INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2578

THE SPOKANE, PORTLAND & SEATTLE RAILWAY COMPANY
REPORT IN REACCIDENT
NEAR VANCOUVER, WASH., ON
MARCH 22, 1942

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SUMMARY

Railroad: Spokane, Fortland & Seattle

Dete: March 22, 1942

Location: Vancouver, Wasn.

Kind of accident: Collision

Trains involved: Yard engine and cars: Passenger

Train number: : Second 3

Engine numbers: Diesel-electric : 620

engine 20

Consist: 24 cars : 6 cars

Speed: Standing : 35-60 m. p. h.

Operation: Timetable and train orders

Track: Single; 1° curve; level

Weather: Clear

Time: About 4:47 p. m.

Casualties: 3 killed; 42 injured

Cause: Accident caused by switching

movement being made on main track without proper flag protection on the time of a

first-class train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2578

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

THE SPOKANE, PORTLAND & SEATTLE RAILWAY COMPANY

June 2, 1942.

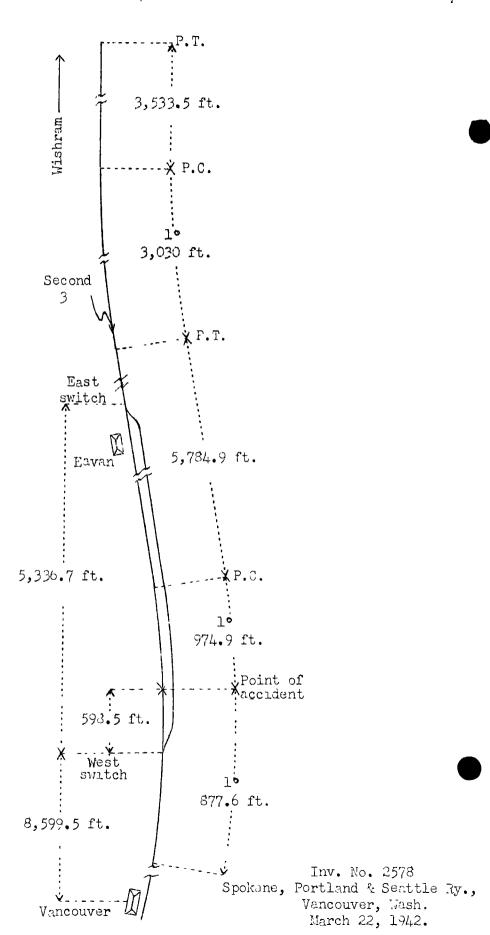
Accident near Vancouver, Wasn., on March 22, 1942, caused by a switching movement being made on the main track without proper flag protection on the time of a first-class train.

REPORT OF THE COMMISSION

PATTERSON, <u>Commissioner</u>:

On March 22, 1942, there was a collision between a yard engine with cars attached and a passenger train on the Spokane, Portland & Seattle Reilway near Vencouver, Wasn., which resulted in the death of 3 employees and the injury of 42 passengers. This accident was investigated in conjunction with a representative of the Department of Labor and Industries of the State of Washington.

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.



o Wishram, Wash.
81.70 mi.
6 Camas
9.9 mi.
6 McL ughlin
2.76 mi.
7 Point of accident
1.74 mi.
6 Vancouver, Wash.

Location of Accident and Method of Operation

This accident occurred on that part of the Vancouver Division designated as the First Sub-division, which extends between Wishram and Vancouver, Wash., a distance of 96.1 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. At Eavan, about 2 miles east of Vancouver, a storage track 5,336.7 feet in length parallels the main track on the south. The west switch of this track is located 1.62 miles cast of the station at Vancouver. The accident occurred on a fill 25 feet in height within yard limits on the main track at a point 598.5 feet east of the west switch of the storage track. As the point of accident is approached from the east there are, in succession, a tangent 3,533.5 feet in length, a 1° curve to the left 3,030 feet, a tangent 5,784.9 feet, and a 1° curve to the right 974.9 feet to the point of accident and 877.6 feet beyond. At the point of accident the grade is level.

Overating rules read in part as follows:

14. Engine Whistle Signalc.

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

- * * *
- (k) ____ o o Single Track- To call attention of engine and train crews of trains of the same class, inferior trains and yard engines, * * * to signals displayed for a following section. If not answered by a train, the train displaying signals must stop, notify them and ascertain the cause.
- 20. All sections except the last will display two green flags, * * * in the places provided for that purpose on the front of the engine.
- 87. Necessary identification of trains must be made at meeting points and at passing points.

- 93. Within yard limits the main track may be used, clearing first class trains when due to leave the last station where time is shown, but not less than five minutes. In case of failure to clear the main track, protection must be given as prescribed by Rule 99.
- 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 fusees. * * *

* * *

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 60 miles per hour.

The east yard-limit sign is 7,676 feet east of the point of accident.

Description of Accident

Diesel-electric yard engine 20 was performing switching service at Ervan. About 4:05 p.m. this engine entered the storage track to clear for No. 3, which was due to leave McLoughlin, about 2.5 miles east of Eavan, at 4:22 p.m. First 3 passed Eavan at 4:28 p.m. and immediately afterward engine 20, headed west and coupled to the west end of a cut of 24 cars, entered the main track. Two cars loaded with sneet metal were switched eastward on the main track and stopped with the east end of the east car 598.5 feet east of the west switch. Soon afterward the two cars were struck by Second 3, were moved westward and collided with the rear of the remainder of the cut of cars near the west switch of the storage track.

The two cars were demolished and the wreckage stopped south of the main track, opposite the west switch of the storage track. The twenty-first and twenty-second cars of the yard cut were derailed and stopped, badly damaged, upright and in line with the main track. The boiler of engine 620, of Second 3, was torn loose from its frame and stopped, practically demolished, 575 feet west of the first point of collision, down the embankment to the south of the track and at right angles to it. The driving-wheel assembly and the frame stopped 75 feet farther west, down the embankment to the north of the track. The cister was torn from the tender frame and both stopped about 170 feet

west of the boiler, down the embankment to the north of the track. The first car was derailed to the north and stopped, badly damaged, at the rear of the distern, with the front end down the embankment and the rear end on the roadbed. The second and third cars were derailed and stopped upright on the roadbed.

It was clear at the time of the accident, which occurred about 4:47 p.m.

The employees killed were the engineer and the fireman of Second 3, and a traveling engineer, who was on the engine.

Discussion

The rules governing operation on the line involved provide that within yard limits inferior-class trains or engines must be clear of the main track when a first-class train is due to leave the last station in the rear where time is shown, or not less than 5 minutes before the first-class train is due at the point involved. If an inferior-class train or engine fails to be clear of the main truck by the time required, flag protection must be provided. When a train displays signals for another train operating on the same schedule, the prescribed enginewhistle signal must be sounded to attract the attention of crews of other trains of the same class, inferior class, and yard engines that signals are displayed. If, the engine-whistle signal is not acknowledged by the other train, the train displaying signals must stop and notify the other train: however, according to past practice, this requirement does not apply to yard engines. All surviving members of the crews involved understood these requirements.

About 1:40 p.m. the yardmaster at Vancouver instructed the erew of yard engine 20 to proceed to Erven to perform switching service at that point. He informed the conductor that an extra freight train was expected to arrive from the east about 3:30 p.m. The yardmaster was not informed until about 4 p.m. that two sections of Mr. 3, a first-class schedule, had been authorized. Yard engine 20 was into clear on the storage track at Eavan when First 3 passed that point.

According to the statements of the enginemen of First 3, green flags were displayed in the places provided at the front of the engine and the engineer sounded the prescribed whistle signal to notify the crew of yard engine 20 that signals were being displayed for Second 3. There was no acknowledgment by yard engine 20. The engineer of First 3 again sounded the prescribed signal, but there was no response from the yard engine.

A fireman, who was deadheading on First 3, said that he heard the prescribed whistle signal sounded as First 3 was passing Eavan. According to statements of the crew of yard engine 20, hone heard a whistle signal sounded by the engineer of First 3. The engineer and the fireman said that possibly the noise of the Diesel engine prevented them from hearing the engine whistle

The engineer of First 3 said that he was not required to stop and to notify the crew of yard engine 20. The trainmaster said that in rules meetings employees were instructed that trains were not required to notify yard engines concerning other sections of a cenedule. If First 3 had been required to stop and to notify yard engine 20 concerning Scenad 3, undoubtedly this accident would have been averted.

Immediately after First 3 passed the west switch of the storage track, yard engine 20 resumed switching operations and pulled 24 cars to the main track. When the engine started to enter the main track the fireman teld the engineer that First 3 was displaying signals but the engineer did not answer him. The engineer said that he did not hear the fireman. Some time later the fireman again told the ongineer that First 3 was displaying signals. The engineer looked toward the east, and, observing a train approaching, he sounded the engine-whistle signal for flag protection. According to the statement of the engine foreman, after two cars had been switched to the main track, the east end of the remainder of the cut stood at the west switch of the storage track. At that time one of the switchmen informed the conductor that First 3 had displayed signals. Imediately afterward the engine whistle was sounded for flag protection and the switchman proceeded eastward to provide flag protection against Second 3. The switchman said that he reached a point about 2,700 feet east of the two cars on the main track and gave stop signals to Second 3; however, these signals were not acknowledged and he was forced to step off the track to avoid being struck. The flagman of Second 3 said that immediately after the accident occurred he proceeded to the rear and met the switchman at a point about 400 feet east of the point where the accident occurred. The switchman did not have torpedoes and fucees in his possession, as required by the rules.

None of the surviving members of the crew of Second 3 was aware of anythin, being wrong until the accident occurred. The brakes were applied in emergency about the time of collision. Since the engineer, the firemen and a traveling engineer who was on the engine were killed in the accident, it could not be determined when they first became aware that the yard engine and cars were occupying the main track.

 ${
m T}$ investigation of this accident disclosed that four members of the crew were in the cab of the yard engine when First 3 passed. The weather was clear and it was daylight. Two of these employees observed that First 3 was displaying signals; however, neither one informed any other member of this fact until after the engine had fouled the main track. One of those employees said that, since the engineer was seated on the side adjacent to the main track, he supposed the engineer observed the signals. The engine foreman was near the main track and observed the passage of First 3 but failed to observe that signals for another section were displayed. Yard engine 20 was into clear for ".. 3 on a track adjacent to the main track and the proper identification of a train requires that observance be made both of the front end to determine if signals are displayed and of the rear end to determine if markers are displayed. If proper identification of First 3 had been made by all members of the crew this accident would have been averted. If the two employees who observed that First 3 displayed signals had taken proper action this accident could have been averted.

Cause

It is found that this accident was caused by a switching movement being made on the main track witnout proper flag protection on the time of a first-class train.

Dated at Washington, D. C., this second day of June, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.