

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2771
THE UNION PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR FULLER, IDAHO, ON
FEBRUARY 6, 1944

SUMMARY

Railroad: Union Pacific
Date: February 6, 1944
Location: Fuller, Idaho
Kind of accident: Derailment
Train involved: Work
Train number: Work Extra 561
Engine number: 561
Consist: 13 cars, caboose
Speed: 20 m. p. h.
Operation: Timetable, train orders and
automatic block-signal system
Track: Single; 3° curve; 0.25 percent
descending grade westward
Weather: Clear
Time: 6:15 p. m.
Casualties: 2 killed; 5 injured
Cause: Lading in car not being
properly distributed

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2771

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

THE UNION PACIFIC RAILROAD COMPANY

March 3, 1944.

Accident near Fuller, Idaho, on February 6, 1944, caused
by lading in car not being properly distributed.

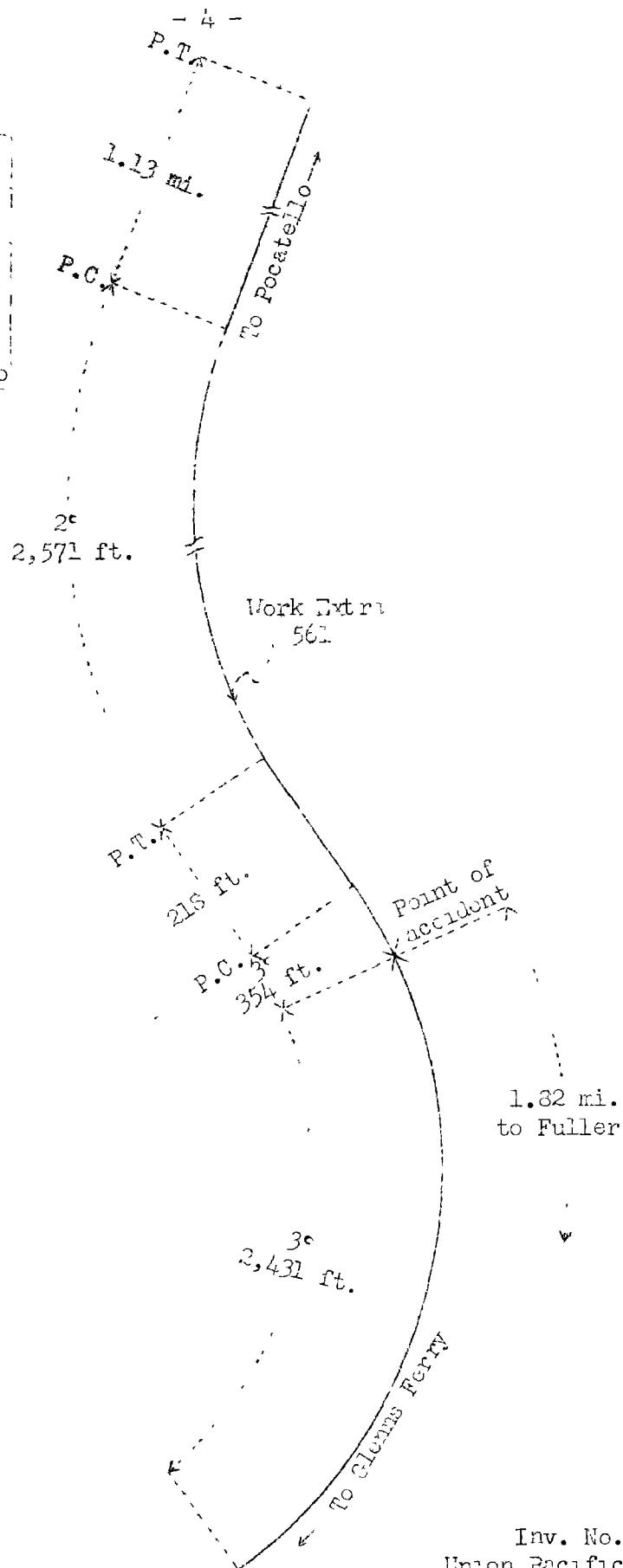
REPORT OF THE COMMISSION¹

PATTERSON, Chairman:

On February 6, 1944, there was a derailment of a work train on the Union Pacific Railroad near Fuller, Idaho, which resulted in the death of two maintenance-of-way employees, and the injury of five maintenance-of-way employees.

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	Pocatello, Idaho
	123.60 mi.
o	Gooding
	4.88 mi.
x	Point of accident
	1.82 mi.
o	Fuller
	29.60 mi.
o	Glenns Ferry, Idaho



Inv. No. 2771
 Union Pacific Railroad
 Fuller, Idaho
 February 6, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the Idaho Division designated as the Third Subdivision and extending between Pocatello and Glenns Ferry, Idaho, 159.9 miles. In the vicinity of the point of accident this was a single-track line over which trains were operated by timetable, train orders and an automatic block-signal system. The accident occurred 1.82 miles east of Fuller. From the east there were, in succession, a tangent 1.13 miles in length, a 2° curve to the left 2,571 feet, a tangent 218 feet and a 3° curve to the right 354 feet to the point of derailment and 2,431 feet beyond. Throughout a distance of 1.71 miles immediately east of the point of accident the grade for west-bound trains varied between 0.77 and 0.25 percent descending, and at this point it was 0.25 percent descending.

On the curve on which the derailment occurred the track structure consisted of 100-pound rail, 33 feet in length, laid in 1921 on 19 treated ties to the rail length. It was fully tieplated, double-spiked, provided with an average of 10 rail anchors per rail length, and was ballasted with gravel to a depth of 8 inches.

Rules governing the Maintenance of Way Department read in part as follows:

1750. * * *

To avoid danger of cars turning over, material must not be loaded on one side or removed from one side of cars in a manner to cause uneven load.

The maximum authorized speed for the train involved was 30 miles per hour on tangents and 25 miles per hour on curves.

Description of Accident

Work Extra 561 consisted of engine 561, headed westward, 13 cars and a caboose, in the order named. The second car was a ditcher, the seventh was empty, the thirteenth was an outfit car, and the remainder were loaded with track material. This train was moving on a 3° curve to the right at an estimated speed of 20 miles per hour when the rear truck of the fourth car, the fifth and sixth cars, and the front truck of the seventh car were derailed.

The fifth car stopped on its right side north of the track and parallel to it. The sixth car stopped, practically upright, south of the track and at an angle of about 45 degrees to it. The trucks of the fifth car stopped under the seventh car. The

derailed cars were slightly damaged. The employees killed and injured were in the fifth car when the accident occurred.

U. P. 26831, the fifth car of the train, was a gondola of steel construction. Its inside measurements were 40 feet 4 inches in length, 9 feet 4-7/8 inches in width, and 4 feet 6 inches in height. Its lightweight, capacity and load limit were, respectively, 42,300, 100,000 and 126,700 pounds. Before unloading was started, the car contained 6,416 tieplates, which weighed 105,864 pounds, and at the time of derailment it contained 3,087 tieplates, which weighed 50,935.5 pounds. The side bearings were spaced 60 inches apart.

It was clear at the time of the accident, which occurred about 6:15 p. m.

Discussion

Work Extra 561, consisting of 13 cars and a caboose, was moving westward on a 3° curve to the right at a speed of about 20 miles per hour when the rear truck of the fourth car, the fifth and sixth cars and the front truck of the seventh car became derailed. The front brakeman, who was in the engine cab, and the enginemen were maintaining a lookout ahead. The first these employees knew of anything being wrong was when the air brakes became applied in emergency and the train stopped abruptly. The conductor was maintaining a lookout ahead from the right side of the caboose. He saw the fifth car overturn to the right just before the brakes became applied in emergency, then the general derailment occurred. Prior to the occurrence of the accident the engine was riding smoothly and there was no indication of defective track. There was no defective condition of the engine or the cars, and there was no indication of dragging equipment, nor of any obstruction having been on the track.

Beginning at a point 354 feet west of the east end of the curve on which the derailment occurred and extending westward 65 feet, wheel marks appeared on the ties 10 inches inside the low rail. These marks were made by the wheels on the low side, which were inclined toward the inside of the curve. Immediately beyond and extending westward about 200 feet to the point where the body of the fifth car stopped on its right side, flange marks appeared on the ties outside the high rail and inside the low rail.

The investigation disclosed that just prior to the occurrence of the accident maintenance-of-way employees were unloading track material from the cars of Work Extra 561. At 6:10 p. m. unloading was stopped and the train proceeded en route to Fuller to clear for an opposing train. Prior to the

derailment about one-half the contents had been unloaded from the south side of this car. The remaining portion of the lading weighed about 50,000 pounds, and practically all of it was contained in the north side of the car, which was on the low side of the curve. The superelevation at the point of derailment was 5-3/8 inches, and the speed was about 30 miles per hour less than equilibrium speed. These conditions caused the body of the car to become overbalanced, and the entire weight of the body was shifted to the low side. While the body was turning over, the outside wheels were lifted off the rail, and the inside wheels were forced inward off the rail and they dropped on the ties 10 inches from the gage side of the low rail. As soon as the body was disengaged from its trucks, the outside wheels dropped on the ties outside the high rail.

The rules of the carrier require that lading must be unloaded in such manner that an unbalanced load will not exist. Why this car was unloaded from one side only was not determined, as the employee directly in charge of the work in this car died as a result of injuries received in the accident.

Cause

It is found that this accident was caused by lading in car not being properly distributed.

Dated at Washington, D. C., this third day of March, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.