

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3138  
THE COLORADO AND SOUTHERN RAILWAY COMPANY  
REPORT IN RE ACCIDENT  
NEAR HORSE CREEK, WYO., ON  
OCTOBER 16, 1947

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SUMMARY

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Railroad: Colorado and Southern  
Date: October 16, 1947  
Location: Horse Creek, Wyo.  
Kind of accident: Head-end collision  
Trains involved: Freight : Freight  
Train numbers: Extra 907 South : Extra 6144 North  
Engine numbers: 907 : 6144  
Consists: 49 cars, caboose : 71 cars, caboose  
Speeds: 27 m. p. h. : 22 m. p. h.  
Operation: Timetable and train orders  
Track: Single; 5°03' curve; 0.45 percent  
descending grade northward  
Weather: Clear  
Time: 11:42 p. m.  
Casualties: . 2 killed; 3 injured  
Cause: Inferior train occupying main track  
on time of opposing superior train  
Recommendation: That the Colorado and Southern  
Railway Company establish an  
adequate block system on the  
line on which this accident  
occurred

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3138

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

THE COLORADO AND SOUTHERN RAILWAY COMPANY

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December 1, 1947

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Accident near Horse Creek, Wyo., on October 16, 1947,  
caused by an inferior train occupying the main  
track on the time of an opposing superior train.

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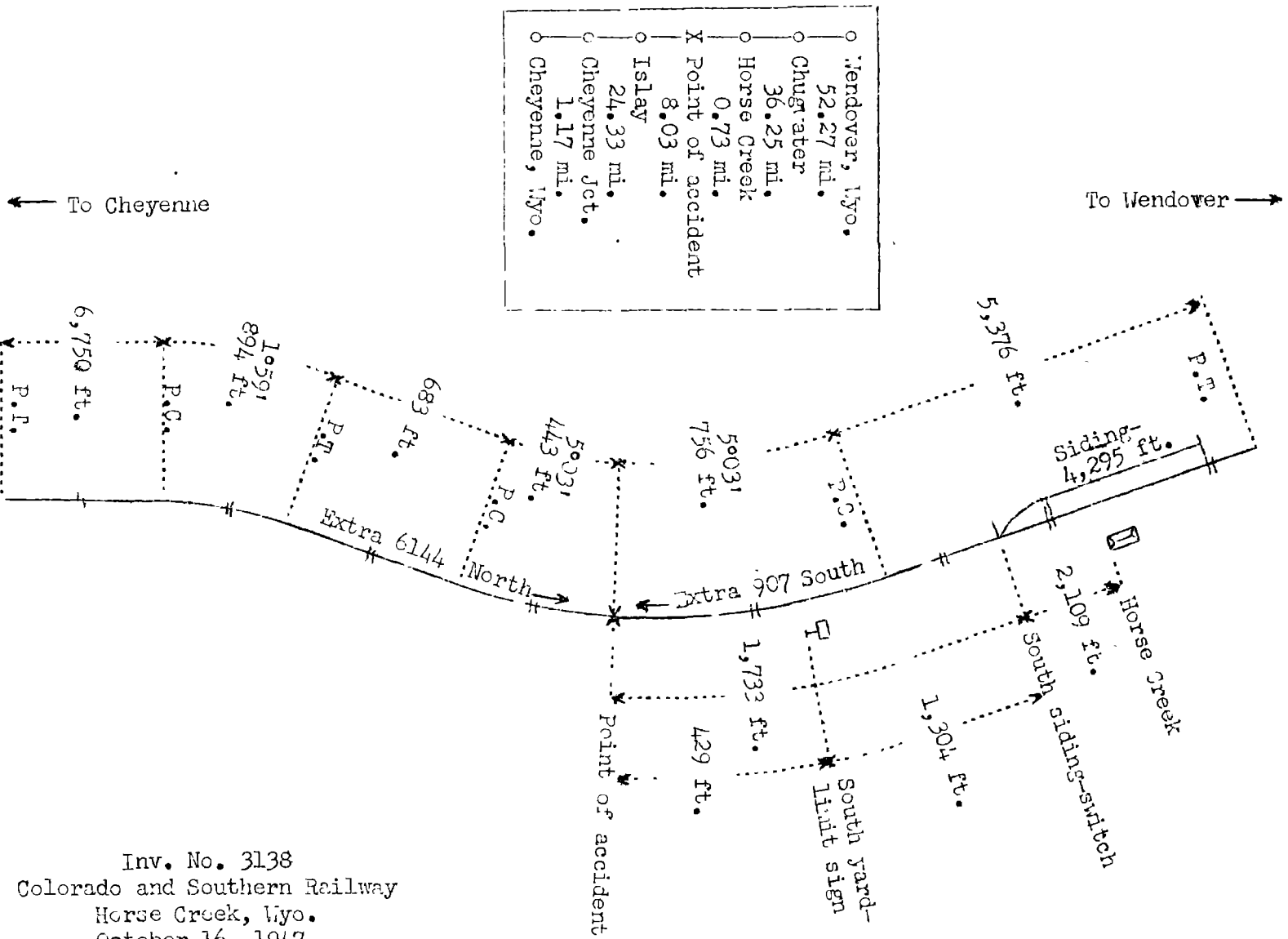
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On October 16, 1947, there was a head-end collision between two freight trains on the Colorado and Southern Railway near Horse Creek, Wyo., which resulted in the death of two employees, and the injury of three employees.

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<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.



- Wendover, Wyo. 52.27 mi.
- Chugwater 36.25 mi.
- Horse Creek 0.73 mi.
- X Point of accident 8.03 mi.
- Islay 24.33 mi.
- Cheyenne Jct. 1.17 mi.
- Cheyenne, Wyo.

Inv. No. 3138  
 Colorado and Southern Railway  
 Horse Creek, Wyo.  
 October 16, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between Cheyenne and Wendover, Wyo., 122.78 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. Within yard limits at Horse Creek, 34.26 miles north of Cheyenne, a siding 4,295 feet in length parallels the main track on the west. The south switch of this siding is 2,109 feet south of the station and 1,304 feet north of the south yard-limit sign. The accident occurred on the main track 1,733 feet south of the south siding-switch and 429 feet south of the south yard-limit sign. From the south there are, in succession, a tangent 6,750 feet in length, a 1°59' curve to the right 894 feet, a tangent 683 feet, and a 5°03' curve to the left 443 feet to the point of accident and 756 feet northward. From the north there is a tangent 5,376 feet in length, and then the curve on which the accident occurred. The accident occurred in a cut, the inner bank of which rises to a height of about 15 feet above the level of the track. The grade is 0.45 percent descending northward.

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

S-71. A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by time-table.

Right is superior to class or direction.

\* \* \*

S-72. \* \* \*

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

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.

Trains must pull into the siding when practicable;  
\* \* \*

93. Within yard limits, the main track may be used clearing first-class trains as prescribed by the rules.

Second and inferior class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

\* \* \*

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 fuses.

\* \* \*

The front of the train must be protected in the same way when necessary by the brakeman, or in his absence by the fireman.

\* \* \*

#### FORMS OF TRAIN ORDERS

\* \* \*

#### S-C

Giving Right Over an Opposing Train

\* \* \*

(3) Extra 1701 east has right over westward extra trains F to Z.

Opposing extra trains, over which the extra has been given right, must not go beyond the point last named until the extra train has arrived, unless directed by train order to do so. \* \* \*

Examples (3) \* \* \* of Form "E" may be used in conjunction with the foregoing form.

\* \* \*

E

Time Orders

\* \* \*

(3) No 1 wait at H until 9 59 a m for No 2.  
The train first named must not pass the designated point before the time given, unless the other train has arrived. The train last named is required to run with respect to the time specified, \* \* \*

Time-table special instructions provide that north-bound trains are superior to south-bound trains of the same class.

Between points 13.39 miles south and 36.61 miles north of Horse Creek the maximum authorized speeds are 55 miles per hour for passenger trains and 45 miles per hour for freight trains.

Description of Accident

At Chugwater, 36.25 miles north of Horse Creek, the crew of Extra 907 South, a south-bound freight train, received copies of train order No. 101 reading in part as follows:

\* \* \*

Extra 907 South has right over Extra 6144 North  
Wendover to Cheyenne Jct wait at

Horse Creek	until	11 40 PM
Islay	until	12 10 AM
* * *		

For Extra 6144 North

Cheyenne Jct. and Islay are, respectively, 33.09 miles and 8.76 miles south of Horse Creek. Extra 907 South, consisting of engine 907, 49 cars and a caboose, departed from Chugwater,

the last open office, at 9:15 p. m., and stopped about 11:15 p. m. on the main track at Horse Creek, with the engine standing about 2,400 feet north of the south siding-switch. Extra 907 South proceeded from this point at 11:39 p. m., passed the south siding-switch at 11:41 p. m., passed the south yard-limit sign, and while moving at a speed of 27 miles per hour it collided with Extra 6144 North at 11:42 p. m., at a point 1,733 feet south of the south siding-switch and 429 feet south of the south yard-limit sign.

At Cheyenne Jct. the crew of Extra 6144 North, a north-bound freight train, received copies of train order No. 101. This train, consisting of engine 6144, 71 cars and a caboose, departed from Cheyenne Jct., the last open office, at 10 p. m., passed Islay about 11:25 p. m. and while moving at a speed of 22 miles per hour it collided with Extra 907 South.

The engine and three cars of Extra 907 South, and the engine and seven cars of Extra 6144 North were derailed and damaged.

The front brakeman of Extra 907 South and the fireman of Extra 6144 North were killed. The engineer and the fireman of Extra 907 South, and the engineer of Extra 6144 North were injured.

The weather was clear at the time of the accident, which occurred at 11:42 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 9.73 trains.

#### Discussion

The crew of each train held copies of train order No. 101, which gave Extra 907 South right over Extra 6144 North between Wendover and Cheyenne Jct., and required Extra 907 South to wait at Horse Creek until 11:40 p. m. for Extra 6144 North. Under the rules, Extra 6144 North was required to be within yard limits at Horse Creek not later than 11:40 p. m., if it proceeded to that station to meet Extra 907 South. Extra 907 South passed the south switch of the siding at Horse Creek at 11:41 p. m. and collided with Extra 6144 North at 11:42 p. m., at a point 429 feet south of the south yard-limit sign.



As Extra 907 South was approaching the point where the accident occurred the speed was 27 miles per hour, as indicated by the tape of the speed recorder. The headlight was lighted brightly, and the enginemen, and the front brakeman, who was on the engine, were maintaining a lookout ahead. The first these employees knew of anything being wrong was when the engineer saw the reflection of the headlight of the approaching train about 300 feet distant, as both trains were moving on the curve and in the cut on which the accident occurred. He immediately moved the brake valve to emergency position, but the collision occurred before the speed was materially reduced. The brakes of this train had been tested and had functioned properly en route.

The surviving members of the crew of Extra 6144 North understood that, under the provisions of train order No. 101, their train was inferior to Extra 907 South, and that their train was required to be within yard limits at Horse Creek not later than 11:40 p. m., if it proceeded to that station for Extra 907 South. Each member of the crew had compared time, and there was a variation of only a few seconds in their watches. Extra 6144 North departed from Islay, 8.76 miles south of Horse Creek, about 11:25 p. m., and the surviving employees said that, at that time, they were confident that sufficient time remained for their train to be within yard limits at Horse Creek not later than 11:40 p. m. However, soon after the train passed Islay, a strong head wind was encountered and the train did not make the expected speed from this point northward. The speed of Extra 6144 North was about 22 miles per hour when the engine was about 2,500 feet south of the south yard-limit sign at Horse Creek. At that time the enginemen, and the front brakeman, who was on the engine, consulted their watches and observed the time as 11:40 p. m. However, no attempt was made by these employees to stop the train, or to provide flag protection against Extra 907 South, until the fireman saw the approaching train and called a warning. Then the engineer moved the brake valve to emergency position, but the collision occurred immediately afterward. The brakes of this train had been tested and had functioned properly en route. The conductor and the flagman were in the caboose. During a period of several minutes prior to the time the collision occurred these employees were aware that there was not sufficient time remaining for their train to proceed to Horse Creek for Extra 907 South, but they took no action to stop the train as they expected the engineer to take action to provide flag protection if it became necessary.

This carrier's book of operating rules contains manual-block rules which provide for blocking of opposing movements, but these rules were not in effect in the territory involved. If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously.

Cause

It is found that this accident was caused by an inferior train occupying the main track on the time of an opposing superior train.

Recommendation

It is recommended that the Colorado and Southern Railway Company establish an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this first day of December, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.