

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3270
NORTHERN PACIFIC RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT BEACH, N. DAK., ON
AUGUST 5, 1949

SUMMARY

Date: August 5, 1949

Railroad: Northern Pacific

Location: Beach, N. Dak.

Kind of accident: Collision

Equipment involved: Engine with cars : Cut of cars

Engine number: 1746 :

Consists: 4 cars : 20 cars

Estimated speeds: 2 m. p. h. : 10 m. p. h.

Operation: Timetable, train orders and automatic
block-signal system; auxiliary track

Track: Single; tangent; 0.06 percent
descending grade eastward

Weather: Clear

Time: 3 p. m.

Casualties: 1 killed; 1 injured

Cause: Cut of cars moving out of control
on grade

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3270

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

NORTHERN PACIFIC RAILWAY COMPANY

October 5, 1949

Accident at Beach, N. Dak., on August 5, 1949, caused
by a cut of cars moving out of control on a grade

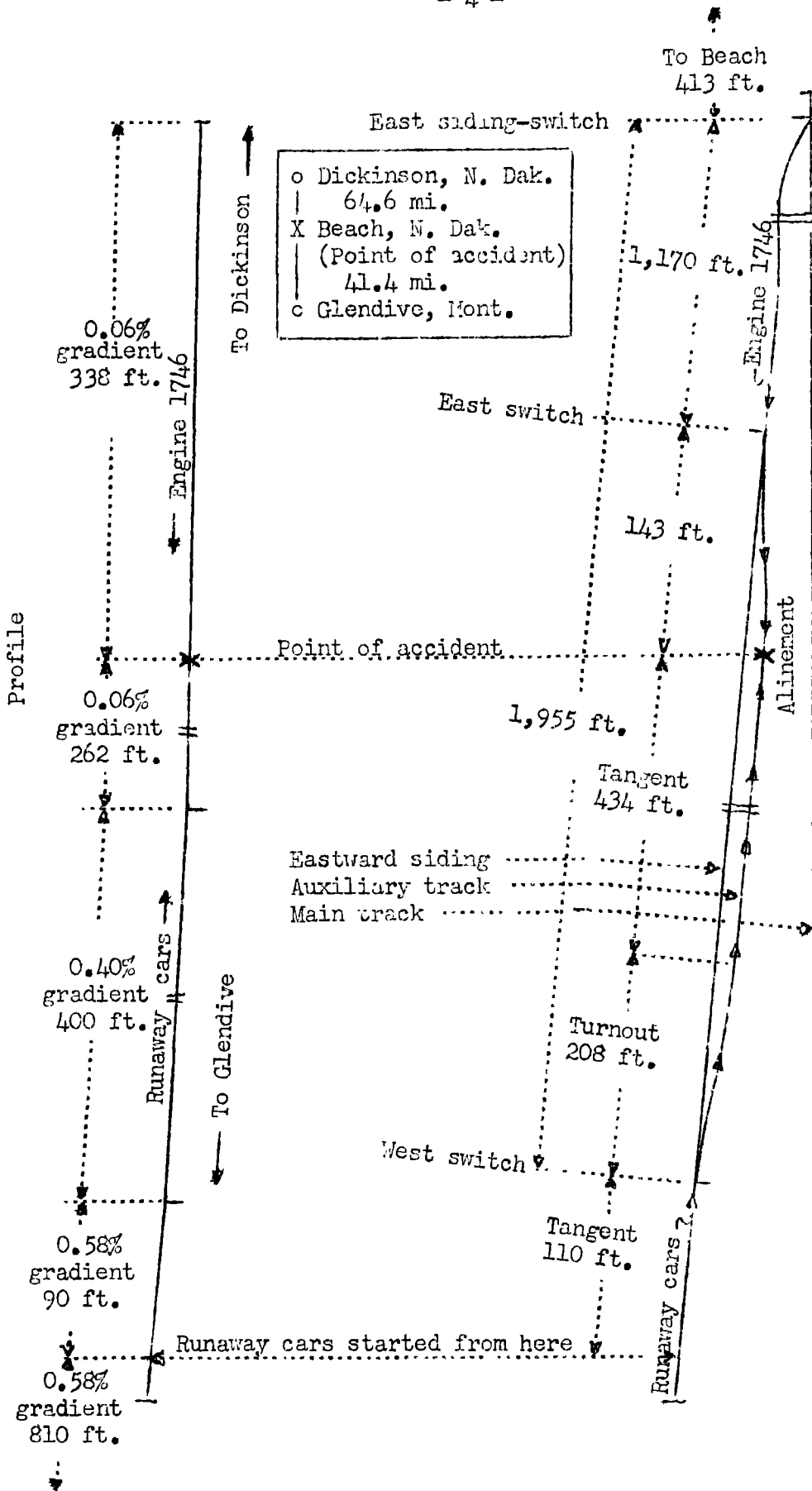
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On August 5, 1949, there was a collision between an engine with cars and a cut of runaway cars on the Northern Pacific Railway at Beach, N. Dak., which resulted in the death of one train-service employee, and the injury of one train-service employee.

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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.



Inv. No. 3270
Northern Pacific Railway
Beach, N. Dak.
August 5, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the Yellowstone Division extending between Glendive, Mont., and Dickinson, N. Dak., 106 miles, a single-track line, over which trains are operated by timetable, train orders and an automatic block-signal system. At Beach, 41.4 miles east of Glendive, a siding 4,715 feet in length, designated as the eastward siding, parallels the main track on the north. The east switch of this siding is located 413 feet west of the station. An auxiliary track 725 feet in length parallels the siding on the south. The east and the west switches of the auxiliary track provide entry to the siding, and are located, respectively, 1,170 feet and 1,955 feet west of the east siding-switch. The accident occurred on the auxiliary track at a point 143 feet west of the east switch. The siding is tangent throughout a distance of 110 feet immediately west of the west switch of the auxiliary track, then there are, in succession, a No. 9 turnout to the right 208 feet in length and a tangent 434 feet to the point of accident. From the west on the siding the grade is, successively, 0.58 percent descending eastward a distance of 900 feet, 0.40 percent descending 400 feet, and 0.06 percent descending 262 feet to the point of accident and 338 feet eastward.

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

806. When cars are left on any track, sufficient hand brakes must be set to prevent cars moving; if the track is on a grade and hand brakes are not sufficient, wheels must also be blocked or chained and, when practicable, cars must be coupled together.

When necessary to hold or stop cars by the use of hand brakes, it must be known that such brakes are in good order before cutting off cars.

Description of Accident

Extra 1746 East arrived at Beach at 12:37 p. m. The crew assembled 17 loaded cars and 3 empty cars and placed them on the eastward siding. The east end of the most easterly car was 110 feet west of the west switch of the auxiliary track. Engine 1746, which was provided with an auxiliary tender, then was detached, and it entered the auxiliary track through the west switch. About 5 minutes later the engine, in backward motion and pulling four cars, started a westward movement on the auxiliary track. It was moving at a speed of about 2 miles per hour when the auxiliary

tender was struck by the cut of 20 cars at a point 143 feet west of the east switch of the auxiliary track. The cut of cars was moving eastward out of control on the descending grade at a speed of about 10 miles per hour.

The east car of the cut of 20 cars was somewhat damaged. The auxiliary tender was demolished. The cistern of the tender of engine 1746 was badly damaged.

A student brakeman was killed, and the flagman was injured.

The weather was clear at the time of the accident, which occurred at 3 p. m.

Discussion

Under the rules of this carrier, when cars are left on any track, sufficient hand brakes must be set to prevent the cars from moving. If cars are left on a grade and the hand brakes are not sufficient to hold the cars, the wheels must also be blocked or chained.

During a period of about 2 hours 20 minutes prior to the time the accident occurred, the crew of Extra 1746 East was engaged in switching operations at Beach. Twenty cars were assembled and were pushed westward on the eastward siding to a point where the east end of the most easterly car was 110 feet west of the west switch of the auxiliary track. The air-brake system of each car was not charged, and hand brakes were not set on any of the cars. The flagman placed blocks under the wheels of the east car. The engine then was detached and it moved eastward a short distance. After it was ascertained that the cars were not moving on the descending grade, the engine entered the auxiliary track at the west switch, which was left lined for movement from the eastward siding to the auxiliary track. The engine pushed 10 cars eastward from the auxiliary track to the eastward siding. Six cars were detached and left on the eastward siding, and the engine, pulling the other four cars, then moved westward on the auxiliary track. The flagman, who was in the vicinity of the west auxiliary track switch, observed that the cut of cars on the eastward siding was moving eastward on the descending grade. He boarded the second car and set the hand brake, but it was not sufficient to stop the cars before the collision occurred. The cut of cars moved a distance of 752 feet before the impact occurred. At the time of the collision the conductor was in the vicinity of a street crossing near the station,

the swing brakeman was east of the engine, the front brakeman was on the front footboard of the engine, the enginemen were in their respective positions in the cab of the engine, and the student brakeman either was on the tender or on the auxiliary tender. Until the collision occurred, none of the surviving employees except the flagman was aware that the cut of cars was moving.

After the accident, tests of the hand-brake equipment of the cars involved disclosed that the brakes of 18 of the cars were in operative condition and functioned properly. The brakes of the two most easterly cars were damaged to the extent that they could not be tested.

Cause

It is found that this accident was caused by a cut of cars moving out of control on a descending grade.

Dated at Washington, D. C., this fifth day of October, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.