

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3245  
SPOKANE, PORTLAND AND SEATTLE RAILWAY COMPANY  
REPORT IN RE ACCIDENT  
NEAR HOME VALLEY, WASH., ON  
APRIL 11, 1949

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SUMMARY

Date: April 11, 1949

Railroad: Spokane, Portland and Seattle

Location: Home Valley, Wash.

Kind of accident: Rear-end collision

Equipment involved: Track motor-car SGH : Engine  
343

Train number: : Extra G.N.  
1720 West

Engine number: : G.N. 1720

Estimated speeds: 20 m. p. h. : 30 m. p. h.

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

Track: Single; tangent; level

Weather: Clear

Time: 12:26 p. m.

Casualties: 1 killed

Cause: Failure to provide adequate protection  
for movement of track motor-car

Recommendation: That the Spokane, Portland and  
Seattle Railway Company provide  
adequate block-signal or train-order  
protection for movement of track  
motor-cars on its line

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3245

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

SPOKANE, PORTLAND AND SEATTLE RAILWAY COMPANY

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June 10, 1949

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Accident near Home Valley, Wash., on April 11, 1949, caused  
by failure to provide adequate protection for the  
movement of a track motor-car.

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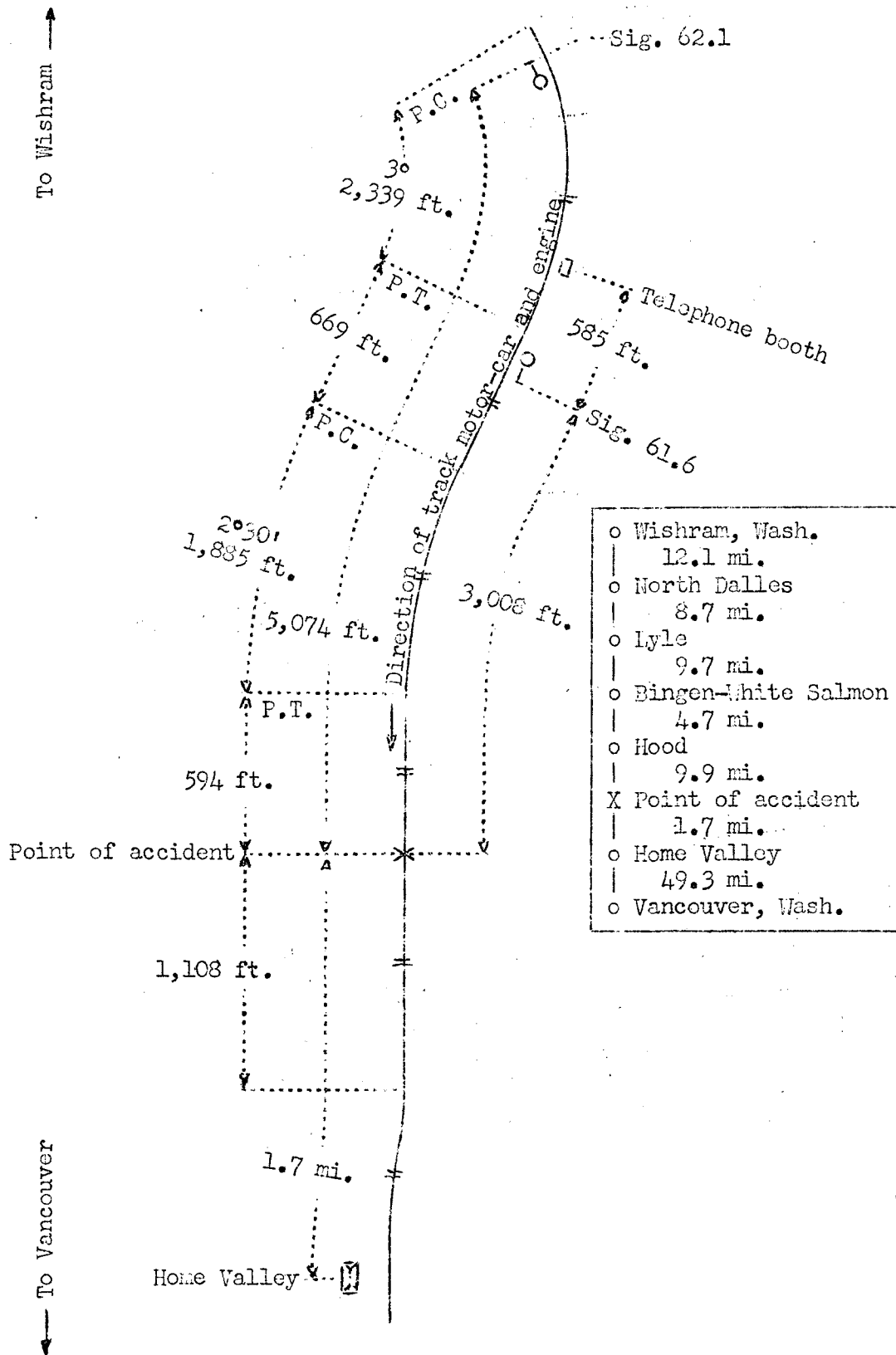
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On April 11, 1949, there was a rear-end collision  
between a track motor-car and an engine on the Spokane,  
Portland and Seattle Railway near Home Valley, Wash., which  
resulted in the death of one maintenance-of-way employee.

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<sup>1</sup>  
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.



Inv. No. 3245  
 Spokane, Portland and Seattle Railway  
 Home Valley, Wash.  
 April 11, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the Vancouver Division extending between Wishram and Vancouver, Wash., 96.1 miles. This is a single-track line, over which trains are operated by timetable, train orders and an automatic block-signal system. The accident occurred on the main track 45.1 miles west of Wishram and 1.7 miles east of the station at Home Valley. From the east there are, in succession, a 3° curve to the right 2,339 feet in length, a tangent 669 feet, a 2°30' curve to the left 1,885 feet, and a tangent 594 feet to the point of accident and 1,108 feet westward. The grade is level.

Automatic signal 62.1, governing west-bound movements, and automatic signal 61.6, governing east-bound movements, are located, respectively, 5,074 feet and 3,008 feet east of the point of accident. The controlling circuits are arranged on the absolute-permissive-block principle. These signals are of the color-light type, and are approach lighted. They display three aspects. Each of these signals can be lighted by the manual operation of a pull-type contactor located in a box mounted on the exterior of the signal case, and it will remain lighted until the contactor is manually restored to normal position. The approach-lighting circuit of signal 62.1 extends to a point 4,450 feet east of the signal. The controlling circuit of signal 61.6 is so arranged that when this signal is lighted it will display a red aspect when a west-bound train is occupying the block between the signal and Hood, 9.3 miles east of the signal.

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

14. ENGINE WHISTLE SIGNALS.

\* \* \*

The signals prescribed are illustrated by "o" for short sounds: "—" for longer sounds. \* \* \*

Sound.

Indication.

\* \* \*

(1) — — o —

Approaching \* \* \* obscured curves; also as frequently as necessary when moving in \* \* \* obscured places to warn trackmen and others.

\* \* \*

(p) Succession of short sounds. Alarm for persons or live stock on the track.

\* \* \*

932. While engine is moving, the fireman must keep a constant lookout when not engaged in other duties. He must be on the lookout if the view of the engineer is obstructed \* \* \*; he must give instant notice to the engineer of any signals or indication of danger or obstruction, or if there is any reason to believe the train may strike a person or object on the track. \* \* \*

Rules and General Instructions for Track and Bridge and Building employees read in part as follows:

108. (M) In issuing line-up for foremen train dispatcher will list all trains on the road, ordered, or expected in the territory involved up to the time limit asked for, with information as to whether regular trains are late or on time, including sections, and for extra trains an approximate time at key stations. The period of time covered should be no longer than necessary. This information should be obtained from operator on duty in writing whenever possible. Foremen and others obtaining line-ups over phone from a designated operator or from the train dispatcher will acknowledge their understanding of the line-up by repeating and giving their names. They must read the line-up to members of their crew.

M 273. Avoidance of False Indications--Signals shall not be operated by short circuiting the track circuit to ascertain whether the block is occupied.

\* \* \*

No motor \* \* \* cars shall be used that are not properly insulated.

\* \* \*

Special rules read in part as follows:

2330. The person in charge of the operation of a motor car must keep in touch with train movements securing the necessary information from train dispatcher.

2331. Motor and push cars must not be placed on main tracks unless tracks are known to be clear or until proper lineup has first been received.

2332. Person in charge of motor car will be required at all times to keep himself informed as to train movements in the vicinity of their operation so as to avoid unnecessary hazards, from running on short time ahead of train or in the face of traffic. Dispatchers will give line-ups to foremen of gangs operating motor cars when requested. They must protect themselves whenever and wherever necessary.

2346. Operation of track cars on obscured curves \* \* \* must be properly protected by flag, unless the line is known to be clear of trains, and then must move at slow speed prepared to stop short of approaching track car or obstruction. Remember these cars do not set automatic block signals.

2366. Track cars shall be equipped with not less than 12 torpedoes, 6 fusees, two red, two yellow and two green flags, each on a three foot staff \* \* \*.

Form 1087 reads as follows:

FOREMAN'S TRAIN LOCATION

Date \_\_\_\_\_

To \_\_\_\_\_ At \_\_\_\_\_

Between Sta. \_\_\_\_\_ And Sta. \_\_\_\_\_

Until \_\_\_\_\_ M \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Supt. \_\_\_\_\_

Repeated at \_\_\_\_\_ By \_\_\_\_\_ Cpr. \_\_\_\_\_

(Continued on next page)

### Acknowledgment

I understand that this is not a train order and does not confer right over any train, or waive any rule. Also that time of trains shown hereon is approximate and that other trains not shown may be run before expiration of time shown between above stations without my knowledge.

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Foreman

The maximum authorized speeds were 45 miles per hour for the engine and 25 miles per hour for the track motor-car.

### Description of Accident

About 11:40 a. m., track motor-car SGH 343, occupied by a track inspector, departed westward from Bingen-White Salmon, 30.5 miles west of Wishram, and while moving at an estimated speed of 20 miles per hour it was struck by Extra G.N. 1720 West at a point 1.7 miles east of the station at Home Valley.

Extra G.N. 1720 West, consisting of G.N. engine 1720 without cars, departed from Wishram at 11 a. m., passed Bingen-White Salmon, the last open office, at 12:04 p. m., and while moving at an estimated speed of 30 miles per hour it struck track motor-car SGH 343.

The track motor-car, which was not derailed, was moved westward approximately 1,926 feet to the point where Extra G.N. 1720 West stopped. The super-structure was destroyed by fire. Engine G.N. 1720 was not damaged.

The weather was clear and a strong wind was blowing from the west at the time of the accident, which occurred at 12:26 p. m.

The track inspector on the track motor-car was killed.

Track motor-car SGH 343 was of the 4-wheel type, and was insulated to prevent the shunting of track circuits. It weighed 575 pounds and was equipped with 4-wheel brakes, a windshield, a rear-view mirror, and a metallic top.

During the 30-day period preceding the day of the accident, the average daily movement in the territory involved was 12.6 trains.



### Discussion

The investigation disclosed that from about 9:15 a. m. to about 11 a. m. on the day of the accident, the track inspector was engaged in assisting track-maintenance forces at a point 4.4 miles east of Bingen-White Salmon. He had received a copy of a line-up, which was issued by the train dispatcher at 6:45 a. m., covering the actual and anticipated movements of trains between Wishram and Vancouver between the hours of 6:45 a. m. and 12:01 p. m. This line-up did not include the movement of Extra G.N. 1720 West. Soon after 11 a. m. the track inspector placed the track motor-car on the main track, and followed Work Extra G.N. 3124 westward to Bingen-White Salmon. Both movements entered the siding at the east siding-switch to meet No. 6, an east-bound first-class passenger train. At this station the conductor of Work Extra G.N. 3124 permitted the track inspector to read a copy of a train order which directed Work Extra G.N. 3124 to protect against Extra G.N. 1720 West after 11:20 a. m. The working limits of Work Extra G.N. 3124 extended between Hood and North Dalles. Hood and North Dalles are, respectively, 4.7 miles west and 18.4 miles east of Bingen-White Salmon. Neither the track inspector, nor any member of the crew of Work Extra G.N. 3124, had information concerning either the consist of Extra G.N. 1720 West, or the time of its departure from any station. The conductor of Work Extra G.N. 3124 said that the track inspector calculated that Extra G.N. 1720 West would meet No. 6 at Lyle, 9.7 miles east of Bingen-White Salmon. Immediately after No. 6 was met, the track inspector placed the track motor-car on the main track and proceeded westward. An opposing track motor-car was closely following No. 6, and the track inspector again placed his track motor-car on the siding until the opposing track motor-car was met. He then departed westward about 11:40 a. m. The track motor-car had reached a point 14.6 miles west of Bingen-White Salmon and 1.7 miles east of Home Valley and was moving at an estimated speed of 20 miles per hour when it was struck by Extra G.N. 1720 West. The track inspector apparently made no effort to stop or to alight from the track motor-car, and it is probable that he was unaware of the approach of Extra G.N. 1720 West. A line-up of train movements was issued by the train dispatcher at 11:53 a. m., which covered the expected movement of trains between Wishram and Vancouver between the hours of 11:53 a. m. and 3 p. m. This line-up included the information that Extra G.N. 1720 West, a light engine, was expected to leave Lyle, 20.8 miles west of Wishram, about 11:45 a. m. The track inspector did not request a copy of this line-up either from the operator or from the train dispatcher.

As Extra G.N. 1720 West was approaching the point where the accident occurred the estimated speed was 45 miles per hour. Signal 62.1 indicated Clear. No train order restricting the movement of Extra G.N. 1720 West with respect to track motor-cars had been issued, and the crew of this train had not been informed that the track motor-car involved was occupying the main track. The engine whistle was sounded about 3,600 feet east of the point of accident. The enginemen were maintaining a lookout ahead from their respective positions in the cab of the engine. Because of track curvature to the left, the view of the track ahead from the right side of the engine was obstructed, and the view from the left side was restricted to approximately 750 feet. The conductor was seated behind the engineer and facing the fireman, and from this position he was unable to see the track ahead. The fireman first observed the track motor-car when it was 250 to 300 feet distant from the engine. He immediately called a warning to the engineer. The engineer closed the throttle, placed the independent brake-valve in quick-application position, and sounded a series of short blasts of the engine whistle. At the time the collision occurred, the speed of the engine had been reduced to about 30 miles per hour. The brake of engine G.N. 1720 had been tested, and had functioned properly when used en route.

Instructions in effect on this line provide that train dispatchers will issue line-ups to the operators at designated points on each sub-division at 7 a. m., 12 noon and 3 p. m. daily, and at other times when requested. The operators, in turn, transmit these line-ups to employees requesting them. A special form is used for recording line-ups, and a supply of this form is furnished to all employees who are required to obtain line-ups. These line-ups do not confer authority over trains or other track motor-cars. A line-up neither relieves the operator of a track motor-car of responsibility for collision if the movement of a train is omitted from the line-up nor if the line-up is otherwise erroneous. Train dispatchers and train crews are not informed when a track motor-car is occupying the main track, and motor-car operators are not informed when another motor-car is occupying the main track. Trains may be created at any time after the issuance of a line-up, and without the issuance of a superseding line-up. Because track motor-cars are insulated to prevent them from shunting track circuits, automatic block-signal systems do not indicate to train crews or to the operators of other track motor-cars that the track is occupied by a track motor-car.

During the past six years the Commission has investigated twenty one collisions, including the instant case, in which track motor-cars were involved. These accidents resulted in the death of 44 persons and in the injury of 81 persons, and were caused by failure to provide adequate protection for the movement of track motor-cars. In the instant case, if an adequate block system had been provided to protect the movement of the track motor-car, both the train and the track motor-car would not have been permitted to occupy the same block simultaneously. If adequate train-order protection had been provided for the movement of the track motor-car, the members of the crew of Extra G.N. 1720 West and the employee on the track motor-car would have had information with respect to the movements in question.

Cause

It is found that this accident was caused by failure to provide adequate protection for the movement of a track motor-car.

Recommendation

It is recommended that the Spokane, Portland and Seattle Railway Company provide adequate block-signal or train-order protection for the movement of track motor-cars on its line.

Dated at Washington, D. C., this tenth day of June, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.