

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2607
THE CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR BELMONT, NEBR., ON
JULY 25, 1942

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SUMMARY

Railroad:	Chicago, Burlington & Quincy
Date:	July 25, 1942
Location:	Belmont, Nebr.
Kind of accident:	Head-end collision
Trains involved:	Freight : Freight
Train numbers:	Extra 6155 East : Extra 5277 West
Engine numbers:	6155-5290 : 5277
Consist:	59 cars, caboose : 25 cars, caboose
Estimated speed:	20 m. p. h. : 18-20 m. p. h.
Operation:	Timetable and train orders, and manual-block system for follow- ing movements only
Track:	Single; 6°02.3' curve; 1.05 percent descending grade westward
Weather:	Clear
Time:	3:25 a. m.
Casualties:	3 killed; 4 injured
Cause:	Accident caused by failure to deliver a meet order
Recommendation:	That the Chicago, Burlington & Quincy Railroad Company establish an adequate block-signal system on the line involved in this accident

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2607

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

THE CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY

September 9, 1942.

Accident near Belmont, Nebr., on July 25, 1942, caused by
failure to deliver a meet order.

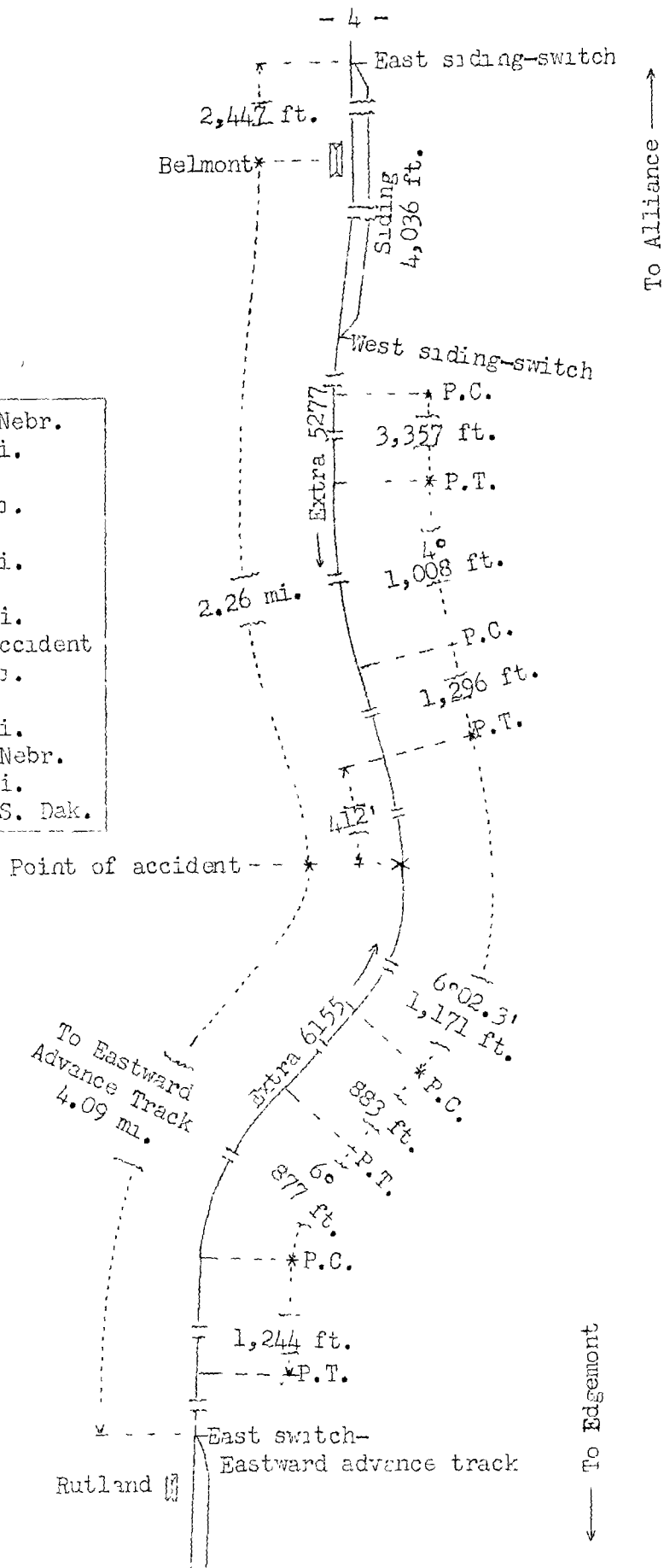
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On July 25, 1942, there was a head-end collision between two freight trains on the Chicago, Burlington & Quincy Railroad near Belmont, Nebr., which resulted in the death of three employees and the injury of four employees.

¹Under 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 Alliance, Nebr. 19.09 mi.
- o Hemingford 6.75 mi.
- o Nonpareil 19.00 mi.
- o Belmont 2.44 mi.
- X Point of accident 4.40 mi.
- o Rutland 6.51 mi.
- o Crawford, Nebr. 53.22 mi.
- o Edgemont, S. Dak.



Inv-2607
Chicago, Burlington & Quincy Railroad
Belmont, Nebr.
July 25, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Alliance Division designated as the Alliance and Edgemont Sub-division and extending between Alliance, Nebr., and Edgemont, S. Dak., a distance of 110.64 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, and a manual-block system for following movements only. The accident occurred at a point 2.26 miles west of the station at Belmont. A siding 4,036 feet in length parallels the main track on the south at Belmont, and the east switch is 2,447 feet east of the station. Between Rutland and Crawford, respectively, 6.07 and 12.58 miles west of Belmont, an auxiliary track designated as the eastward advance track parallels the main track on the south. As the point of accident is approached from the east there are, in succession, a tangent 3,357 feet in length, a 4° curve to the left 1,008 feet, a tangent 1,296 feet and a 6°02.3' curve to the right 1,171 feet in length. The accident occurred on this curve at a point 412 feet from its eastern end. As the point of accident is approached from the west there are, in succession, a tangent 1,244 feet in length, a 6° curve to the right 877 feet, a tangent 883 feet and the curve on which the accident occurred. At the point of accident the grade for west-bound trains is 1.05 percent descending.

Operating rules read in part as follows:

S-87. * * *

Extra trains * * * will be governed by train orders with respect to opposing extra trains.

S-88. * * *

At meeting points between extra trains, the train in the inferior time-table direction must take the siding unless otherwise provided.

* * *

211. When a "19" train order has been transmitted, * * *. The operator * * * will * * * deliver a copy to each person addressed * * *. But when delivery to enginemen will take the operator from the immediate vicinity of his office, the engineman's copy will be delivered by conductor or brakeman.

* * *

Time-table instructions read in part as follows:

TRAINS EASTWARD ARE SUPERIOR TO
TRAINS OF THE SAME CLASS WESTWARD.

Eastward advance track between
Crawford and Rutland will be used
only on train order authority.

* * *

No train order signal at * * * Crawford
* * *. All trains must have Clearance
Form A.

* * *

In the vicinity of the point of accident the maximum authorized speed for freight trains is 20 miles per hour.

Description of Accident

At Edgemont, 65.8 miles west of Belmont, Extra 6155 East, an east-bound freight train, consisted of engine 6155, 2 loaded and 72 empty cars and a caboose. At this point the crew received a clearance, Form A, and copies of four train orders, of which one was train order No. 627, Form 19, reading in part as follows:

* * * Eng 6155 run extra
Edgemont to Alliance * * *
Extra 6155 East use Eastward
advance track Crawford to
Rutland * * *

After a terminal air-brake test was made this train departed from Edgemont at 10:50 p. m., July 24, according to the dispatcher's record of movement of trains. At Crawford, the last open office, the crew received a clearance, Form A, and copies of five train orders, of which two were train orders Nos. 503 and 504, Form 19, reading in part as follows:

No. 503

Eng 5277 run Extra Alliance
to Edgemont meet * * *
Extra 6155 East at Nonpareil * * *

No. 504

Extra 6155 East meet
Extra 5277 West at
Belmont instead of Nonpareil

After some cars were added and others set off, Extra 6155 East consisted of engine 6155, 2 loaded and 57 empty cars, engine 5290, and a caboose, in the order named. An air-brake test was made and the train departed from Crawford on the eastward advance track at 2:55 a. m., entered the main track at Rutland, and while moving at a speed of about 20 miles per hour it collided with Extra 5277 West at a point 2.26 miles west of the station at Belmont.

Extra 5277 West, a west-bound freight train, consisted of engine 5277, 25 loaded cars and a caboose. At Alliance, 44.84 miles east of Belmont, the crew received a clearance, Form A, and copies of five train orders, of which one was train order No. 503, Form 19, previously quoted. After a terminal air-brake test was made this train departed from Alliance at 1:10 a. m., according to the dispatcher's record of movement of trains. At Hemingford, 25.75 miles east of Belmont and the last open office, the

crew received a clearance, Form A, and copies of three train orders, of which two were train order No. 504, Form 19, previously quoted, and train order No. 507, Form 19, reading in part as follows:

Order No. 504 is annulled
Extra 6155 East meet Extra
5277 West on Eastward advance
track * * *

Extra 5277 West departed from Hemingford at 2:20 a. m., passed Belmont, and while moving at an estimated speed of 18 to 20 miles per hour it collided with Extra 6155 East.

From an engine moving in either direction in the vicinity of the point of accident, the view of a train approaching from the opposite direction is restricted to a distance of about 230 feet, because of track curvature and a cut.

Engines 6155 and 5277 stopped, badly damaged, upright and in line with the track. The front ends telescoped each other. All wheels of engine 6155 except the trailer wheels were derailed. The first 8 cars of Extra 6155 were derailed and stopped, badly damaged, in various positions on the roadbed. The Nos. 2, 3 and 4 pairs of driving wheels and the trailer wheels of engine 5277 were derailed. The tender telescoped the engine cab a distance of 2-1/2 feet. The first 8 cars of Extra 5277 were derailed and stopped, badly damaged, in various positions on the roadbed.

The weather was clear at the time of the accident, which occurred about 3:25 a. m.

The employees killed were the engineer, the fireman and the front brakeman of Extra 5277 West. The employees injured were the engineer, the fireman, the front brakeman and the flagman of Extra 6155 East.

Data

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 14.8 trains.

Discussion

The rules governing operation on the line involved provide that extra trains will be governed by train orders with respect to opposing extra trains. At meeting points between extra trains, the train in the inferior time-table direction must enter the siding unless otherwise provided. When train orders have been received by an operator for delivery to a train, the operator must enter on a clearance form the numbers of the orders and deliver the clearance form together with copies of the orders to the conductor and the engineer of the train. All the employees involved understood these requirements.

The investigation disclosed that train orders were issued which authorized the movement of Extra 6155 East from Edgemont to Alliance and Extra 5277 West from Alliance to Edgemont. These orders contained the provision for Extra 6155 to use the eastward advance track from Crawford to Rutland and established the meeting

point for these trains first at Nonpareil and then at Belmont. The crews of both trains held copies of these orders. Later, order No. 507, which changed the meeting point from Belmont to the eastward advance track, was issued. The east switch of the eastward advance track is 6.35 miles west of Belmont. At Heringford, the last open office east of the point of accident, the crew of Extra 5277 West received a clearance card and copies of order No. 507, and this train departed at 2:20 a. m. Order No. 507 was sent to Crawford, the last open office west of the point of accident, for delivery to Extra 6155 East. According to the statement of the operator at Crawford, at 2:11 a. m. he copied order No. 507, which was addressed to Extra 6155 East. Previously, he had copied other orders for delivery to this train. These orders were placed on a hook located near his desk, and he thought he had placed copies of order No. 507 on the hook. At 2:45 a. m. he issued a clearance card and delivered five orders to Extra 6155, and this train departed at 2:55 a. m. About 30 minutes later, or about the time the accident occurred, he found that he had not delivered copies of order No. 507 to the crew of Extra 6155. This resulted in a lap of authority of the trains involved, as the crew of Extra 6155 East held a train order authorizing its train to proceed to Belmont to meet Extra 5277 West at that station, and the crew of the latter train held an order authorizing its train to proceed to Rutland, about 6 miles west of Belmont, to meet Extra 6155 East. These trains collided at a point about 4 miles east of Rutland or 2 miles west of Belmont.

The view had by the members of the crews on the engines of both trains of the point where the accident occurred was restricted to a distance of about 230 feet. The accident occurred before action could be taken to stop either train.

The manual-block system is used on the line involved for following movements only. The book of operating rules of this railroad contains manual-block rules which provide for blocking of opposing movements as well as following movements, but these rules are not in effect on the territory involved. If an adequate block system had been in use on the line involved, this accident would not have occurred.

Cause

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

Recommendation

The Chicago, Burlington & Quincy Railroad Company should establish an adequate block-signal system on the line involved in this accident. A rule to show cause why it should not do so will be served on said carrier.

Dated at Washington, D. C., this ninth day of September, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.