

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT OF THE DIRECTOR  
BUREAU OF SAFETY

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ACCIDENT OF THE  
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY

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FOND DU LAC, WIS.

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MARCH 28, 1933

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INVESTIGATION NO. 2263

SUMMARY

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Inv-2263

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Railroad: Minneapolis, St. Paul & Sault Ste. Marie  
Date: March 28, 1938  
Location: Fond du Lac, Wis.  
Kind of accident: Head-end collision  
Trains involved: Yard Engine : Freight extra  
Train numbers: : Extra 4018 West  
Engine numbers: 2622 : 4018  
Consist: Light : 47 cars, caboose  
Speed: 0-15 m.p.h. : 4-8 m.p.h.  
Track: 3<sup>o</sup> right curve and 0.75 percent descending grade for westbound trains.  
Weather: Clear  
Time: 4:15 p.m.  
Casualties: 3 injured  
Cause: Failure of yard engine to be operated under proper control within yard limits.

Inv-2263

April 19, 1938.

To the Commission:

On March 28, 1938, there was a head-end collision between a freight train and a yard engine on the Minneapolis, St. Paul & Sault Ste. Marie Railway at Fond du Lac, Wis., which resulted in the injury of three employees.

#### Location and method of operation

This accident occurred on the First Subdivision of the Fond du Lac Division, extending between Shops Yard, Wis., and Forest Park, Ill., a distance of 147.5 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and a manual block-signal system. The accident occurred on the main track, within yard limits, 39 feet east of bridge #155-A, which spans the west branch of Fond du Lac River. Approaching from the east there are several tangents and curves, followed by 309 feet of tangent, then a 3<sup>o</sup> right curve 812 feet long, on which the accident occurred at a point 224 feet from its eastern end. Approaching from the west there are also several tangents and curves, followed by 218 feet of tangent, and then the curve on which the accident occurred. The grade is 0.75 percent descending westward at the point of accident.

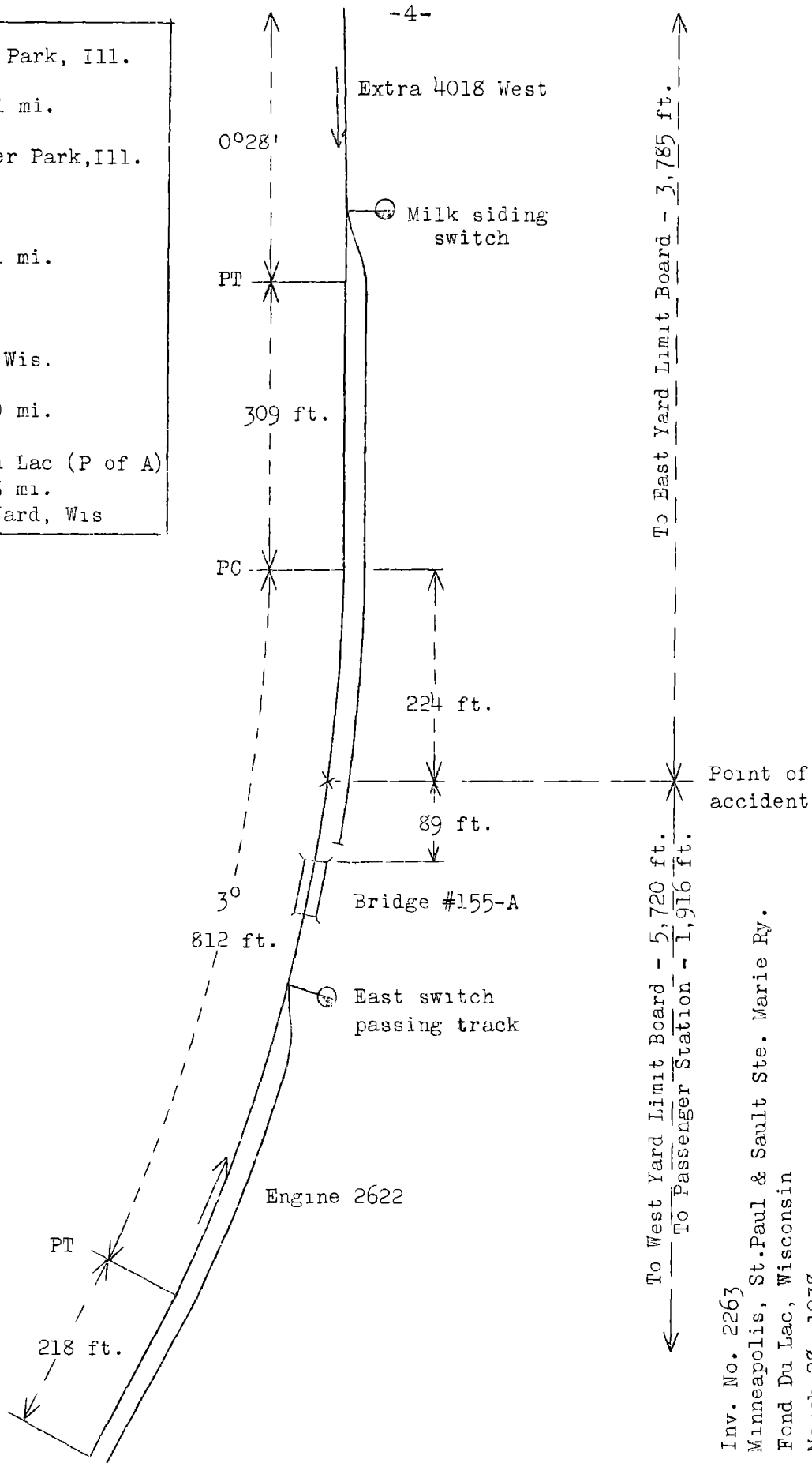
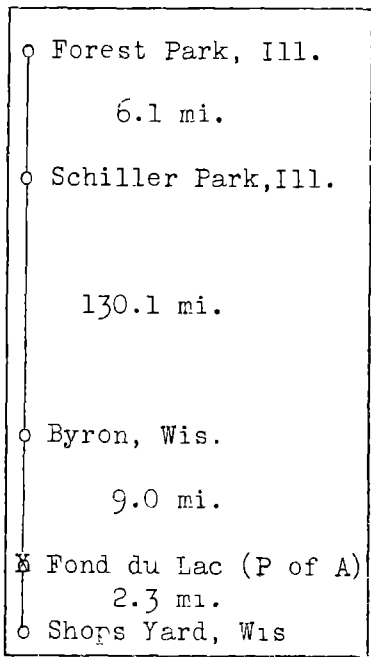
A train-order signal is located at the passenger depot, 1,916 feet west of the point of accident. The west yard-limit board is 5,720 feet west, and the east yard limit board 5,701 feet east, of the train-order signal.

A passing track and a stub-end spur known as the milk siding parallel the main track on the south; the milk siding is 635 feet long, and the switch leading thereto is facing-point for westward movements. The east switch of the passing track is 320 feet west, and the milk siding switch 570 feet east, of the point of accident. Bridge #155-A is 98 feet long.

Rule 93 of the book of rules of the operating department reads as follows:

93. Within yard limits the main track may be used, protecting against first class trains.

Second and third class and extra trains must move within yard limits at restricted speed unless the main track is seen or known to be clear.



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The location of yard limit boards will be designated by time-table.

Restricted speed is defined as "Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced."

On account of curvature, buildings and trees, the view when approaching the point of accident from either direction is restricted to about 650 feet.

The weather was clear at the time of the accident, which occurred about 4:15 p.m.

#### Description

Yard engine 2622, headed east, was in charge of Conductor McCallum and Engineman Spillman. Shortly after 4 p.m. while moving eastward, light, on the main track between Fond du Lac station and the milk siding it collided head-on with Extra 4018. The speed of the yard engine at the time of collision was variously estimated at from 0 to 15 miles per hour.

Extra 4018, a west-bound freight train, consisted of 46 loaded cars, 1 empty car and caboose, (2,294 tons), hauled by engine 4018, and was in charge of Conductor Winkler and Engineman Kronforst. This train departed from Schiller Park, its initial terminal, at 10:50 a.m., according to the train sheet, passed Byron, the last open office, at 4:01 p.m., and while proceeding through the yard limits at Fond du Lac, 9 miles beyond, it collided with yard engine 2622 while traveling at a speed estimated to have been between 4 and 8 miles per hour.

The rear tender truck of yard engine 2622 was derailed; the engine had been reversed and it moved backward from the point of collision to the east switch of the passing track. Engine 4018 stopped with its pilot just west of the bridge, about 190 feet west of the point of collision. None of the equipment in Extra 4018 was derailed. The employees injured were the engineman, the fireman and the head brakeman of Extra 4018 West.

#### Summary of evidence

Engineman Spillman, of yard engine 2622, stated that he was thoroughly familiar with the physical characteristics in the Fond du Lac district. On this tour of duty the air brakes on his engine had worked properly at all times. Sometime after 2:20 p.m. while in the vicinity of Fond du Lac station the conductor orally gave him a line-up, stating that No. 25, a west-bound freight train, would arrive at 3:46 or 3:47 p.m.; Engineman Spillman did

not inquire as to whether any other trains were coming. Shortly after 4 p.m., after No. 25 had gone, they left the west switch of the siding and proceeded eastward on the main track for the purpose of getting a car from the milk siding. The speed of his engine was about 15 miles per hour. While moving around the 30° curve to his left after passing the east switch of the siding Fireman Rosenthal, in his natural voice, said "hold her." Assuming from the nature of the warning that it was due to someone walking along the track, or for some similar reason, the engineman merely applied the independent engine brake and closed the throttle; because of the line-up he had received he did not figure that any train was coming at that moment. Shortly afterwards the fireman again said "hold her" and then the engineman applied the air brakes in emergency; at that time his engine was on the bridge. He said that his engine stopped just east of the bridge, and at that time Extra 4018 was about 30 or 40 feet away. He had succeeded in placing his engine in reverse, but did not get it started backward until after the impact. Engineman Spillman thought that he was complying with rule 93, and understood that under its requirements he was supposed to expect trains at any time; however, in this case he did not expect Extra 4018 because it was not included in the line-up information, and during the six month period he had been working on this job this extra was the first train that had come into Fond du Lac regarding which he did not receive advance information.

Fireman Rosenthal, of yard engine 2622, stated that approaching the point of accident the speed was about 15 miles per hour. The view across the inside of the curve was in favor of the fireman. When he was just about at the east switch of the passing track he told the engineman to "hold her," but as the engineman merely applied the independent brake and did not shut off at that time, and as the distance between the two opposing trains was rapidly closing up, the fireman prepared to get off and again warned the engineman, saying "hold her, there is somebody coming." He tried to get off, but as the engine was on the bridge he had to wait until it got across; just as soon as he cleared the bridge railing, he got off, and at that time the speed of his engine was about 6 or 7 miles per hour. He could not say whether the engineman reversed the engine, or whether the engine had come to a stop when the collision occurred, but after the accident it moved in backward motion to the east switch of the passing track. Fireman Rosenthal thought that considering the speed of his engine and the distance required to bring it to a stop, the provisions of rule 93 were not complied with; however, had the engineman applied the brakes in emergency when the first warning was given the engine would have stopped before reaching the bridge.

Brakeman Duffy, of yard engine 2622, was on the rear footboard of the tender. Approaching the bridge, he thought he heard a whistle; looking ahead he saw smoke and jumped off. At that time his engine was about two car lengths west of the bridge, and was moving at a speed of about 12 miles per hour. The collision occurred before he regained his feet and he did not know whether the yard engine was moving at the time of the accident. He thought the speed excessive and believed that if the yard engine had been operated in compliance with rule 93 the accident would have been averted. It has been the practice for a long time to get a line-up on trains before working in the vicinity of Fond du Lac station.

Brakeman Puls, of yard engine 2622, who was also on the rear footboard, got off about 20 feet east of the bridge; he was positive that the yard engine was moving eastward at the time of the impact. Brakeman Puls said that rule 93 was not complied with, as the speed was excessive in this instance. He corroborated Brakeman Duffy's statement that it had been the practice for many years to get a line-up on trains.

Conductor McCallum, of yard engine 2622, was not with his engine when the accident occurred, having remained with the caboose to finish work on his reports. The conductor said that he does not always get a line-up on trains at Fond du Lac, and he does not feel that it is his duty to do so, anymore than to ask the operator for information on No. 25, which was about the only train they figured on at that time of day.

Engineman Kronforst, of Extra 4018, stated that the air brakes were tested Schiller Park and functioned properly en route. Descending the hill approaching Fond du Lac he moved at reduced speed and at the C.M.St.P.& P.Ry. crossing, located about 900 feet east of the point of accident, the speed was about 7 miles per hour. Just before crossing Tompkins Street, located about 150 feet east of the point of accident, he saw the yard engine coming around the curve at a speed of about 15 miles per hour; at that time the yard engine was west of the east switch of the passing track. At first he thought that it was on the siding and would remain in the clear, but very soon afterwards, he realized that it was coming toward his train. The brakes on his train were already applied in service and he then moved the brake valve to emergency position; when his engine was about half way between Tompkins Street and bridge #155-A he jumped off. He estimated the speed of his train to have been about 6 or 7 miles per hour at the time of collision and that of the yard engine about the same as when he first saw it, 15 miles per hour. He had sounded the station whistle signal and also whistled for all

crossings at Fond du Lac. Engineman Kronforst thought he was complying with the requirements of rule 93, and that he could have stopped his train short of any stationary obstruction.

Fireman Keapock, of Extra 4018, stated that he was on the outside of the curve and unaware of anything wrong until the engineman called a warning of danger. The head brakeman got off first and the fireman jumped just as the impact occurred; at that time the gangway of the engine was 80 to 100 feet east of the bridge, and the speed of the train was about 4 miles per hour. He was of the opinion that his train was being operated strictly in compliance with the provisions of rule 93.

Head Brakeman Deitte, of Extra 4018, was also on the seat box on the left side of the cab and knew nothing of the impending collision until the engineman called a warning. The brakeman's estimate of the speed of his train approaching the scene of the accident agreed with that of the members of the engine crew, and he thought that his train was being operated in compliance with the terms of rule 93.

Conductor Winkler and Flagman Braun, of Extra 4018 West, were in the caboose; they estimated the speed to have been not more than 7 or 8 miles per hour when the collision occurred, and they also were of the opinion that their train was operated under proper control within yard limits and in accordance with the requirements of rule 93.

#### Discussion

The evidence indicates that the engineman of Extra 4018 was operating his train, down the hill within yard limits of Fond du Lac at low speed and that he could have stopped his train short of any stationary obstruction. All of the members of the extra were of the opinion that the train was being operated in compliance with the provisions of rule 93, and the maximum estimate of the speed made by them was 8 miles per hour.

On the other hand, the fireman and both brakemen of yard engine 2622 stated that their engine was not being operated in compliance with the provisions of rule 93, and that the speed was too high; the engineman, however, thought he was complying with rule 93, apparently depending upon information contained in the line-up from which he understood or assumed that the track was clear.

There was also a difference of opinion among members of the yard crew as to whether their engine was moving at the time of collision. The engineman stated that he had brought his engine to a stop just prior to the impact, and that he had reversed the



engine but had not succeeded in starting a westward movement at the time the collision occurred. However, one of the yard brakemen was positive that the yard engine was moving eastward at the time of the accident, while the freight engineman estimated its speed to have been about 15 miles per hour when the impact occurred.

It appears from the evidence that each train became visible to the crew of the other at about the same time. Because of the curvature the fireman of the yard engine was first to see the extra and he immediately warned the engineman but the latter did not make the maximum effort to stop until the warning was repeated.

#### Conclusion

This accident was caused by failure of the yard engine to be operated under proper control within yard limits.

Respectfully submitted,

W. J. PATTERSON,

Director.