

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3681
CHICAGO AND NORTH WESTERN RAILWAY COMPANY
IN RE ACCIDENT
AT BALATON, MINN., ON
MARCH 11, 1956

- 2 -

SUMMARY

Date:	March 11, 1956	
Railroad:	Chicago and North Western	
Location	Balaton, Minn.	
Kind of accident:	Rear-end collision	
Trains involved	Passenger	. Passenger
Train numbers	518	519
Locomotive numbers:	Diesel-electric unit 0-167	: Diesel-electric unit 5030-A
Consists	5 cars	6 cars
Estimated speeds:	Standing	. 30 m. p. h.
Operation.	Timetable and train orders	
Track:	Single; tangent; 0.22 percent descending grade westward	
Weather	Clear	
Time	11.12 p. m.	
Casualties:	7 injured	
Cause.	Failure to provide adequate protection for preceding train	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3681

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

CHICAGO AND NORTH WESTERN RAILWAY COMPANY

April 30, 1956

Accident at Balaton, Minn., on March 11, 1956, caused by failure to provide adequate protection for the preceding train.

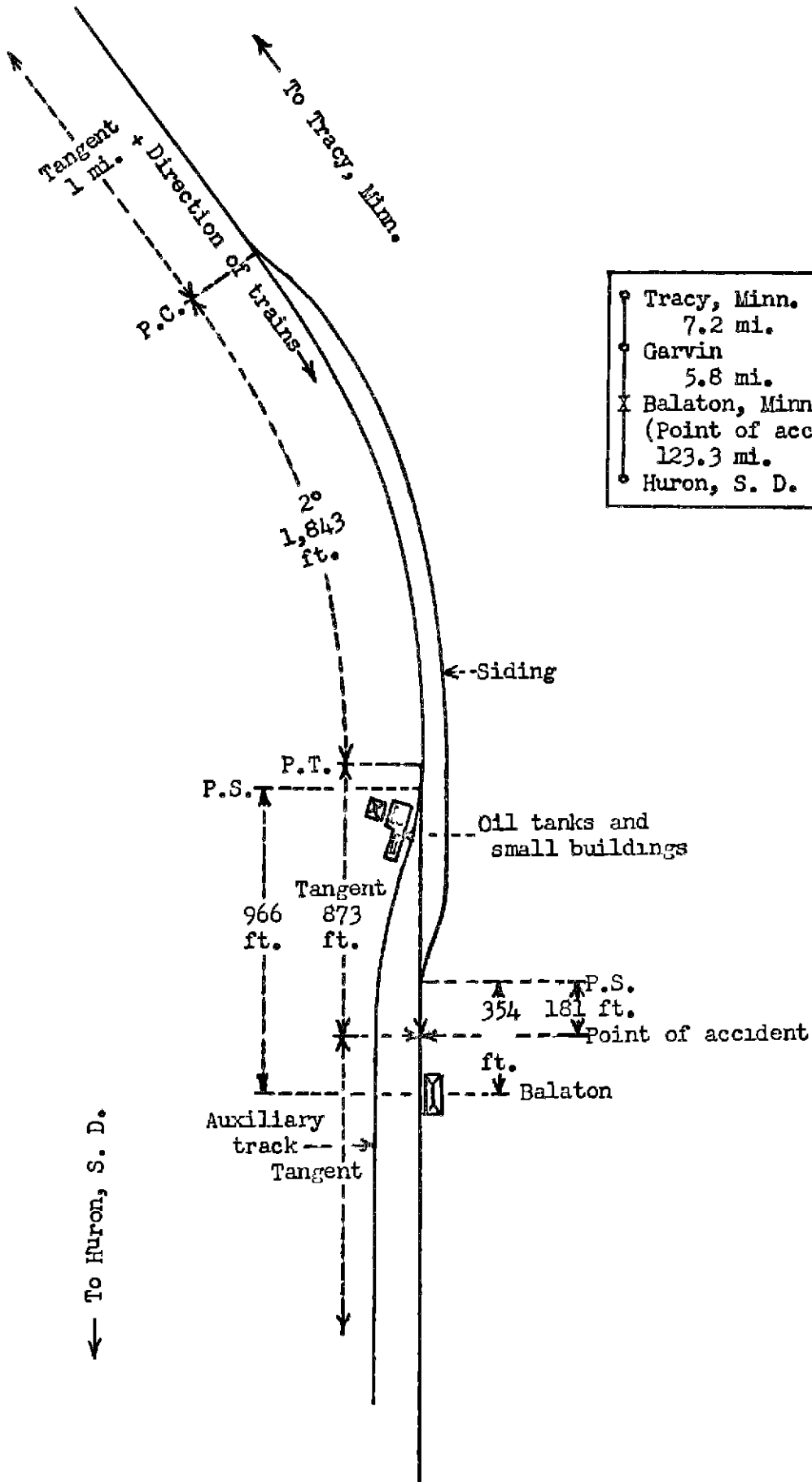
REPORT OF THE COMMISSION¹

CLARKE, Commissioner:

On March 11, 1956, there was a rear-end collision between two passenger trains on the Chicago and North Western Railway at Balaton, Minn., which resulted in the injury of two passengers, two dining-car employees, and three train-service employees. This accident was investigated in conjunction with a representative of the Minnesota Railroad and Warehouse Commission.

1

Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



○	Tracy, Minn.	7.2 mi.
○	Garvin	5.8 mi.
X	Balaton, Minn.	(Point of accident)
		123.3 mi.
○	Huron, S. D.	

Report No. 3681
 Chicago and North Western Railway
 Balaton, Minn.
 March 11, 1956

Location of Accident and Method of Operation

This accident occurred on that part of the Dakota Division extending between Tracy, Minn., and Huron, S. Dak., 136.3 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Balaton, Minn., 13.0 miles west of Tracy, an auxiliary track parallels the main track on the north and a siding parallels the main track on the south. The east auxiliary-track switch and the west siding-switch are, respectively, 966 feet and 354 feet east of the station. The accident occurred on the main track at a point 181 feet west of the west siding-switch. From the east there are, in succession, a tangent more than 1 mile in length, a 2° curve to the right 1,843 feet, and a tangent 873 feet to the point of accident and a considerable distance westward. The grade for west-bound trains is 0.33 percent ascending a distance of 2,800 feet and 0.22 percent descending 698 feet to the point of accident.

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

35. The following signals will be used by flagmen:

* * *

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

91. Unless some form of block signals is used, the time space to be maintained between trains in the same direction will be indicated by special rule on each division time-table. This rule will not relieve trainmen from observing all rules in regard to the protection of their trains.

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 fusces. * * *

Timetable special instructions, as amended by a general order, read in part as follows:

* * * trains will be spaced 10 minutes apart, except that a train must not follow a passenger train within 15 minutes.

- 6 -

The maximum authorized speed for passenger trains is 59 miles per hour.

Description of Accident

No. 515, a west-bound first-class passenger train, consisted of Diesel-electric unit O-167, one mail car, three baggage cars, and one coach, in the order named. All cars were of all-steel construction. According to the dispatcher's record of the movement of trains, this train departed from Tracy, the last open office, at 10:45 p. m., 6 hours 15 minutes late. It stopped at the station at Balaton about 11:08 p. m. with the rear end 181 feet west of the west siding-switch. About 4 minutes later the rear end was struck by No. 519.

No. 519, a west-bound first-class passenger train, consisted of Diesel-electric unit 5030-A, one baggage-tap car, three coaches, one sleeping car, and one baggage-mail car, in the order named. The first four cars were of light-weight construction, and the other cars were of conventional all-steel construction. According to the dispatcher's record of the movement of trains, this train departed from Tracy at 10:55 p. m., 1 hour 26 minutes late. While it was moving at an estimated speed of 30 miles per hour it struck the rear end of No. 515.

No. 515 was moved westward a distance of approximately 90 feet by the force of the impact. The rear car was overturned to the north and stopped immediately north of the main track and parallel to it. It was destroyed. The rear end of the fourth car was derailed, and this car stopped upright and in line with the track. It was considerably damaged. The third car was destroyed, and the first and second cars were slightly damaged. No. 519 stopped with the front of the locomotive 131 feet west of the point of collision. None of the equipment of this train was derailed. The front end of the locomotive was badly damaged.

The engineer, the conductor, and the flagman of No. 519 were injured.

The weather was clear at the time of the accident, which occurred about 11:12 p. 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 7.27 trains.


The rear car of No. 515 was equipped with a signal device which was designed to display an oscillating red light to the rear when operated manually or when operated automatically by a brake-pipe reduction of predetermined amount. Ordinarily this device was used to provide additional rear-end protection when the train was standing or moving under circumstances in which it might be overtaken, but on the day of the accident the device was inoperative.

Discussion

The schedule time of No. 519 between Tracy and Huron is 1 hour 15 minutes less than that of No. 515. On those occasions when No. 515 is overtaken by No. 519, the crew of No. 515 ordinarily lets No. 519 pass. Before No. 515 departed from Tracy on the day of the accident the operator told the conductor that No. 519 should arrive at Tracy about 10:50 p. m.

On the day of the accident No. 515 departed from the station at Tracy at 10:40 p. m. It stopped at a fueling station approximately 825 feet west of the station to fuel the locomotive, and departed from the latter point at 10:45 p. m. Station work was performed at Garvin, 7.2 miles west of Tracy, and at Balaton. The train crew of this train consisted of a conductor, a brakeman, and a train baggageman. The brakeman was regularly assigned to handle mail at stations. When the train stopped at Balaton the conductor immediately lighted a red fusee and alighted from the rear end of the rear car. The markers at the rear end of the train were lighted. The conductor proceeded eastward to provide protection, and he said that when he reached a point about 600 feet east of the rear end of his train he saw the headlight of No. 519 at a distance of 2 or 3 miles. He continued eastward and gave stop signals with the fusee. He said that his signals were not acknowledged, and that No. 519 passed him with no apparent reduction in speed. He thought he had reached a point 1,200 or more feet east of the rear end of his train when No. 519 passed. The other members of the crew estimated that their train had been standing at Balaton between 3 and 5 minutes when the accident occurred.

Before No. 519 departed from Tracy the conductor informed the engineer that No. 515 had departed at 10:40 p. m. No. 519 departed from the station at 10:55 p. m. The brakes of the train had been tested at Tracy, and they functioned properly when used after leaving Tracy. The headlight and the oscillating white headlight were lighted brightly. As



- 8 -

this train was approaching Balaton the speed was about 50 miles per hour. The enginemen were maintaining a lookout ahead from the control compartment at the front of the locomotive, and the members of the train crew were in the cars of the train. The enginemen said they expected to overtake No. 515 after leaving Tracy, and as the train approached Balaton they watched for a fusee or the reflection of a fusee. They said that there was none visible, and when the train reached a point between 1-1/2 miles and 1 mile east of Balaton they decided that No. 515 had departed. They said that as the locomotive was leaving the west end of the curve immediately east of the point of accident they saw stop signals being given with a lighted fusee. The engineer immediately made an emergency application of the brakes, and he estimated that the speed had been reduced to about 30 miles per hour when the collision occurred. Both the engineer and the fireman said that the stop signals were given from a point between the auxiliary track switch and the rear end of No. 515.

As a west-bound train moves on the curve east of the station at Balaton the enginemen's view of the track in the vicinity of the station is restricted by several oil tanks and small buildings located approximately 150 feet west of the auxiliary-track switch and 30 feet north of the main track. In observations made after the accident occurred it was found that an object at the point of accident is visible throughout a maximum distance of 1,455 feet immediately east of that point.

According to the dispatcher's record of the movement of trains, the time interval between the departure of No. 515 and the departure of No. 519 at Tracy was 10 minutes instead of the 15 minutes required by the rules and special instructions. The operator at Tracy could see the rear end of No. 515 while that train was standing at the fueling station, and he reported the train to the dispatcher as having departed from Tracy at 10:45 p. m., the time it departed from the fueling station. The conductor of No. 519 went on duty at Tracy at 10:15 p. m. and received his train orders and clearance before No. 515 departed from the station. He saw No. 515 depart from the station, and when No. 519 arrived, at 10:46 p. m., he informed the engineer that No. 515 had departed at 10:40 p. m. No. 519 departed at 10:55 p. m., 15 minutes later. No. 519 did not stop at the fueling station.

- 9 -

In this territory trains are operated by timetable and train orders only. At open stations and at points at which one train is passed by another, the following train is spaced by the time-interval method. Between 8 a. m. Sundays and 7:15 a. m. Mondays there are no open offices between Tracy and Huron, and except for the spacing at the terminals and at passing points the only protection between trains moving in the same direction is that provided by the crew of the preceding train.

Cause

This accident was caused by failure to provide adequate protection for the preceding train.

Dated at Washington, D. C., this thirtieth day of April, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. MCCOY,
Secretary.