INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2843

THE CHICAGO, BURLINGTON & QUINCY
RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT FAIRMONT, NEBR., ON

NOVEMBER 12, 1944

SUMMARY

Railroad:	Chicago, Burlington & Quincy	
Date:	November 12, 1944	
Location:	Fairmont, Nebr.	
Kind of accident:	Rear-end collision	
Trains involved:	Passenger	: Freight
Train numbers:	5	: 61
Engine numbers:	Diesel-electric 9900	: Diesel-electric 105
Consist:	3 cars	: 115 cars, caboose
Estimated speed:	5 m. p. h.	: 15 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system	
Track:	Single; tangent; level	
Weather:	Dense fog	
Time:	1:13 p. m.	
Casualties:	4 killed; 6 injured	
Cause:	Failure properly to control speed of following train in accordance with signal indications	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2843

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY

December 14, 1944.

Accident at Fairmont, Nebr., on November 12, 1944, caused by failure properly to control the speed of the following train in accordance with signal indications.

REPORT OF THE COMMISSION[1]

PATTERSON, Chairman:

On November 12, 1944, there was a rear-end collision between a passenger train and a freight train on the Chicago, Burlington & Quincy Railroad at Fairmont, Nebr., which resulted in the death of four passengers and the injury of six passengers.

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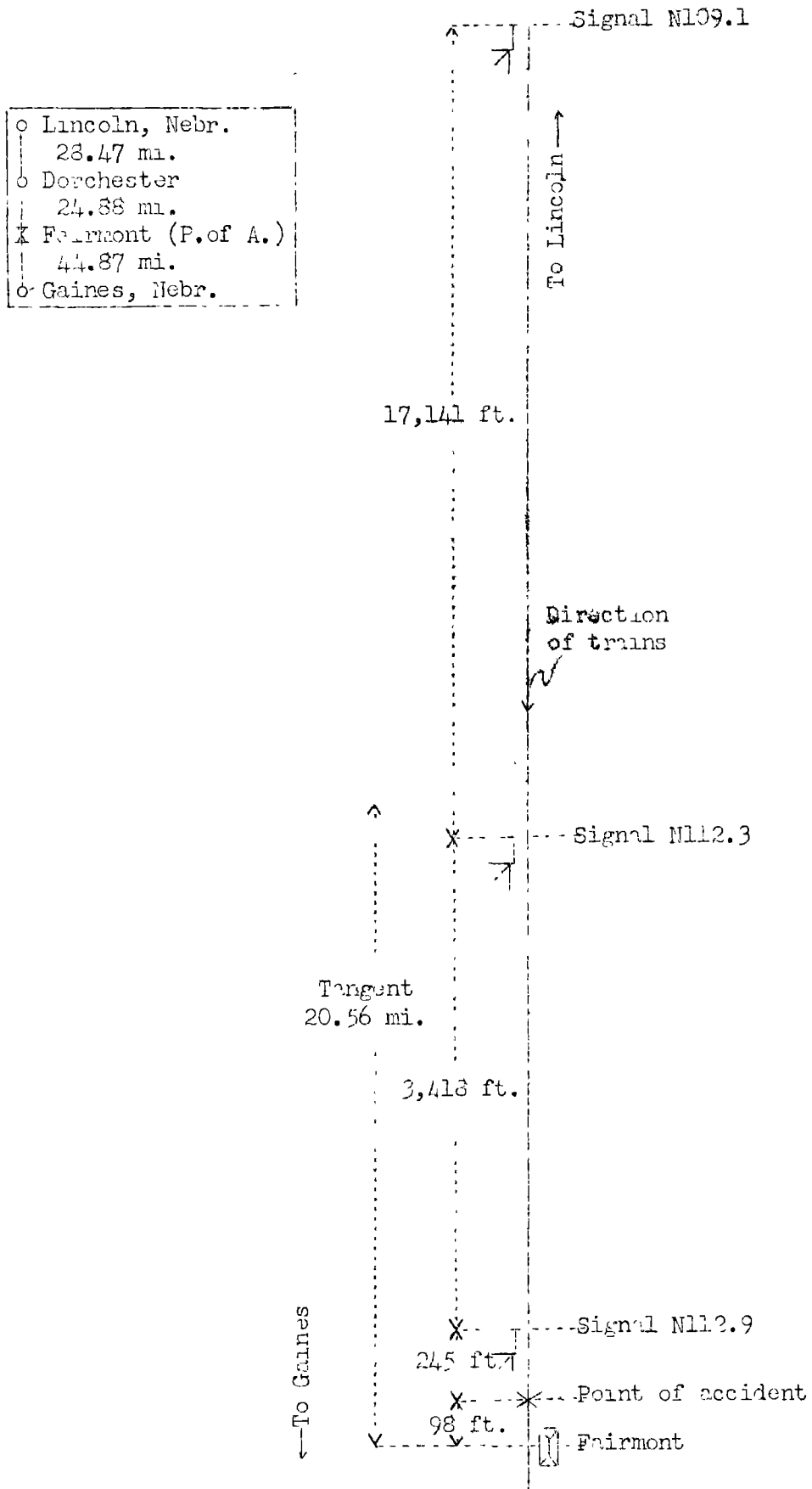
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Chairman Patterson for consideration and disposition.



Inv. No. 2843
Chicago, Burlington & Quincy Railroad
Fairmont, Nebr.
November 12, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the Lincoln Division designated as the Lincoln to Gaines Sub-division and extending westward from Lincoln to Gaines, Nebr., 98.22 miles. In the vicinity of the point of accident this was a single-track line over which trains were operated by timetable, train orders and an automatic block-signal system. The accident occurred on the main track at Fairmont, 53.35 miles west of Lincoln, at a point 98 feet east of the station. The main track was tangent throughout a distance of 20.56 miles east of this point and a considerable distance westward. The grade for west-bound trains was, successively, 0.10 percent ascending 1,800 feet, 0.36 percent ascending 2,500 feet, level 1,000 feet, and 0.30 percent ascending 1,000 feet, then it was level 1,025 feet to the point of accident and 575 feet beyond.

Automatic signals N109.1, N112.3, and N112.9, governing west-bound movements, were located, respectively, 20,804 feet, 3,663 feet, and 245 feet east of the point of accident. These signals were of the three-indication, color-light type, and were continuously lighted. The involved aspects and corresponding indications and names of these signals were as follows:

Signal	Aspect	Indication	Name
N109.1, N112.3	Yellow	Approach next signal prepared to stop	Approach-Signal
N112.9	Red, with number plate	Stop; then proceed	Stop and Proceed-Signal

The controlling track circuits were so arranged that, when a west-bound train occupied the main track in the block immediately west of signal N112.9, signal N112.9 would display stop-and-proceed and signals N112.3 and N109.1 would display approach-next-signal-prepared-to-stop.

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.

11. A train finding a fusee burning on or near its track must stop and extinguish the fusee, and then proceed at restricted speed.

14. ENGINE WHISTLE SIGNALS.

Note.--The signals prescribed are illustrated by "o" for short sounds; "___" for longer sounds.

* * *

SOUND.	INDICATION.
* * *	
(e) ___ ___ ___ ___ ___	Flagman may return from east or north, as prescribed by Rule 99.
* * *	

15. The explosion of two torpedoes is a signal to reduce speed and look out for a train ahead or obstruction. The explosion of one torpedo will indicate the same as two, but the use of two is required.

* * *

34. All members of train and engine crews must, when practicable, communicate to each other by its name the indication of all signals affecting the movement of their train.

35. The following signals will be used by flagmen:

Day signals--A red flag,
Torpedoes and
Fusees.

Night signals--A red light,
A white light,
Torpedoes and
Fusees.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees.

When recalled and safety to the train will permit he may return.

When the conditions require, he will leave the torpedoes and a lighted fusee.

* * *

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used. Conductors and enginemen are responsible for the protection of their trains.

509. * * *

* * *

When a train is stopped by a Stop and Proceed-signal it may proceed--

(A) On single track, at once at restricted speed, expecting to find a train in the block, broken rail, obstruction or switch not properly lined.

* * *

The maximum authorized speed for the freight train was 55 miles per hour.

Description of Accident

No. 5, a west-bound first-class passenger train, consisted of four articulated streamlined units. The first unit, No. 9900, consisted of a Diesel-electric power compartment, a railway post office compartment and a baggage compartment; the second unit was a baggage car; the third unit was a coach; and the fourth unit was a coach and lounge car. This train departed from Dorchester, 24.88 miles east of Fairmont, at 12:22 p. m., 1 minute late, and stopped at Fairmont at 1:02 p. m. About 11 minutes later, after this train had moved about 20 feet westward, the rear end was struck by No. 61.

No. 61, a west-bound second-class freight train, consisting of Diesel-electric engine 105, of the 4-unit type, 115 cars and a caboose, passed Dorchester about 12:37 p. m., 5 hours 31 minutes late, passed signals N109.1 and N112.3, which displayed approach-next-signal-prepared-to-stop, passed signal N112.9, which displayed stop-and-proceed, and while moving at an estimated speed of 15 miles per hour it struck No. 5 at a point 245 feet west of signal N112.9.

The force of the impact crushed the rear portion of the rear car of No. 5 a distance of about 21 feet. The front end of the first Diesel-electric unit of No. 61 was slightly damaged.

There was a dense fog at the time of the accident, which occurred about 1:13 p. m.

Discussion

Under the rules of this carrier governing operation in automatic block-signal territory an approach indication requires that the speed of a train must be so controlled that the train can be stopped at the next signal. A stop-and-proceed indication requires a train to stop at the signal, then it may proceed but must be prepared to stop short of a train, an obstruction or anything that may require the speed of a train to be reduced. All the employees concerned so understood.

No. 5 stopped at the station at Fairmont at 1:02 p. m. About 11 minutes later, after this train had started and moved westward about 20 feet, the rear end was struck by No. 61 about 245 feet west of signal N112.9, which displayed stop-and-proceed.

The members of the train crew of No. 5, except the flagman, were engaged in handling mail, baggage and express at the station when they observed the following train approaching about 700 feet

distant. The flagman assisted passengers to detrain, and then, about 1 minute after his train had stopped, he proceeded eastward to provide flag protection. About 9 minutes later, after the flagman had reached a point about 300 feet to the rear of his train, the engine whistle signal recalling him was sounded. He was returning to his train when he heard a train approaching from the east. Then he ran back toward the approaching train and was giving stop signals with a lighted fusee from a point about 300 feet to the rear of his train when the engine of No. 61 passed him. The conductor and the flagman of No. 5 thought the flag protection furnished their train was sufficient.

As No. 61 was approaching signal N109.1, located 17,141 feet east of signal N112.3, the speed was about 35 miles per hour. The brakes had functioned properly at all points where used en route. The enginemen and the front brakeman were maintaining a lookout ahead. Their view of the track ahead was restricted to a distance of about 700 feet because of dense fog. Signal N109.1 displayed approach-next-signal-prepared-to-stop, and the employees on the engine called the indication. When the engine was in the vicinity of signal N112.3, located 3,418 feet east of signal N112.9, the speed was about 25 miles per hour. This signal displayed approach-next-signal-prepared-to-stop, and the employees on the engine called the indication. When the engine reached a point about 500 feet east of signal N112.9 the engineer was preparing to make a service brake-pipe reduction and he observed, simultaneously, stop signals being given with a lighted red fusee and signal N112.9 displaying stop-and-proceed, and he immediately moved the brake valve to emergency position. The speed of No. 61 was about 15 miles per hour when the collision occurred. The engineer of No. 61 said he thought that when his train was approaching Fairmont No. 5 would be far enough west of signal N112.9 for this signal to display approach instead of stop-and-proceed. If the speed of No. 61 had been controlled in accordance with the indications displayed by the signals involved, this accident would not have occurred.

Cause

It is found that this accident was caused by failure properly to control the speed of the following train in accordance with signal indications.

Dated at Washington, D. C., this fourteenth day of December, 1944.

By the Commission, Chairman Patterson.

W. P. BARTEL,
Secretary.

(SEAL)