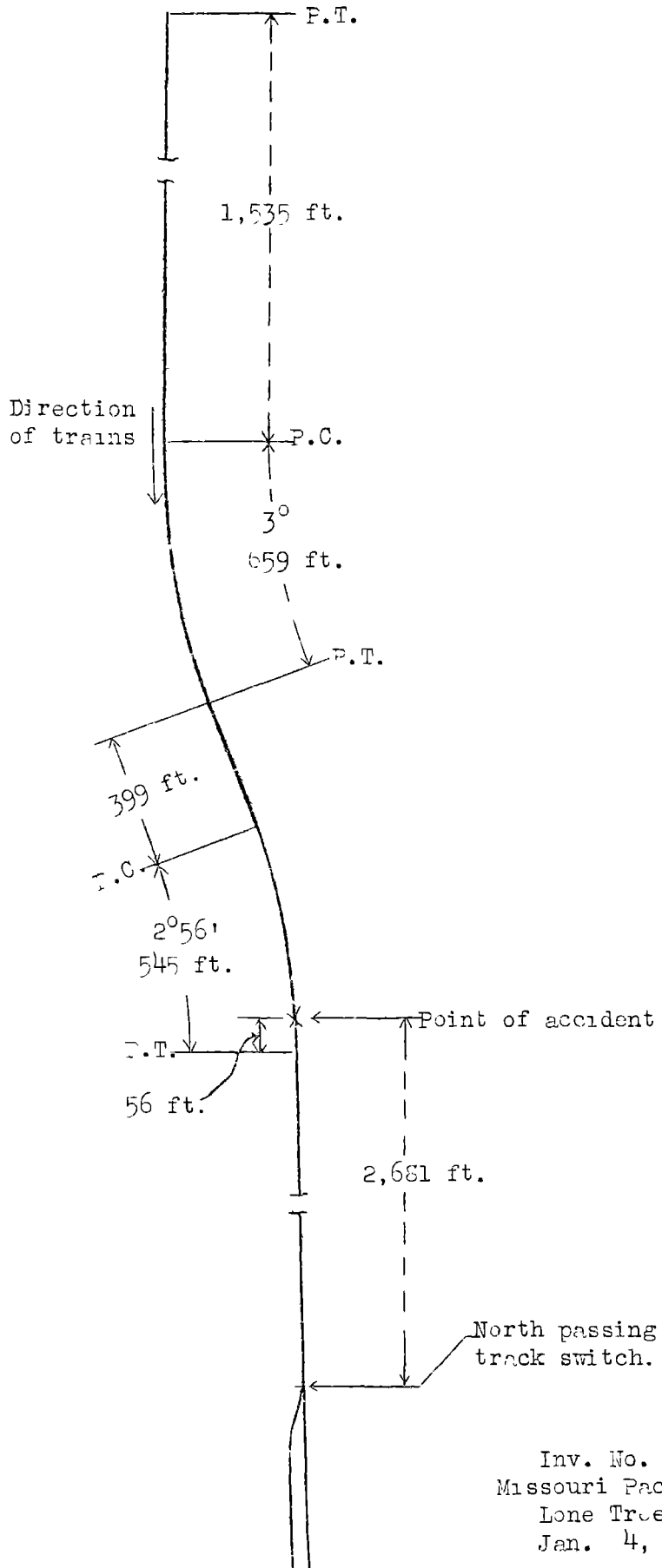
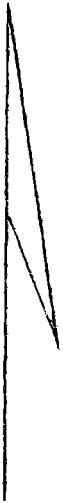
This accident occurred on the Pleasant Hill District of the Joplin Division, which extends between Pleasant Hill and White River Division Junction, Mo., a distance of 114.76 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. The accident occurred at a point 2,681 feet north of the north switch of the passing track at Lone Tree; approaching this point from the north, the track is tangent for a distance of 1,535 feet, followed by a 3° curve to the left 659 feet in length, tangent track for a distance of 399 feet, and then a 2°56' curve to the right 545 feet in length, the accident occurring on this latter curve at a point 56 feet from its southern end. The grade in the vicinity is undulating and at the point of accident is 0.3 percent ascending for south-bound trains.

Special time-table instructions restrict the speed of passenger trains to 55 miles per hour and freight trains to 45 miles per hour.

The weather was partly cloudy and it was moonlight at the time of the accident, which occurred about 6:53 p.m.

#### Description

Extra 1444, a south-bound freight train, consisted of 85 cars, 1 deadhead caboose and 1 working caboose, hauled by engine 1444, and was in charge of Conductor Williams and Engineman Niemeyer. This train departed from Pleasant Hill, 16.2 miles north of Lone Tree, at 6 p.m., according to the train sheet, and at Cowdy, 1.11 miles beyond Pleasant Hill, 29 cars were set out, the train consisting of 56 cars and 2 cabooses on leaving that point. This train passed Harrisonville, 6.64 miles north of Lone Tree, at 6:44 p.m., according to the train sheet, 1 minute ahead of the schedule of Train No. 221, stopped at the north switch of the siding at Lone Tree about 6:54 p.m., and had just started to enter the siding when its rear end was struck by Train No. 221.



•Fleasant Hill, Mo.	1.11 mi.
•Gowdy	3.36 mi.
•Ore	3.12 mi.
•Euber	1.97 mi.
•Harrisonville	6.64 mi.
* (Point of accident)	
•Lone Tree	6.29 mi.
•Archie	92.27 mi.
•White River Div. Jc., Mo.	

Inv. No. 2030  
 Missouri Pacific R.R.  
 Lone Tree, Mo.  
 Jan. 4, 1936

Train No. 221, a south-bound passenger train, consisted of 1 baggage car and 1 coach, of all-steel construction, hauled by engine 6517, and was in charge of Conductor Oliver and Engineman Huey. This train departed from Harrisonville at 6:50 p.m., according to the train sheet, 5 minutes late, and collided with the rear end of Extra 1444 at Lone Tree while traveling at a speed estimated to have been 35 miles per hour.

Train No. 221 continued on the track a distance of 277 feet after the collision, completely demolishing the rear caboose, while the dead-head caboose was thrown over the engine and came down on the tender, the trucks of these cabooses being pushed ahead of the engine until it stopped. The four rear cars in Extra 1444 were derailed to the right, the three rear cars being overturned, while the fourth car from the rear remained upright with its front end on the track; the fifth car from the rear was knocked off center. The employee killed was the conductor of Extra 1444.

#### Summary of evidence

Engineman Niemeyer, of Extra 1444, stated that his train left Pleasant Hill at 6 p.m., 30 minutes ahead of the schedule time of Train No. 221, and in conversation with his fireman and head brakeman the remark was made that they ought to go to Lone Tree ahead of that train. His train remained clear of the time of Train No. 221 until he reached Huber, 8.61 miles north of Lone Tree; he passed Huber at 6:38 p.m., the scheduled leaving time of Train No. 221 from Ore, the next station in the rear, and the fireman warned him that they were on short time but he had in mind going to Lone Tree, so that he could have time for coal and water and then proceed to a station in advance before meeting an opposing passenger train. On approaching Harrisonville he thought that was a bad place to stop, due to the limited view, and inasmuch as it was then 6:42 p.m. he was 3 minutes ahead of the schedule of Train No. 221 at that point and decided to proceed to Lone Tree, and thought that it would save a delay to Train No. 221 at Harrisonville. He approached the mile board at Lone Tree at a speed of about 40 miles per hour, sounded the meeting-point whistle signal, and whistled out a flag. The fireman had warned him the second time that they were on short time, and when he whistled out a flag he made the statement to the fireman that a red fusee should be thrown off. He then reduced speed and again whistled out a flag on approaching the switch, and on looking back he saw the headlight of Train No. 221 coming over the hill. A stop was made to enable the head brakeman to open the switch and the train had proceeded a distance of about two car lengths when the air brakes were applied, but he did not know until later

that Train No. 221 had struck the rear of his train. Engineman Niemeyer further stated that he had expected to receive an order at Harrisonville, either a run-late order or an order to run from Harrisonville to Lone Tree ahead of Train No. 221, but the order board was clear when his train passed that point.

Fireman Boyd, of Extra 1444, stated that at the time they left Gowdy the question of clearing for Train No. 221 was discussed, and when the engineman stated that they would try to go to Lone Tree, Fireman Boyd said to him that they had very little time and he thought that they should clear at Gowdy or Ore. On passing Huber he did not look at his watch but knew they were on short time at Harrisonville, although he considered Lone Tree a better place at which to get into clear. The engine was fairly close to the switch at Lone Tree when the engineman whistled out a flag, and, while he was not sure, he did not think the engineman whistled out a flag more than once, and he said the engine was just entering the switch when the air brakes were applied in emergency.

Head Brakeman Lawless, of Extra 1444, stated that he heard the conversation relative to Train No. 221, and was informed by the engineman that they would go to Lone Tree for that train but at no time did he make any objection, although he realized that they could not reach that point in time to clear the leaving time of the passenger train at Harrisonville, the last station in the rear where time was shown. They all realized that the result would be an unusually long delay to their train if it should take siding at Ore or Huber, and the brakeman said it was not unusual to go from Gowdy to Lone Tree, a distance of 15.09 miles, in 28 or 30 minutes. However, the train did not make the speed that he anticipated, and as they passed through Huber he left the brakeman's cabin on the tender and looked back to the rear of the train for a signal and while there he saw the engineman turn on the cab light and look at his watch. After sounding a meeting-point whistle signal the engineman whistled out a flag between 1/2 and 1/4 mile north of the switch at Lone Tree, and just before the train stopped Brakeman Lawless saw a red fusee thrown off from the rear end of his train. Brakeman Lawless further stated that he saw the headlight of the following train just before he went over the tender and got down from the gangway preparatory to opening the switch.

Flagman Jeans, of Extra 1444, stated that on passing Ore he suggested to the conductor that they apply the brakes by means of the conductor's valve, as he knew that they were close to the time of Train No. 221, but the conductor said "No, let him go". Flagman Jeans again mentioned the subject at

Huber and the conductor said the chances were that they would get something at Harrisonville relative to the following train; the board at Harrisonville, however, was clear. Flagman Jeans said that he then became nervous and on reaching the top of Snowball Hill, about 4 miles south of Harrisonville and  $2\frac{1}{2}$  miles from the switch at Lone Tree, he figured they would head in at Lone Tree and reached for a fusee to light and throw off, but the conductor told him not to throw it off because he did not want to stop Train No. 221 and delay it, stating that the way their train was moving the engineman was figuring on going to Archie, 6.29 miles beyond Lone Tree. Flagman Jeans kept a constant lookout, and shortly thereafter he saw the reflection of the headlight of the following train, and he then picked up a fusee and threw it off, and about that time the brakes started to apply. The flagman then realized that the engineman was going to stop at Lone Tree and got down from the cupola, picked up flagging equipment, including a fusee, and jumped off, but due to the speed he missed his footing and the fusee was jerked out of his hand. He got up and ran toward the approaching train, swinging his red lantern, and was about five car lengths or more from the rear of his train when the collision occurred. Flagman Jeans stated he did not hear his engineman whistle out a flag, and he did not think that the whistle could have been heard in the caboose 60 car lengths from the engine except in unusually clear weather. It was his idea that the fusee which was thrown off was about 15 or 18 car lengths from the point of accident, but afterwards this fusee was found to be 495 feet from the point of accident. Flagman Jeans stated that the reason he did not throw off fusees at proper intervals was because he obeyed the instructions of the conductor, although he knew that under the rules he should have provided adequate protection for the rear end of his train. The conductor appeared to be in normal condition and, so far as he knew, was in good health; the conductor was still in the cupola when the flagman jumped down to get off, and he knew of no reason why the conductor could not have left the caboose before the accident occurred.

Engineman Huey, of Train No. 221, stated that his train was a few minutes late and after leaving Harrisonville he operated the train at the maximum authorized speed of 55 miles per hour and continued at that speed until he saw a fusee lying on the track and at the same time he saw a red light and then a flagman with red and white lanterns about 100 feet north of the caboose. As soon as he saw the fusee he applied the air brakes in emergency and then opened the sanders, reducing the speed to about 35 miles per hour at the time of the collision. He estimated the distance of his engine from the caboose when he first saw the fusee to have been 600 or 700 feet; the fusee

was flickering as though it had not yet started to burn freely, and when he looked at his watch at 7:05 p.m., 9 minutes after the accident, it was still burning.

#### Discussion

The rules require that unless otherwise provided an inferior train must clear the time of a superior train in the same direction not less than 5 minutes, but must be clear at the time a first-class train in the same direction is due to leave the next station in the rear where time is shown, and, failing to clear the main track by the time required by rule, must be protected as required by rule 99; this latter rule provides that when a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection, and by night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

The entire crew of Extra 1444 was fully aware of their limited time in which to go to Lone Tree ahead of Train No. 221; in fact, some of them knew they were on the time of that train when passing Huber, 8.61 miles from Lone Tree. The engineman, however, stated that he expected to receive an order at Harrisonville, and when he failed to receive it he gave as his reason for not clearing the track at that point the fact that it was a bad place in which to stop, due to the limited view, and that he thought he could reach Lone Tree if rear-end protection were provided. He stated that he whistled out a flag near the mile board at Lone Tree and again just before reaching the switch, but the flagman stated that he did not hear these signals, also that the conductor told him not to throw off a fusee at the time he started to take such action when  $2\frac{1}{2}$  miles from Lone Tree, in addition to having told him not to apply the brakes by means of the emergency valve when passing Ore, 11.73 miles from Lone Tree. A fusee finally was thrown off, however, and while the flagman said this was about the time the speed began to be reduced preparatory to stopping at Lone Tree, this fusee afterwards was found to be only 495 feet from the point of accident. The flagman then jumped off, fell down, got up and started back, but got back only a few car lengths before the following train passed him. The evidence clearly shows that extra 1444 had been running on the time of a following superior train for many miles, but nothing had been done by any one toward providing proper protection until too late to avert the accident.

There are 8 passenger trains operated daily over this part of the railroad, and the total traffic for the 30 days



preceding the date of this accident averaged nearly 20 trains per day. Traffic of this density together with the conditions brought out by this investigation call for serious consideration as to the need for the block-signal system for the purpose of preventing future accidents of the character here involved.

#### Conclusion

This accident was caused by the operation of an extra train on the time of a following superior train without authority and without adequate flag protection.

#### Recommendation

It is recommended that this carrier give consideration to the need for the additional protection on this line which would be afforded by adoption of the block system.

Respectfully submitted,

W. J. PATTERSON,

Director.