

BUREAU OF SAFETY

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REPORT NO. 1973

Railroad: Missouri Pacific  
Date: March 26, 1935  
Location: Shields, Kans.  
Kind of accident: Side collision  
Trains involved: Passenger : Freight  
Train Numbers: Second No. : Second No.  
12 : 77  
Engine Numbers: 1422 : 1426  
Consist: 3 baggage, : 42 cars  
11 Pullman :  
1 dining :  
Speed: 6-7 m.p.h. : 3-10 m.p.h.  
Track: 0°30' curve; grade slightly undulating  
Weather: Clear.  
Time: 3:50 a.m.  
Casualties: 39 injured  
Cause: Failure of Engineman of Train Second No.  
77 properly to control speed of train  
when approaching meeting point; Train  
Second No. 12, taking siding, had not  
cleared main line.

1973

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN  
ACCIDENT ON THE MISSOURI PACIFIC RAILROAD AT SHIELDS,  
KANS., ON MARCH 26, 1935.

May 2, 1935.

To the Commission:

On March 26, 1935, there was a side collision between a passenger train and a freight train on the Missouri Pacific Railroad at Shields, Kans., which resulted in the injury of 35 passengers and 4 Pullman employees.

Location and method of operation

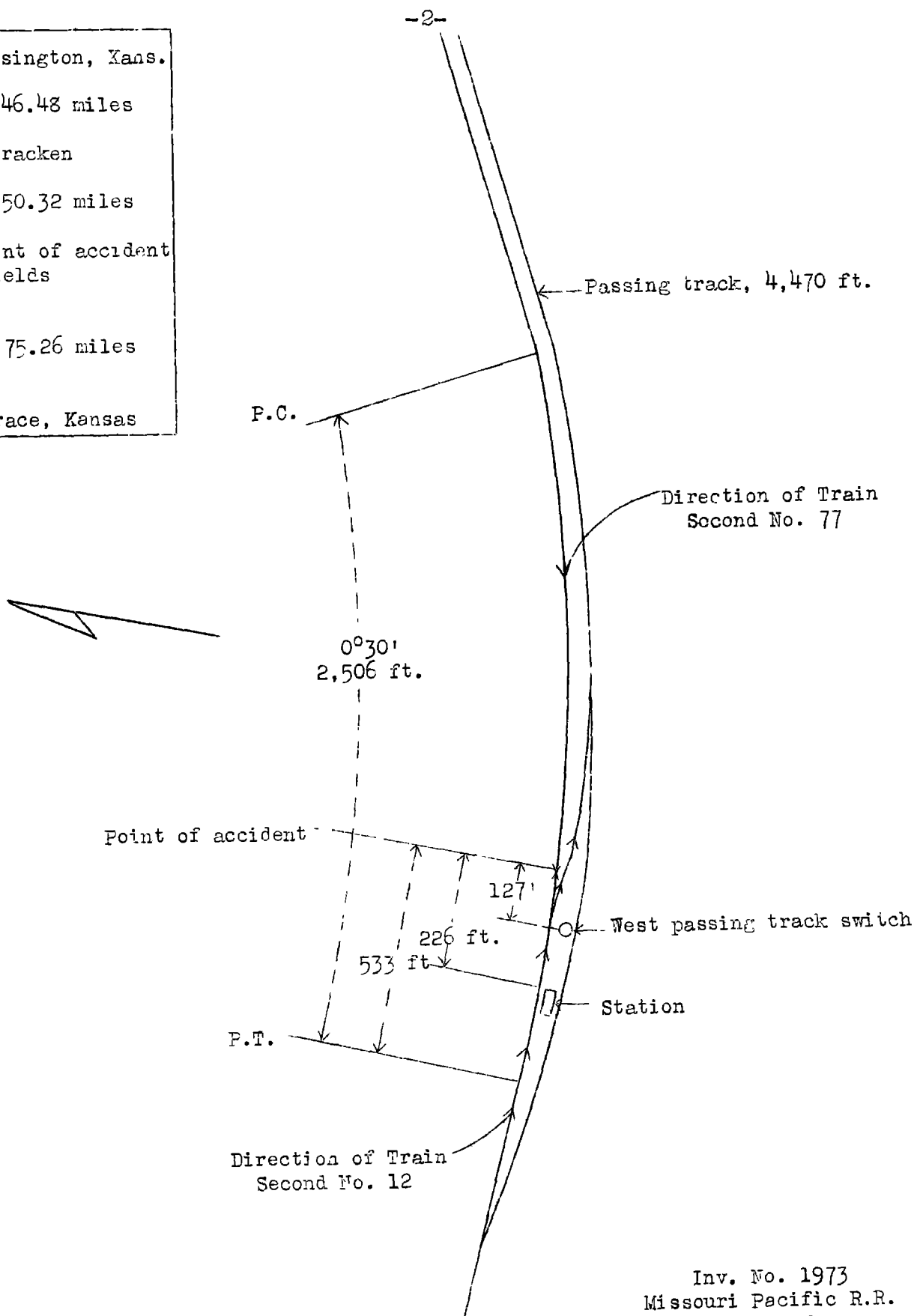
This accident occurred on that part of the Hoisington District of the Colorado Division which extends between McCracken and Horace, Kans., a distance of 125.58 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by time table and train orders, no block signal system being in use. The accident occurred at the fouling point of the west switch of the passing track at Shields; the passing track is 4,470 feet in length and parallels the main track on the south. Approaching this point from the east the track is tangent for a distance of more than 4 miles, followed by a  $90^{\circ}30'$  curve to the right 2,506 feet in length, the accident occurring on this curve at a point 533 feet from its western end. Approaching from the west the track is tangent for 9 miles followed by the curve on which the accident occurred. The grade for west-bound trains varies from 0.17 to 0.47 percent ascending for a distance of 4,100 feet, followed by 0.03 percent descending grade for a distance of 600 feet and then 0.12 percent ascending for a distance of approximately 500 feet to the point of accident.

The weather was clear at the time of the accident, which occurred about 3:50 a.m.; the wind was blowing and there was considerable dust in the air.

Description

Train Second No. 12, an east-bound passenger train, known as the CCC Special, consisted of 1 baggage car, 1 dining car, 5 Pullman sleeping cars, 1 baggage car, 2 Pullman sleeping cars, 1 baggage car and 4 Pullman sleeping cars, in the order named, hauled by engine 1422, and was in charge of Conductor Hooker and Engineman Woodburn. This train departed from Horace, 75.26 miles west of Shields, at 1:49 a.m. At Scott City, 26.95 miles west of Shields, the crew received a copy of train order 17, form 19,

•Hoisington, Kans.
46.48 miles
•McCracken
50.32 miles
*Point of accident
•Shields
75.26 miles
•Horace, Kansas



Inv. No. 1973  
 Missouri Pacific R.R.  
 Shields, Kans.  
 March 26, 1935

reading:

Second 12 engine 1422 meet second 77 engine  
1426 at Shields instead of Ludwig Second  
77 hold main track at Shields.

Train Second No. 12 left Scott City at 3:10 a.m., stopped at Shields for the brakeman to line the switch and while heading in at the west end of the passing track at a speed of 6 or 7 miles per hour, the third car was struck by train Second No. 77.

Train Second No. 77, a west-bound second-class freight train, consisted of 41 cars and a caboose, hauled by engine 1426, and was in charge of Conductor Madden and Engineman Spencer. This train departed from Hoisington, 96.8 miles east of Shields, at 12:15 a.m. At Utica, 15.3 miles east of Shields, the crew received a copy of train order 17, form 19, previously quoted. Train Second No. 77 left Utica at 3:22 a.m. and on approaching the station at Shields, collided with the side of Train Second No. 12 while traveling at a speed estimated to have been from 3 to 10 miles per hour.

The left side of the third car in Train Second No. 12 was raked for about one-third its length at the rear end; this car was not derailed. The fourth car, of composite steel and wood construction, was overturned on its right side parallel with the track, the entire left side together with part of the floor and the roof being torn off. The fifth car, of all steel construction, was derailed and leaned toward the right at an angle of 45° with the right side of the front vestibule damaged. Engine 1426 of Train Second No. 77 was derailed but remained upright, stopping 15 feet from the switch point and opposite the fifth car in Train Second No. 12.

#### Summary of evidence

Engineman Woodburn, of Train Second No. 12, stated that he received train order 17, among others, changing the meeting point with Train Second No. 77 from Ludwig to Shields. On approaching Shields he sounded the station whistle signal and the meeting point whistle signal and stopped his train west of the passing track for the brakeman to open the switch; he then headed in on the passing track and did not realize until the accident occurred that Train Second No. 77 was not going to stop. He stated that the moon was shining and there was not much wind but a great deal of dust, although he had no difficulty in observing the switch lights. On account of the dust, however, he did not dim his headlight while pulling in on the passing track.

Fireman Wharton, of Train Second No. 12, stated that as his train was heading in on the passing track he saw Train Second No. 77 approaching, and the first indication he had that it was not going to stop was when the engine of that train passed his cab, at which time its speed was about 8 miles per hour. He estimated the speed of his own train to have been 6 or 8 miles per hour.

Head Brakeman Bohannon, of Train Second No. 12, stated that when he started to line the switch for the passing track he saw Train Second No. 77 about at the east switch of the passing track; the headlight on the engine of that train was turned on dim. As his own train pulled in on the passing track he boarded the engine on the right side, then walked over to the fireman's side. Train Second No. 77 was then about 30 or 40 car lengths distant and about that time the fireman stated that it was going to hit them. Brakeman Bohannon went to the gangway and gave a stop signal with his lantern as the other train passed. He estimated the speed of Train Second No. 77 to have been from 7 to 10 miles per hour.

Engineman Spencer, of Train Second No. 77, stated that on approaching Shields the speed of his train was about 35 miles per hour; he sounded the whistle signal at the station board and then the meeting point whistle signal and eased off on the throttle when about at the east switch of the passing track. The speed was rapidly reduced and he estimated that he had about 80 or 85 car lengths in which to stop. When about 20 car lengths from the west passing track switch he made a brake-pipe reduction, of from 7 to 10 pounds, at which time the speed was about 20 or 22 miles per hour; at that time he could see the headlight of the opposing train, and he dimmed the headlight of his engine. He did not release the brakes at any time after making this reduction and figured that he would roll up fairly close to clear the switch; he then saw the train heading in on the passing track and realized that he had misjudged his distance; he immediately applied the brakes in emergency, at which time his engine was about 2 or 3 car lengths from the point of accident, and his train was then traveling at a speed of 10 or 12 miles per hour. The wind was blowing from the south which made the dust quite bad on the north side of the train; he did not think that it materially interfered with his vision although there was dust in his eyes. Engineman Spencer stated that the train orders were handled in the usual manner and that neither he nor the fireman overlooked the meet with Train Second No. 12, but that he misjudged his distance in making this stop. He stated that the air brakes had been tested at Hoisington, they functioned properly and he did not run by at any place where stops were made en route. Engineman Spencer had been in service on this district for about 29 years.

The statements of Fireman Mall, of Train Second No. 77, corroborated those of the engineman. He stated that the speed of his train was being constantly reduced on approaching the point of accident; he could see the glare of the headlight in the distance and that indicated to him that the train must be pretty close and he expected the meet would be made without a stop on their part.

Head Brakeman Naylor, of Train Second No. 77, stated that approaching Shields he was on the rear of the tender and he saw the headlight of Train Second No. 12 shining on the station. He first became alarmed when his engine was about 5 car lengths from the fouling point between the main and passing tracks; his train was then traveling at a speed of about 5 miles per hour; he got down on the sill step and stepped off, warning the engineman as he did so. He estimated the speed of his train to have been 2 or 3 miles per hour at the time of the accident.

Conductor Madden and Flagman Van Brimmer, of Train Second No. 77, estimated the speed of their train at the time of the accident to have been 6 or 8 miles per hour.

Car Inspectors Stafford and Courtney stated that they tested the air brakes on Train Second No. 77 before its departure from Hoisington and all brakes were working properly throughout the train.

#### Discussion

The evidence indicates that Engineman Spencer sounded the station and meeting-point whistle signals on approaching Shields, eased off on the throttle at the east passing track switch, and that the speed was reduced to about 20 miles per hour when he made a service application of the brakes about 20 car lengths from the point of accident; the speed was further reduced to about 10 or 12 miles per hour when the engineman realized his train would not be stopped short of the fouling point and placed the brake valve in emergency position when about 3 car lengths from the point of accident. Engineman Spencer stated that he thought the service application would be sufficient to stop his train clear of the switch, but that he misjudged the distance. The brakes had been tested and functioned properly en route. Engineman Spencer was thoroughly familiar with this territory, having been employed on this district for 29 years.

#### Conclusions

This accident was caused by the failure of Engineman Spencer, of Train Second No. 77, properly to control the speed of his train when approaching a meeting point.

Respectfully submitted,  
W. J. PATTERSON,  
Director.