# INTERSTATE COMMERCE COMMISSION

.

WASHINGTON

INVESTIGATION NO. 3146

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MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT VERGAS, MINN., ON

NOVELBER 24, 1947

Inv-3146

# SUMMARY

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Railroad:	Minneapolis, St. Paul & Sault Ste. Marie
Date:	November 24, 1947
Location:	Vergas, Minn.
Kind of accident:	Side collision
Trains involved:	Freight : Passenger.
Train numbers:	Extra 1010 West : 110
Engine numbers:	1010 ; 2707
Consists:	39 cars, caboose : 8 cars
Estimated speeds:	10 m. p. h. : 30 m. p. h.
Operation:	Timetable and train orders
Track:	Single; 2° curve; 0.35 percent descending grade eastward
Weather:	Clear
Time:	2:50 a. m.
Casualties:	l killed; 6 injured
Cause:	Failure of superior train to obey a wait order

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INTERSTATE COMMERCE COMMISSION

# INVESTIGATION NO. 3146

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

> MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILROAD COMPANY

> > January 22, 1948

Accident at Vergas, Minn., on November 24, 1947, caused by failure of superior train to obey a wait order.

REPORT CF THE COMMISSION

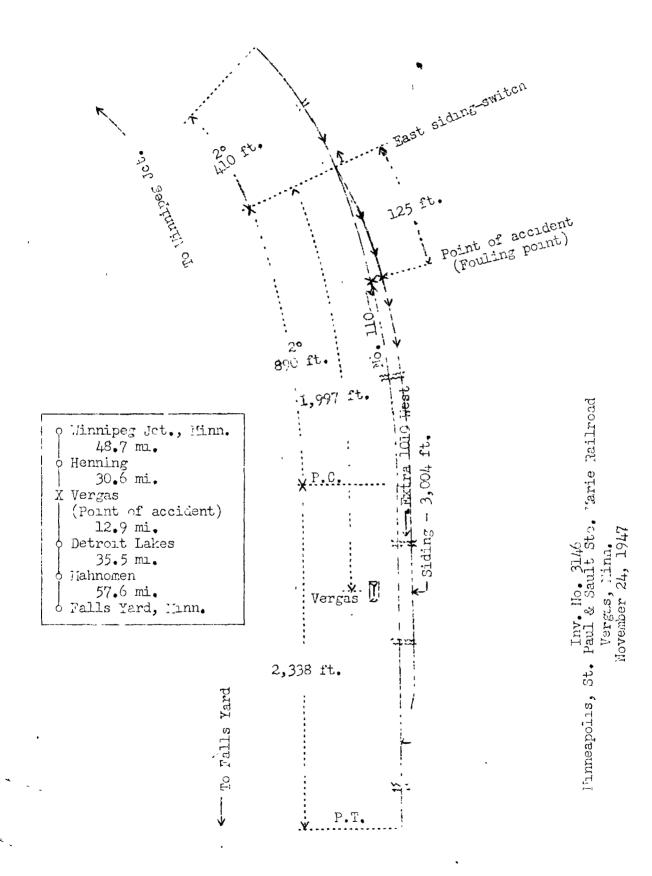
PATTERSON, Commissioner:

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On November 24, 1947, there was a side collision between a passenger train and a freight train on the Minneapolis, St. Paul & Sault Ste. Marie Railroad at Vergas, Minn., which resulted in the death of one trainservice employee, and the injury of two passengers, one dining-car employee, one baggageman, and two trainservice employees. This accident was investigated in conjunction with a representative of the Minnesota Railroad and Warehouse Commission.

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.



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### Location of Accident and Method of Operation

This accident occurred on that part of the Winnipeg Division extending between Winnipeg Jct. and Falls Yard, Hinn., 185.3 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. At Vergas, 79.3 miles west of Winnipeg Jct., a siding 3,004 feet in length parallels the main track on the south. The east switch of this siding is 1,997 feet east of the station. The accident occurred at the fouling point of the main track and the turnout of the east siding-switch, at a point 125 feet west of the switch. From the west there are, in succession, a tangent 2,338 feet in length and a 2° curve to the left 890 fect to the east siding-switch and 410 feet eastward. The grade is 0.35 percent descending eastward.

The suitchstand at the cast siding-switch is located on the south side of the main track. It is provided with a red circular target 18 inches in diameter and an oilburning switch lamp. The center of the target is 5 feet 2 inches above the tops of the ties, and the center of the switch lamp is 6 feet 8 inches above the tops of the ties. When the switch is lined for entry to the siding, the red target is at right angles to the track and the lamp displays a red aspect in the direction of an approaching train.

This carrier's operating rules read in part as follows:

#### DEFINITIONS.

\* \* \*

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Train.---An engine or more than one engine coupled, with or without cars, displaying markers.

\* \* \*

Restricted Speed.--Proceed prevared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

S-5. Unless otherwise specified, the time applies at the switch where an opposing train enters the siding; \* \* \*

14. ENGINE WHISTLE SIGNALS.

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\* \* \*

The signals prescribed are illustrated by "o" for short sounds: "\_\_\_\_" for longer sounds. \* \* \*

\* \* \*

Sound.

Indication.

\* \* \*

(n) \_\_\_\_\_ o Approaching meeting or waiting points. Answer to 16 (1). See Rule 5-90.

\* \* \*

# 16. CONMUNICATING SIGNALS.

Fote.--The signals prescribed are illustrated by "o" for short sounds; "\_\_\_\_" for longer sounds.

Sound.

#### Indication.

\* \* \*

(1)\_\_\_\_ \* \* \* approaching meeting or waiting points. See Rule S-90.

\* \* \*

17. The headlight must be displayed to the front of trains by night \* \* \*. It must be extinguished when a train turns out to meet another train and has stopped clear of the main track, \* \* \*.

\* \* \*

S-17. When a train is to take siding to meet an opposing train, and the headlight of the train which is to take siding fails before train is clear of main track, \* \* \*, a member of the crew must be immediately sent ahead on main track to stop opposing train until main track is clear.

Until the headlight of a train turned out to meet another train is extinguished, it is an indication that the main track is obstructed. The opposing train must approach prepared to stop before passing the headlight and if the head end of train is clear of main track, may proceed only at restricted speed to the point where the main track may be obstructed.

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17 (B). \* \* \*

Headlights should be dimmed under conditions outlined below:

\* \* \*

When passing engine or rear of train, to afford identification of moving train;

\* \* \*

19. Unless otherwise provided, the following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train.

\* \* \* while running on single track, \* \* \*.

Lights \* \* \*, showing green to the front and side and red to the rear.

73. Extra trains are inferior to regular trains.

S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes \* \* \*

S-90. On trains equipped with communicating signal system the conductor must give signal 16 (1) to the engineer immediately after passing the last station but not less than one mile preceding \* \* \* a point where by train order it is to \* \* \* wait for, an opposing train. The engineer will immediately reply with signal 14 (n). \* \*

\* \* \*

99. When a trains stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. When recalled and safety to the train will permit, he may return.

\* \* \*

The front of the train must be protected in the same way when necessary by the forward brakeman, fireman, or other competent employe.

\* \* \*

#### FORMS OF TRAIN ORDERS.

\* \* \*

Time Orders.

\* \* \*

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#### S-E.

(1.) No 1 wait at H until 9 59 a m

for No 2

The train first-named must not pass the designated points before the times given, unless the other train has arrived. The train last named is required to run with respect to the time specified, at the designated points or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train first-named.

In this territory the maximum authorized speeds are 60 miles per hour for passenger trains and 50 miles per hour for freight trains. 1

# Description of Accident

Extra 1010 West, a west-bound freight train, consisted of engine 1010, 39 cars and a caboose. At Henning, the last open office, 30.6 miles east of Vergas, the crew of this train received copies of train order No. 8, reading in part as follows:

> No 110 wait at Vergas until two fifty five 2 55 am \* \* \* for Extra 1010 West

Extra 1010 West departed from Henning at 1:57 a.m. and stopped about 2:44 a.m., with the engine immediately est of the east siding-switch at Vergas. About 6 minutes later, while this train was entering the siding and moving at an estimated speed of 10 miles per hour the thirty-eighth car was struck by No. 110 at the fouling point of the main track and the east siding-switch.

No. 110, an east-bound first-class passenger train, consisted of engine 2707, one baggage car, one mail-express car, one passenger-baggage car, two coaches, one cafe-lounge car and two Pullman sleeping cars, in the order named. All cars were of all-steel construction. At Mahnomen, 48.4 miles west of Vergas, the crew received copies of train order No. 8. This train departed from Mahnomen at 1:28 a. m., 6 minutes late, departed from Detroit Lakes, the last open office, 12.9 miles west of Vergas, at 2:34 a. m., 13 minutes late, passed the station at Vergas, and while moving at an estimated speed of 30 miles per hour it struck Extra 1010 West.

The rear truck of the thirty-eighth car, the thirtyninth car and the caboose of Extra 1010 West, and the engine and the first three cars of No. 110 were derailed and damaged.

The thirty-sixth to thirty-ninth cars, inclusive, of Extra 1010 West were tank cars containing oil. The tank of the thirty-ninth car was punctured, and the derailed equipment of both trains and the thirty-sixth and thirty-seventh cars of Extra 1010 West were damaged by fire. The engine of No. 110 stopped on its left side across the main track, with the front end 210 feet east of the point of collision. The first three cars stopped practically upright, and in line with the track.

The conductor of Extra 1010 Mest was killed. The engineer, the fireman and the baggageman of No. 110 were injured.

The weather was clear at the time of the accident, which occurred about 2:50 a.m.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 7.83 trains.

## <u>Discussion</u>

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The crews of both trains held copies of train order No. 8, which required No. 110, an east-bound first-class passenger train, to vait at Vergas until 2:55 a. m. for Extra 1010 West, a vest-bound freight train. Under the rules, the time applied at the east switch of the siding at Vergas. No. 110 was required to remain clear of the east siding-switch until 2:55 a. m., unless Extra 1010 West was into clear on the siding, and Extra 1010 'lest was required to be into clear on the siding not later than 2:50 a. m., if it proceeded to Vergas to meet No. 110. The surviving employees concerned understood these requirements. Extra 1010 East entered the siding at the east switch about 2:44 a. m. and was moving at a speed of about 10 miles per hour when the second car ahead of the caboose was struck about 2:50 a. m. by No. 110 at the fouling point of the main track and the east siding-suitch.

As Extra 1010 West was entering the siding the enginemen and the front brakeman were on the ergine and the conductor and the flagman were in the caboose. The engineer said that when the engine of No. 110 was some distance east of his engine he moved the headlight control-switch from bright position to dim position and then to bright position to indicate to the enginemen of No. 110 that his train was entering the siding. Immediately after the engine of No. 110 passed his engine, he observed that the headlight of his engine was not lighted. He thought the filament of the headlight bulb had failed and, later, when he was removing the bulb from the receptacle to replace it with another, it became broken, The other members of the crew on the engine did not observe that the headlight was not burning. The flagman said that just before the collision occurred he dismounted from the rear step of the caboose in the immediate vicinity of the east siding-switch to be in position to restore the switch to normal position. Immediately after the collision occurred he consulted his watch and observed the time as 2:50 a. m. The other surviving members of this crew did not consult their watches until several minutes after the time of the accident. Each member of the crew had compared time, and there was a variation of only a few seconds in their watches. The conductor was fatally injured.

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As No. 110 was approaching Vergas the speed was about . 60 miles per hour. The headlight was lighted brightly, and the enginemen were maintaining a lookout ahead. The conductor and the front brakeman were in the third car and the flagman was in the rear car. Each member of the crew had compared time, and there was a variation of only a few seconds in their watches. They had read train order No. 8, and each understood the requirements of the order. When the engine was about 2 miles west of the station the waiting-point signal was sounded on the train-communication system, and the engineer acknowledged this signal by sounding the prescribed signal on the engine whistle. At that time the engineer consulted his watch and observed the time as 2:48 a. m., and he made a service brake-pipe reduction which reduced the speed to about 20 miles per hour. This speed was maintained until his engine was in the vicinity of the engine on the siding, and he identified it as being the engine of Extra 1010 West. The enginemen said that, because the headlight of Extra 1010 West was extinguished, they thought that train was into clear on the siding, and the engineer moved the throttle to open position. The speed of No. 110 was about 30 miles per hour when the engine was about 300 feet west of the east siding-switch, then the engineer saw the rear portion of Extra 1010 West moving on the turnout, and he immediately moved the brake valve to emergency position, but the collision occurred before the train could be stopped. The switch light at the east siding-switch was on the south side of the main track, and therefore the rear end of Extra 1010 West obstructed the light from the view of the enginemen of No. 110. The members of the train crew of No. 110 identified the engine of Extra 1010 West as their train passed the engine, and they said that when the speed of their train was increased they thought their enginemen had knowledge that Extra 1010 West was into clear on the siding.

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In the territory where this accident occurred trains are operated by time-table and train orders only. If an adequate block system had been in use, the crew of No. 110 would have received information that Extra 1010 West had not cleared the main track, and this accident probably would have been prevented.

Cause

It is found that this accident was caused by failure of superior train to obey a wait order.

Dated at Mashington, D. C., this twenty-second day of January, 1948.

By the Commission, Commissioner Patterson.

(SEAL)

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W. P. BARTEL, Secretary.