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INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

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BUREAU OF SAFETY

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ACCIDENT ON THE

ILLINOIS CENTRAL RAILROAD

AND THE

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY

SIOUX CITY, IOWA

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JUNE 26, 1940

INVESTIGATION NO. 2434

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# SUILARY

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# Inv-2434

Railroads:	Chicago, St. Paul, Minneapolis & Omaha	:	Illinois Central
Date:	June 26, 1940		
Location:	Sioux City, Iowa		
Kind of accident:	Side-collision		
Trains involved:	C. St. P. M. & O. freight	:	C. & N. W. passenger
Train numbers:	19	:	239
Engine numbers:	232	:	Gas-electric motor-car 9915
Consist:	15 cars, caboose	;	Motor and 2 cars
Speed:	2-5 m. p. h.	:	20-25 m. p. h.
Operation:	Timetable and train orders	:	Yard rules
Track:	C. St. P. M. & O. Single; tangent; practically level	:	I. C. Single; curve to right; 0.187 per- cent descending grade westward
Weather:	Clear and moonlight		
Time:	3:25 a. m.		
Casualties:	8 injured		
Cause:	Failure to operate train on Illinois Central in accordance with rules governing use of railroad crossing at grade.		

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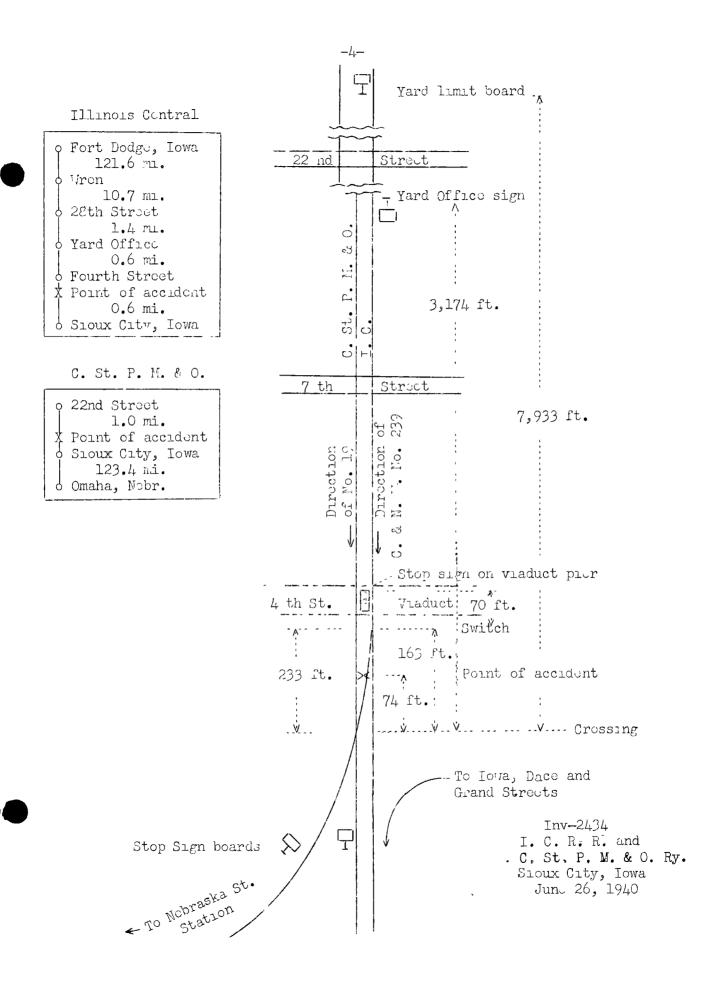
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To the Commission:

On June 26, 1940, there was a side collision between a Chicago & North Western Railway passenger train, which was being operated on the Illinois Central Railroad, and a Chicago, St.Paul, Minneapolis & Omaha Railway freight train at a crossing of the Illinois Central Railroad and the Chicago, St. Paul, Minneapolis & Omaha Railway at Sioux City, Iowa, which resulted in the injury of three passengers, two railway mail clerks, and three trainservice employees. This accident was investigated in conjunction with the Iowa State Commerce Commission.

#### Location and Method of Operation

The Chicago & North Western Railway, the Chicago, St. Paul, Minneapolis & Omaha Railway, and the Illinoi; Central Railroad hereinatter will be referred to as the C. & F. W., the C. St. P. M. & O., and the I. C., respectively. The accident occurred within yard limits at the intersection of the main track of the I. C. and the main track of the C. St. P. M. & C., both of which are single-track lines. Siour City is located on that part of the Western Division designated as the Omaha Subdivision of the C. St. P. M. & O., which extends between Twenty-second Street, Sioux City, Iova, and Onaha, Nebr., a distance of 124.4 miles; also, on that part of the Iowa Division of the I. C. designated as the Cherokee District which extends between Fort Dodge and Sioux City, a distance of 134.9 miles. C. & N. W. trains are operated over the I. C. track between Wren, Iowa, and Sloux City, a distance of 13.3 miles. Between Twenty-second Street and Fourth Street in Sioux City the I. C. track parallels the C. St. P. M. & O. track on the south. At Fourth Street one line diverges to the north, crosses the main track of the C. St. P. M. & O. at a point 233 feet west of Fourth Street viaduct, at which point the accident occurred, and extends to Nebraska Street Station; another line extends in a vesterly direction parallel to the C. St. P. M. & O. track and connects with the C. & N. W. near Dace Street at a point about 2,000 feet west of the crossing involved. On the line to Nebraska Street Station trains are operated by timetable and train orders; no form of block system is in use; on the line to Dace Street, trains are operated by yard rules. On the C. St. P. M. & O. trains are operated by timetable and train orders: no form of block system is in use.



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Time-table directions on both roads are east and vest. As the point of accident is approached from the east on the I. C., the track is tangent a distance of 4,383 feet to the point of accident. The grade for west-bound trains is 0.187 percent descenaing at the point of accident. As the point of accident is approached from the east on the C. St. P. M. & O., the track is tangent a considerable distance and is practically level. At a point 163 feet east of the crossing on the I. C. track there is a facing-point switch having a No. 10 turnout to the right for westward movements. This switch is provided with a low-type switch-stand, which is located to the right of the track and is coulpped with a target. An oil-burning lamp displays a green light when the switch is set for movement to Nebraska Street The center of the lens is 26 inches above the top of Station. the ties. Crews of trains using the route between Fourth Street and the C. & N. W. connection are required to operate the switch for such movement. Engineering are required to maintain a vigilant lookout to see that switches between Fourth Street and a point a considerable distance west thereof are properly lined for their route.

A stop sign governing westward movements on both railroads is painted on the east end of a viaduct ther which stands between the I. C. and C. St. P. H. tracks at Fourth Street; this sign is located 70 feet east of the switch serving the two I. C. routes and 235 feet east of the crossing involved.

Special time-table instructions of the I.C. read in part as follows:

93. Yards: Sioux City. All trains move at restricted speed \* \* \* between Yard Office and junction with C. & N. W. at Iowa and Dace Streets, Sioux City \* \* \*

98. Trains must stop at junctions, railroad crossings, and draw bridges as follows:

Siour City - C. St. P. M. & O. Ry.

101. Speed Restrictions, except where lower speed
is required:
 All trains - Between 7th and 20nd Streets,

Sioux City - 25 miles per hour.

In the I. C. book of operating rules Restricted Speed is defined as follows: Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced. Special time-table rules of the C. St. P. M. & O. read as follows:

RAILRCAD CROSSINGS IOWA-NEB. STATE LAW.

12. All railroad trains and locomotives vithout trains shall come to a full stop at least 200 feet and not more than 800 feet from the crossing of the other railroad, and the engineman shall sound two long blasts of the whistle before starting forward, EXCEPT where said railroads maintain a semaphore and gate with torpedo attachment and when the signals indicate the crossings to be clear, no stop need be made.

STOPPING AT RAILROAD CROSSINGS.

13. After coming to a full stop at regular stop boards, must proceed cantiously with train under full control, until point is reached where unobstructed view of crossing line can be had by the engineman, so that, if necessary stop can be made in time to avoid striking engines or cars on crossing. Trains will use extra care approaching railroad crossings in stormy or foggy vesther, especially where one stop is made for two or more crossings.

Rule 98 of the operating rules of both carriers reads in part as follows:

Trains must approach \* \* \* , railroad crossings at grade, \* \* \* prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. Where required by law, trains must stop.

The weather was clear and it was moonlight at the time of the accident, which occurred about 3:25 a. m.

#### Description

No. 19, a C. St. P. M. & O. west-bound second-class freight train, with Conductor Polmantier and Engineman Lynch in charge, consisted of engine 232, 15 cars and a caboose. This train departed from Twenty-second Struct Yard, Sioux City, at 3:15 a.m., according to the train sheet, 2 nours 30 minutes late, stopped at Eleventh Street cross-over, then entered the main track, stopped at the stop sign for the I. C. crossing at Fourth Street, then proceeded and was noving over the crossing at a speed of 2 to 5 miles per hour when the fourth car in the train was struck by C. & L. W. train No. 239.

No. 239, a C.& N. W. west-bound passenger train, with Conductor Evans and Engineman Dickson in charge, consisted of gas-electric motor-car 9015, one mail-baggage car, and one coach, in the order named. The motor-car and the first car were of allsteel construction and the second car was of wooden construction. This train entered upon the I. C. track at Wren, 12.7 miles east of Fourth Street, Sioux City, at 3:10 a. m., according to the train sheet, on time, stopped at Dinetcenth Street to discharge a passenger, passed the stop sign at Fourth Street viaduet without stopping, passed the switch lined in normal position for movement over the C. St. P. M. & O. crossing, and, while moving at a speed of 20 or 25 miles per hour, struck the left side of C. St. P. M. & O. No. 19.

Motor-car 9915, of the C. & N. W. train, becaud derailed and stopped on its left side with its rear end on the I. C. main track and it, front end on the left rail of the C. St. P. M. & O. track. The fuel tanks were punctured and the fuel became ignited. The first car of No. 239 stopped about 25 feet east of the crossing; it was not derailed but was slightly damaged. The rear car remained on the track. The fourth car of C. St. P. M. & O. No.19 which was struck by motor-car S915 stopped about 75 feet beyond the center of the crossing and leaned at an angle to the right; its front end fouled the C. St. P. M. & O. main track and its rear end fouled the I. C. main track; its left side was sheared near the rear end and was crushed invard about one-fourth its length. The fifth car stopped to the right of the I. C. track and parallel to it, and leaned at an angle of 45 degrees; the left front corner of this car was crushed. The sixth car stopped to the right of the C. St. P. M. & O. mair track and leaned at a slight angle; it was slightly damaged. The seventh car was slightly damaged but was not derailed.

The employees injured were the ergineman, the baggageman and the brakeman of C. & N. W. No. 239.

#### Summary of Evidence

Engineman Lynch, of C. St. P. H. & O. No. 19, stated that a terminal air-brake test was made before departure. As his train approached Fourth Street he could see the viaduet distinctly. He stopped his train at the stop sign for the I. C. crossing, then the train proceeded over the crossing. He had applied the air brakes preparatory to stopping at a stop sign for a railroad crossing located a short distance west of the crossing involved, and his train was moving at a speed of about 5 miles per hour when the collision occurred. Subsequent to the accident he said the engineman of No. 239 told him that he was confused and lost as to location.

Fireman Cain, of C. St. P. M. & C. No. 19, estimated that the speed of his train was about 5 miles per hour at the time of the accident.

Front Brakeman Roberts, of C. St. P. M. & O. No. 19, stated that the speed of his train was 1 or 2 miles per hour at the time of the accident.

Conductor Polaantier, of C. St. P. M. & O. No. 19, stated that a terminal air-brake test was made and the brakes were reported as functioning properly. He was on the engine as his train was passing Fourth Street viaduet. Looking back he saw the headlight of C. & N. W. No. 239 approaching. The weather was clear and he saw the C. & N. W. train collide with his train. He said that the speed of his train vas about 5 miles per hour at the time of collision.

Flagman Schimelpfenig, of C. St. P. M. & O. No. 19, stated that when his train stopped at Fourth Street viacuct he heard the whistle of the C. & N. W. engine sounded for Seventh Street, which is about 1,300 feet east of the point of accident. He was on the rear platform of his caboose when the C. & N. W. train passed at a speed of about 20 or 25 miles per hour. His own train was moving at a speed of 5 miles per hour.

Engineman Dickson, of C. & N. W. No. 239, stated that the air brakes were tested before leaving Hawarden, 43.1 miles west of Sioux City, and they functioned properly en route. When his train approached the point of accident the headlight on the motor car was burning brightly, and the train was moving at a speed of about 25 miles per hour. He intended to stop at the switch at Fourth Street viaduct for it to be lined for movement to Dace Street and the C. & N. W. connection. He was maintaining a lookout for the viaduct as a landmark, as he knew the location of the switch involved in relation to the viaduct. As his train approached the point where the accident occurred he saw a green light ahead, but being confused about his location he thought that it was a signal east of the viaduct and that the viaduct was about three blocks west of the light. He saw a train on the adjacent track and thought it was a switch engine with a cut of cars; he did not realize that it was a train moving on the C. St. P. M. & O. main track. He did not see the viaduct until his motor-car was passing under it, and it was then too late to take any action to stop his train short of the crossing involved.

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He did not remember any condition which might have obstructed his view. He had made three round trips as a student to learn the physical characteristics of the road in this territory; two round trips were made on Nos. 23 and 24, April 8 and 10; these trips were made in daylight. On June 13 he rode No. 2 and on June 25 hc rode No. 1; these trips were made at night. On student trips he had been able to see the viaduct plainly. He was examined June 13 on the I. C. operating miles and on June 22 received a gualification card to operate on the line between Wren and Sioux City. The trip involved was his first trip as engineman on this part of the railroad. He was familiar with the speed restrictions and knew that trains should proceed at restricted speed in the territory in which the accident occurred. He said that he was not sufficiently familiar with the territory to operate safely at night. A conductor who was deadheading on the motor-car from Hawardon to Nincteenth Street had informed him when the train reached Nineteenth Street: this was the last stop made prior to the accident. Engineman Dickson expressed the opinion that if a helper had been on the motor-car with him the accident would not have occurred.

Conductor Evans, of C. & N. W. Po. 239, stated that as his train approached Fourth Street viaduct it was moving at a speed of 25 miles per hour. This speed was too great for his train to stop at the switch. He proceeded to the vestibule to ascertain whether someone had opened the switch for his train to enter the line to Dace Street and the C. & N. W. connection. He saw the brakeman reach for the emergency cord to apply the brakes, but before either of them could pull the cord the accident occurred. Subsequent to the accident he observed that the switch was set in normal position, which was for movement to Nebraska Street Station; the laup was burning and was displaying a green aspect. He understood that his train was required to move at rostricted speed throughout a distance of 3,100 feet immediately east of the switch involved, but he was of the opinion that 25 miles per hour was not excessive if visibility vas unrestricted.

Brakeman Strong, of C. & N. W. No. 239, stated that as his train passed over Seventh Street he opened the trap door on the rear end of the coach preparatory to getting off to line the switch at Fourth Street to normal position after passage of his train. He observed that there was no reduction in speed, looked out to identify his location, and then reached for the emergency cord to apply the brakes, and as he did so the collision occurred. Bag\_ageman Hanson, of C.& N. W. No. 239, stated that it is his outy to Handle the switch at Fourth Street for his train to proceed to Dace Street and the C. & N. W. connection. At the time of the accident he was moving baggage to the doorway in readiness for unloading when his train reached the station. He was not aware of the location and did not think his train had reached the switch. The train was moving at a speed of about 20 miles per hour at the time of the accident.

Conductor Aeck, who was deadheading on C. & N. W. No. 239 on the night of the accident, stated that it is customary for him to get off at Nineteenth Street. Since Engineman Dickson was a new man on this run the deadheading conductor went to the motorcar at Hawarden and asked the engineman if he knew the location of Nineteenth Street. When the engineman replied that he did not, the deadheading conductor decided to ride in the engine-room to Nineteenth Street. He observed that the engineman complied not only with the speed restrictions by reducing speed to 25 miles per hour at Twenty-second Street, but also handled the motor very efficiently. The engineman did not ask for any information and appeared to be familiar with the territory.

According to data furnished by the C. & N. W., gas-electric motor-car 9915 was a 3-compartment unit. It was operated by one man from a control station located at the front and just to the right of the center-line of the car.

#### Discussion

According to the evidence, the C. St. P. M. & O. train had stopped for the I. C. crossing and was proceeding at a speed between 2 and 5 miles per hour when it was struck by the C. & N. W. train.

The engineman of the C. & N. W. train said that he became lost as to location and entered the turn-out at Fourth Street before he was aware that he was close to that point. This was his first trip in the charge of a train on this part of the railroad. He had been qualified to operate over this territory as an engineman after making three student trips in order to become familiar with the method of operation and the physical characteristics of the I. C. between Wren and Sioux City. Under special time-table instructions he was required to operate his train in this territory at restricted speed prepared to stop short of train or obstruction; however, the evidence indicated that the speed was about 25 miles per hour when his train approached the point of accident. The evidence also indicated that when the engineman realized his location the speed was such that his train could not be stopped in time to avert the accident. Had the engineman operated his train in compliance with time-table instructions undoubledly this accident would have been averted.

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Had supervisory officials of the I. C. given the engineman a thorough examination before qualifying him to operate in this territory, his unfamiliarity with the physical characteristics and the method of operation on this line would have been disclosed; if such action had been taken it is probable that this accident would have been averted.

### Conclusion

This accident was caused by failure to operate the train on the Illinois Central in accordance with rules governing the use of a railroad crossing at grade.

Respectfully submitted,

S. N. MILLS,

Director.