INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3500

NORTHERN PACIFIC RAILWAY COMPANY
AND
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE
RAILROAD COMPANY

IN RE ACCIDENT

NEAR CARRINGTON, N. DAK., ON

DECEMBER 24, 1952

SUMMARY

Date:	December 24, 1952	
Railroads:	Northern Pacific	: Minneapolis, St. Paul & Sault Ste. Marie
Location:	Carrington, N. Dak.	
Kind of accident:	Side collision	
Trains involved:	Passenger	: Passenger
Train numbers:	157	: 12
Engine numbers:	2154	: 706
Consists:	2 cars	: 3 cars
Estimated speeds:	7 m. p. h.	: 12 m. p. h.
Operation:	Timetable and train orders	: Timetable and train orders, and manual block system for following movements only
Tracks:	Single; 0°30' curve; 0.3 percent descending grade westward	: Single; tangent level
Weather:	Cloudy	
Time:	1: 13 p. m.	
Casualties:	1 killed; 15 injured	
Cause:	Failure properly to control speed of both trains approaching railroad crossing at grade	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3500

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

NORTHERN PACIFIC RAILWAY COMPANY
AND
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE
RAILROAD COMPANY

March 9, 1953

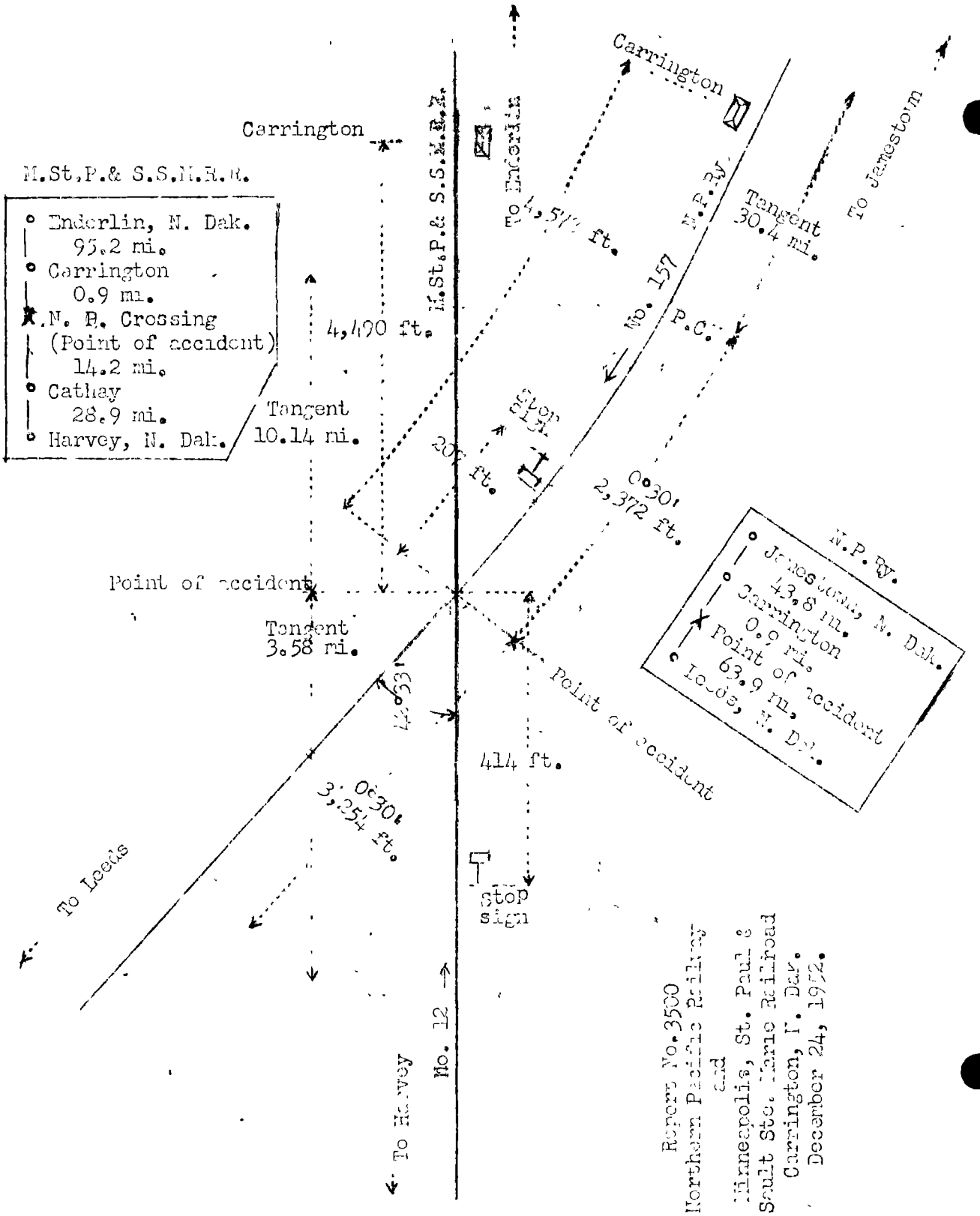
Accident near Carrington, N. Dak., on December 24, 1952, caused by failure properly to control the speed of both trains approaching a railroad crossing at grade.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On December 24, 1952, there was a side collision between a passenger train on the Northern Pacific Railway and a passenger train on the Minneapolis, St. Paul & Sault Ste. Marie Railroad near Carrington, N. Dak., which resulted in the death of one train-service employee, and the injury of eight passengers, one railway-mail clerk, one express messenger-baggageman and five train-service employees. This accident was investigated in conjunction with a representative of the Public Service Commission of North Dakota.

[1] 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.



Report No. 3500
Northern Pacific Railway
and
Minneapolis, St. Paul &
Sault Ste. Marie Railroad
Carrington, N. Dak.
December 24, 1952.

Location of Accident and Method of Operation

This accident occurred at the intersection of the Northern Pacific Railway and the Minneapolis, St. Paul & Sault Ste. Marie Railroad near Carrington, N. Dak. The crossing is located on that part of the Fargo Division of the N.P. extending between Jamestown and Leeds, N. Dak., 108.6 miles, and on that part of the Minnesota Division of the M.St.P.& S.S.M. extending between Harvey and Enderlin, N. Dak., 139.2 miles. The crossing is 44.7 miles west of Jamestown and 43.1 miles east of Harvey. At Carrington the N.P. station is located 4,573 feet east of the crossing and the M.St.P.& S.S.M. station is located 4,490 feet east of the crossing. In the vicinity of the point of accident each is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use on the N.P., but a manual-block system for following movements only is used on the M.St.P.& S.S.M. The N.P. track extends north and south. The M.St.P. & S.S.M. track extends southeast and northwest and intersects the N.P. track at an angle of 42°33'. Timetable directions on both lines are east and west and these designations are used in this report. From the east on the N.P. the track is tangent throughout a distance of 30.4 miles and then there is a 0°30' curve to the right 2,372 feet to the crossing and 3,254 feet westward. From the east the grade is, successively, 0.09 percent descending throughout a distance of 1,000 feet, level 950 feet and 0.30 percent descending 823 feet to the crossing. From the west on the M.St.P.& S.S.M. the track is tangent throughout a distance of 3.58 miles west of the crossing and 10.14 miles eastward. The grade is level throughout a distance of 1.10 miles immediately west of the crossing and 893 feet eastward.

A stop sign governing west-bound movements on the N.P. is located 207 feet east of the crossing, and a stop sign governing east-bound movements on the M.St.P.& S.S.M. is located 414 feet west of the crossing.

The Consolidated Code of Operating Rules, in effect on both lines, 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.

98. Trains must approach * * * railroad crossings at grade, * * * prepared to stop, unless * * * track is clear. Where required by rule or law, trains must stop.

98 (A). Unless otherwise provided, at a railroad crossing at grade not protected by signals, train or engine must make the required stop. A lookout must be maintained for conflicting movements and unless there is a clear view of at least two hundred feet of the other track on each side of the crossing from the point where the stop is made, the movement must be made at restricted speed, * * *

* * *

Timetable special instructions of the N.P. provide that first-class trains moving between the station at Carrington and the M.St.P.& S.S.M. crossing shall proceed at Restricted Speed.

The maximum authorized speed for passenger trains on the N.P. line is 40 miles per hour. The maximum authorized speed for passenger trains on the M.St.P.& S.S.M. line is 59 miles per hour, but it was temporarily restricted to 40 miles per hour in the vicinity of the point of accident.

Description of Accident

No. 157, a west-bound first-class N.P. passenger train, consisted of engine 2154, a 4-6-2 type, one mail-express car and one coach, in the order named. The cars were of steel-underframe construction. This train departed from Carrington, 0.9 mile east of the crossing and the last open office, at 1:09 p. m., 2 hours 42 minutes late, and stopped with the front end of the engine about 75 feet east of the stop sign located 207 feet east of the crossing. It then proceeded and, while entering the crossing at an estimated speed of 7 miles per hour, collided with the engine of M.St.P. & S.S.M. No. 12.

No. 12, an east-bound first-class M.St.P.& S.S.M. passenger train, consisted of engine 706, a 4-6-2 type, one baggage car, one mail-express car and one coach, in the order named. The baggage car was of steel-underframe construction and the other cars were of all-steel construction. This train departed from Cathay, 14.2 miles west of the point of accident and the last open office, at 12:55 p. m., 31 minutes late,

and stopped with the cab of the engine in the vicinity of the stop sign located 414 feet west of the crossing. It then proceeded and, while moving at an estimated speed of 12 miles per hour, collided with the engine of N.P. No. 157 at the crossing.

The engine of each train was derailed and became separated from its tender. The engines stopped upright and side by side in the northeast angle of the intersection. The N.P. engine stopped at an angle of about 60 degrees to the N.P. track and with the left side of the engine against the right side of the M.St.P.& S.S.M. engine. The latter engine stopped with the front end at an angle of 78 degrees to the M.St.P.& S.S.M. track and west of the N.P. engine. The trailer wheels of each engine remained on the track structure at the crossing. The tender of the N.P. engine was derailed and stopped in line with the track. It leaned toward the left at an angle of about 30 degrees. The tender of the M.St.P.& S.S.M. engine and the front wheels of the front truck of the first car of No. 12 were derailed and stopped in line with the track. Both engines were badly damaged and the tenders were somewhat damaged.

The engineer of No. 12 was killed. The engineer, the fireman and the conductor of No. 157, and the fireman and the conductor of No. 12 were injured.

The weather was cloudy at the time of the accident, which occurred about 1:15 p. m.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing was 3.46 trains on the N.P. and 7.6 trains on the M.St.P.& S.S.M.

Discussion

Under the rules of both lines trains approaching the crossing where the accident occurred must stop at their respective stop signs. A lookout for conflicting movements must be maintained and unless the conflicting route is seen to be clear, the speed must be so controlled that the train can be stopped short of an obstruction.

On the day of the accident N.P. No. 157 arrived at Carrington at 1:04 p. m. The rear car of the train was detached and the train departed at 1:09 p. m. As this train was approaching the crossing where the accident occurred the

engineer and the fireman were maintaining a lookout ahead from their respective positions in the cab of the engine. The conductor, who was the only train-service employee of the crew, was in the coach, the rear car of the train. A running test of the brakes was made after the train departed from the station and the brakes functioned properly. The train was stopped with the front end of the engine about 75 feet east of the stop sign. The side curtains of the engine were fastened across the gangways. The engineer said that the windows on both sides of the cab were open and that, after the train stopped, the fireman informed him that a passenger train was approaching from the west on the M.St.P.& S.S.M. He asked the fireman if the train on the other line was preparing to stop and, when the fireman replied that it was reducing speed, he sounded the proceed signal on the engine whistle and started the train. When the fireman informed him that the train on the other line had stopped the speed of his train was increased to about 7 miles per hour. The wind was from the west and smoke trailed down on the right side of the engine. When the fireman called a warning he immediately made an emergency application of the brakes and closed the throttle before the collision occurred. The N.P. engine was not equipped with a stoker. The fireman said that he last attended the fire at Carrington and he was on the seat box when his train stopped at the stop sign east of the crossing. No. 157 proceeded at once. The fireman said he informed the engineer that the M.St.P.& S.S.M. train had stopped and then glanced ahead in the direction of movement amd momentarily observed the steam gauge and water glass before he again looked toward the train on the other line. When he observed that the M.St.P.& S.S.M. train was moving toward the crossing he became concerned and called a warning. He alighted from the left side of the engine before the collision occurred. The conductor said that he was supplying fuel to the car heater in the forward end of the coach when his train stopped at the stop sign and proceeded. He said that he did not observe the train on the other line. After he finished attending the heater he proceeded toward the center of the car. He said that the brakes were applied in emergency immediately before the accident occurred.

As M.St.P.& S.S.M. No. 12 was approaching the crossing where the accident occurred the engineer and the fireman were maintaining a lookout ahead from their respective positions in the cab of the engine. The baggageman was in the first car and the conductor and the flagman were in the coach, the rear car of the train. The brakes of this train had been tested

and had functioned properly when used en route. The engine of this train was not equipped with a stoker. The fireman said that he last attended the fire when the train was about 2.5 miles west of the crossing, and he was on the seat box when the engine stopped with the cab adjacent to the stop sign west of the crossing. He said that the window on the engineer's side of the cab was open and he observed that the engineer was looking toward the crossing and in the direction of the N.P. track east of the crossing. The side curtains were fastened across the gangways of the engine. The fireman said there was no conflicting movement within his range of vision on the other line and he informed the engineer that the N.P. line west of the crossing was clear. He said that the engineer did not reply and he observed that the engineer was still looking toward the other line east of the crossing. When the fireman again informed him that the N.P. line west of the crossing was clear, the engineer raised his left hand but did not reply. The fireman thought that this was an acknowledgement and he did not repeat the information. The proceed signal was sounded on the engine whistle by the engineer and the train was then started. The fireman said he assumed the engineer had observed that there was no conflicting movement in the vicinity of the crossing before starting the train and he stepped down to the deck and was attending the fire when the collision occurred. The engineer was killed in the accident. The baggageman said that he became concerned when he observed from a window of the baggage car door that the N.P. train was closely approaching the crossing. The conductor said that the speed was about 12 miles per hour and the brakes were not applied before the collision occurred.

After the accident occurred the throttle of the N.P. engine was found in closed position and the reverse lever was in position for forward motion. The automatic brake valve was in emergency position and the independent brake valve was in application position. Examination of the M.St.P.& S.S.M. engine after the accident occurred disclosed that the throttle was in open position and latched approximately in the center of the quadrant. The automatic brake valve was in running position and the independent brake valve was in application position.

The rules of both carriers required, under the circumstances present at the crossing, that each train be operated in such manner that it could be stopped short of a train or obstruction. The marks of collision indicated that the two engines arrived at the crossing at the same instant.

Cause

It is found that this accident was caused by failure properly to control the speed of both trains approaching a railroad crossing at grade.

Dated at Washington, D. C., this ninth day of March, 1953.

By the Commission, Commissioner Patterson.

(SEAL)

GEORGE W. LAIRD,

Acting Secretary.