

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3043  
DULUTH, WINNIPEG AND PACIFIC RAILWAY COMPANY  
REPORT IN RE ACCIDENT  
NEAR ANGORA, MINN., CN  
DECEMBER 1, 1946

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SUMMARY

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Railroad: Duluth, Winnipeg and Pacific  
Date: December 1, 1946  
Location: Angora, Minn.  
Kind of accident: Head-end collision  
Trains involved: Freight : Freight  
Train numbers: Third 418 : Extra 2480 West  
Engine numbers: 2459 : 2480  
Consists: 26 cars, caboose : 26 cars, caboose  
Estimated speeds: 25 m. p. h. : 25 m. p. h.  
Operation: Timetable and train orders  
Track: Single; 2° curve; 1.05 percent  
ascending grade eastward  
Weather: Clear  
Time: 7:15 a. m.  
Casualties: 5 killed; 3 injured  
Cause: Failure to deliver meet order  
Recommendation: That the Duluth, Winnipeg and Pacific  
Railway Company install an adequate  
block system

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3043

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

DULUTH, WINNIPEG AND PACIFIC RAILWAY COMPANY

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December 30, 1946

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Accident near Angora, Minn., on December 1, 1946, caused  
by failure to deliver a meet order.

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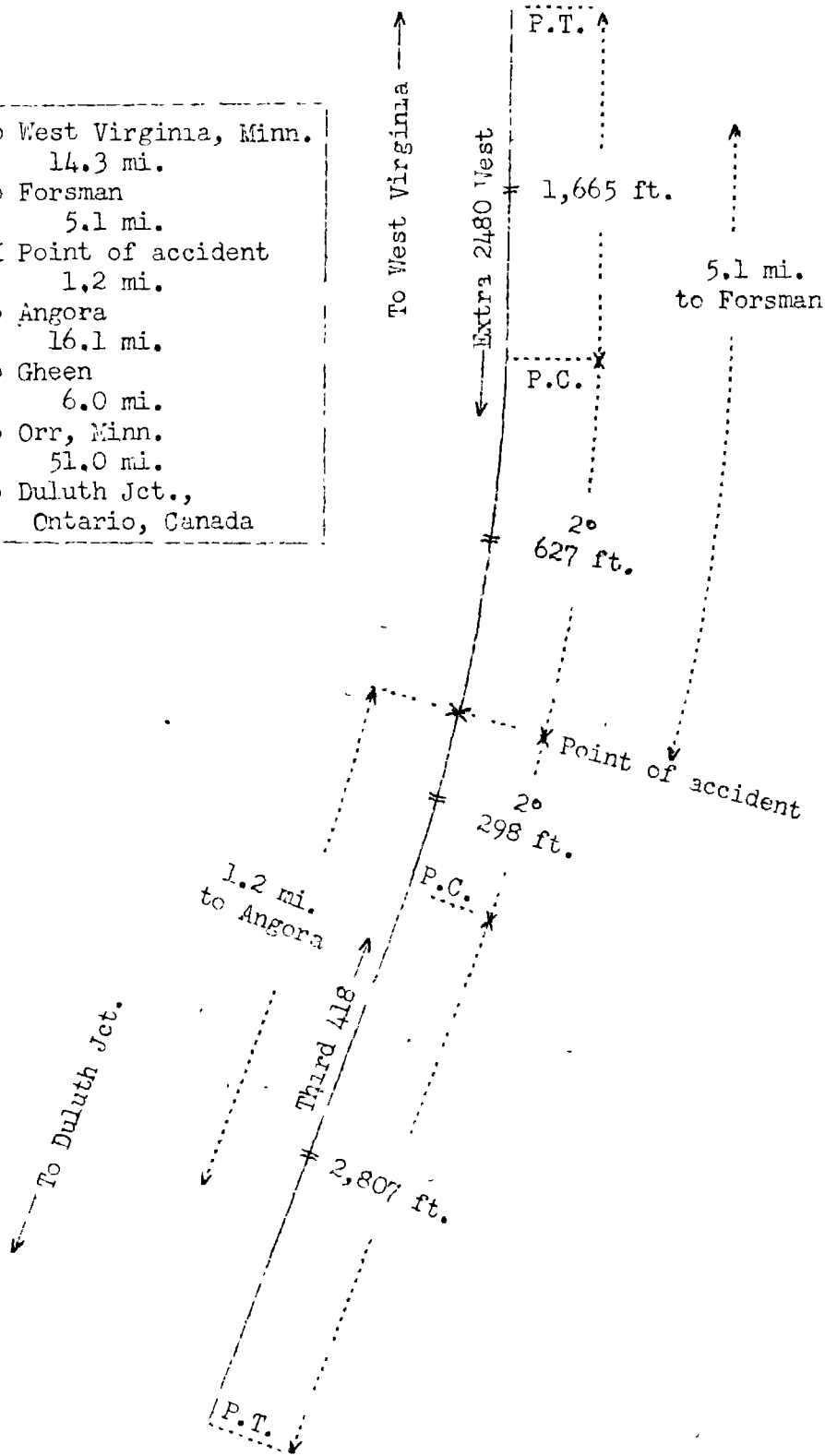
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On December 1, 1946, there was a head-end collision between two freight trains on the Duluth, Winnipeg and Pacific Railway near Angora, Minn., which resulted in the death of five employees, and the injury of three employees. This accident was investigated in conjunction with a representative of the Minnesota Railroad and Warehouse Commission.

<sup>1</sup>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 West Virginia, Minn. 14.3 mi.
- o Forsman 5.1 mi.
- X Point of accident 1.2 mi.
- o Angora 16.1 mi.
- o Gheen 6.0 mi.
- o Orr, Minn. 51.0 mi.
- o Duluth Jct., Ontario, Canada



Inv. No. 3043  
 Duluth, Winnipeg and Pacific Railway  
 Angora, Minn.  
 December 1, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Duluth Jct., Ontario, Canada, and West Virginia, Minn.; 93.7 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred 74.3 miles east of Duluth Jct. and 1.2 miles east of the station at Angora. From the west there is a tangent 2,807 feet in length, which is followed by a 2° curve to the left 298 feet to the point of accident and 627 feet eastward. From the east there is a tangent 1,665 feet in length, which is followed by the curve on which the accident occurred. The grade is 1.05 percent ascending eastward.

Operating rules read in part as follows:

73. Extra trains are inferior to regular trains.

88. \* \* \* At meeting points trains must take the siding as herein prescribed, \* \* \*

\* \* \*

Between regular and extra trains, the extra train must take the siding;

\* \* \*

A train required to take siding for an opposing train must pull in when practicable. \* \* \*

205. Train orders must be addressed to those who are to execute or observe them, \* \* \*

\* \* \*

213a. After a \* \* \* train order has been correctly repeated the train despatcher will respond "complete" with the time and his initials. The operator receiving this response will then write on the order the word "complete", the time, and his last name in full, and personally deliver a copy to each of those addressed \* \* \*; but when delivery to the engineman would take the operator away from the immediate vicinity of his office, \* \* \* delivery of all orders to the engineman will be made by the conductor.

218. Train orders once in effect continue so until fulfilled, superseded or annulled. \* \* \*

\* \* \*

221. Clearances must be issued for the conductor, each engineman \* \* \* of the train addressed, \* \* \*

221a. When there are train orders to be delivered to a train, the operator after making out clearance \* \* \* will transmit the numbers of all orders shown thereon to the train despatcher \* \* \*. The despatcher will check the numbers thus transmitted against the record of train orders, know that they comprise all the orders issued for that train at that station and make an entry of these numbers in the same manner in the train order book \* \* \*. He will then give O.K. with the time and his initials to the operator who will write on the clearance O.K. with the time and the initials of the despatcher, \* \* \*

\* \* \*

Forms of Train Orders

\* \* \*

Form A \* \* \* Fixing meeting points for opposing trains.

(1) \* \* \*

No. 5 Eng. 405 meet Extra 701 East at B.

\* \* \*

\* \* \*

Trains receiving these orders will run to the designated points and there meet in the manner prescribed by the Rules.

\* \* \*

Form L-Annuling a Train Order.

(1) Order No. ten 10 \* \* \* is annulled.

\* \* \*

\* \* \* the annulling order will be addressed to the train and copies of both orders must be delivered to the train \* \* \*

\* \* \*

On the line involved the maximum authorized speeds are 40 miles per hour for passenger trains and 25 miles per hour for freight trains.

Description of Accident

At Orr, 22.1 miles west of Angora, the crew of Third 418, an east-bound second-class freight train, received a clearance form and copies of train order No. 5, reading in part as follows:

Third 418 Eng 2459 meet \* \* \*  
Extra 2480 West at Angora \* \* \*

Third 418 departed from Orr at 6:14 a. m., 6 hours 11 minutes late. At Gheen, 16.1 miles west of Angora, the crew of this train received a clearance form and copies of train order No. 6, reading in part as follows:

Order No. Five 5 is annulled  
Third 418 Eng 2459 meet  
Extra 2480 West at Forsman \* \* \*

Forsman is 6.3 miles east of Angora. There are sidings at Angora and Forsman. Third 418, consisting of engine 2459, 26 cars and a caboose, departed from Gheen, the last open office, at 6:28 a. m., 6 hours 10 minutes late, passed Angora and while moving at an estimated speed of 25 miles per hour it collided with Extra 2480 West at a point 1.2 miles east of the station at Angora.

At West Virginia the crew of Extra 2480 West, a westbound freight train, received a clearance form and copies of four train orders, among which was train order No. 5. Train order No. 6 had been sent to the operator at West Virginia for delivery to the crew of Extra 2480 West, but the order number was not written on the clearance form and copies of this order were not delivered to the crew by the operator. Extra 2480 West, consisting of engine 2480, 26 cars and a caboose, departed from West Virginia at 6:22 a. m., passed the east siding-switch at Forsman, where it would have been required to enter the siding to meet Third 418 if copies of train order No. 6 had been delivered to the crew, and while moving at an estimated speed of 25 miles per hour it collided with Third 418 at a point 5.1 miles west of Forsman.

The engines of both trains, the first four cars of Third 418 and the first five cars of Extra 2480 West were derailed and badly damaged.

The engineer, the fireman and the front brakeman of Third 418 and the engineer and the front brakeman of Extra 2480 West were killed. The conductor of Third 418 and the conductor and the fireman of Extra 2480 West were injured.

The weather was clear at the time of the accident, which occurred about 7:15 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 9.6 trains.

### Discussion

The rules governing operation on this line provide that before train orders and the prescribed clearance form are delivered to a train, the operator must transmit to the train dispatcher the number of each train order to be delivered to that train, then the dispatcher must check his record to ascertain if the operator has included the correct numbers of all train orders on the clearance form before he authorizes the operator to clear the train. The train dispatcher and the operator concerned in this investigation understood these requirements.

The investigation disclosed that train order No. 5, which established Angora as the meeting point between Third 418 and Extra 2480 West, was sent to the operator at Orr for delivery to the crew of Third 418 and to the operator at West Virginia for delivery to the crew of Extra 2480 West. The crews of these trains received copies of train order No. 5. Later, train order No. 6, which annulled train order No. 5 and established Forsman as the meeting point between these trains, was sent to the operator at Green for delivery to the crew of Third 418 and to the operator at West Virginia for delivery to the crew of Extra 2480 West. Copies of train order No. 6 were delivered to the crew of Third 418 by the operator at Green, but copies of this order were not delivered to the crew of Extra 2480 West by the operator at West Virginia, and the number of this order was not written on the clearance form issued to Extra 2480 West at West Virginia. This resulted in an overlapping of authority of the trains involved, as the crew of Extra 2480 West held an order authorizing its train to proceed to Angora to meet Third 418 at that station, and the crew of the latter train held an order authorizing its train to proceed to Forsman, 6.3 miles east of Angora, to meet Extra 2480 West. These trains collided at a point 1.2 miles east of the station at Angora. Because of an embankment and vegetation on the inside of the curve on which the collision occurred, the members of the crew on the engine of each train were unable to see the other train more than a few hundred feet. The collision occurred before effective action could be taken to stop either train.

The train dispatcher said that, when the operator at West Virginia asked for authority to issue a clearance form and to deliver orders to Extra 2480 West, he understood the operator



to state correctly the numbers of all the orders that had been sent to that office for delivery to Extra 2480 West, including order No. 6. The operator at West Virginia said that soon after order No. 6 was completed to him he erroneously placed the copies of this order on a hook on which he had previously placed other orders to be held for delivery to the crew of Extra 2463 West. He was positive that the number of order No. 6 was not given to the train dispatcher at the time he asked for authority to issue the clearance form to Extra 2480 West, and, as a result, the number of this order was not written on the clearance form he delivered to the crew of that train. At the time the operator delivered copies of the other orders and the clearance form to the conductor of Extra 2480 West, he forgot that order No. 6 was addressed to that train, and he was not aware of his failure to deliver this order until after the accident occurred.

Trains are operated on this line by timetable and train orders only. If an adequate block system had been in use, these opposing trains would not have been permitted to occupy the same block simultaneously notwithstanding the failure to deliver the train order, and the accident probably would have been averted.

#### Cause

It is found that this accident was caused by failure to deliver a meet order.

#### Recommendation

It is recommended that the Duluth, Winnipeg and Pacific Railroad Company install an adequate block system on its line.

Dated at Washington, D. C., this thirtieth day of December, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.