

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 2557  
THE MINNEAPOLIS & ST. LOUIS RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
NEAR HELENA, MINN., ON  
JANUARY 9, 1942

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SUMMARY

Railroad: Minneapolis & St. Louis

Date: January 9, 1942

Location: Helena, Minn.

Kind of accident: Rear-end collision

Trains involved: Freight : Passenger

Train numbers: 96 : Extra 502 East

Engine numbers: 229-624 : 502

Consist: 63 cars, caboose : 4 cars

Speed: 10-12 m. p. h. : 15-20 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; 0.62 percent  
ascending grade eastward

Weather: Clear

Time: About 3:22 a. m.

Casualties: 1 killed; 2 injured

Cause: Accident caused by failure to  
provide flag protection for  
preceding train

Recommendation: That the Minneapolis & St. Louis  
Railroad Company establish an  
adequate block system on the line  
involved in this accident

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 2557

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS  
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE MINNEAPOLIS & ST. LOUIS RAILROAD COMPANY

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February 20, 1942.

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Accident near Helena, Minn., on January 9, 1942, caused  
by failure to provide flag protection for preceding  
train.

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REPORT OF THE COMMISSION<sup>1</sup>

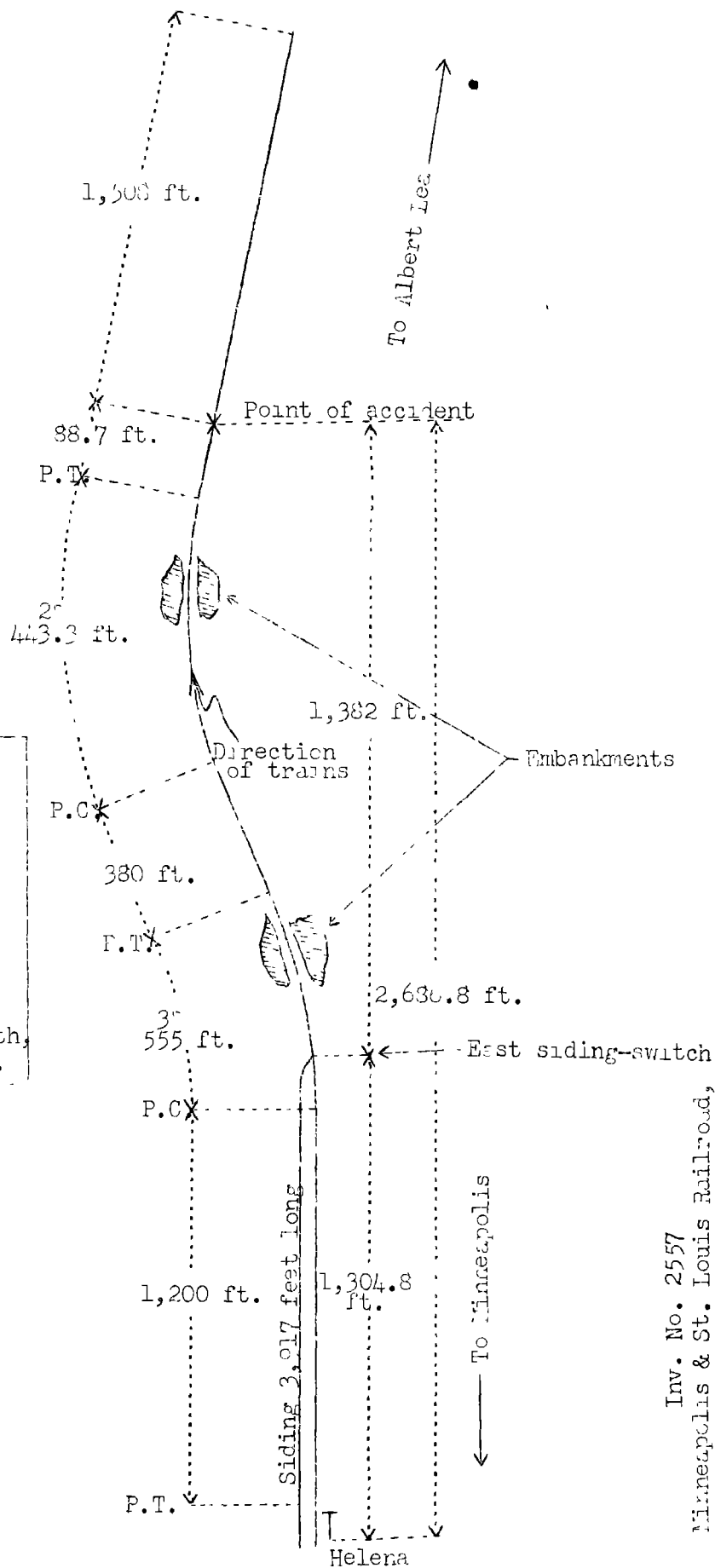
PATTERSON, Commissioner:

On January 9, 1942, there was a rear-end collision between a freight train and a passenger train on the Minneapolis & St. Louis Railroad near Helena, Minn., which resulted in the death of one employee and the injury of two employees. This accident was investigated in conjunction with a representative of the Minnesota Railroad and Warehouse Commission.

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<sup>1</sup>Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.

o	Albert Lea, Minn.
	70.79 mi.
X	Point of accident
	0.51 mi.
o	Helena
	9.00 mi.
o	Merriam
	24.30 mi.
o	Cedar Lake
	2.60 mi.
o	Second Street North,
	Minneapolis, Minn.



Inv. No. 2557  
 Minneapolis & St. Louis Railroad,  
 Helena, Minn.,  
 January 9, 1942.

### Location of Accident and Method of Operation

This accident occurred on the First District, which extends between Second Street North, Minneapolis, and Albert Lea, Minn., a distance of 107.2 miles. According to time-table directions, Albert Lea is east of Minneapolis. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred at a point 2,686.8 feet east of the station at Helena. As the point of accident is approached from the west there are, in succession, a tangent 1,200 feet in length, a 3° curve to the left 555 feet, a tangent 380 feet, a 2° curve to the right 443.3 feet, and a tangent 88.7 feet to the point of accident and 1,508 feet beyond. The grade for east-bound trains varies between 0.15 and 1.00 percent ascending a distance of 1 mile to the point of accident and 3,100 feet beyond and is 0.62 percent at the point of accident.

Operating rules read in part as follows:

99. j. 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 day, as well as by night when the view is obscured, lighted fuseses must be thrown off at frequent intervals.

100. Conductors and enginemen are responsible for the protection of their trains.

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 35 miles per hour on curves and 50 miles per hour on tangents. The maximum authorized speed for freight trains is 25 miles per hour on curves and 35 miles per hour on tangents.

### Description of Accident

No. 96, an east-bound second-class freight train, consisted of engines 229 and 624, 53 loaded and 10 empty cars and a caboose. After a terminal air-brake test was made this train departed from Cedar Lake, 33.3 miles west of Helena, at 12:55 a. m., according to the dispatcher's record of movement of trains, 2 hours 22 minutes late, and passed Hopkins, 28.1 miles west of Helena, at 1:15 a. m., 2 hours 25 minutes late, where the crew received a message reading as follows:

Psgr Extra 502 East out Mpls 230am  
watch out for them and if they over-  
take you run them around promptly.

No. 96 passed Merriam, 9 miles west of Helena and the last open office, at 2:56 a. m., 3 hours 16 minutes late, passed Helena, and while it was moving at an estimated speed of 10 to 12 miles per hour its rear end was struck by Extra 502 East at a point 2,686.8 feet east of Helena.

Extra 502 East, an east-bound passenger train, consisted of engine 502, one baggage car, one Pullman sleeping car and two business cars, in the order named. The first car was of steel-underframe construction and the remainder were of all-steel construction. After a terminal air-brake test was made this train departed from Minneapolis, 35.9 miles west of Helena, at 2:30 a. m., according to the dispatcher's record of movement of trains, passed Merriam at 3:10 a. m., and while moving at an estimated speed of 15 to 20 miles per hour it collided with the rear end of No. 96. The brakes of Extra 502 had functioned properly at all points where used en route.

At points 250 feet and 950 feet west of the point of accident embankments on each side of the track rise to a maximum height of 20 feet. There is vegetation on both sides of the track. Because of track curvature, the embankments and the vegetation, the view of the point of accident from either side of an approaching east-bound engine is restricted to a distance of about 650 feet.

The caboose of No. 96 was demolished and its front truck and part of the underframe were forced under the rear end of the rear car. The rear car was badly damaged. The front end of engine 502 was slightly damaged.

The weather was clear at the time of the accident, which occurred about 3:22 a. m.

The employee killed was the flagman of No. 96, and the employees injured were the conductor of No. 96 and the fireman of Extra 502 East.

#### Data

During the 30-day period preceding the day of the accident, the average daily movement over the line involved was 12.8 trains.

#### Discussion

The rules governing operation on the line involved provide 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. When the view is obscured, lighted fusees must be thrown off at frequent intervals. The surviving employees involved understood these requirements.

No. 96 passed Merriam, 9 miles west of Helena, at 2:56 a. m. and about 26 minutes later, while it was moving on an ascending grade east of Helena at a speed of about 12 miles per hour, its rear end was struck by Extra 502 East. The conductor of No. 96 stated that as his train was approaching the point where the accident occurred, the flagman and he were in the caboose. His train was moving at average speed for a tonnage train on the ascending grade east of Helena. The first he was aware that Extra 502 was closely approaching was when he saw the headlight of that train about 300 feet distant. He knew that his train was being operated under circumstances in which it might be overtaken by another train and he understood that flag protection was required; however, he did not expect the following train to overtake his train so soon and no action was taken to provide flag protection by either the conductor or the flagman. Just before the accident occurred, he was watching the forward part of his train going around the curve. He saw a reflection, looked back and saw the headlight of the following train, and jumped off just before the collision occurred. Had flag protection been provided by some member of the crew of No. 96 it is probable this accident would have been averted.

The engineer of Extra 502 stated that as his train was approaching Helena the speed was 35 or 40 miles per hour and he was maintaining a lookout ahead. His view of the track ahead was obscured because of track curvature. The road foreman of engines, who was maintaining a lookout from the left side of the cab of engine 502, first saw the caboose of the preceding train when his engine was about 650 feet from it and he called a warning to the engineer. The engineer immediately moved the brake valve to emergency position but the distance was not sufficient to stop short of the preceding train.

On the line involved trains are operated by timetable and train orders only. If an adequate block system had been in use on this line, this accident would not have occurred.

#### Cause

It is found that this accident was caused by failure to provide flag protection for the preceding train.

Recommendation

It is recommended that the Minneapolis & St. Louis Railroad Company establish an adequate block-signal system on the line involved in this accident.

Dated at Washington, D. C., this twentieth day of February, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.