

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3003
GREAT NORTHERN RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT SUMMIT, MONT., ON
JULY 12, 1946

SUMMARY

Railroad: Great Northern

Date: July 12, 1946

Location: Summit, Mont.

Kind of accident: Head-end collision

Trains involved: Freight : Engine

Train numbers: 684 : Extra 300 West

Engine numbers: 3371 : 300

Consist: Auxiliary water car, :
19 cars, caboose

Estimated speed: 10 m. p. h. : Standing

Operation: Movements with current of traffic
by time-table, train orders and
automatic block-signal system;
movements against current of
traffic by train orders only;
yard limits

Track: Double; 6° curve; 1.56 percent
ascending grade eastward

Weather: Clear

Time: 7:10 p. m.

Casualties: 1 killed; 5 injured

Cause: Overlapping of authority of
two opposing trains

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3003

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

GREAT NORTHERN RAILWAY COMPANY

August 27, 1946.

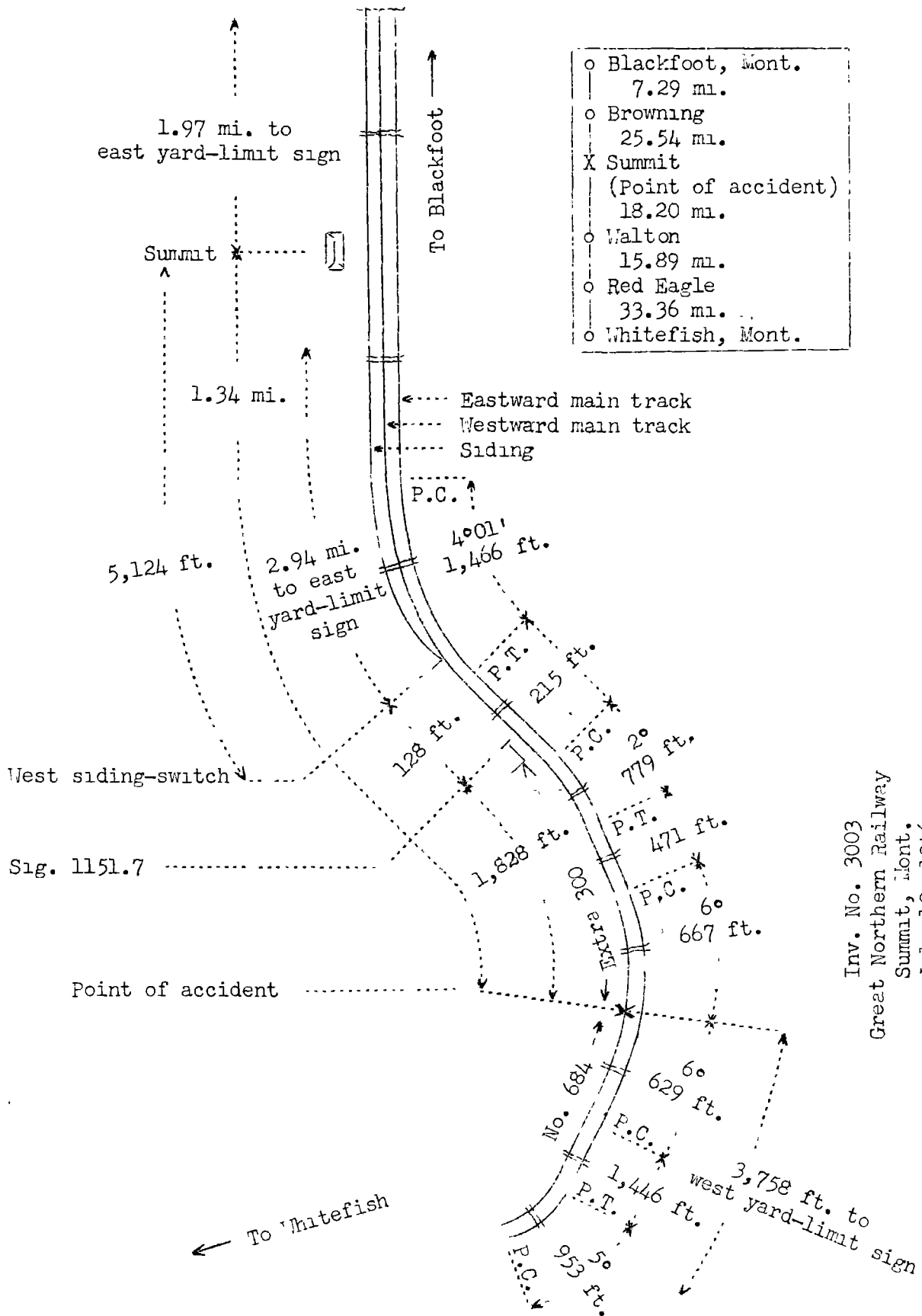
Accident at Summit, Mont., on July 12, 1946, caused by
overlapping of authority of two opposing trains.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On July 12, 1946, there was a head-end collision between a freight train and an engine on the Great Northern Railway at Summit, Mont., which resulted in the death of one trespasser, and the injury of one trespasser, one assistant storekeeper and three train-service 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,



Location of Accident and Method of Operation

This accident occurred on that part of the Kalispell Division extending between Blackfoot and Whitefish, Mont., 100.28 miles. Between Summit and Red Eagle, respectively, 32.83 and 66.92 miles west of Blackfoot, this is a double-track line over which movements with the current of traffic are operated by time-table, train orders and an automatic block-signal system. There is no block system in use for movements against the current of traffic, and such movements are operated by train orders only. The accident occurred on the westward main track, within yard limits at Summit, at a point 3.31 miles west of the east yard-limit sign, 1.54 miles west of the station and 0.71 mile east of the west yard-limit sign. From the east there are, in succession, a 4°01' curve to the left 1,466 feet in length, a tangent 215 feet, a 2° curve to the right 779 feet, a tangent 471 feet and a 6° curve to the right 667 feet to the point of accident and 629 feet westward. From the west there are, in succession, a 5° curve to the left 953 feet in length, a tangent 1,446 feet and the curve on which the accident occurred. At the point of accident the grade is 1.56 percent ascending eastward.

At Summit a siding 7,051 feet long parallels the westward main track on the north. The west siding-switch is 5,124 feet west of the station. The accident occurred 1,956 feet west of the west siding-switch.

Signal 1151.7, governing west-bound movements on the westward main track, is 128 feet west of the west siding-switch. This signal is of the one-arm, three-position, upper quadrant, semaphore type, and is approach lighted. The involved day aspect displayed by this signal and the corresponding indication and name are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Horizontal	Stop, then proceed at restricted speed	Stop and proceed signal

Operating rules 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.

93. * * *

* * *

Within yard limits second and inferior class, extra trains and engines must move at restricted speed.

Within yard limits when running against the current of traffic * * *, all trains and engines must move at restricted speed.

* * *

203. Train orders must be numbered consecutively each day, beginning at midnight.

204. Order books must be addressed to those who are to receive them, naming the place at which each is to receive his copy. * * *

* * *

FORMS OF TRAIN ORDERS.

* * *

* * *

D-R.

Providing for a Movement Against the Current of Traffic.

(1.) No 1 has right over opposing trains on -- track C to F.

The designated train must use the track specified between the points named and has right over opposing trains on that track between those points. Opposing trains must not leave the point last named until the designated train arrives.

* * *

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of opposing trains.

Description of Accident

Train order No. 274 addressed to westward trains at Browning, 25.54 miles east of Summit, and to No. 684 at Walton, 18.20 miles west of Summit, and made complete at 5:55 p. m., read as follows:

No 684 eng 3371 has right
over opposing trains on
westward track Walton to
Summit

Another train order, which was also issued as order No. 274, addressed to Engine 300 and Engine 3361 at Summit and made complete at 6:33 p. m., read as follows:

Engs 300 and 3361 run as
two 2 extras Summit to
Walton

At Walton the crew of No. 684, an east-bound third-class freight train, received a clearance form and copies of the first-mentioned train order. No. 684, consisting of engine 3371, 1 auxiliary water car, 19 cars and a caboose, departed on the westward main track from Walton, the last open office west of Summit, at 6:10 p. m., passed the west yard-limit sign at Summit and while moving at an estimated speed of 10 miles per hour it collided with Extra 300 West at a point 3,758 feet east of the west yard-limit sign.

At Summit the crew of Extra 300 West, a west-bound Diesel-electric engine of the three-unit type, received a clearance form and copies of the last-mentioned train order. This train entered the westward main track about 7:05 p. m. at the west siding-switch, 2.94 miles west of the east yard-limit sign at Summit, and stopped at signal 1151.7, which displayed stop-then-proceed-at-restricted-speed. This train then proceeded and moved to a point 1,956 feet west of the west siding-switch, where it stopped within yard limits, and immediately afterward it was struck by No. 684. The crew of Extra 300 West did not hold copies of the train order which authorized No. 684 to use the westward main track.

The front ends of the engines of both trains were considerably damaged. The second, third and fourth cars of No. 684 were derailed and damaged.

The weather was clear at the time of the accident, which occurred about 7:10 p. m.

The conductor, the flagman and the swing brakeman of No. 684 were injured.

Discussion

The crew of Extra 300 West consisted of an engineer and a fireman. As this train was approaching the point where the collision occurred the speed was about 10 miles per hour. Because of embankments adjacent to the track and track curvature, the view had by the enginemen of the track ahead was materially restricted. The engineer first saw the engine of No. 684 about 450 feet distant, but he thought this train was occupying the eastward main track. Soon afterward he observed that No. 684 was moving on the westward main track. Then he immediately moved the control lever to closed position and placed the brake valve in full application position. His engine had just stopped when the collision occurred. As No. 684 was approaching the west yard-limit sign at Summit the speed was about 15 miles per hour. The front brakeman and the swing brakeman, who were on the engine, and the enginemen were maintaining a lookout ahead. The conductor and the flagman were in the caboose. The fireman saw the approaching engine soon after his engine entered the curve on which the accident occurred, but he did not realize that the approaching engine was occupying the westward main track until immediately prior to the collision. Then he called a warning to the engineer, who immediately moved the brake valve to emergency position. The speed of No. 684 was about 10 miles per hour when the collision occurred.

The investigation disclosed that two train orders had been issued under the same number. The first of these authorized No. 684, an east-bound train, to use the westward main track from Walton to Summit and gave No. 684 right over opposing trains between these points on the westward main track. The second order authorized engine 300 to run extra on the westward main track from Summit to Walton. The first order, which authorized the movement of No. 684 against the current of traffic, was addressed to No. 684 at Walton and to opposing trains at Browning, about 25 miles east of Summit, but was not addressed to opposing trains originating at Summit. The train dispatcher understood that, under the rules, no opposing movement should have been authorized to proceed from Summit until after No. 684 had arrived at Summit. However, when he issued the second order, for the movement of Extra 300 West, he overlooked the fact that the order authorizing the movement of No. 684 against the current of traffic had not been sent to westward trains originating at Summit. When he sent the first of these orders he did not use a small blank space remaining at the bottom of a right-hand page of the train-order book, but turned the leaf and wrote it on the top portion of the next page. Before he sent the second order, he turned this leaf to the original position, and the book remained open in this position. About 38 minutes later, when he sent the second of these orders he wrote it on the small blank space remaining at the bottom of

the right-hand page, and overlooked the fact that he had previously issued the first order. The order which authorized No. 684 to use the westward main track between Walton and Summit was not addressed to Extra 300 West at Summit, and therefore the crew of this train did not receive copies of this train order. This resulted in an overlapping of authority between No. 684 and Extra 300 West.

The accident occurred within yard limits. The investigation disclosed that both trains were moving at a slow rate of speed as they were approaching the curve on which the accident occurred. Extra 300 West had just stopped when the collision occurred, and it appears from the statements of the members of the crew of No. 684 who were on the engine that action to stop their train would have been taken immediately when the approaching engine was first seen if they had not held the train order giving their train right over all opposing trains on the westward main track between Walton and Summit.

Cause

It is found that this accident was caused by overlapping of authority of two opposing trains.

Dated at Washington, D. C., this twenty-seventh day of August, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.