INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3284

SPOKANE, PORTLAND AND SEATTLE RAILWAY COMPANY

IN RE ACCIDENT

NEAR OAKBROOK, OREG., ON

SEPTEMBER 22, 1949

SUMMARY

Date:	September 22, 1949	
Railroad:	Spokane, Portland and Seattle	
Location:	Oakbrook, Oreg.	
Kind of accident:	Head-end collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra G.N. 440 East	: Extra G.N. 3128 West
Engine numbers:	Diesel-electric units 440A, 440B, 440C and 440D	: 3128
Consists:	99 cars, caboose	: 24 cars, caboose
Estimated speeds:	30 m. p. h.	: 30 m. p. h.
Operation:	Timetable and train orders	
Track:	Single; 2°55' curve; 0.48 percent descending grade westward	
Weather:	Clear	
Time:	9 p. m.	
Casualties:	3 killed; 2 injured	
Cause:	Failure to obey provisions of a train order	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3284

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

SPOKANE, PORTLAND AND SEATTLE RAILWAY COMPANY

November 29, 1949

Accident near Oakbrook, Oreg., on September 22, 1949, caused by failure to obey provisions of a train order.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On September 22, 1949, there was a head-end collision between two freight trains on the Spokane, Portland and Seattle Railway near Oakbrook, Oreg., which resulted in the death of three employees, and the injury of two employees. This accident was investigated in conjunction with a representative of the Public Utilities Commissioner of Oregon.

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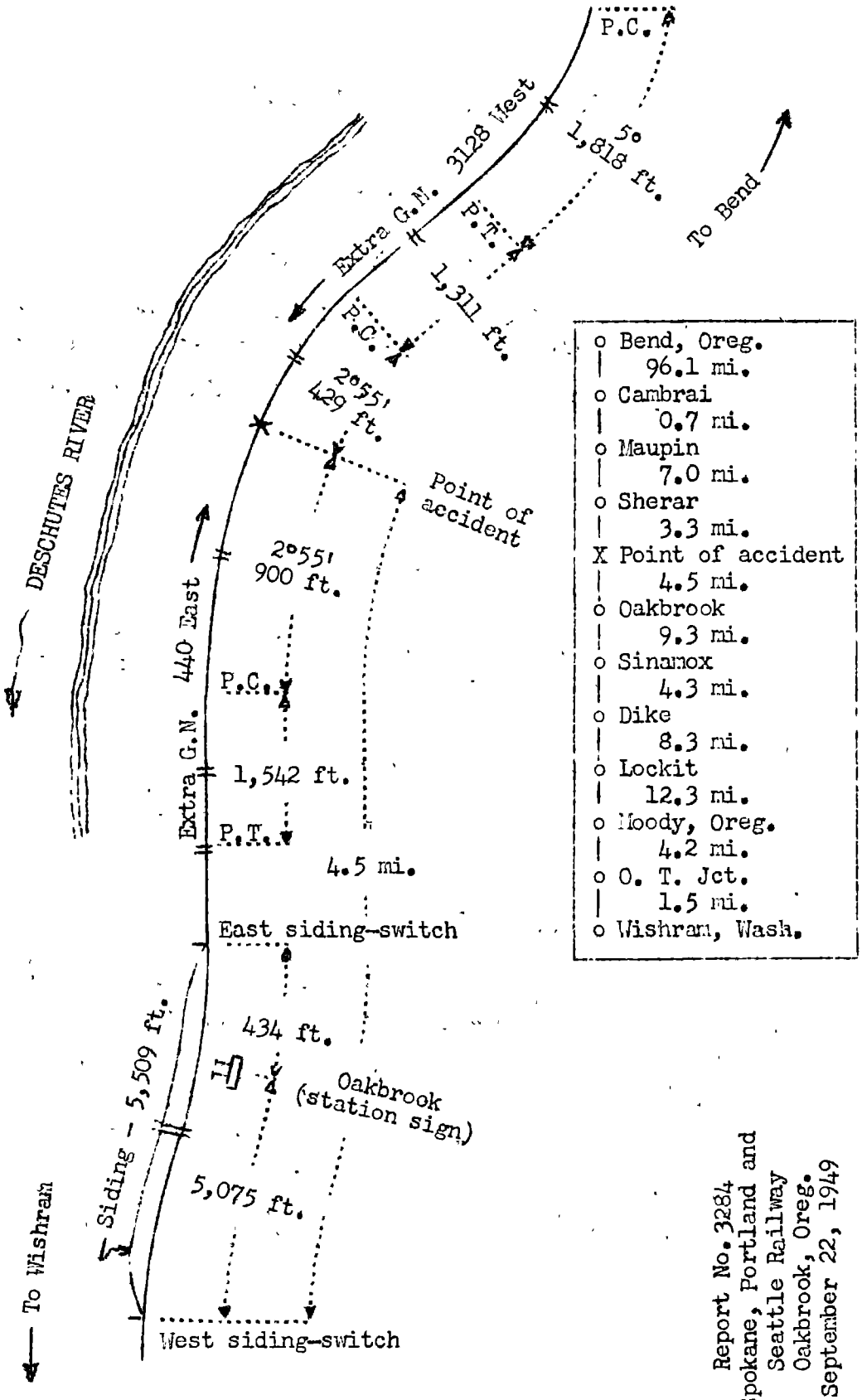
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Report No. 3284
Spokane, Portland and Seattle Railway
Oakbrook, Oreg.
September 22, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the Spokane, Portland and Seattle Railway designated as the Oregon Trunk Railway and extending between Wishram, Wash., and Bend, Oreg., 151.5 miles, a single-track line, over which trains are operated by timetable and train orders. At the point of accident there is no block system in use. At Oakbrook, 39.9 miles east of Wishram, a siding 5,509 feet in length parallels the main track on the north. The west switch of this siding is 5,075 feet west of the station. The accident occurred on the main track 4.5 miles east of the west siding-switch. From the west there are, in succession, a tangent 1,542 feet in length, and a 2°55' curve to the right 900 feet to the point of accident and 429 feet eastward. From the east there are, in succession, a 5° curve to the right 1,818 feet in length, a tangent 1,311 feet, and the curve on which the accident occurred. The grade is 0.48 percent descending westward.

In the vicinity of the point of accident the track parallels the south bank of the Deschutes River. The track is laid on a side-hill cut and is about 63 feet above the level of the shore-line of the river and about 140 feet horizontally distant. The south wall of the cut is approximately 14 feet 4 inches from the center-line of the track and rises almost vertically to a height of about 35 feet above the level of the track. The south wall of the cut and the curvature of the track restrict the range of vision from trains approaching the point of accident to a distance of about 500 feet.

Between Sherar and Cambrai, respectively, 7.8 miles and 15.5 miles east of Oakbrook, an automatic block signal system is in use. Sherar is the first station east of Oakbrook. The last signal governing west-bound movements is located approximately 5.3 miles east of the point of accident. The controlling circuit extends westward a distance of 2.5 miles to a sign bearing the words "END OF BLOCK." At Oakbrook automatic block signal 38.8, the last signal governing east-bound movements, is located immediately west of the west siding-switch. The controlling circuit extends eastward a distance of about 3.5 miles to an end-of-block sign. Automatic block signal 39.7, governing west-bound movements, is located immediately east of the east siding-switch. The controlling circuit extends westward a distance of about 5.75 miles to an end-of-block sign.

Signals 39.7 and 38.8 display either an aspect to proceed or an aspect to stop. An automatic three-aspect approach signal is provided in approach to each of these signals. They are located, respectively, 1.80 miles west and 2.25 miles east of signals 39.7 and 38.8. The accident occurred at a point about 1 mile east of the end-of-block sign east of Oakbrook and about 3.8 miles west of the end-of-block sign west of Sherar.

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

204. * * *

* * *

Engineers must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

FORMS OF TRAIN ORDERS.

* * *

S-C

Giving Right Over an Opposing Train.

* * *

(6.) Extra 38 east has right over Extra 37 west
X to G and wait at M until 9 59 a m
L 10 30 a m
J 10 55 a m
for Extra 37 west

The first-named train must not pass the designated waiting points before the times given unless the second-named train has arrived. The second-named train must clear the time specified at the designated waiting points or any intermediate station not less than five minutes.

In Example * * * (6), the first-named train must not go beyond G until the other train has arrived, unless directed by train order to do so.

* * *

Examples * * * (6) of Form S-C give right to the first-named train over the specified train between the points named. If the trains meet at either of the designated points, the first-named train must take the siding, unless the order otherwise prescribes. If the trains meet between the designated points, the second-named train must take the siding, unless the order otherwise prescribes.

* * *

The maximum authorized speed for the trains involved was 35 miles per hour.

Description of Accident

At Wishram the crew of Extra G.N. 440 East, an east-bound freight train, received, among others, copies of train order No. 79 reading in part as follows:

Extra GN 440 East has right over * * *
Extra GN 3128 West Wishram to Oakbrook
and wait at

OT Jct until	seven thirty	730PM
Moody	seven forty	740PM
Lockit	seven fifty nine	759PM
Dike	eight fifteen	815PM
Sinamox	eight twenty five	825PM

for * * * Extra GN 3128 west

O. T. Jct., Moody, Lockit, Dike, and Sinamox are located, respectively, 1.5 miles, 5.7 miles, 18 miles, 26.3 miles, and 30.6 miles east of Wishram. Extra G.N. 440 East, consisting of Diesel-electric units 440A, 440B, 440C and 440D, coupled in multiple-unit control, 99 cars and a caboose, departed from Wishram, the last open office, at 7:15 p. m., passed the west siding-switch at Oakbrook, where it was required to enter the siding to clear for Extra G.N. 3128 West, and while moving at an estimated speed of 30 miles per hour it collided with Extra G.N. 3128 West at a point 4.5 miles east of the west siding-switch.

Extra G.N. 3128 West, a west-bound freight train, consisted of engine G.N. 3128, 24 cars and a caboose At Maupin, 14.8 miles east of Oakbrook, the crew received copies of train order No. 79. This train departed from Maupin, the last open office, at 7:55 p. m., and while it was moving at an estimated speed of 30 miles per hour it collided with Extra G.N. 440 East.

The first unit of Diesel-electric locomotive G.N. 440 was derailed to the left and stopped on its left side, with the front end 8 feet west of the point of accident and 62 feet north of the track and the rear end 28 feet north of the track. This unit was badly damaged. The second and the third units were not derailed, but were considerably damaged. The rear truck of the fourth unit was derailed, and this unit was badly damaged. The first eight cars of Extra G.N. 440 East were derailed and stopped in various positions on or near the track. The first and the second cars were destroyed, and the other derailed cars were considerably damaged. The rear truck of the ninth car was derailed, but this car was not damaged. The engine, the tender, and the first to the eleventh cars, inclusive, of Extra G.N. 3128 West were derailed. The engine stopped on its right side, with the front end 5 feet west of the point of accident and 66 feet north of the track and the rear end 85 feet north of the track. It was badly damaged. A separation occurred between the engine and the tender. The tender stopped upright and in line with the track. It was badly damaged. The derailed cars stopped in various positions on or near the track. The first three cars were destroyed and the fourth to the ninth cars, inclusive, were considerably damaged. The tenth and eleventh cars were not damaged.

The fireman of Extra G.N. 440 East and the engineer and the front brakeman of Extra G.N. 3128 West were killed. The engineer of Extra G.N. 440 East and the fireman of Extra G.N. 3128 West were injured.

The weather was clear at the time of the accident, which occurred at 9 p. m.

During the 30-day period preceding the day of the accident the average daily movement in this territory was 10.3 trains.

Discussion

The crews of both trains held copies of train order No. 79, which conferred right to Extra G.N. 440 East over Extra G.N. 3128 West between Wishram and Oakbrook. Under the rules, Extra G.N. 440 East was not permitted to pass the designated waiting points shown in the order before the times specified unless Extra G.N. 3128 West had arrived

at one of these stations. If Extra G.N. 3128 West did not proceed beyond Oakbrook to meet Extra G.N. 440 East, Extra G.N. 440 East was required to enter the siding at Oakbrook at the west switch and was not permitted to leave Oakbrook until Extra G.N. 3128 West had arrived at that station. The surviving members of the crews of both trains so understood.

As Extra G.N. 3128 West was approaching the point where the accident occurred the speed was about 30 miles per hour. The headlight was lighted brightly. The enginemen and the front brakeman were on the engine, and the conductor, the swing brakeman, and the flagman were in the caboose. The brakes of this train had been tested and had functioned properly when used en route. As the train was closely approaching the point where the accident occurred the fireman observed the reflection of a light on the rails and called a warning to the engineer. He thought that the engineer made an application of the brakes, but the collision occurred before the brake application was effective. The employees in the caboose were not aware that the opposing train had passed Oakbrook until the collision occurred.

After Extra G.N. 440 East passed Sinamox the front brakeman observed sparks under the left side of the train about 25 car lengths behind the engine. He proceeded to the control compartment at the front of the first Diesel-electric unit and informed the enginemen. The engineer thought that the sparks were caused by the sticking of the brake on one of the cars. In order to release the brake on this car, he made a service brake-pipe reduction, which immediately was released. Because of curvature of the track, the employees on the Diesel-electric unit were unable again to observe the left side of the train until it entered a curve to the left east of the west siding-switch at Oakbrook. When the train entered this curve, the engineer crossed to the left side of the control compartment to inspect the train. He thought that the brakes had released properly and returned to his seat. As the Diesel-electric unit was closely approaching the point where the accident occurred the speed was about 30 miles per hour. The enginemen were in the control compartment at the front of the first Diesel-electric unit, the front brakeman was in the control compartment at the rear of the fourth Diesel-electric unit, and the conductor, the swing brakeman, and the flagman were in the caboose. The headlight was lighted brightly. The

brakes of this train had been tested and had functioned properly when used en route. The fireman observed the reflection of a light on the rails. He called a warning to the engineer, who immediately placed the brake valve in emergency position. The collision occurred a few seconds later.

The surviving members of the crew of Extra G.N. 440 East said that when their train passed Sinamox they were aware that Extra G.N. 3128 West had not been met and that their train was required to enter the siding at the west siding-switch at Oakbrook to clear for Extra G.N. 3128 West. The engineer said that while the train was approaching and while passing Oakbrook he was concerned about the cause of the sparks from underneath the train to the extent that he overlooked the requirement that his train enter the siding at that station to clear for Extra G.N. 3128 West. The front brakeman said that he was concerned in the action taken by the engineer in releasing the brakes. After the brakes were released, he proceeded to the control compartment at the rear of the fourth unit and was not aware that the train had passed Oakbrook. The conductor said that when the brakes were applied and then released as the train approached Oakbrook he assumed that a member of the crew of Extra G.N. 3128 West had operated the west siding-switch for Extra G.N. 440 East to enter the siding. When the caboose passed the west siding-switch he then assumed that Extra G.N. 3128 West had arrived at Oakbrook and had entered the siding. He then proceeded to the rear platform of the caboose to identify the opposing train. When the caboose passed the east siding-switch without meeting Extra G.N. 3128 West he entered the caboose to re-read the train order, then opened the conductor's valve. The collision occurred immediately afterward. The flagman was on the rear platform of the caboose when the train passed Oakbrook. He said that when he realized the train was proceeding on the main track and that Extra G.N. 3128 West was not on the siding he reminded the conductor that their train was required to meet Extra G.N. 3128 West at that station. He thought that after he took this action, the responsibility for stopping the train rested with the conductor, and therefore took no other action. The swing brakeman said that he was sitting at a window on the south side of the caboose and was not aware until after the collision occurred that the train had passed Oakbrook.

A block-signal system is not in use on this line throughout a distance of about 5 miles, between Oakbrook and Sherar, and at certain other points. This collision occurred at a point where neither of the two trains involved was protected by a block-signal system.

Cause

It is found that this accident was caused by failure to obey provision of a train order.

Dated at Washington, D. C., this twenty-ninth day of November, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.