

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3752

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

IN RE ACCIDENT

AT WINNEBAGO, WIS., ON

MAY 7, 1957

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SUMMARY

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Date: May 7, 1957

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

Location: Winnebago, Wis.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: 22 : 25

Locomotive numbers: Diesel-electric units 2201A and 2225B : Diesel-electric units 2203A, 2201C, 2500B, and 2404

Consists: 23 cars, caboose : 76 cars, caboose

Speeds: Standing : 27 m. p. h.

Operation: Timetable, train orders, and automatic block-signal system

Track: Single; tangent; 0.51 percent descending grade eastward

Weather: Clear

Time: 12:50 a. m.

Casualties: 4 injured

Cause: Switch being opened in front of approaching train

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3752

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

July 8, 1957

Accident at Winnebago, Wis., on May 7, 1957, caused by a
switch being opened in front of an approaching train.

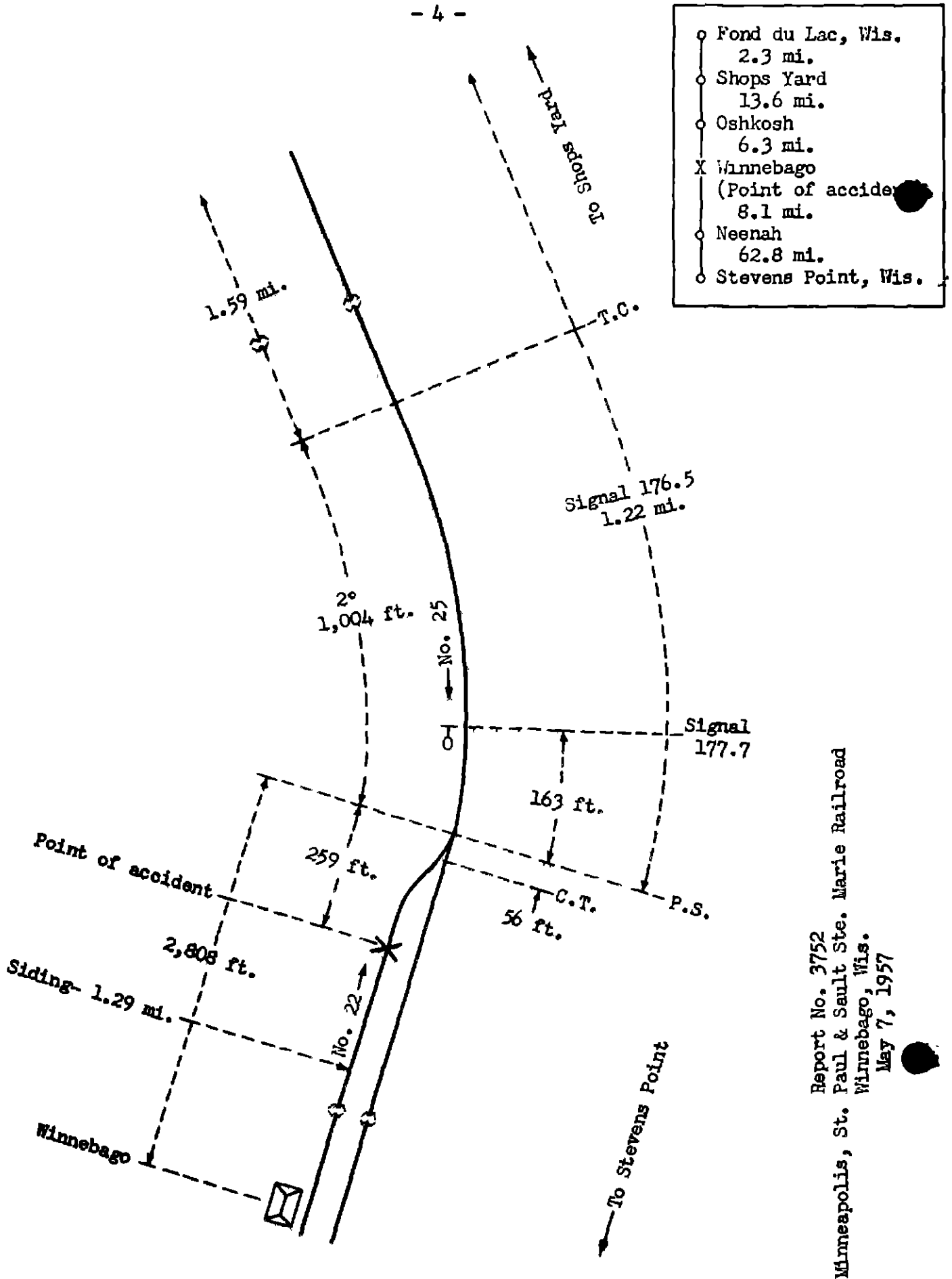
REPORT OF THE COMMISSION¹

TUGGLE, Commissioner:

On May 7, 1957, there was a head-end collision between two freight trains on the Minneapolis, St. Paul & Sault Ste. Marie Railroad at Winnebago, Wis., which resulted in the injury of four train-service 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 Tuggle for consideration and disposition.



Report No. 3752
 Minneapolis, St. Paul & Sault Ste. Marie Railroad
 Winnebago, Wis.
 May 7, 1957

Location of Accident and Method of Operation

This accident occurred on that part of the Stevens Point Division extending between Stevens Point, Wis., and Shops Yard, near Fond du Lac, Wis., 90.8 miles, a single-track line, over which trains are operated by timetable, train orders, and an automatic block-signal system. At Winnebago, 70.9 miles east of Stevens Point, a siding 1.29 miles in length parallels the main track on the north. The east siding-switch is 2,808 feet east of the station. The accident occurred on the siding at a point 259 feet west of the east switch. The main track is tangent throughout a distance of several miles immediately west of a point 56 feet west of the east siding-switch. From the east there is a tangent 1.59 miles in length and a 2° curve to the right 1,004 feet to the east siding-switch and 56 feet westward. The grade is 0.51 percent descending eastward at the point of accident.

The switch stand at the east end of the siding at Winnebago is of the horizontal-throw intermediate-stand type. It is located 9 feet 3 inches north of the center-line of the track. It is not equipped with a switch lamp. When the switch is lined for movement on the main track a circular red target 18 inches in diameter is parallel to the track. When the switch is lined for entry to the siding the target is at right angles to the track. The switch is provided with a cam rod switch-point lock which must be released before the switch can be opened. The cam rod handle is locked to the switch stand with the same lock that locks the operating lever.

Semi-automatic signal 176.5 and automatic signal 177.7, governing west-bound movements on the main track, are located, respectively, 1.22 miles and 163 feet east of the east siding-switch at Winnebago. These signals are of the searchlight type. The aspects applicable to this investigation and the corresponding indications and names are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
176.5	Green-over-red	Proceed.	Clear signal.
177.7	Green	Proceed.	Clear signal.
177.7	Red-over-number plate	Stop, then proceed at restricted speed.* * *	Stop and proceed signal.

The controlling circuits are so arranged that when a switch within the block of signal 177.7 is opened the signal will indicate Stop-then-proceed-at-restricted-speed.

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

104 (A). * * *

Employees must stand not less than twenty feet from the switch stand and, when practicable, on the opposite side of the track while a train is closely approaching or passing. An employee who is to line a main track switch for a train or engine that is on siding for another train must not go between the fouling point and the main track switch until such train has passed.

* * *

The maximum authorized speed for freight trains in the vicinity of the point of accident is 55 miles per hour.

Description of Accident

No. 22, an east-bound third-class freight train, consisted, at the time of the accident, of diesel-electric units 2201A and 2225B, coupled in multiple-unit control, 23 cars, and a caboose. At Neenah, 8.1 miles west of Winnebago, the members of the crew received copies of train order No. 343 reading in part as follows:

No 25 wait at Winnebago until twelve fifty
1250 AM for No 22. * * *

This train departed from Neenah at 12:22 a. m., 17 minutes late, entered the siding at Winnebago, and stopped about 12:45 a. m. with the front of the locomotive 259 feet west of the east siding-switch. About 5 minutes later the front end was struck by No. 25.

No. 25, a west-bound second-class freight train, consisted of diesel-electric units 2203A, 2201C, 2500B, and 2404, coupled in multiple-unit control, 76 cars, and a caboose. At Shops Yard the members of the crew received copies of train order No. 343. The train departed from Shops Yard at 12:13 a. m., 58 minutes late, and passed Oshkosh, 6.3 miles east of Winnebago, at 12:40 a. m., 1 hour 5 minutes late. It passed signal 176.5, which indicated Proceed, passed signal 177.7, which indicated Stop-then-proceed-at-restricted-speed, entered the east end of the siding at Winnebago, and while moving at a speed of 27 miles per hour, as indicated by the tape of the speed-recording device, it struck No. 22.

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No. 22 was moved westward a distance of 87 feet by the force of the impact. None of the equipment of this train was derailed. The first diesel-electric unit was badly damaged, the second unit was somewhat damaged, the first and third cars were slightly damaged, and the second car was badly damaged. The diesel-electric units, the first three cars, and the front truck of the fourth car of No. 25 were derailed. The first two diesel-electric units stopped approximately in line with the track with the front of the first unit 27 feet west of the point of collision. The third unit stopped with the front end on the track structure and the rear end 25 feet north of the track. The fourth unit stopped on its right side against the left side of the third unit. The derailed cars stopped in various positions on or near the tracks. The first diesel-electric unit was badly damaged, the second unit was somewhat damaged, and the third and fourth units were considerably damaged. Two of the derailed cars were considerably damaged, and two were slightly damaged.

The flagman of No. 22, and the engineer, the fireman, and the front brakeman of No. 25 were injured.

The weather was clear at the time of the accident, which occurred about 12:50 a. m.

Discussion

The crews of both trains held copies of train order No. 343. Under the provisions of this order, if No. 22, the inferior train, proceeded to Winnebago to meet No. 25 it was required to clear the main track at the west switch not later than 12:45 a. m. and to remain clear of the main track until No. 25 had passed. The members of the crews of both trains so understood.

When No. 22 stopped at the east end of the siding at Winnebago the enginemen and the front brakeman were on the locomotive. The conductor and the flagman were in the caboose. After the train stopped, the engineer extinguished the headlight. The front brakeman went to a train dispatcher's telephone located 208 feet west of the east siding-switch and asked the dispatcher the location of No. 25. The dispatcher told him that the train had passed Oshkosh. The brakeman remained at the telephone several minutes. He then heard the engineer of No. 25 sound the grade-crossing whistle signal for a rail-highway grade crossing in the vicinity of signal 176.5. He closed the door of the telephone box, went to the east siding-switch, unlocked and opened the switch, placed the lock in the hasp, and then took a position at a

rail-highway grade crossing a short distance east of the switch. As No. 25 approached, the brakeman gave proceed signals with his lantern. The enginemen of No. 22 said that after the brakeman walked to the telephone they did not again see him until they saw him giving these signals. They were not aware that the switch was lined for entry to the siding until the locomotive of No. 25 approached closely enough so that the switch points were visible in the light of the headlight.

As No. 25 was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout from the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The headlight and the oscillating white light on the locomotive were lighted brightly. The employees on the locomotive said that after the locomotive passed signal 176.5, which indicated Proceed, they saw that signal 177.7 indicated Proceed. They could also see the lights on the locomotive of No. 22 at the east end of the siding at Winnebago. When the locomotive reached a point which these employees variously estimated as from 900 feet to 1,600 feet east of the siding switch they saw the indication of signal 177.7 change to Stop-then-proceed-at-restricted-speed. When this occurred the engineer made an emergency application of the brakes. According to the tape of the speed-recording device the speed was 47 miles per hour when the brakes were applied, and it had been reduced to 27 miles per hour when the collision occurred.

The front brakeman of No. 22 was unable to account for his action in operating the switch. He had lined the west siding-switch for his train to enter the siding, and at the time he left the locomotive he was aware that the train was on the siding. There is a spring switch at the west end of the siding at Winnebago, and the brakeman said that it was not unusual for east-bound trains to hold the main track when meeting opposing trains at this point. When he heard No. 25 approaching he gained the impression that the train was to be operated through the siding, and after lining the switch he gave a proceed signal with his lantern. At the time of the accident he had been employed as a brakeman during a period of approximately 2 years and had been regularly assigned on No. 22 during a period of about 1 month.

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Cause

This accident was caused by a switch being opened in front of an approaching train.

Dated at Washington, D. C., this eighth day of July, 1957.

By the Commission, Commissioner Tuggle.

(SEAL)

HAROLD D. McCOY,

Secretary.