

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3495  
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE  
RAILROAD COMPANY  
IN RE ACCIDENT  
AT CAVOUR, WIS., ON  
NOVEMBER 8, 1952

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**SUMMARY**

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Date: November 8, 1952

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

Location: Cavour, Wis.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: 15 : 16

Engine numbers: Diesel-electric units 210B and 210A : Diesel-electric units 206A and 206B

Consists: 57 cars, caboose : 45 cars, caboose

Speeds: 51 m. p. h. : Standing

Operation: Timetable and train orders

Track: Single; tangent; 0.07 percent ascending grade westward

Weather: Clear

Time: 1:20 a. m.

Casualties: 1 killed; 4 injured

Cause: Failure to obey meet order

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3495

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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January 15, 1953

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Accident at Cavour, Wis., on November 8, 1952, caused by  
failure to obey a meet order.

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

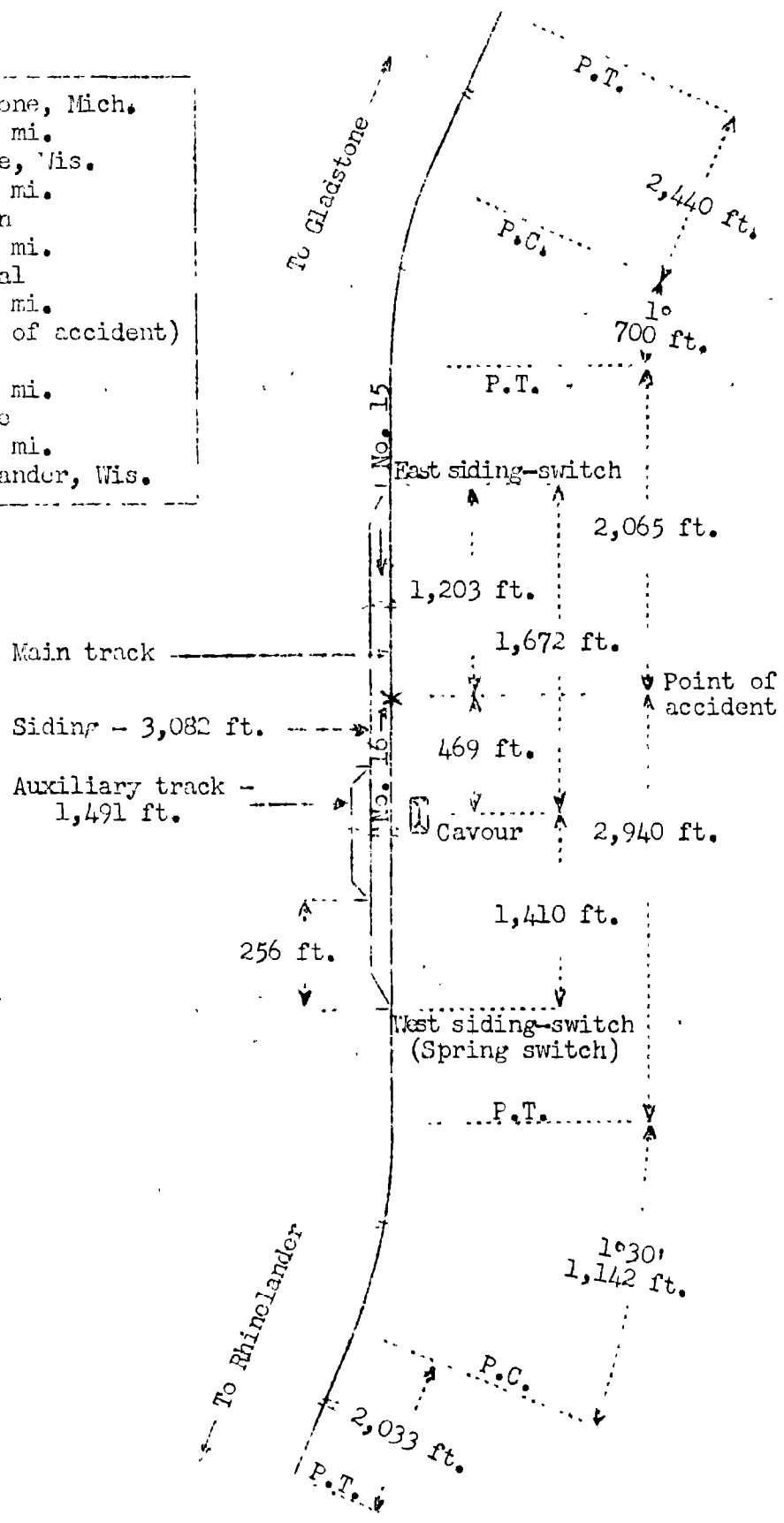
PATTERSON, Commissioner:

On November 8, 1952, there was a head-end collision between two freight trains on the Minneapolis, St. Paul & Sault Ste. Marie Railroad at Cavour, Wis., which resulted in the death of one employee, and the injury of four employees.

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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 Gladstone, Mich.
- | 53.2 mi.
- o Pembine, Wis.
- | 19.2 mi.
- o Goodman
- | 9.7 mi.
- o Bonneval
- | 4.3 mi.
- X (Point of accident)
- Cavour
- | 12.3 mi.
- o Argonne
- | 27.2 mi.
- o Rhineland, Wis.



Report No. 3495  
 Minneapolis, St. Paul & Sault Ste. Marie Railroad  
 Cavour, Wis.  
 November 8, 1952

Location of Accident and Method of Operation

This accident occurred on that part of the Gladstone Division extending between Gladstone, Mich., and Rhineland, Wis., 125.9 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 Cavour, Wis., 86.4 miles west of Gladstone, a siding 3,082 feet in length parallels the main track on the north. The east and the west switches of the siding are located, respectively, 1,672 feet east and 1,410 feet west of the station. An auxiliary track 1,491 feet in length parallels the siding on the north. The west switch of this track is 256 feet east of the west siding-switch. It is used as an industry track and by trains with cars in excess of the siding capacity to double over to clear the main track. The accident occurred on the main track at a point 1,203 feet west of the east siding-switch. From the east there are, in succession, a tangent 2,440 feet in length, a 1° curve to the left 700 feet and a tangent 2,065 feet to the point of accident and 2,940 feet westward. From the west there are, in succession, a tangent 2,033 feet in length, a 1°30' curve to the left 1,142 feet and the tangent on which the accident occurred. Throughout a distance of 1.12 miles immediately east of the point of accident the grade for west-bound trains varies between 0.64 percent descending and 0.07 percent ascending. At the point of accident the grade is 0.07 percent ascending westward.

The switch stand at the east siding-switch is of the hand-throw, intermediate-stand type, and is located 9 feet 3 inches north of the center-line of the main track. It is equipped with an oil-burning lamp, which displays a green aspect in the direction of approaching trains when the switch is lined in normal position and a red aspect when the switch is lined for entry to the siding. The centers of the lenses of the lamp are 6 feet 3 inches above the level of the tops of the rails.

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

14. ENGINE WHISTLE SIGNALS.

\* \* \*

The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. \* \* \*

\* \* \*

Sound.	Indication.
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\* \* \*

(n) — — o	Approaching meeting or waiting points. * * * See Rule S-90.
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\* \* \*

S-72. \* \* \*

Trains in the direction specified by time-table are superior to trains of the same class in the opposite direction.

S-89. At meeting points, the inferior train must take the siding. \* \* \*

The inferior train must pull into the siding when practicable. \* \* \*

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.

S-90. On trains equipped with communicating signal system the conductor must give signal \* \* \* to the engineer immediately after passing the last station but not less than one mile preceding a schedule meeting point with a train of the same or superior class or a point where by train order is to meet, or has to wait for, an opposing train. The engineer will immediately reply with signal 14 (n). If the engineer fails to answer by signal 14 (n), the conductor must take immediate action to stop the train.

On other trains, the engineer will give signal 14 (n) at least one mile before reaching a meeting or waiting point.

204. \* \* \*

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Engineers must show train orders to fireman and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

#### 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.

Timetable special instructions provide that east-bound trains are superior to trains of the same class in the opposite direction.

The maximum authorized speed for the trains involved was 45 miles per hour.

#### Description of Accident

No. 16, an east-bound second-class freight train, consisted of Diesel-electric units 206A and 206B, coupled in multiple-unit control, 45 cars and a caboose. At Argonne, 12.3 miles west of Cavour and the last open office, the crew received copies of train order No. 34 reading in part as follows:

NO 16 MEET NO 15 AT CAVOUR \* \* \*

NO 16 STAND BACK UNTIL NO 15 DOUBLES OVER

No. 16 departed from Argonne at 1 a. m., 9 hours 30 minutes late, and stopped about 1:15 a. m. at a point 500 feet west of the west siding-switch at Cavour. Several minutes later

it proceeded eastward and stopped on the main track with the front end of the locomotive 1,203 feet west of the east siding-switch. A few seconds later it was struck by No. 15.

No. 15, a west-bound second-class freight train, consisted of Diesel-electric units 210B and 210A, coupled in multiple-unit control, 57 cars and a caboose. At Pembine, 33.2 miles east of Cavour and the last open office, the crew received copies of train order No. 34. No. 15 departed from Pembine at 11:42 p. m., 3 hours 22 minutes late, passed the east siding-switch at Cavour, where it was required to enter the siding to meet No. 16, and while moving at a speed of 51 miles per hour, as indicated by the tape of the speed-recording device, it collided with No. 16 at a point 1,203 feet west of the east siding-switch.

Both Diesel-electric units, the first 24 cars and the thirty-first and thirty-second cars of No. 15 were derailed. The first Diesel-electric unit stopped with the front end against the first Diesel-electric unit of No. 16 and about 130 feet west of the point of collision. A separation occurred between the units. The second Diesel-electric unit stopped on its right side, on the north side of the siding, parallel to the track and about opposite the first Diesel-electric unit of the opposing train. The derailed cars stopped in various positions on or near the main track and the siding. The Diesel-electric units of No. 16 were moved westward a distance of approximately 130 feet by the impact. Both Diesel-electric units were derailed and stopped about in line with the track. The first four cars were derailed and stopped in various positions on or near the main track. They obstructed the siding and the auxiliary track. The Diesel-electric units of both trains were badly damaged. The thirty-first and thirty-second cars of No. 15 were considerably damaged and the other derailed cars of both trains were badly damaged.

The engineer of No. 16 was killed. The engineer, the fireman and the front brakeman of No. 15, and the fireman of No. 16 were injured.

The weather was clear at the time of the accident, which occurred about 1:20 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 5.8 trains.



The brake equipment of Diesel-electric unit 210B is of the 24-RL type. A safety-control feature is not provided.

### Discussion

The rules of this carrier provide that trains in the direction specified by the timetable are superior to trains of the same class in the opposite direction. At meeting points the inferior train must take the siding, and must pull into the siding when practicable. The engineer must sound a meeting-point signal at least 1 mile before the train reaches a meeting point. Engineers must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen. Train order No. 34 established Cavour as the meeting point between No. 15 and No. 16. Under the rules No. 15 was required to enter the siding at Cavour at the east siding-switch.

No. 16 first stopped at Cavour about 5 minutes before the accident occurred, with the front end of the locomotive approximately 500 feet west of the west siding-switch. Several minutes later, because its train of 45 cars could be stopped on the main track between the switches of the siding and the opposing train permitted to proceed through the siding without doubling over, No. 16 started to move toward the clearance point on the main track at the east end of the siding. The engineer, the fireman and the front brakeman were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The fireman and the front brakeman said that when their locomotive was east of the station they observed that the speed of the approaching opposing train was not being properly controlled. No. 16 was stopped immediately. The fireman and the front brakeman alighted from the locomotive before the collision occurred. The engineer was killed in the accident. The members of the crew in the caboose were unaware that anything was wrong until the accident occurred.

The conductor of No. 15 received copies of train order No. 34 from the operator at Pembine about 1 hour 40 minutes before the accident occurred. The conductor said that he read and understood the order. Because it would be necessary to operate a spring switch when doubling over on the siding

at Cavour, he instructed the front brakeman concerning the movements that would be required at that point. The front brakeman delivered the engineer's copy of train order No. 34 when he returned to the locomotive. The conductor said that he observed the front brakeman hand the order to the engineer, and he said that he then repeated orally to the engineer the instructions contained in the meet order. The train order was read by the members of the crew on the locomotive. Each understood that No. 15 was to meet No. 16 at Cavour and that No. 15 was required to enter the siding at the east siding-switch. No. 15 departed from Pembine at 11:42 p. m. The conductor boarded the caboose and showed train order No. 34 to the flagman. The flagman read and understood the order. No. 15 stopped at Goodman, 14 miles east of Cavour. One car was added to the train and it then proceeded westward. The engineer said that after the train departed from Goodman the members of the crew on the locomotive repeated that their train was to meet No. 16 at Cavour.

As No. 15 was approaching the point where the accident occurred the engineer and the front brakeman were maintaining a lookout ahead from their respective positions in the control compartment of the first Diesel-electric unit. The fireman was patrolling the engine compartments of the Diesel-electric units. The conductor and the flagman were in the cupola of the caboose. The brakes of this train had been tested and had functioned properly when used en route. The headlight was lighted brightly. The engineer said that soon after the train passed Bonneval, 4.21 miles east of the point of accident, he decided to heat his lunch on a cylinder in the engine compartment. He said that he was aware that his train was approaching the meeting point with No. 16 at Cavour but he thought it safe to leave the control compartment of the locomotive a few seconds to place the food container in the engine compartment. Before he left the control compartment he reduced the throttle from No. 8 position to No. 5 position. He said that immediately after he entered the engine compartment he slipped and his head struck against some object with such force that he lost consciousness. He was unable to estimate the length of time he remained in the engine compartment. He said that when he regained consciousness he was dazed but realized that his train was closely approaching the meeting point and he returned to the control compartment and was attempting to move the brake valve to apply the brakes when the collision occurred. The front brakeman said that he observed the fireman leave the control compartment. Later he observed the engineer leave the controls and enter the engine compartment. He thought the fireman left the operating compartment about 10 to 15 minutes before the accident occurred

and that he was alone in the operating compartment about 3 or 4 minutes. When he observed the headlight of the opposing train he became concerned. He said that he did not observe the engineer return to the operating compartment before the collision occurred, and because of his limited experience he did not know how to apply the brakes with the engineer's brake valve. The members of the crew in the caboose said that they were aware their train was approaching Cavour. They became concerned when the speed was not reduced approaching the meeting point but took no action to stop the train before the collision occurred.

Cause

It is found that this accident was caused by failure to obey a meet order.

Dated at Washington, D. C., this fifteenth day of January, 1953.

By the Commission, Commissioner Patterson.

(SEAL)

GEORGE W. LAIRD,  
Acting Secretary.