

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3169
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE
RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT MILLTOWN, WIS., ON
FEBRUARY 24, 1948

SUMMARY

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

Date: February 24, 1948

Location: Milltown, Wis.

Kind of accident: Derailment

Train involved: Passenger

Train number: 62

Engine number: 716

Consist: 3 cars

Estimated speed: 40 m. p. h.

Operation: Timetable and train orders, and
manual-block system for following
movements only

Track: Single; 2° curve; 0.1 percent
ascending grade eastward

Weather: Clear

Time: 3:17 p. m.

Casualties: 21 injured

Cause: Obstruction on track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3169

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

April 9, 1948

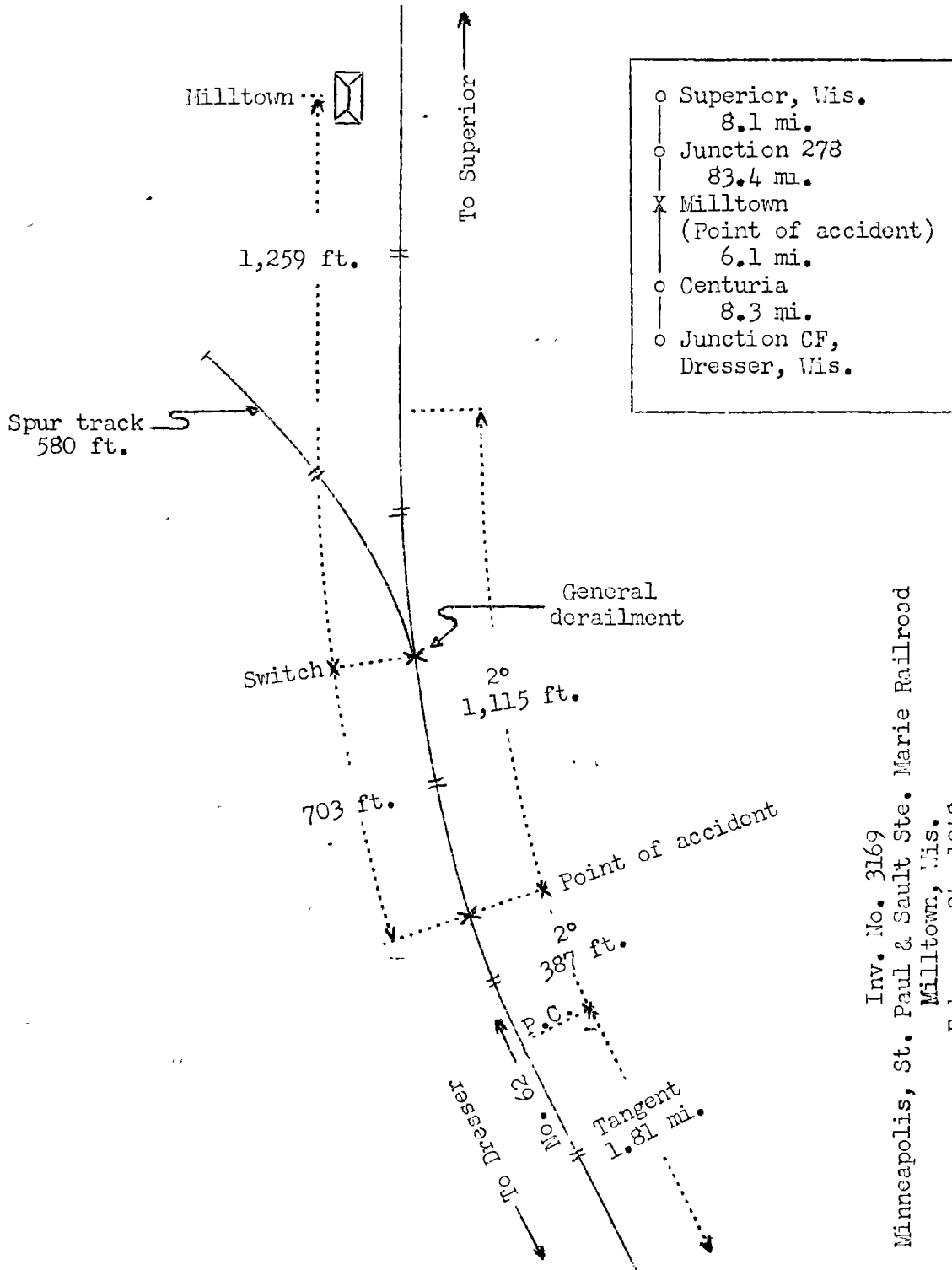
Accident at Milltown, Wis., on February 24, 1948, caused
by an obstruction on the track.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On February 24, 1948, there was a derailment of a passenger train on the Minneapolis, St. Paul & Sault Ste. Marie Railroad at Milltown, Wis., which resulted in the injury of 15 passengers, 2 railway-mail clerks and 4 train-service employees.

¹ 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.



Inv. No. 3169
 Minneapolis, St. Paul & Sault Ste. Marie Railroad
 Milltown, Wis.
 February 24, 1948

Location of Accident and Method of Operation

This accident occurred on that part of the Minneapolis-Duluth Division extending between Junction CF, Dresser, and Junction 278, near Superior, Wis., 97.8 miles, a single-track line, over which trains are operated by timetable and train orders, and a manual-block system for following movements only. At Milltown, 14.4 miles east of Junction CF, a spur track 580 feet long connects with the main track and extends northeastwardly at an angle of about 45 degrees from the main track. The switch is 1,259 feet west of the station. Entry to the spur track is made through a No. 10 turnout. The accident occurred on the main track 703 feet west of the spur-track switch, and the general derailment occurred at the turnout of the switch. From the west on the main track, there are, in succession, a tangent 1.81 miles in length and a 2° curve to the right 387 feet to the point of accident and 1,115 feet eastward. The grade is 0.1 percent ascending eastward.

The track structure consists of 90-pound rail, 39 feet in length, laid on an average of 23 treated ties to the rail length. It is fully tieplated, single-spiked, provided with 4-hole joint bars and 10 rail anchors per rail length, and is ballasted with gravel to a depth of 24 inches. At the point of accident the curvature was 2°, the gage was 4 feet 8-7/16 inches and the superelevation was 3-1/2 inches.

The maximum authorized speed for passenger trains is 55 miles per hour.

Description of Accident

No. 62, an east-bound first-class passenger train, consisted of engine 716, a 4-6-2 type, one mail-express car and two coaches, in the order named. All cars were of steel construction. This train departed from Centuria, the last open office, 6.1 miles west of Milltown, at 3:10 p. m., 6 minutes late, and while it was moving at an estimated speed of 40 miles per hour the No. 1 pair of engine-truck wheels became derailed. These wheels continued in line with the track a distance of 703 feet to the turnout of the spur-track switch, where all wheels of the engine and the cars were derailed.

The engine stopped in reverse direction, on its right side, down an embankment, north of the main track and at an angle of 15 degrees to it, with the rear of the engine 22 feet north of the centerline of the main track and 300 feet east of the spur-track switch. The engine was badly damaged

and the cab was demolished. The tender cistern stopped upside down, about 15 feet south of the track and opposite the engine. The tender frame was torn loose at the rear of the cistern. The first car stopped practically upright, south of the main track and at an angle of 55 degrees to it, with the front end 300 feet east of the switch and 38 feet south of the main track. The second car stopped on its left side, down the embankment and against the engine, about 5 feet north of the track and at an angle of 15 degrees to it. The third car, remaining coupled to the second car, stopped north of the main track, practically in line with the second car and leaned to the north at an angle of 15 degrees. The rear end of this car was 150 feet east of the switch. The cars were considerably damaged. The cars were not equipped with tightlock couplers.

The engineer, the fireman, the conductor and the baggage-man were injured.

The weather was clear at the time of the accident, which occurred about 3:17 p. m.

Discussion

No. 62 was moving at an estimated speed of 40 miles per hour on a 2° curve to the right, in territory where the maximum authorized speed was 55 miles per hour, when the No. 1 pair of engine-truck wheels became derailed. These wheels continued in line with the track a distance of 705 feet to a facing-point switch, where the general derailment occurred. As the train was approaching the point where the accident occurred the throttle was in drifting position, and the engine-men were maintaining a lookout ahead. The members of the train crew were in various locations in the cars of the train. Prior to the time of the accident, the engine and the cars had been riding smoothly. The engineer said that when the engine was about 900 feet west of the spur-track switch he made a brake application preparatory to stopping the train at the station. Immediately afterward he felt the front end of the engine drop, and he moved the brake valve to emergency position. The general derailment at the switch occurred before the speed was materially reduced. The fireman and the members of the train crew were not aware of anything being wrong until the brakes were applied in emergency. The brakes of this train had been tested and had functioned properly en route.

Examination after the accident disclosed no defective condition of the engine or cars which could have contributed to the cause of the accident. The throttle lever was in drifting position, the reverse lever was in position for

25 percent cut-off in forward motion, the independent brake valve was in running position and the automatic brake valve was in emergency position.

Examination of the main track throughout a considerable distance westward from the point of derailment disclosed that the alinement, gage and surface were well maintained for the maximum authorized speed. There was no indication of dragging equipment or of defective track. The first mark on the track structure was a flange mark on the inner edge of the top surface of the north, or high, rail at a point 387 feet north of the south end of the curve. This mark extended diagonally across the top of the head of the rail a distance of 35 feet to the point where a wheel dropped outside the rail. Opposite this point a flange mark appeared on the ties inside the south rail. From this point eastward a distance of 668 feet to the spur-track switch, flange marks appeared on the tops of the ties immediately inside the south rail and outside the north rail to the point where wheels struck the north stock rail and the frog of the turnout of the spur-track switch. East of this point the track was torn up to the point where the engine stopped. In the immediate vicinity of the first mark on the track structure crushed stone was found on the top surface of the high rail and adjacent to it.

The investigation disclosed that about 50 minutes before the accident occurred three boys, about 11 years of age, had been playing near the track in this vicinity. Two of the boys had placed stones upon the north rail at the point where the derailment occurred. Recovered fragments of these stones indicated that one had been 4 inches long, 2-1/2 inches wide and 3 inches thick, and the other about 4 inches long, 2-1/2 inches wide and 2 inches thick. Apparently, one or both of these stones were of sufficient size and hardness to cause the left No. 1 engine-truck wheel to rise at least as high as the level of the top of the high rail, and, since the flanges were bearing heavily against the high rail, this wheel crossed over the head of the rail and dropped to the outside.

Cause

It is found that this accident was caused by an obstruction on the track.

Dated at Washington, D. C., this ninth day of April, 1948.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.