

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3313
GREAT NORTHERN RAILWAY COMPANY
IN RE ACCIDENT
AT ASSINNIBOINE, MONT., ON
JANUARY 16, 1950

SUMMARY

Date: January 16, 1950

Railroad: Great Northern

Location: Assiniboine, Mont.

Kind of accident: Head-end collision

Trains involved: Freight : Passenger

Train numbers: Extra 105 East : 235

Engine numbers: Diesel-electric units 273-A and 268-B : Diesel-electric unit 208

Consists: 49 cars, caboose : 3 cars

Estimated speeds: Standing : 15 m. p. h.

Operation: Timetable and train orders

Track: Single; 2° curve; 0.62 percent descending grade eastward

Weather: Clear

Time: 8:35 a. m.

Casualties: 29 injured

Cause: Inferior train occupying main track on time of opposing superior train without flag protection

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3313

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

GREAT NORTHERN RAILWAY COMPANY

April 11, 1950

Accident at Assinniboine, Mont., on January 16, 1950,
caused by an inferior train occupying the main track
on the time of an opposing superior train without
flag protection.

REPORT OF THE COMMISSION¹

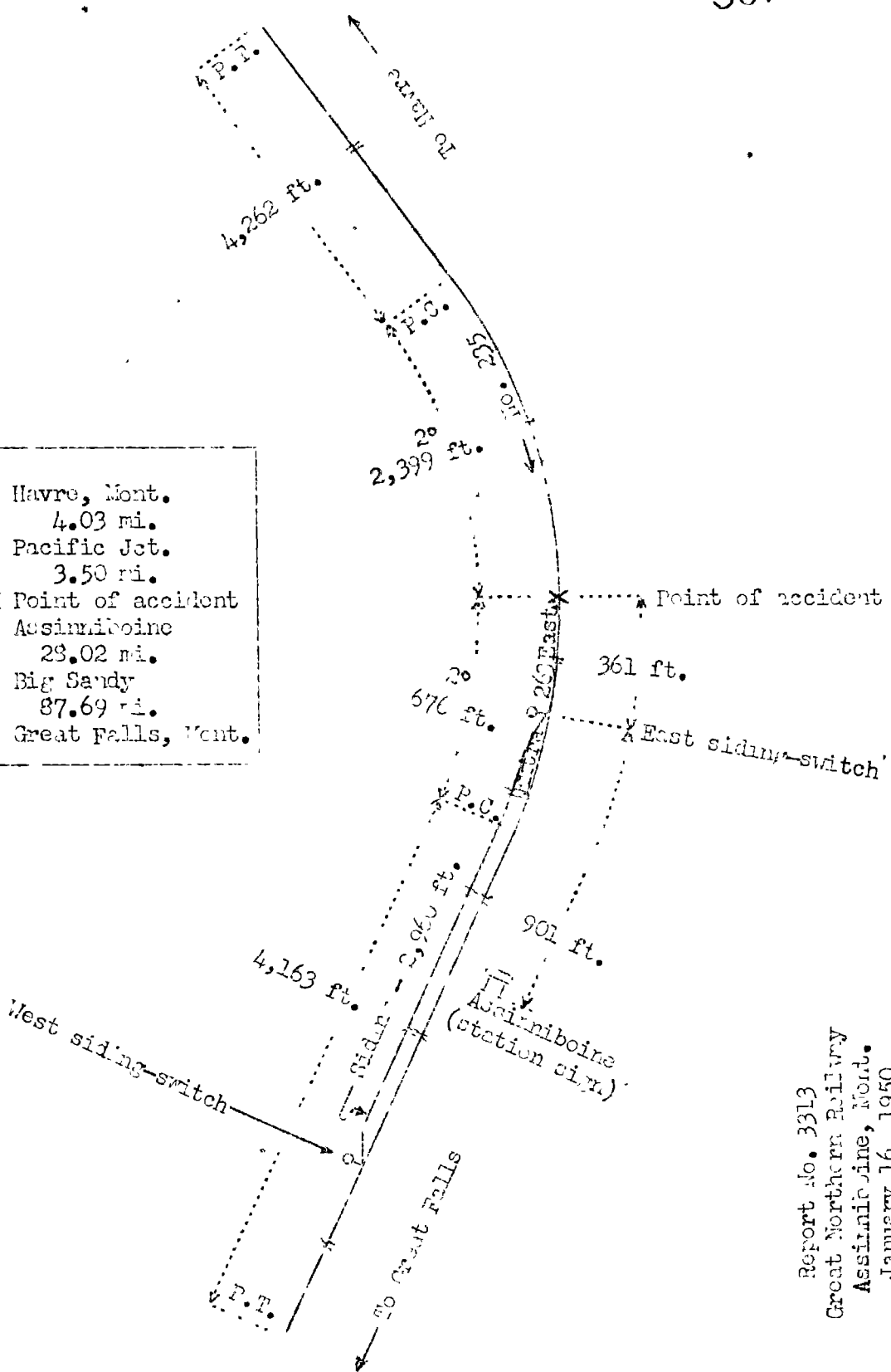
PATTERSON, Commissioner:

On January 16, 1950, there was a head-end collision between a freight train and a passenger train on the Great Northern Railway at Assinniboine, Mont., which resulted in the injury of 21 passengers, 1 person carried under contract, 2 dining-car employees, and 5 train-service employees. This accident was investigated in conjunction with a representative of the Montana Board of Railroad Commissioners and Public Service Commission.

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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 Havre, Mont. 4.03 mi.
- o Pacific Jet. 3.50 mi.
- X Point of accident Assiniboine 28.02 mi.
- o Big Sandy 87.69 mi.
- o Great Falls, Mont.



Report No. 3313
 Great Northern Railway
 Assiniboine, Mont.
 January 16, 1950

Location of Accident and Method of Operation

This accident occurred on that part of the Butte Division extending between Great Falls and Havre, Mont., 123.24 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 Assinniboine, 7.53 miles west of Havre, a siding 2,960 feet in length parallels the main track on the north. The east switch of this siding is 901 feet east of the station sign. The accident occurred on the main track at a point 361 feet east of the east siding-switch. From the west there are, in succession, a tangent 4,163 feet in length and a 2° curve to the left 676 feet to the point of accident and 2,390 feet eastward. From the east there are, in succession, a tangent 4,262 feet in length and the curve on which the accident occurred. The grade for east-bound trains is, successively, 0.10 percent ascending 1,000 feet, 0.183 percent ascending 1,350 feet, 0.209 percent ascending 165 feet, 0.209 percent descending 284 feet, and 0.62 percent descending 76 feet to the point of accident. The grade for west-bound trains varies between 0.35 percent and 0.62 percent ascending throughout a distance of 2 miles immediately east of the point of accident.

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

S-5. Unless otherwise specified, the time applies at the switch where an opposing train enters the siding;
* * *

17. The headlight * * * must be extinguished when a train turns out to meet another train and has stopped clear of the main track * * *

* * *

S-17. * * *

Until the headlight of a train turned out to meet another train is extinguished, it is an indication that the main track is obstructed. The opposing train must approach prepared to stop before passing the headlight and if the head end of train is clear of main track, may proceed only at restricted speed to the point where the main track may be obstructed.

17(C). On * * * diesel-electric * * * powered trains, when full power headlight is not required it must be burning dim during daylight hours, except as prescribed by Rule 17.

35. The following signals will be used by flagmen:

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

* * *

73. Extra trains are inferior to regular trains.

S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided. * * *

S-89. At meeting points, the inferior train must take the siding and clear the time of the superior train not less than five minutes * * *

The inferior train must pull into the siding when practicable. If necessary to back in, it must be protected as prescribed by Rule 99.

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 * * *

* * *

The front of the train must be protected in the same way when necessary by the forward brakeman, fireman, or other competent employe.

* * *

The maximum authorized speeds were 55 miles per hour for the passenger train and 35 miles per hour for the freight train.

Description of Accident

Extra 263 East, an east-bound freight train, consisted of Diesel-electric units 263-A and 263-B, coupled in multiple-unit control, 49 cars and a caboose. This train departed from Big Sandy, the last open office, 28.02 miles west of Assinniboine, at 6:05 a.m. and stopped on the main track at Assinniboine about 8:23 a.m., with the front of the first Diesel-electric unit about 300 feet east of the east siding-switch. Several minutes later it moved eastward and stopped with the front of the first Diesel-electric unit 361 feet east of the east siding-switch. About 8:35 a.m. it was struck by No. 235.

No. 235, a west-bound first class passenger train, consisted of Diesel-electric unit 228, one mail-baggage car, one coach, and one cafe-parlor car, in the order named. All cars were of steel-underframe construction. This train departed from Havre, the last open office, at 8:20 a.m., on time, and while moving at an estimated speed of 15 miles per hour it struck Extra 263 East.

None of the equipment of either train was derailed. The first car of Extra 263 East was badly damaged, and both Diesel-electric units and the second car were somewhat damaged. The first car of No. 235 was badly damaged, and the Diesel-electric unit and the second and third cars were somewhat damaged.

The engineer of Extra 263 East, and the conductor, the engineer, the front brakeman, and the flagman of No. 235 were injured.

The weather was clear at the time of the accident, which occurred about 8:35 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 8.6 trains.

Discussion

Under the rules, the schedule time of a west-bound train at Assinniboine applies at the west switch of the siding. No. 235 was due to leave Pacific Jct., 3.5 miles east of Assinniboine, at 8:27 a.m., and to leave Assinniboine at 8:32 a.m. Unless flag protection was provided as prescribed by rule No. 99, Extra 263 East was

required to be clear of the main track between Pacific Jct. and the west siding-switch at Assinniboine not later than 8:22 a.m. If it entered the siding at Assinniboine at the west switch, it was required to be clear of the main track not later than 8:27 a.m.

As Extra 263 East was approaching Assinniboine the speed was about 30 miles per hour. The brakes of this train had been tested and had functioned properly when used en route. The headlight was lighted. The engineer and the fireman were in the control compartment at the front of the first Diesel-electric unit, the front brakeman was in the control compartment at the rear of the second Diesel-electric unit, and the conductor and the flagman were in the cupola of the caboose. The conductor and the flagman said that the train departed from Laredo, 7.38 miles west of Assinniboine, about 8:05 a.m. and they considered that there was ample time to proceed to Assinniboine to clear the time of No. 235 in compliance with the rules. As the train was approaching Assinniboine, their view from the cupola was somewhat obscured by swirling snow along the sides of the train, and they were unable to determine their exact location until the front of the train was in the vicinity of the west siding-switch. When it became apparent that the train would not be stopped short of the switch, the conductor opened the conductor's valve. The train stopped with the front end about 300 feet east of the east siding-switch. After the conductor closed the conductor's valve so that the brakes could be released, he proceeded toward the front of the train. Immediately after the brakes were released, the conductor and the flagman heard a proceed signal sounded on the pneumatic horn of the Diesel-electric unit, then the train moved forward. The flagman at once opened the conductor's valve again, which action caused the brakes to be applied a second time. He closed the valve and then, from the top of the caboose, gave back-up signals with a red flag. The conductor continued toward the front of the train and used a lighted fusee to give back-up signals. He had reached a point about 275 feet west of the front of the train when the collision occurred. The engineer was injured in the accident and could not be questioned during this investigation. The fireman and the front brakeman said that the engineer had not discussed with them the matter of clearing the main track for No. 235, and they both overlooked the fact that their train was occupying the main track on the time of an opposing superior train. Their train had been delayed at several points en route because of overheated journals.

When the brakes were applied at Assinniboine by the use of the conductor's valve, the front brakeman assumed that another journal had become overheated. He assembled tools and prepared to assist the other members of the train crew in making necessary repairs. When he alighted from the Diesel-electric unit he observed the signals being given by the conductor and the flagman. The fireman also observed the signals at the same time. The fireman said the engineer attempted to start the train in backward motion, but before the brake pipe was charged sufficiently to release the brakes to permit the train to be moved westward, the enginemen and the front brakeman observed the approach of No. 235. The front brakeman then ran toward the approaching train and gave stop signals with a red flag. He had reached a point about 150 feet east of the front of his train when No. 235 passed him.

As No. 235 was approaching the point where the accident occurred the speed was about 50 miles per hour. The enginemen were maintaining a lookout ahead from their positions in the control compartment at the front of the Diesel-electric unit, and the members of the train crew were in various locations throughout the cars of the train. The brakes of this train had been tested and had functioned properly when used en route. When the train was about 0.9 mile east of the east siding-switch at Assinniboine, the enginemen observed Extra 263 East, which appeared to be standing between the switches of the siding at that station. The headlight of Extra 263 East was lighted, and the engineer of No. 235 initiated a service brake application. Because of curvature of the track, the enginemen did not become aware that Extra 263 East was occupying the main track east of the east siding-switch until their train was about 750 feet distant from the front end of Extra 263 East. The engineer immediately initiated an emergency brake application, and the speed of the train was reduced to about 15 miles per hour when the collision occurred.

Cause

It is found that this accident was caused by an inferior train occupying the main track on the time of an opposing superior train without flag protection.

Dated at Washington, D. C., this eleventh day of April, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.