

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3294

THE NORTHERN PACIFIC TERMINAL COMPANY
OF OREGON

IN RE ACCIDENT

AT PORTLAND, OREG., ON

OCTOBER 10, 1949

SUMMARY

Date: October 10, 1949

Railroad: Northern Pacific Terminal
Company of Oregon

Location: Portland, Oreg.

Kind of accident: Collision

Equipment involved: N.P. passenger train : Business car

Train number: 408 :

Engine number: Diesel-electric units:
6500A, 6500B and
6500C

Consist: 11 cars :

Estimated speeds: 3 m. p. h. : Standing

Operation: Special instructions

Track: Yard track; tangent; 0.03 percent
descending grade southward

Weather: Misting

Time: 4:30 p. m.

Casualties: 1 killed; 9 injured

Cause: Failure of the Northern Pacific
Terminal Company of Oregon to
establish definite and adequate
rules governing movements on its
station tracks

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3294

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

THE NORTHERN PACIFIC TERMINAL COMPANY OF OREGON

January 6, 1950

Accident at Portland, Oreg., on October 10, 1949, caused
by failure of the Northern Pacific Terminal Company of
Oregon to establish definite and adequate rules
governing movements on its station tracks.

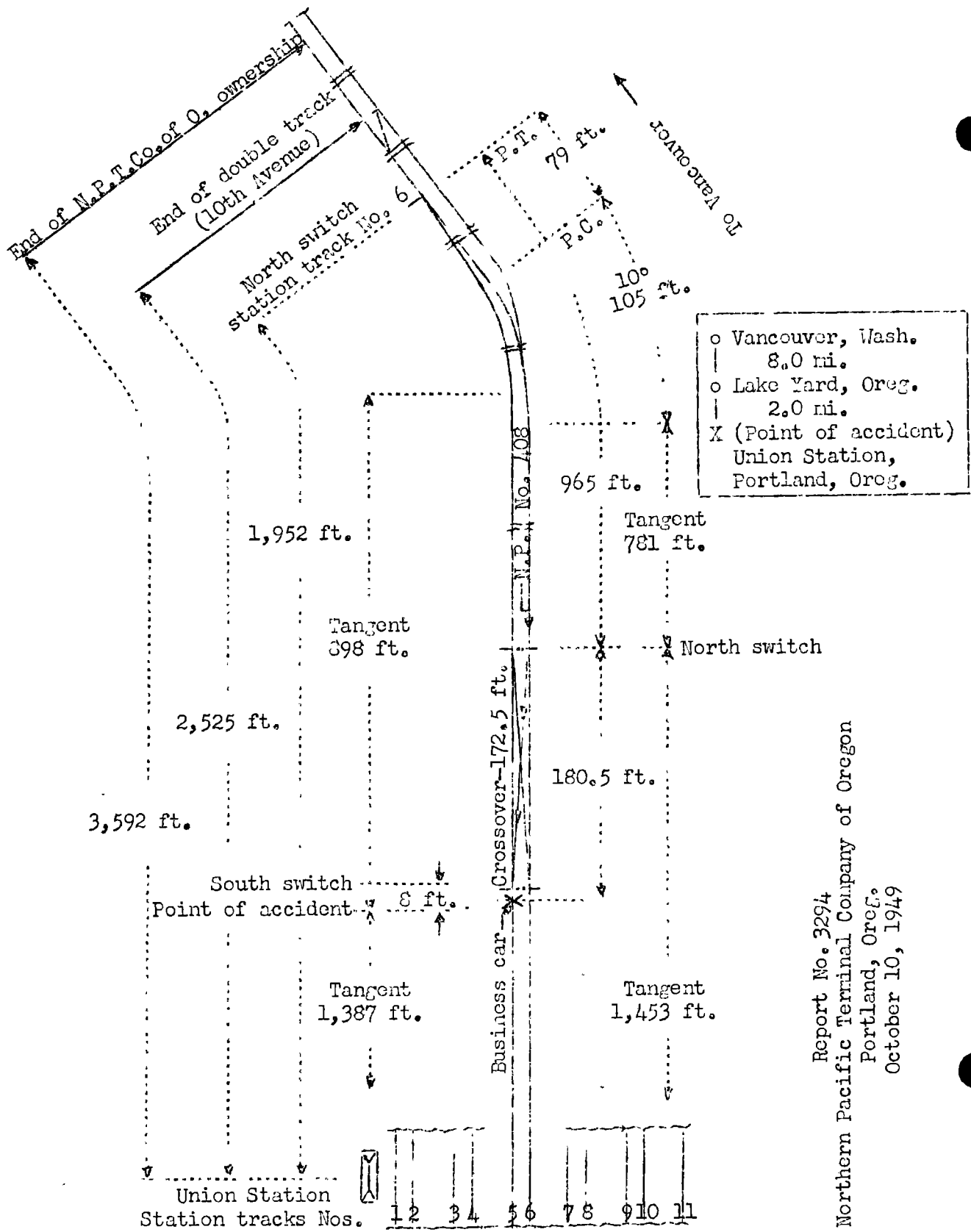
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On October 10, 1949, there was a collision between a
Northern Pacific Railway passenger train and a business car
on the line of the Northern Pacific Terminal Company of
Oregon at Portland, Oreg., which resulted in the death of one
employee, and the injury of four passengers, four employes,
and one non-trespasser. This accident was investigated in
conjunction with a representative of the Public Utilities
Commissioner of Oregon.

¹

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



Report No. 3294
 Northern Pacific Terminal Company of Oregon
 Portland, Ore.
 October 10, 1949

Location of Accident and Method of Operation

This accident occurred on a station track at Union Station, Portland, Oreg., over which trains are operated by special instructions. At Union Station, Portland, there are 11 station tracks, designated from west to east, successively, as tracks Nos. 1 to 11. Tracks Nos. 5 and 6 are, respectively, 2,580 feet and 2,918 feet in length. The north switch of track No. 6 is 1,952 feet north of the station. The north switch of a crossover which connects tracks Nos. 5 and 6 is located 965 feet south of the north switch of track No. 6. This crossover is facing-point for south-bound movements on track No. 6 and is 172.5 feet in length. The accident occurred on track No. 5 at a point 180.5 feet south of the north crossover-switch. Track No. 5 is tangent throughout a distance of 898 feet immediately north and 1,387 feet immediately south of the point of accident. From the north on track No. 6 there are, in succession, a tangent 79 feet in length, a 10° curve to the right 105 feet, and a tangent 781 feet to the north crossover-switch and 1,453 feet southward. The grade for south-bound movements is 0.06 percent descending a distance of 452 feet, then 0.03 percent descending 604 feet to the point of accident.

The distance between the center-lines of tracks Nos. 5 and 6 is 12 feet 2-1/2 inches. The crossover between these tracks is provided with a No. 9 turnout at each end. The switch stand at the north switch is of the ground-throw type and is located 4 feet 2 inches east of the center-line of the track. The switch is equipped with an oil-burning lamp located 5 feet 8 inches west of the center-line of the track. This lamp is mounted on a turning base which is operated by a bar connected to the operating rod of the switch. It displays a green aspect when the switch is lined in normal position, and displays a red aspect when the switch is lined for entry to the crossover. The lenses of the lamp are 4-1/4 inches in diameter, and the centers of the lenses are 1-7/8 inches above the level of the tops of the rails. A switch target is not provided.

Trains of the Northern Pacific Railway, hereafter referred to as the N.P., regularly are operated over the line of the Spokane, Portland and Seattle Railway, hereafter referred to as the S.P. & S., between Vancouver, Wash., 10 miles north of Union Station, Portland, and then to the Union Station over the tracks of the Northern Pacific Terminal

Company of Oregon, hereafter referred to as the N.P.T. N.P. trains moving over the tracks of the N.F.T. are governed by special instructions contained in the timetable of the S.P.& S. Timetable directions on the S.P.& S. are east and west. Directions on the tracks of the N.P.T. are north and south and are used in this report.

Timetable special instructions of the S.P.& S. read in part as follows:

2. At Portland--Between end of double track at 10th Avenue and Union Station, trains and engines will be governed by signals from switch tenders. Westward trains and engines must not pass clearance point at end of double track until proceed signal from switch tender is received.

* * *

On N.P.T. Co. trackage, trains and engines using tracks 1 to 10 inclusive must run at restricted speed when passing a train receiving or discharging passengers
* * *

* * *

Timetable special instructions of the N.P. read in part as follows:

At Portland, through interlocking at south end NPT Co. property, and on depot yard tracks-----6 MPH.

The train involved was restricted to 6 miles per hour over the station tracks of the N.P.T.

Description of Accident

No. 408, a south-bound first-class N.P. passenger train, consisted of Diesel-electric units 6500A, 6500B and 6500C, coupled in multiple-unit control, one baggage car, five coaches, one dining car, one parlor car, and three sleeping cars, in the order named. The first car was of steel-underframe construction, the third, fourth, fifth, and sixth cars were of light-weight steel construction, and the other cars were of all-steel construction. No. 408 becomes No. 705 when it enters the S.P.& S. This train

passed Lake Yard, the last open office, 2 miles north of Union Station, Portland, at 4:25 p. m., on time. As it approached 10th Avenue, 2,525 feet north of Union Station, Portland, the switchtender at that point gave a hand signal to proceed. The train passed 10th Avenue, entered track No. 6 at the north switch, entered track No. 5 at the crossover, and, while moving at a speed of about 3 miles per hour, it struck a business car which was standing on track No. 5 at a point 8 feet south of the south crossover-switch.

No. 408 stopped with the front end of the first Diesel-electric unit 42 feet south of the point of accident. None of the equipment of No. 408 was damaged. As a result of the impact, the business car was coupled to the front of the first Diesel-electric unit of No. 408 and was somewhat damaged.

A car repairman who was crossing track No. 5 near the south end of the business car was killed. The engineer of No. 408, a dining-car attendant of No. 408, an attendant of the business car, and a car repairman were injured.

It was misting at the time of the accident, which occurred about 4:30 p. m.

The Diesel-electric units of No. 408 were provided with 24-RL brake equipment. The feed valve was adjusted to supply brake-pipe pressure of 110 pounds. Three of the cars were equipped with L-3 triple valves, one with U-12-B control valve, four with D-22-BR control valves, and three with UC control valves.

Discussion

About 20 minutes before the accident occurred, a yard engine of the N.P.T. pulled a business car northward on track No. 6 to the crossover, then pushed the car through the crossover to track No. 5. The car was detached from the engine at a point 8 feet south of the south crossover-switch. The engine then moved northward through the crossover to track No. 6 and then to the north end of the station tracks where switching was performed on track No. 5. When the engine started to move northward, one of the yard brakeman assigned to the crew boarded the footboard on the south end of the engine. He said that as the engine moved through the crossover he observed the yard conductor line the south crossover-switch to normal position and give a proceed signal. He understood the proceed signal to indicate that either the

yard conductor or the other yard brakeman would restore the north crossover-switch to normal position. The yard conductor said that as the engine moved northward he observed that one yard brakeman was accompanying the engine and the other yard brakeman was standing in the vicinity of the crossover. He lined the south crossover-switch to normal position and, assuming that the yard brakeman who was on the ground would line the north crossover-switch, gave a proceed signal to the yard brakeman who was on the engine. The yard brakeman who was on the ground said that when he observed the proceed signal given by the yard conductor he understood it to indicate that the yard conductor would line both crossover switches. After the engine departed, neither the yard conductor nor the yard brakeman lined the north crossover-switch, and neither of them observed that it had not been restored to normal position. The members of the yard crew first were aware that the north crossover-switch was lined for entry to the crossover when they observed that No. 408 had entered the crossover from track No. 6.

No. 408 received a proceed signal from the switchtender at 10th Avenue and entered track No. 6 at a speed of about 6 miles per hour. The enginemen were in their respective positions in the control compartment at the front of the first Diesel-electric unit, and the members of the train crew were in various locations throughout the cars of the train. The brakes of this train had been tested and had functioned properly when used en route. The enginemen observed that track No. 6 was clear and that a passenger train was standing on track No. 7 and passengers were being loaded from the platform between tracks Nos. 6 and 7. As No. 408 approached the crossover, the enginemen were maintaining a lookout for persons and for baggage and express trucks which might cross track No. 6 in front of their train. The engineer did not observe the position of the north crossover-switch until the train was closely approaching it. When he observed that the switch was lined for entry to the crossover, he immediately initiated an emergency brake application. The speed of the train had been reduced to about 3 miles per hour when the collision occurred. The fireman was not aware of the position of the switch until the train entered the crossover. Because the switch stands of the crossover switches are not provided with targets and the aspects displayed by the lamps are not visible at a distance during the day, enginemen of an approaching train cannot determine the positions of the switches until they approach them closely enough to observe the position of the switch points.

Employees in train and engine service on the N.P., the S.P.& S., and the N.P.T. are governed by a consolidated code of operating rules. An agreement among these carriers provides that employees in train and engine service who have been examined and qualified on these operating rules are qualified to perform service on the tracks of any of the three lines. Employees are examined on the operating rules by an official of the carrier by which they are employed. The crew of No. 408 had been examined by officials of the N.P. on the consolidated code of operating rules but had not been examined by an official of the N.P.T.

The investigation disclosed that there was not a common understanding as to the method of operation on the N.P.T. station tracks, that this operation was not covered by definite written rules, and that N.P. employees had not been instructed on the method of operation on the N.P.T. the same as N.P.T. employees had been instructed. N.P.T. employees thought that all tracks south of 10th Avenue were yard tracks, that movements of passenger trains on these tracks were not authorized by timetable, that south-bound passenger trains enter these tracks on authority of hand signals from switch-tenders, that crossover switches should be lined for straight-track movements at all times except when being used for crossover movements, and that the speed of any train on these tracks must be so controlled that the train can be stopped short of an obstruction. On the other hand, the N.P. employees thought that a proceed signal from the switchtender indicated that the track was clear to the point where the train would stop at Union Station, that the speed of the train must not exceed 6 miles per hour, and that their train had the same authority on a station track as on a main track. The engineer and the fireman of No. 408 said it was their understanding that their train might enter one track and then be crossed over to another track before it arrived at the Union Station, and that any such route lined up was assurance that the tracks in the route were not occupied by any other movement or obstructed by cars. They thought that the instruction concerning restricted speed when a train was passing another train which was receiving or discharging passengers was only for the purpose of averting injury to passengers and employees on or near the track and that the movement of their train with respect to other trains was not affected. The superintendent of the N.P. had the same understanding of the operation on the N.P.T. as did the crew of No. 408.

The method of operation on the station tracks is not covered by definite written rules. The N.P.T. should take immediate steps to formulate such rules to cover the operations on the station tracks and to give the same instructions to employees of the tenant lines as those given to N.P.T. employees.

Cause

It is found that this accident was caused by failure of the Northern Pacific Terminal Company of Oregon to establish definite and adequate rules governing movements on its station tracks.

Dated at Washington, D. C., this sixth day of January, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.