

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2838
THE UNION PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR CORLETT JUNCTION, WYO., ON
OCTOBER 24, 1944

SUMMARY

Railroad: Union Pacific
Date: October 24, 1944
Location: Corlett Junction, Wyo.
Kind of accident: Rear-end collision
Trains involved: Freight : Engine
Train numbers: Extra 3556 East : Extra 2282 East
Engine numbers: 3556 : 2282
Consist: 75 cars, caboose :
Estimated speed: Standing : 25 m. p. h.
Operation: Timetable, train orders and
automatic block-signal system
Track: Double, tangent, 1.2273 percent
descending grade eastward
Weather: Clear
Time: 5:20 a. m.
Casualties: 3 killed
Cause: Failure properly to control speed
of following train in accordance
with signal indications

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2838

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

THE UNION PACIFIC RAILROAD COMPANY

December 13, 1944.

Accident near Corlett Junction, Wyo., on October 24, 1944,
caused by failure properly to control the speed of
the following train in accordance with signal indi-
cations.

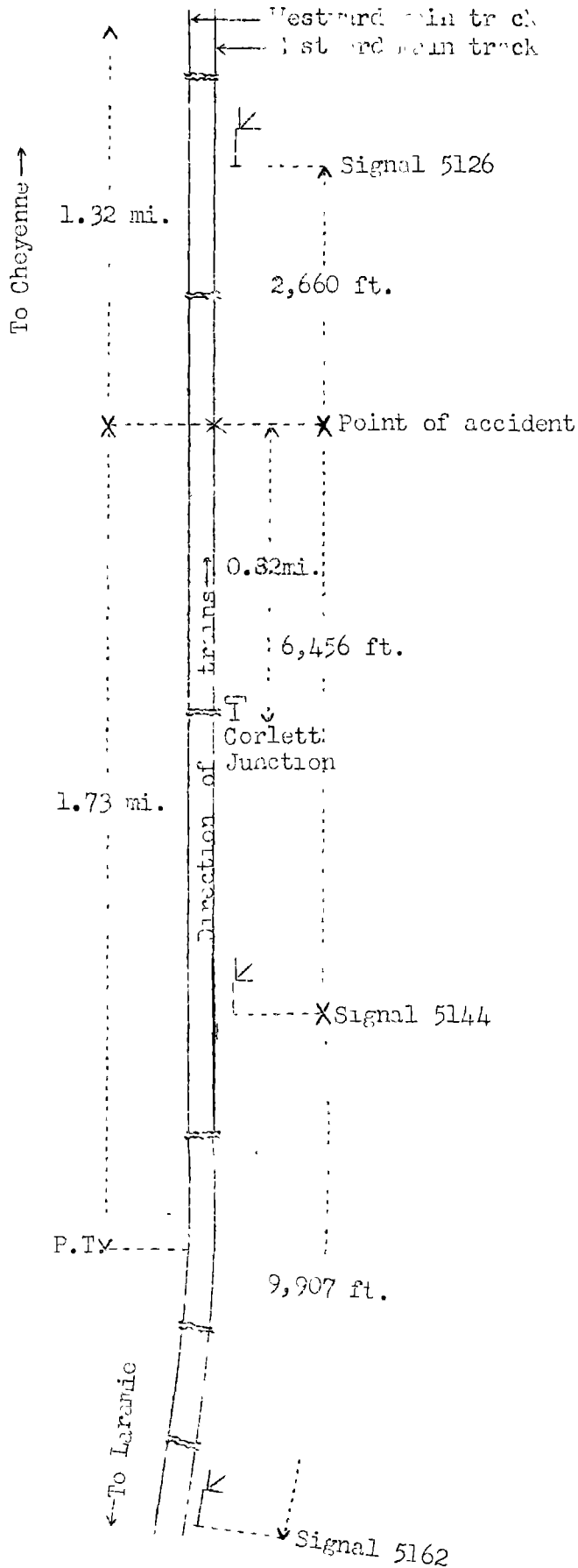
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REPORT OF THE COMMISSION

PATTERSON, Chairman:

On October 24, 1944, there was a rear-end collision between a freight train and an engine on the Union Pacific Railroad near Corlett Junction, Wyo., which resulted in the death of two persons carried under contract and one train-service employee.

¹Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Chairman Patterson for consideration and disposition.

- o Cheyenne, Wyo. 3.63 mi.
- X Point of accident 0.82 mi.
- o Corlett Junction 5.00 mi.
- o Borie 47.30 mi.
- o Laramie, Wyo.



Inv-28336
 Union Pacific Railroad
 Corlett Junction, Wyo.
 October 21, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the Wyoming Division designated as the Fifth Subdivision and extending eastward from Laramie to Cheyenne, Wyo., 56.8 miles. This was a double-track line over which trains moving with the current of traffic were operated by timetable, train orders and an automatic block-signal system. The accident occurred on the eastward main track 53.12 miles east of Laramie, at a point 0.82 mile east of the station at Corlett Junction. The main tracks were tangent throughout a distance of 1.73 miles west of this point and 1.32 miles eastward. The grade for east-bound trains varied between 0.076 and 1.461 percent descending throughout a distance of 7,000 feet, then it was descending, successively, 0.9825 percent 2,000 feet, 1.2372 percent 2,200 feet, 1.110 percent 1,100 feet, 0.8935 percent 2,800 feet, 0.9825 percent 2,700 feet and 1.2273 percent 342 feet to the point of accident and 3,058 feet beyond.

Automatic signals 5162, 5144 and 5126, which governed east-bound movements on the eastward main track, were located, respectively, 16,363 and 6,456 feet west and 2,660 feet east of the point of accident. These signals were of the three-indication, color-light type, and were approach-lighted. The involved aspects and corresponding indications and names of these signals were as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Yellow	Enginemen finding an Approach signal displaying a restrictive indication * * * must immediately reduce speed to 20 miles an hour, and as much slower as necessary in order to be able to stop before passing the next home signal. Enginemen and trainmen must be on the alert and prepared to respect whatever indication the next signal in advance may give.	Approach Signal.
Red	Stop.	Stop Signal.

Operating rules read in part as follows:

DEFINITIONS.

* * *

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or switch not properly lined, and be on lookout for broken rail, or anything that may affect movement of train.

11. A train finding a fusee burning red on or near its track must stop before passing the fusee, extinguish it, and may then proceed at reduced speed for at least one-half mile.

15. The explosion of two torpedoes is a signal to immediately reduce speed to 20 miles an hour and proceed at that speed for a distance of one mile from the point where the torpedoes were placed, keeping a close lookout for train or obstruction. A slower speed must be observed where conditions require. The explosion of one torpedo will indicate the same as two, but the use of two torpedoes is required in all cases.

* * *

34. All members of engine and train crews must, when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

99. When a train stops, except when clear of the main track, the flagman must go back immediately with flagman's signals, a sufficient distance to insure full protection. One-half mile from the rear of his train he will place two torpedoes on the rail, continuing back one mile from the rear of his train he will place two torpedoes on the rail. He may then return to the two torpedoes one-half mile from rear of his train where he must remain until relieved by another flagman or is recalled by the whistle of his engine.

* * *

The following signals will be used by flagmen:

* * *

Night signals--A red light, a white light, not less than ten torpedoes, three red and three yellow fuses.

509. When a train is stopped by a Stop signal * * * it may proceed * * *

* * *

(c) On two or more tracks, after stopping, two long blasts of engine whistle must be sounded, and train may proceed at once at restricted speed through the entire block to the next home signal.

The maximum authorized speed for the trains involved was 40 miles per hour.

Description of Accident

Extra 3556 East, an east-bound freight train, consisting of engine 3556, 75 cars and a caboose, passed Borie, 5 miles west of Corlett Junction and the last open office, at 4:53 a. m., passed Corlett Junction and stopped on the eastward main track

at signal 5126, which displayed stop, then proceeded a distance of about 2,500 feet and again stopped, about 5:12 a. m., with the rear end standing 6,456 feet east of signal 5144. About 8 minutes later the rear end was struck by Extra 2282 East.

Extra 2282 East, an east-bound engine, passed Borie at 5:02 a. m., passed signal 5162, which displayed approach, passed signal 5144, which displayed stop, passed Corlett Junction, and while moving at an estimated speed of 25 miles per hour it struck Extra 3556 East.

The caboose and the rear car of Extra 3556 East were badly damaged. The front end of engine 2282 was considerably damaged.

It was clear at the time of the accident, which occurred about 5:20 a. m.

The conductor of Extra 3556 East was killed.

Engine 2282 was provided with No. 6-ET air-brake equipment, an F-4-B feed valve, two 8-1/2-inch cross-compound compressors, a C-8 reducing valve and a type A super-governor. The double-heading cock was 9 inches below the automatic brake valve. The driving wheel brake cut-out cock was on the right side of the cab 29 inches in front of the seat box.

Discussion

About 5:12 a. m. Extra 3556 East stopped in compliance with a stop indication displayed by signal 5126. About 8 minutes later, after this train had proceeded eastward about 2,500 feet and had again stopped, the rear end was struck by Extra 2282 East at a point 6,456 feet east of signal 5144.

When Extra 3556 East first stopped, the flagman placed two torpedoes on the south rail of the eastward main track. When the train stopped at the point where the accident occurred he immediately proceeded westward and had reached a point about 2,000 feet to the rear of his train when he saw the reflection of the headlight of a train approaching from the west. He placed a lighted fusee on the eastward main track and lighted an additional fusee, which he carried with him as he proceeded toward the approaching train. He was giving stop signals with a lighted fusee from a point about 2,600 feet to the rear of his train when Extra 2282 East passed him. The flagman said his signals were not acknowledged, and there was no indication that the air brakes had been applied when the engine passed him.

As Extra 2282 East was approaching signal 5162, located 9,907 feet west of signal 5144, the speed was about 20 miles per hour. This train consisted of the engine only, and the crew consisted of the engineer and the fireman. The air brakes had

functioned properly at all points where used en route. Signal 5162 displayed approach, and the enginemen called the indication. The throttle lever was in drifting position, and the engineer made a light service brake-pipe reduction. The approach indication required the speed to be not in excess of 20 miles per hour until the train reached the next signal, and to be so controlled that the train could be stopped short of the next signal. A speed of about 18 miles per hour was maintained from signal 5162 and until the engine reached a point a short distance west of signal 5144. This signal displayed stop, and the enginemen called the indication. The stop indication required the train to stop at the signal, and authorized it to proceed through the block prepared to stop short of a train or an obstruction. The engineer said that he attempted to stop the engine at the signal by operating first the independent brake valve and then the automatic brake valve, but, although the gauges indicated proper main-reservoir and brake-cylinder pressures, no application of the air brakes was obtained. The engine passed the signal at a speed of about 18 miles per hour, then gained momentum on the descending grade eastward and was moving at a speed of about 25 miles per hour when the collision occurred. The engineer said that when the brakes failed to apply he made several unsuccessful attempts to ascertain the cause of the failure. Then, soon after torpedoes were exploded and he saw stop signals being given with a lighted fusee, he placed the reverse lever in position for the engine to move in backward motion and opened the throttle lever in an attempt to stop the engine short of the preceding train, but this action was not taken soon enough to avert the collision.

In tests made soon after the accident occurred there was no condition found that would prevent the proper functioning of the air-brake system of engine 2282.

Cause

It is found that this accident was caused by failure properly to control the speed of the following train in accordance with signal indications.

Dated at Washington, D. C., this thirteenth day of December, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.