# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2612

THE SPOKANE, PORTLAND & SEATTLE RAILWAY COMPANY

REPORT IN RE ACCIDENT

NEAR YELLEPIT, WASH., ON

AUGUST 6, 1942

## SUMMARY

Railroad: Spokane, Portland & Seattle

Date: August 6, 1942

Location: Yellepit, Wash.

Kind of accident: Rear-end collision

Trains involved: Freight : Freight

Train numbers: Extra 506 West : Extra 900 West

Engine numbers: 506 : 900

Consist: 98 cars, caboose: 117 cars, caboose

Speed: Standing : 40 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; practically level

Weather: Clear

Time: About 12:30 p. m.

Casualties: 3 injured

Cause: Accident caused by failure to provide

adequate protection for preceding

train

Recommendation: That the Spokane, Portland & Seattle

Railway Company establish an adequate block-signal system on the line involved in this accident

## INTERSTATE COMMERCE COMMISSION

# INVESTIGATION NO. 2612

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

THE SPOKANE, PORTLAND & SEATTLE RAILWAY COMPANY

September 22, 1942.

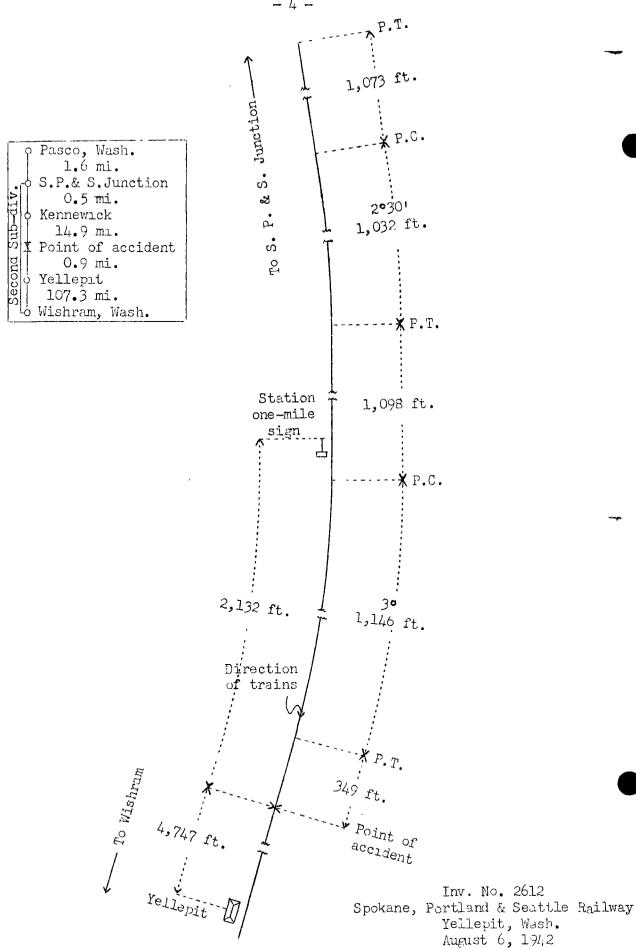
Accident near Yellepit, Wash., on August 6, 1942, caused by failure to provide adequate protection for preceding train.

REPORT OF THE COMMISSION

# PATTERSON. Commissioner:

On August 6, 1942, there was a rear-end collision between two freight trains on the Spokane, Portland & Scattle Railway near Yellepit, Wash., which resulted in the injury of three employees. This accident was investigated in conjunction with a representative of the Department of Labor and Industries of the State of Washington.

<sup>&</sup>lt;sup>1</sup>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.



2612

# Location of Accident and Method of Operation

This accident occurred on that part of the Vancouver Division designated as the Second Sub-division and extending between S. P. & S. Junction and Wishram, Wash., a distance of 123.6 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track at a point 4,747 feet east of the station at Yellepit. As the point of accident is approached from the east there are, in succession, a tangent 1,073 feet in length, a 2030' curve to the right 1,032 feet, a tangent 1,098 feet, a 3° curve to the hight 1,146 feet and a tangent 349 feet to the point of accident and a considerable distance beyond. The grade at the point of accident is practically level.

Operating rules read in part as follows:

#### DEFINITIONS

Restricted Speed.- Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

\* \* \*

- 11. A train finding a fusee burning red on or near its track must stop and extinguish the fusee. Train may then proceed at restricted speed.
- 35. The following signals will be used by flagmen:

Day signals-- A red flag,
Torpedoes and
Fusces.

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- 91. Unless some form of block signals is used, trains in the same direction must keep not less than ten minutes apart, except in closing up at stations.
- 99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusces. When recalled and safety to the train will permit, he may return.

\* \* \*

2612

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

\* \* \*

In the vicinity of the point of accident the maximum authorized speed for the trains involved is 40 miles per hour.

# Description of Accident

Extra 506 West, a west-bound freight train, departed from Pasco, 17.9 miles east of Yellepit, at 7:45 a.m., according to the dispatcher's record of movement of trains. After some cars were added, this train, consisting of engine 506, 55 loaded and 43 empty cars and a caboose, departed from Kennewick, 15.8 miles east of Yellepit, at 11:32 a.m., and stopped on the main track at Yellepit about 12:25 p.m., with the caboose standing 4,747 feet east of the station. About 5 minutes later the rear end of this train was struck by Extra 900 West.

Extra 900 West, a west-bound freight train, consisted of engine 900, 96 loaded and 21 empty cars and a caboose. A terminal air-brake test was made and this train departed from Pasco at 11:55 a.m., according to the dispatcher's record of movement of trains, passed Kennewick at 12:09 p.m., and while moving at an estimated speed of 40 miles per hour it collided with the rear end of Extra 506 West.

From the right side of a west-bound engine the view of the point where the accident occurred is restricted to a distance of 1,006 feet, and from the left side, to about 350 feet, because of a cut and track curvature immediately east of the point of accident.

The caboose and the rear 6 cars of Extra 506 were derailed and demolished. The seventh car ahead of the caboose was somewhat damaged. Engine 900 was derailed to the south and stopped, badly damaged, on its left side with the front end 377 feet west of the point of accident. The first 16 cars of Extra 900 were derailed and stopped in various positions on the track and near it. Of these cars, 7 were demolished. The wreckage of both trains was contained within a distance of 420 feet.

The weather was clear at the time of the accident, which occurred about 12:30 p.m.

The employees injured were the engineer, the fireman and the front brakeman of Extra 900.

# Data

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 10.5 trains.

# Discussion

The rules governing operation on the line involved provide that when a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. When the view is obscured, lighted fusces must be thrown off at proper intervals. When a train stops under circumstances in which it may be overtaken by prother train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection. All members of both crews involved understood these requirements.

As Extra 506 West was approaching Yellepit the speed was about 30 miles per nour. Because it was necessary to take water and to set out a car at Yellepit, this train stopped on the main track at Yellepit at 12:95 p.m., with the caboose standing 0.9 mile west of the station, a d about 5 minutes later the rear end was struck by Extra 90. Yest.

As Extra 900 West was opproaching the point where the accident occurred the speed was about 40 miles per hour. enginemen and the front brakeman were maintaining a lookout anead. Because of track curvature to the right and the cut. their view of the track ahead was considerably restricted. There was no condition of the engine that distracted their attention or obscured their vision. They did not see any burning fusee or a flagman, and no torpedo was exploded. engineer first saw the capoose of the preceding train when his engine was about 900 feet from it, and he immediately moved the brake valve to emergency position, but the distance was not sufficient for Extra 900 to be stopped short of the rear end of Extra 506. He expected preceding trains to provide flag protection, and said that had lighted fusees been dropped at proper intervals from the rear of Extra 506 this accident would have been prevented. The fireman of Extra 900 was so seriously injured that he was unable to make a statement. The conductor and the flagman of Extra 506 knew that their train would stop at Yellepit. They said that no burning fuser was dropped in the vicinity of the point of accident because they thought it could not be seen in the bright sunlight by the crew of the engine of a following train. The engineer of Extra 900 said that he had never experienced any difficulty in seeing burning fusees in daylight. The flagman of Extra 506 said that when his train stopped he immediately proceeded eastward and within a period of about 5 minutes had reconsd a point near the one-mile sign, located 2,132 feet cast of the point where the accident occurred, when he observed the approve ing train. He did not light a fuse nor place torpedoes on the rail. He gave stop signals with a red flag, but his signals were not acknowledged. Extra 900 passed him at a speed of about 40 miles per hour, and at that time the brakes were not applied.

In the vicinity of the point of accident there is no restriction to prevent a following freight train from proceeding at the maximum authorized speed of 40 miles per hour. The rules require that flag protection be provided a sufficient distance for following trains to stop from their maximum authorized speed short of a preceding train. The investigation disclosed that engineers of west-bound freight trains use a distance of about 1 mile for stopping at Yellepit from a speed of 40 miles per hour by a service brake-pipe reduction, and a distance of about 2,640 feet is required for stopping a freight train from a speed of 40 miles per hour by an emergency application of the brakes. Under the rules, when Extra 506 was moving at reduced speed throughout a distance of about 1 mile in preparing to stop at Yellepit, the flagman was required to drop lighted fusees at intervals to provide protection for his train. After Extra 506 stopped at Yellerit, the flagman was required to proceed to the rear a sufficient distance to provide adequate protection. Had adoc ate il protection been provided for Extra 506 it is probable this accident would have been averted.

In the territory involved trains are operated by timetable and train orders only. If an adequate block system had been in use on this line, this accident would not have occurred.

# Cause

It is found that this accident was caused by failure to provide adequate protection for the preceding train.

## Recommendation

The Spokene, Portland & Seattle Railway Company should establish an adequate block-signal system on the line involved in this accident.

Dated at Washington, D. C., this twenty-second day of September, 1942.

By the Commission. Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.