

Inv-2240

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
MISSOURI PACIFIC RAILROAD

POPLAR BLUFF, MO.

DECEMBER 27, 1937

INVESTIGATION NO. 2240

Summary

Inv-2240

Railroad: Missouri Pacific
Date: December 27, 1937
Location: Poplar Bluff, Mo.
Kind of accident: Rear-end collision
Trains involved: Freight : Mixed
Train numbers: Extra 1496 : No. 451
Engine numbers: 1496 : 479
Consist: 72 cars, caboos : 12 freight cars,
: 2 passenger cars
Speed: 5-6 m.p.h. : 10-20 m.p.h.
Track: Tangent; level
Weather: Dense fog
Time: About 7:20 p.m.
Casualties: 1 killed
Cause: Failure of following train to observe yard-limit rule; failure of preceding train to afford adequate rear-end protection.

Inv-2240

January 27, 1938.

To the Commission:

On December 27, 1937, there was a rear-end collision between a freight train and a mixed train on the Missouri Pacific Railroad at Poplar Bluff, Mo., resulting in the death of one employee.

Location and method of operation

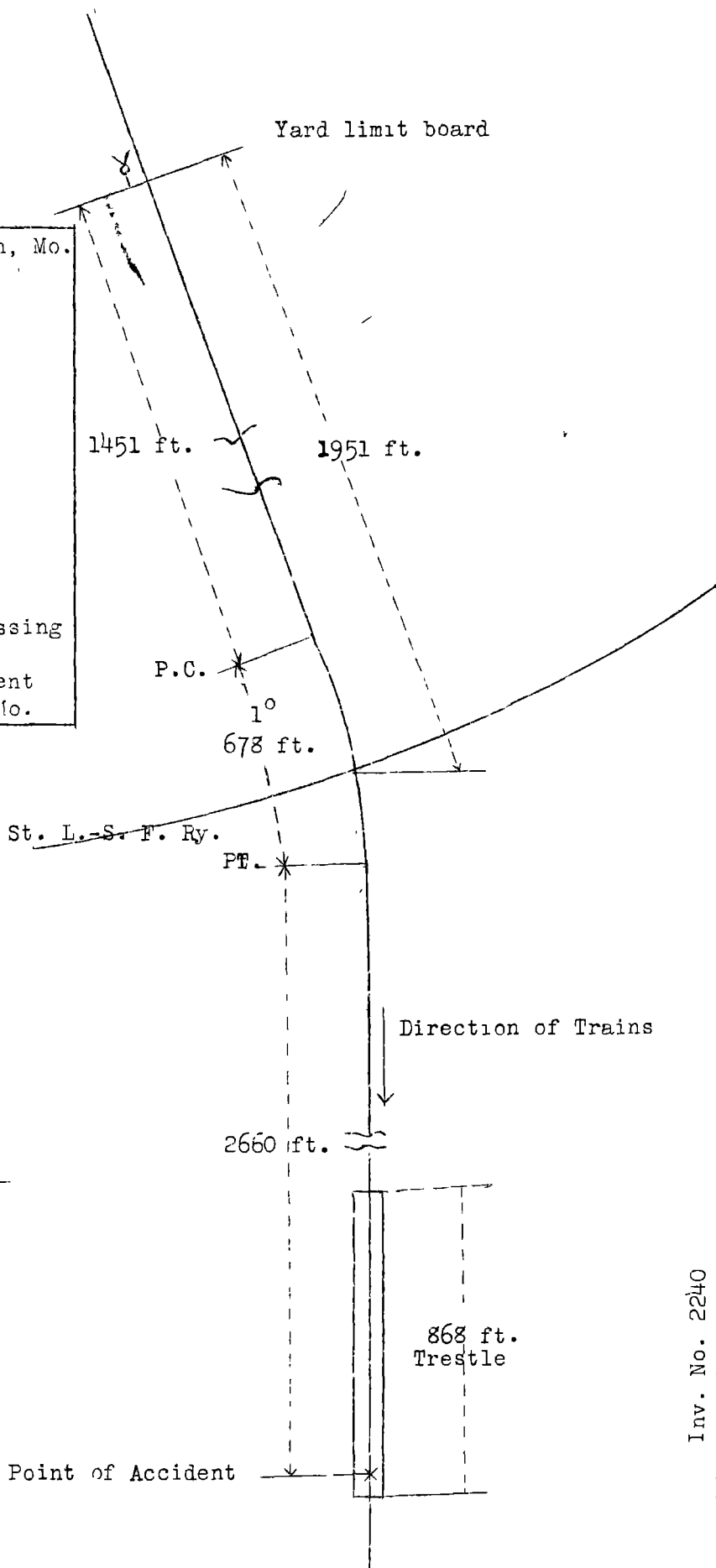
This accident occurred on the Poplar Bluff District of the Missouri Division, extending between Bird's Point and Poplar Bluff, Mo., a distance of 70.13 miles. This is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. Timetable directions, which are north and south, are used in this report. The accident occurred on the main track at a point approximately 4,790 feet south of the north yard-limit board. Approaching this point from the north the track is tangent for a distance of more than 8 miles to the yard-limit board and for 1,451 feet beyond, then there is a 1° curve to the right 678 feet in length, which is followed by 2,660 feet of tangent track to the point of accident. The grade is level from the yard-limit board to the point of accident.

A main track of the St. L.-S. F. Ry. crosses the Mo. Pac. R. R. track at a point approximately 1,951 feet south of the yard-limit board. The north end of an open-deck trestle, 868 feet in length, is located approximately 3,931 feet south of the yard-limit board; the accident occurred on this bridge at a point about 10 feet from the south end. The view approaching the scene of the accident was unobstructed.

Rule 93 reads as follows: "Within yard limits the main track may be used, protecting against first-class trains. Second and inferior class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear."

Rule 101 reads as follows: "Trains must be fully protected against any known condition which interferes with their safe passage at normal speed. When conditions are found which may interfere with the safe passage of trains at normal speed and no protection has been provided, such action must be taken as will insure safety."

○ Dexter Junction, Mo.	1.21 mi.
○ Dexter	7.22 mi.
○ Dudley	4.16 mi.
○ Ives	2.61 mi.
○ Fisk	1.44 mi.
○ Ash Hill	2.85 mi.
○ Junland	5.02 mi.
○ St. L.-S. F. Crossing	1.28 mi.
X Point of accident	
○ Poplar Bluff, Mo.	



Inv. No. 2240
 Missouri Pacific R.R.
 Poplar Bluff, Mo.
 Dec. 27, 1937

Paragraph 4 of rule 99 provides: "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. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals."

The weather was dark and very foggy at the time of the accident, which occurred at about 7:20 p.m.

Description

Extra 1496, a south-bound freight train, consisted of 72 cars and a caboose, hauled by engine 1496, and was in charge of Conductor Gatlin and Engineman Dunlap. This train left Dexter Junction, the last open office, 25.79 miles north of Poplar Bluff, at 6:05 p.m., according to the train sheet, passed No. 451 at Dexter, 24.58 miles north of Poplar Bluff, and while proceeding within yard limits at the latter point at a speed of about 5 or 6 miles per hour its rear end was struck by No. 451.

No. 451, a south-bound second-class mixed train, consisted of 12 freight cars and 2 passenger cars, hauled by engine 479, and was in charge of Conductor Thirlwell and Engineman Hayes. This train left Dexter Junction at 4:25 p.m., according to the train sheet, 4 hours 40 minutes late; left Dexter about 6:30 p.m., approximately 5 minutes behind Extra 1496, and collided with the rear of the latter train while traveling at a speed variously estimated to have been between 10 and 20 miles per hour.

Engine 479 stopped with its front end about 50 feet south of the south end of the trestle. The front end of the engine was slightly damaged. The caboose of Extra 1496, which had a steel underframe and wooden superstructure, was demolished, its forward end being telescoped into the rear of the preceding car which was slightly damaged. The employee killed was the rear brakeman of Extra 1496.

Summary of evidence

Conductor Gatlin, of Extra 1496 South, stated that No. 451 was on the main track at Dexter when his train left that point at 6:30 p.m., and that the caboose markers and cupola lights on his train were burning brightly. The weather was very foggy in places between Dexter and Poplar Bluff and he instructed the rear brakeman to throw off a lighted fusee at Ives, 13.2 miles north of Poplar Bluff. He also instructed the rear brakeman to watch the rear of the train and the latter took fusees with him and assumed a position on the right

side of the cupola. His train moved at a normal rate of speed en route and when he left his position at his desk on entering the yard limits at Poplar Bluff he felt an application of the brakes at which time the speed was about 12 miles per hour. Shortly after passing the yard-limit board the rear brakeman went to the rear platform, and Conductor Gatlin went to the rear platform at the time the caboose had reached the north end of the trestle; at that time the speed was about 6 or 7 miles per hour. He heard a train approaching from the rear and he instructed the rear brakeman to light a fusee, but due to the fact that the caboose was on the trestle the brakeman could not throw off the fusee but did give stop signals from the caboose platform with it. At that time the headlight of the approaching train appeared to be from 20 to 30 car lengths distant. Approaching the south end of the trestle the rear brakeman remarked that the following train was going to hit theirs and he then threw the fusee to the side of the trestle and ran forward in the caboose while the conductor jumped to the creek-bed; the collision occurred immediately thereafter. The conductor estimated the speed of his own train to be 6 or 7 miles per hour and that of No. 451 to be 20 miles per hour at the time of the impact, and stated that it was quite foggy. Conductor Gatlin indicated that even though his train was within yard limits it was his duty as well as that of the rear brakeman to protect the rear of the train according to the provisions of rule 99 when the weather conditions were such as existed at the time of the accident. The conductor also indicated that it was his understanding that he should have taken some action to insure safety in order to comply with rule 101.

Engineman Dunlap, Fireman Ashby, and Head Brakeman Berry, of Extra 1496 South, made statements to the effect that their train did not stop between Dexter and the point of the accident. Foggy weather prevailed this entire distance, the fog being heavier in some places than in others, but it was particularly dense at Poplar Bluff. At about 7:20 p.m., while proceeding at a speed of 5 or 6 miles per hour, the brakes became applied in emergency as a result of the accident.

Engineman Hayes, of No. 451, stated that the brakes on his train were tested before leaving Dexter. He said his train left Dexter about 6:32 p.m. and that Extra 1496 departed at about 6:27 p.m. Fog existed all the way from Dexter to Poplar Bluff but it was more dense at some points than at others, the range of vision being 25 or 30 car lengths at some locations and at others only 3 or 4 car lengths. A maximum speed of 35 or 40 miles per hour was attained but when pockets of fog were encountered the speed was reduced to 10 or 12 miles per hour. No. 451 stopped at both Dudley and Fisk and the rear end of Extra 1496 South was not seen after the latter train left Dex-

ter. When Extra 1496 left Dexter Engineman Hayes observed that the caboose marker lights of that train were burning but did not observe the cupola light. He did not encounter any burning fusees en route until he observed a burning fusee being moved across the track in the immediate vicinity of the point of accident. Approaching the yard-limit board at Poplar Bluff the fog seemed to be rather heavy and he could see the yard-limit board at a distance of only about five car lengths; about this time he sounded one long blast of the whistle and then made a brake-pipe reduction of about 10 pounds which resulted in the speed being reduced to about 20 or 25 miles per hour when the yard-limit board was passed. Due to the fog he could see the home signal at the St. L. -S. F. Ry. crossing a distance of only about five car lengths; the speed had been reduced to about 10 or 12 miles per hour and he sounded one long blast of the whistle for the crossing. South of the crossing the fog seemed to clear up somewhat and he released the brakes. Between the crossing and the north end of the trestle he sounded a road-crossing whistle signal. When he approached the north end of the trestle the fog became heavier and he made a 10 or 12-pound reduction and thought the train was under control at the time he observed the aforementioned burning fusee. He immediately placed the brake valve in emergency position, but he did not think he obtained much reduction in speed as the rate of speed was about 10 miles per hour at the time of the impact which he thought occurred at 7:22 p.m. He said he had had no trouble in controlling the speed of the train en route. Engineman Hayes stated that he was familiar with the requirements of rule 93 and was of the opinion that he was operating his train under control.

The statements of Fireman Ashby and Head Brakeman Bates, of No. 451, corroborated that of Engineman Hayes except that Head Brakeman Bates said he was keeping a careful lookout for the caboose ahead when entering the yard limits and was a little alarmed at the speed of No. 451 under the conditions existing at that time, but due to not having had a great deal of experience he did not call the engineman's attention to any violation of the rules. Brakeman Bates estimated the speed at the time of the accident to have been between 12 and 15 miles per hour and said the accident occurred at 7:20 p.m.

The statements of Conductor Thirlwell, Brakeman Eustas and Brakeman Brown corroborated those of the engineman and the fireman with respect to the speed of the train and the weather conditions.

Discussion

The evidence is to the effect that there was more or less fog between Dexter and Poplar Bluff and that it was particularly heavy within the yard limits at Poplar Bluff. Extra 1496 passed No. 451 at Dexter and the latter train left that point about five minutes after Extra 1496 had departed; therefore, the crew of each train should have been aware of the proximity of the other train. The conductor of the preceding train instructed his flagman to throw off a burning fusee at Ives, where there were no yard limits, and also instructed the rear brakeman to watch to the rear. Extra 1496 did not stop between Dexter and the point of accident while No. 451 made two stops. The speed of Extra 1496 was about 5 or 6 miles per hour at the time of the accident while that of No. 451 was not less than 10 miles per hour, according to the testimony. It is evident that No. 451 was moving at a speed too high for safe operation in yard limits under the existing conditions. The evidence was to the effect that the brakes functioned normally.

The superintendent of the railroad, in questioning the conductor of Extra 1496 South, indicated that it was the duty of the crew of the preceding train in yard limits during adverse weather conditions to provide flag protection in compliance with the fourth paragraph of rule 99; also, to comply with the provisions of rule 101. The conductor indicated that his understanding with respect to the movement in question was the same as that of the superintendent. Requiring Extra 1496 to comply with the provisions of rules 99 and 101 and at the same time requiring No. 451 to comply with the provisions of rule 93, although the end sought is extra precaution, results in a division of responsibility, but if, as indicated by the superintendent in charge of the territory within which this accident occurred, rule 101 is intended under certain circumstances to nullify the provisions of rule 93 the wording of both rules should be clarified so as to permit of no misunderstanding.

Conclusions

This accident was caused by the failure of No. 451 to be operated under control within yard limits, and the failure of Extra 1496 South to provide adequate rear-end protection in foggy weather.

Respectfully submitted,

W. J. PATTERSON,
Director.