

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3360  
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE  
RAILROAD COMPANY  
IN RE ACCIDENT  
AT PHILLIPS, WIS., ON  
AUGUST 31, 1950

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SUMMARY

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Date: August 31, 1950

Railroad: Minneapolis, St. Paul & Sault  
Sta. Marie

Location: Phillips, Wis.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: Extra 1004 West : Extra 3011 East

Engine numbers: 1004 : 3011

Consists: 26 cars, caboose : 25 cars, caboose

Estimated speeds: Standing : 25 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; 1.06 percent  
ascending grade eastward

Weather: Clear

Time: 9:05 a. m.

Casualties: 1 killed; 2 injured

Cause: Failure to provide protection for  
train advanced to meeting point  
where opposing train was to  
receive meet order

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3360

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

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October 31, 1950

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Accident at Phillips, Wis., on August 31, 1950, caused by failure to provide protection for a train advanced to the meeting point where the opposing train was to receive the meet order.

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

PATTERSON, Commissioner:

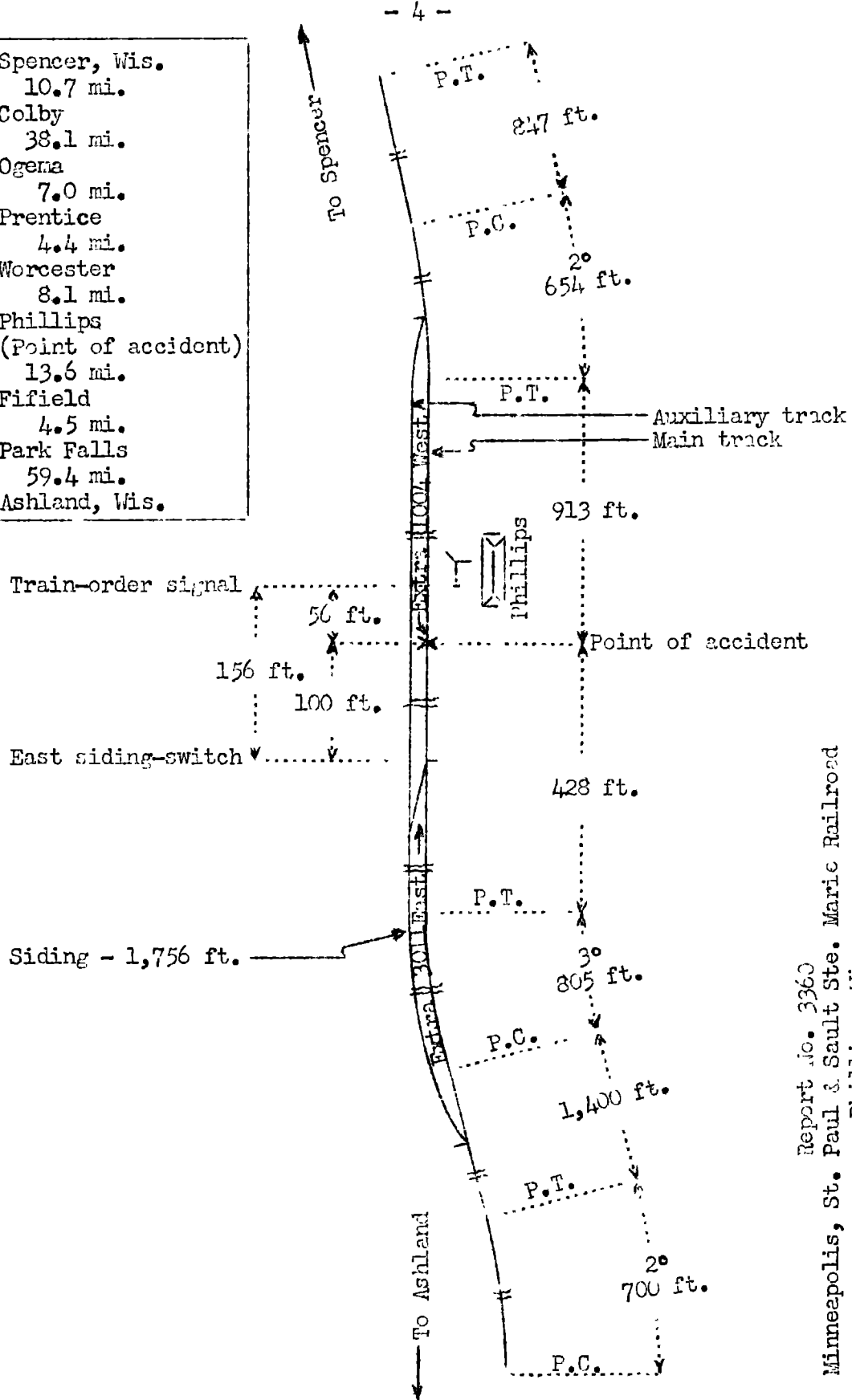
On August 31, 1950, there was a head-end collision between two freight trains on the Minneapolis, St. Paul & Sault Ste. Marie Railroad at Phillips, Wis., which resulted in the death of one employee, and the injury of two employees.

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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 Spencer, Wis. | 10.7 mi.
- o Colby | 38.1 mi.
- o Ogema | 7.0 mi.
- o Prentice | 4.4 mi.
- o Worcester | 8.1 mi.
- X Phillips (Point of accident) | 13.6 mi.
- o Fifield | 4.5 mi.
- o Park Falls | 59.4 mi.
- o Ashland, Wis.



Report No. 3360  
 Minneapolis, St. Paul & Sault Ste. Marie Railroad  
 Phillips, Wis.  
 August 31, 1950

Location of Accident and Method of Operation

This accident occurred on that part of the Stevens Point Division extending between Spencer and Ashland, Wis., 145.8 miles. 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. At Phillips, 68.3 miles west of Spencer, a siding 1,756 feet in length parallels the main track on the north. An auxiliary track connects with the siding near the east siding-switch and parallels the main track a distance of 1,269 feet east of the east siding-switch. The east switch of the siding is 156 feet west of the train-order signal. The accident occurred on the main track at a point 56 feet west of the train-order signal and 100 feet east of the east siding-switch. From the east there are, in succession, a tangent 247 feet in length, a 2° curve to the right 654 feet and a tangent 913 feet to the point of accident and 428 feet westward. From the west there are, in succession, a 2° curve to the left 700 feet in length, a tangent 1,400 feet, a 3° curve to the right 805 feet and the tangent on which the accident occurred. Throughout a distance of approximately 3,000 feet immediately east of the point of accident the grade varies between 0.78 percent and 1.20 percent descending westward. Throughout a distance of approximately 1,500 feet immediately west of the point of accident the average grade is 0.24 percent ascending eastward, and is 1.06 percent ascending at the point of accident.

The train-order signal at Phillips is of the three-position, upper-quadrant, semaphore type. The aspects applicable to this investigation and their corresponding indications and names are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Horizontal	Stop.	Stop signal.
Diagonal to the right	Proceed under clearance or train order and clearance.	19 order signal.

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

S-71. A train is superior to another train by right, class or direction.

Right is conferred by train order \* \* \*

\* \* \*

S-89 (A). \* \* \*

At train order meeting points, the train holding the main track must stop clear of the switch used by the train to be met in going on siding unless the train to be met is clear of the main track and switch is properly lined.

99. When a train 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, \* \* \*

\* \* \*

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

\* \* \*

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. \* \* \*

The several addresses must be in the order of superiority of trains, each office taking its proper address, and, when practicable, except in automatic block signal territory, must include the operator at the meeting or waiting point.

\* \* \*

A train order must not be sent to a superior train at the meeting or waiting point if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

S-208 (A). A train advanced to a station where the opposing train receives the order at the meeting or waiting point must approach that station expecting to find the train receiving the order on the main track and where conditions require, the train advanced must protect against the opposing train as prescribed by Rule 99.

221 (B). Where a three-position train order signal is used, the "19 order signal" may be used for "19" train orders. When the order is addressed to the operator at the meeting or waiting point as provided in Rule 208, or when the order restricts the superiority of a train and is sent to a point where such superiority is restricted, the train dispatcher must instruct the operator to display the "stop signal."

\* \* \*

FORMS OF TRAIN ORDERS,

S-A.

Fixing Meeting Points for Opposing Trains.

(1.) No 1 meet No 2 at B.

\* \* \*

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

S-C.

Giving Right Over an Opposing Train.

\* \* \*

(6.) Extra 38 east has right over Extra 37 west X to G and wait at M until 9 59 a m

L 10 30 a m

J 10 55 a m

for Extra 37 west.

The first-named train must not pass the designated waiting points before the times given unless the second-named train has arrived. The second-named train must clear the time specified at the designated waiting point or any intermediate station not less than five minutes.

The maximum authorized speed for freight trains was 35 miles per hour.

Description of Accident

Extra 1004 West, a west-bound freight train, consisted of engine 1004, 26 cars and a caboose. At Spencer the crew received copies of train order No. 416 reading as follows:

Eng 3011 run extra Park Falls to Colby  
has right over Extra 1004 West Park Falls  
to Prentice and at Prentice and wait at  
Phillips until eight ten 8 10 a m Worcester  
eight twenty five 8 25 a m for Extra 1004  
West

At Ogema, 43.8 miles west of Spencer, the crew received copies of train order No. 420 reading as follows:

Extra 1004 West meet Extra 3011 East and  
No 28 at Phillips Extra 3011 East and  
No 28 get this at Phillips

This train departed from Prentice, the last open office, 12.5 miles east of Phillips, at 8:41 a. m., and stopped on the main track at Phillips at 9:04 a. m., with the front of the engine at a point 100 feet east of the east siding-switch and 56 feet west of the train-order signal. About one minute later it was struck by Extra 3011 East.

Extra 3011 East, an east-bound freight train, consisted of engine 3011, 25 cars and a caboose. At Park Falls, 13.1 miles west of Phillips, the crew received copies of train order No. 416. This train departed from Fifield, the last open office, 13.6 miles west of Phillips, at 7:32 a. m., passed the east switch of the siding at Phillips, and while moving at an estimated speed of 25 miles per hour it struck Extra 1004 West.

Engine 1004 was derailed to the south and stopped 71 feet east of the point of accident. It leaned to the south at an angle of about 45 degrees. The cistern was torn from the tender frame, and it stopped with the front end on the roadbed and the rear end south of the track and against the station building. The first two cars were derailed to the south. The engine and the tender were badly damaged. The first car was demolished and the second car was considerably damaged. Engine 3011 was derailed to the south and stopped in line with the track. The first to the eighth cars, inclusive, were derailed and stopped in various positions along the track. The engine and the tender were considerably damaged. The first, third and fourth cars were demolished. The second, and the fifth to the eighth cars, inclusive, were badly damaged.



The fireman of Extra 3011 East was killed. The engineer and the front brakeman of Extra 3011 East were injured.

The weather was clear at the time of the accident, which occurred about 9:05 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 7.9 trains.

### Discussion

The rules of this carrier provide that when a train order is sent, when practicable, except in automatic block-signal territory, a copy must be given to the operator at the meeting point. A train order must not be sent to a train at a meeting point if it can be avoided, but when an order is so sent the fact will be stated in the order and special precautions must be taken to insure safety. At train-order meeting points the train holding the main track must stop clear of the switch used by the train to be met in going on siding, unless the train to be met is clear of the main track and the switch is properly lined. When an order is addressed to a train at the meeting point or when an order is addressed to the operator at the meeting point, the dispatcher must instruct the operator to place the train-order signal in position to indicate Stop. A train advanced to a station where an opposing train receives the order at the meeting point must approach that station expecting to find the opposing train on the main track, and, where conditions require, must protect against the opposing train as prescribed by Rule 99.

The crews of both trains held copies of train order No. 416, which gave Extra 3011 East right over Extra 1004 West between Park Falls and Prentice and also at Prentice. In addition, this order contained instructions for Extra 3011 East to wait at Phillips until 8:10 a. m. and at Worcester until 8:25 a. m. for Extra 1004 West. About 8 a. m. the dispatcher instructed the operator at Phillips to display the Stop signal on the train-order signal for east-bound trains. After the operator reported that the proper signal was displayed, train order No. 420, addressed to Extra 1004 West at Ogema, and to Extra 3011 East and No. 28 at Phillips, was transmitted. The order was not addressed to the operator at Phillips. This order established Phillips as the meeting point between Extra 1004 West and both Extra 3011 East and No. 28. No. 28, an east-bound third-class freight train, was due to leave Phillips at 7:01 a. m. The order also contained

the instruction that both Extra 3011 East and No. 28 would get the order at Phillips. About 35 minutes later the operator was directed to display the 19-order signal for west-bound trains. After the operator made the proper response, train order No. 421, addressed to Extra 1004 West at Phillips, was transmitted. This order contained the instruction that all east-bound extra trains except Extra 3011 East would wait at Fifield until 12:30 p. m. This order was made Complete at 8:48 a. m.

Extra 1004 West departed from Prentice, the last open office, 12.5 miles east of Phillips, at 8:41 a. m. The speed was reduced to about 10 miles per hour at a point approximately one mile east of the station at Phillips. The engineer and the front brakeman were maintaining a lookout ahead from their respective positions in the cab of the engine. The conductor and the flagman were in the caboose. The members of the crew were aware that their train was to meet Extra 3011 East and No. 28 at Phillips and that the opposing trains would get the order at that station. Preparations were made to send the front brakeman ahead to provide protection against the opposing trains. However, the train-order signal at Phillips displayed the 19-order signal for west-bound trains, and the indication was called by the members of the crew who were in the cab of the engine. The engineer said that, because there was no opposing train at Phillips, he thought the 19-order signal was displayed for an order which would advance his train beyond Phillips. The conductor also observed the aspect of the train-order signal. Because of this aspect the engineer stopped the train with the front of the engine about 100 feet east of the east siding-switch. The engineer applied the independent brake on the engine and sounded the engine-whistle signal for the flagman to protect the rear of the train. He did not instruct the front brakeman to provide protection against east-bound trains. The engineer then alighted from the engine to ascertain what orders were to be delivered to his train. The collision occurred about one minute after the train stopped.

As Extra 3011 East was approaching the point where the accident occurred the speed was about 25 miles per hour. The brakes of this train had been tested and had functioned properly when used en route. The engineer and the front brakeman were maintaining a lookout ahead from their respective positions in the cab of the engine. The conductor and the flagman were in the caboose. Train order No. 416 conferred superiority to Extra 3011 East over Extra 1004 West to Prentice, and the restriction to wait at Phillips until 8:10 a. m. had expired. Because of track curvature and vegetation on the inside of the curve west of the station, the view of the train-order signal at Phillips from the cab of an east-bound engine is restricted to a distance of approximately 1,200 feet. When

the engineer observed the train-order signal, it displayed Stop for east-bound trains, and the 19-order signal for west-bound trains. He then observed the opposing train on the main track in the vicinity of the station. He immediately initiated an emergency application of the brakes and warned the fireman and the front brakeman. He said the speed of the train was not materially reduced before the collision occurred.

The operator at Phillips said that he thought the Stop signal displayed by the train-order signal provided sufficient protection against Extra 3011 East and that he was not otherwise instructed to provide protection. The train dispatcher said he overlooked the requirement of addressing order No. 420 to the operator at the meeting point. The dispatcher said he thought the auxiliary track formed a part of the siding and that it was not necessary to instruct the operator to provide protection against Extra 3011 East. The members of the crew of Extra 1004 West said that because the train-order signal at Phillips did not indicate Stop they assumed that they would receive a train order to advance their train beyond that station. However, under the conditions present at that time, the crew was required to furnish protection against opposing trains at Phillips.

Cause

It is found that this accident was caused by failure to provide protection for a train advanced to the meeting point where the opposing train was to receive the meet order.

Dated at Washington, D. C., this thirty-first day of October, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.