

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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REPORT NO. 3386

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC  
RAILROAD COMPANY

IN RE ACCIDENT

NEAR LYONS, IOWA, ON

JANUARY 18, 1951

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SUMMARY

Date: January 18, 1951

Railroad: Chicago, Milwaukee, St. Paul and Pacific

Location: Lyons, Iowa

Kind of accident: head-end collision

Trains involved: Freight : Freight

Train numbers: 165 : 86

Engine numbers: 475 : Diesel-electric units 45D, 45C, 45B and 45A

Consists: 32 cars, caboose : 113 cars, caboose

Estimated speeds: 5 m. p. h. : 18 m. p. h.

Operation: Timetable and train orders; yard limits

Track: Single; 7°30' curve; 0.08 percent descending grade westward

Weather: Cloudy; dark

Time: 5:50 a. m.

Casualties: 3 injured

Cause: Failure properly to control speed of both trains moving within yard limits

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3386

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS  
UNDER THE ACCIDENT REPORTS ACT OF MAY 8, 1910.

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD COMPANY

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April 2, 1951

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Accident near Lyons, Iowa, on January 18, 1951, caused by  
failure properly to control the speed of both trains  
moving within yard limits.

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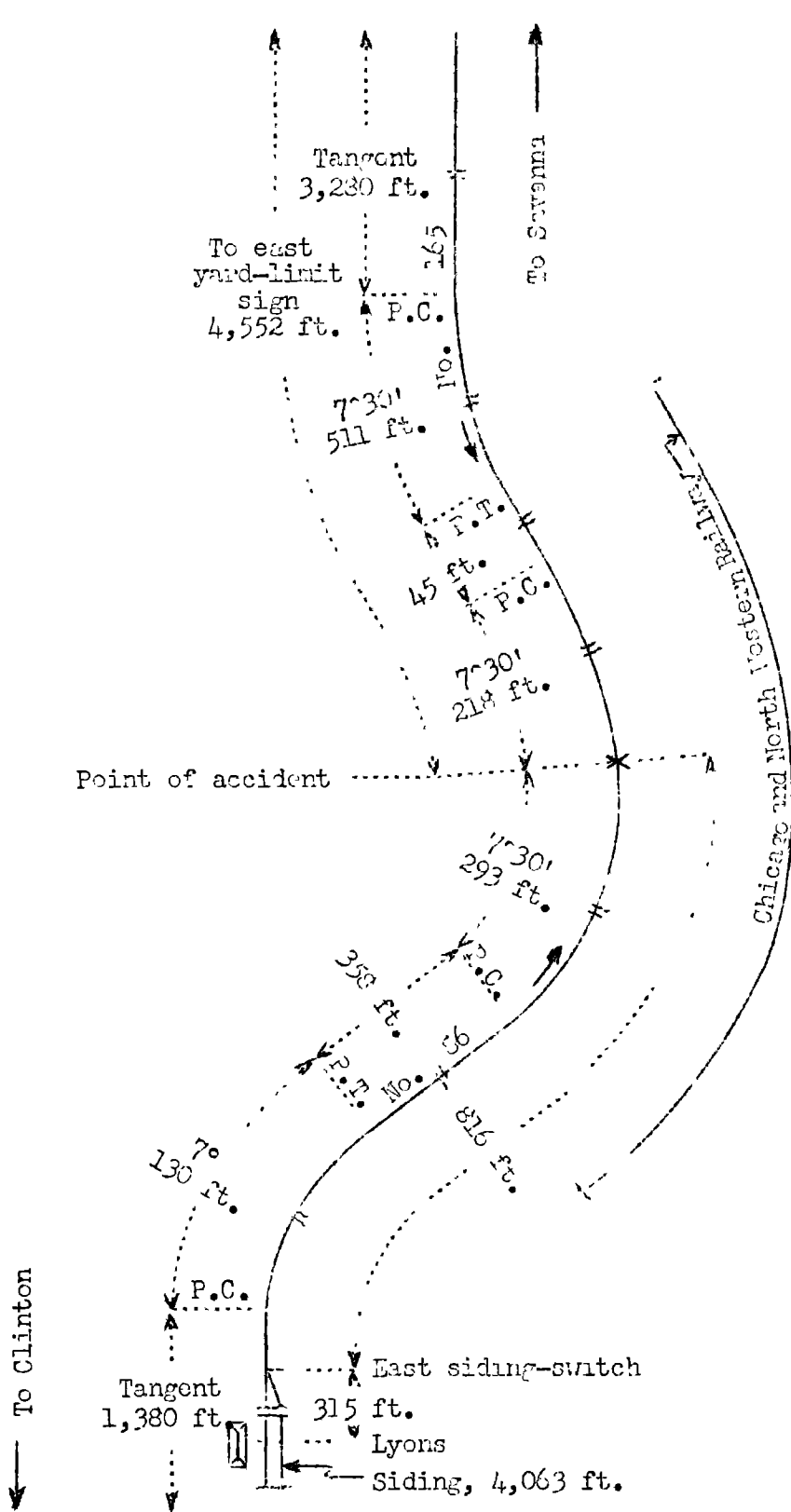
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On January 18, 1951, there was a head-end collision between two freight trains on the Chicago, Milwaukee, St. Paul and Pacific Railroad near Lyons, Iowa, which resulted in the injury of three employees. This accident was investigated in conjunction with a representative of the Iowa State Commerce Commission.

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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 Savanna, Ill. | 4.20 mi.
- o Sabula Jet., Iowa | 12.79 mi.
- X Point of accident | 0.21 mi.
- o Lyons | 2.70 mi.
- o Clinton | 33.90 mi.
- o Mahant, Iowa

Report No. 3286  
 Chicago, Milwaukee, St. Paul and Pacific Railroad  
 Lyons, Iowa  
 January 18, 1951

Location of Accident and Method of Operation

This accident occurred on that part of the Dubuque and Illinois Division extending between Savanna, Ill., and Clinton, Iowa, 19.9 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. Yard limits extend from a point 16.12 miles west of Savanna to Clinton. At Lyons, Iowa, 17.2 miles west of Savanna, a siding 4,063 feet in length parallels the main track on the south. The east siding-switch is 315 feet east of the station. The accident occurred on the main track within yard limits at a point 4,552 feet west of the east yard-limit sign and 818 feet east of the east siding-switch at Lyons. From the east there are, in succession, a tangent 3,280 feet in length, a 7°30' curve to the left 511 feet, a tangent 45 feet and a 7°30' curve to the right 218 feet to the point of accident and 293 feet westward. From the west there are, in succession, a tangent 1,380 feet in length, a 7° curve to the right 150 feet, a tangent 358 feet and the curve on which the accident occurred. The grade for west-bound trains is, successively, 0.05 percent ascending 900 feet, 0.37 percent ascending 400 feet, and 0.08 percent descending 472 feet to the point of accident. The grade for east-bound trains is, successively, 0.22 percent ascending 900 feet, 0.10 percent descending 600 feet, and 0.08 percent ascending 1,228 feet to the point of accident. In the vicinity of the point of accident a track of the Chicago and North Western Railway parallels the track of the Chicago, Milwaukee, St. Paul and Pacific Railroad on the south.

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

DEFINITIONS.

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

93. \* \* \*

Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines.

Within yard limits second and inferior class, extra trains and engines must move at restricted speed.

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Timetable special instructions provide that eastward trains are superior to westward trains of the same class.

The maximum authorized speed for freight trains was 40 miles per hour, but it was restricted to 30 miles per hour on the curve on which this accident occurred.

#### Description of Accident

No. 165, a west-bound second-class freight train, consisting of engine 475, 32 cars and a caboose, entered the Dubuque and Illinois Division at Sabula Jct., Iowa, 4.2 miles west of Savanna. Before the train arrived at Sabula Jct. the crew had received copies of a message which contained the information that No. 86 was expected to leave Nahant, 38.9 miles west of Clinton, about 4 a. m. No. 165 departed from Sabula Jct. at 5:12 a. m., 4 hours 57 minutes late, passed the yard-limit sign east of Lyons about 5:45 a. m., and while moving at a speed of about 5 miles per hour it collided with No. 86 at a point 4,552 feet west of the east yard-limit sign and 816 feet east of the east siding-switch at Lyons.

No. 86, an east-bound second-class freight train, consisted of Diesel-electric units 45D, 45C, 45B and 45A, coupled in multiple-unit control, 113 cars and a caboose. This train passed Clinton, its initial station on the Dubuque and Illinois Division and the last open office, at 5:40 a. m., on time, passed the east siding-switch at Lyons about 5:50 a. m., on time, and while moving at a speed of 18 miles per hour it collided with No. 165.

The engine and tender of No. 165 were not derailed, but the front end of the engine was extensively damaged and the boiler was shifted on the frame. The first three cars and the front truck of the fourth car of this train were derailed, and these cars stopped in various positions on or near the track. The first three cars were somewhat damaged. The four Diesel-electric units, the first four cars, and the front truck of the fifth car of No. 86 were derailed. The first Diesel-electric unit stopped upright and in line with the track. The second unit stopped on its right side and approximately at right angles to the track. The third and fourth units and the first two cars stopped upright and at right angles to the track, and the other derailed cars stopped upright and practically in line with the track. The first Diesel-electric unit was badly damaged, and the other three units were considerably damaged. The first two cars and the seventy-third car were destroyed, and the third car was considerably damaged.

The fireman of No. 165 and the fireman and the front brakeman of No. 86 were injured.

The weather was cloudy and it was dark at the time of the accident, which occurred about 5:50 a. m.

#### Discussion

Before No. 165 arrived at Sabula Jct., the crew received copies of a message which contained the information that No. 86 was expected to leave Nahant about 4 a. m. This crew received no train order concerning the movement of No. 165 with respect to No. 86, and, except within yard limits, No. 165 was required by the rules to clear the schedule time of No. 86 not less than 5 minutes. No. 165 departed from Sabula Jct. at 5:12 a. m. and passed the yard-limit sign east of Lyons about 5:45 a. m., 5 minutes before No. 86 was due to leave Lyons. Switching was to be performed at Lyons, and the crew had arranged that the train was to enter the siding before they engaged in switching operations. As the train was approaching Lyons, the speed was reduced to about 5 miles per hour. The enginemen were in their respective positions on the engine, the front brakeman was preparing to alight from the engine to line the east siding-switch for entry into the siding, and the conductor and the flagman were in the caboose. The headlight was lighted brightly. Because of curvature of the track and buildings adjacent to the track, one train was not visible to the crew of the other until the engines were about 425 feet apart. The engineer said that when he first observed the headlight of No. 86 he thought it was the headlight of an engine on the track of the Chicago and North Western Railway. The two trains were less than 500 feet apart before he realized that No. 86 was approaching. He then made an emergency application of the brakes, but the collision occurred before the speed of the train was materially reduced.

As No. 86 was approaching the point where the accident occurred the speed was about 18 miles per hour. The enginemen were maintaining a lookout ahead from the control compartment at the front of the first Diesel-electric unit, the front brakeman was in the second Diesel-electric unit, and the conductor and the flagman were in the caboose. The headlight was lighted brightly. The crew had received no information as to the location of No. 165. When the front of the train was about 350 feet east of the east siding-switch at Lyons the enginemen observed the reflection from the headlight of an opposing train. At first they thought it was the headlight

of an engine on the track of the Chicago and North Western Railway. When they realized that the opposing train was on the track on which their train was moving, the engineer made an emergency application of the brakes. The collision occurred before the speed of the train was materially reduced.

This accident occurred within yard limits. Under the rules of this carrier governing operation of trains within yard limits, each train was permitted to occupy the main track without protecting against the opposing train, but each train was required to be operated in such a manner that it could be stopped short of an opposing train or an obstruction.

Cause

It is found that this accident was caused by failure properly to control the speed of both trains moving within yard limits.

Dated at Washington, D. C., this second day of April, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. PARTEL,  
Secretary.