### INTERSTATE CONTERCE COMMISSION

REPORT OF THE DIRECTOR OF THE DURZAU OF SAFETY CONCERNING AN ACCIDENT ON THE SPOKANE, PORTLAND & SEATTLE RAILWAY IEAR CARSOI, WASH., ON FEBRUARY 13, 1934.

April 19, 1934.

To the Commission:

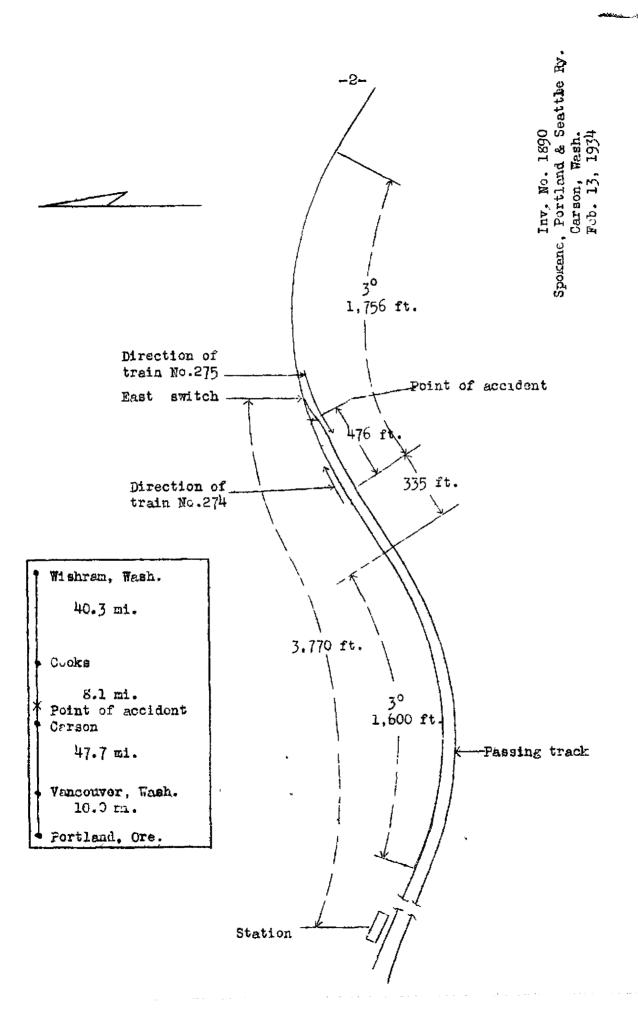
On February 13, 1934, there was a side collision between two freight trains on the Spokine, Portland & Scattle Railway near Carson, Wash., which resulted in the injury of two employees.

## Location and method of operation

This accident occurred on the First Sup-division of the Vancouver Division, which extends between Vancouver and Wishram, Wash., a distance of 96.1 miles, and is a single-track line over which trains are operated by time table and train orders, no form of block-signal system being in use in the vicinity of the point of accidert. At Carson there is a passing track which parallers the main track on the south, the east switch being located 5,770 feet east of the station; the accident occurred at the fouling point of this switch. Approaching the point of accident from the east, the track is takent for a distance of 3,700 feet, followed by a 30 curve to the left 1,756 feet in length, the accident occurred on this curve at a point about 476 feet from its western end. Approaching from the west, there is a 30 curve to the left 1,600 feet in length and then tangent track for a distance of 335 feet, followed by the curve on waich the accident occurred. The grade is level. time table rules provide that east-bound trains are superior to west-bound trains of the same class.

In the immediate vicinity of the point of accident the track is laid in a cut along the side of a nill covered with a thick growth of trees and brush, and the range of vision of the crews of trains approaching in either direction on this curve is restricted to a very short distance.

The weather was clear at the time of the accident, which occurred about 8:43 p.m.



### Description

West-bound third-class freight Tielm No. 275 consisted of 66 cars and a caboose, nauled by Great Northern engine 3127, and was in charge of Conductor Lee and Engineman Taylor. This train departed from Wishiam, 48.4 miles from Carson, at 7:10 p.m., according to the train sheet, 2 hours and 25 minutes late, passed Cooks, 8.1 miles east of Carson, at 8:25 p.m., according to the statements of the crew, 1 hour and 8 minutes late, and stopped at a point about 617 feet east of the east passing-track switch at Carson about 8:38 p.m. in order to allow a flactor run ahead to flag Train No. 274 and the biskeman to open the switch. After standing there a few minutes the train then proceeded and was heading in on the passing track at a speed of 4 or 5 miles per hour when the fifth car was struck by Train No. 274.

East-bound thild-class freight Train No. 274 consisted of 23 cars and a caboose, hauled by engine 603, and was in charge of Conductor Johnson and Engineman Schaar. This train departed from Vancouver, 47.7 miles from Carson, at 7:15 p.m., according to the train sheet, 15 minutes late, passed Stevenson, the last open office, 3.9 miles west of Carson, at 8:33 p.m., 3 minutes late, and collided with Train No. 275 cast of Carson while traveling at a speed estimated to have been between 10 and 15 miles per hour.

Eagine 803, of Train No. 274, stopped on its left side to the left of the track, and was considerably damaged. Except for the front truck of the first car, home of the other equipment in this train was derailed. The fifth to the ninth sers, including, in Train No. 275 were derailed, the last four of these cars being practicelly devolished. The employees injured were the engineran and fireman of Train No. 274.

# Sammary of evidence

Enginemar Taylor, of Train No. 275, stated that on passing Cooks at 8:25 p.m. the speed of his train was about 40 miles per hour or a little here and he thought he had ample time to get his train into clear at Carson for Train No. 274, which was due to leave that point at 8:40 p.m., although he said he lost a little time due to a strong head wind which was encountered just west of Cooks. He stopped his train 10 cr 12 car lengths east of the switch at Carson to allow one brakeman to go shead to flag and the other brakeman to open the switch, and while he did not know the exact the ne thought it was about 8:38 p.m. when he stopped and about 2 cinutes later when he started. After the engine and the first three cars had

entered the passing track he saw the neadlight of Train No. 274 and he could see his flagman ahead. He estimated the speed of that train to have been 15 or 20 miles per hour as it passed him, but thought the speed had been reduced to 8 or 10 miles per hour at the time of the accident, which he said occurred at 8:43 n.m. Engineman Taylor stated that the flagman vas out far enough to have stopped Train No. 274 if he had not moved his own train ahead, but at the time he thought he had given the flagman time enough to get out a sufficient distance properly to flag the approaching train. On further questioning Engineman Taylor said that under favorable conditions it would require 5 or 6 minutes to stop a train of the length and tonnage of his train on the day of the accident, head in on the passing track, and get into clear, and that when he passed Cooks he figured that he would stop at the east switch at Carson about 8:35 or 8:36 p.m. and possibly would have to provide flag protection.

Fireman Showman, of Train No. 275, stated that on passing Cooks he figured that they could reach Carson in time to clear for Train No. 274, although he added that it would not have been possible to stop, open the switch, pull into clear and close the switch by 8:40 p.m. A short time after leaving Cooks, they ran into a strong wind which slowed them down and it then became apparent to himself and the engineman that they were going to be on short time; on approaching Carson he took the flagging equipment out of his seatbox and as soon as the train stopped Brakeman See went forward with a lighted fusce.

Head Brakeman Barnard, of Train No. 275 stated that when the train stopped Middle Brakeman See got off the engine first and ran shead to flag Train No. 274, and when Brakeman Barnard reached the switch, Brakeman See was about one-malf car length shead of him. Brakeman Barnard boarded the engine as it was pulling in at the switch and stood in the gangway on the right side, and when the engine had proceeded about two car lengths in on the passing track he saw Train Fo. 274 approaching; at that time Brakeman See was about 20 car lengths west of the switch.

Middle Brakeman See, of Train No. 275, stated that shortly after passing Cooks the engineman stated that they would be a little short on time but they would send out a flag, to which Brakeman See replied that he would be ready. Before the train stopped he was on the ground and ran forward; he heard the whistle of the approaching train and when it came within sight it was about seven or eight car lengths distant. His flag was answered and he saw fire flying from the wheels before the train passed him, indicating that the engineman had taken prompt action to stop his train. Brakeman See stated that

when Train No. 274 stopped he was at the front end of the last car, the twenty-second car.

Conductor Lee, of Train No. 275, stated that on passing Cooks he noted the time os 8:35 p. A. and a remirk was made that they had ample time to clear for Train No. 274 or to at least get out a flag a sufficient distance to stop that train before heading in on the passing track. He stated that the distance from the west switch at Cooks to the east switch at Carson is a little which are then 7 miles and that 15 minutes was sufficient time in which to reach Carson and send out a flag but that it would be impossible to get their tisin into clear within that time. On passing Cooks he could have applied the air brakes from the conductor's valve in the chlose, but did not like to do it on account of the danger of tegring the train to pieces. The statements of Flagmen McMeel brought out nothing additional of importance.

Equineman Schaer, of Train No. 274, stated that as his engine came around the curve west of the point of accident at a speed of about 30 mles per hour the fireman called "fusee", about the same time he saw the reflection of the fusee and immediately closed the throttle, applied the air brakes in e lergency, and opened the sanders. When he reached a point where he could see the fusce he could also set the engine of Train No. 275, about 15 car lengths discent, and the flagran was only a stort distance ahead of that engine, Engineman Schaer stating that when he passed the flagman the latter was about four car lengths west or the engine of Train No. 375. Engine an Schaer estimated that he was about 20 car lengths west of the point of accident when he applied the brakes in euripency, and that the speed had been reduced to between 10 and 15 miles per hour at the time of the accident. The statements of Fireman Seilinger practically corroporated those of the engineman; he added that he first cav the reflection of the fusic, and that when he saw the engine of Train No. 275 the flagmen was not more than thrue car lengths west of it. On passing the west switch of the passing brack he had looked at lis watch and it was then 3:42 p.m.

Conductor Johnson, of Train No. 274, stated that his train passed the station at Carson at a speed of about 27 miles per hour and as soon as he felt the impact he called to the others in the caboose, there being several employees who were deadnesding, and they all said that it was 8:43 m.m. The air brokes had been properly to ited at Vancoiver and functioned properly en route. After the accident Conductor Johnson started ahead on the right side, ero sellover five or six car lengths from his engine and there saw Brakeman See for the first time.

Observations made after the accident showed that the fireman of an east-bound train could have seen an engine on the passing track near the east switch for a distance of 860 feet while the engineman's view was limited to 660 feet.

#### Conclusions

This accident was caused by the operation of Train No. 275 on short time against an opposing train which was superior by direction.

Rule S-83 provides that at meeting points between trains of the same class the inferior train must clear the main track before the leaving time of the superior train, and rule S-87 provides that an inferior train must keep out of the way of opposing superior trains, and failing to clear the main track by the time required by rule must be protected as prescribed by rule 99. The statements of the members of the crew of Train No. 275 indicated that they passed Cooks at 8:25 p.m., and under the provisions of the rules their train was required to be into clear at Carson at 8:40 p.m., the leaving time of Train No. 274, the superior train by direction. Both the engineman and the conductor stated that on passing Cooks, 8.1 miles east of Carson and the last point at waich they could have cleared the main track, they realized that they could not get into clear at Carson for Train No. 274 but figured that they would have time to send out a flagman to protect thom while heading in on the passing track. There was not time enough, however, for the flagman to get out far enough to provide full protection, with the result that neither of the two rules referred to above was observed. It was particularly dangerous to attempt the movement in question in view of the many curves and very restricted view in the immediate vicinity of the east switch at Carson.

The evidence indicates that the brakeman sent ahead to stop Train No. 274 went out as far as could be expected in the very short tire he had at his disposal, reaching a point probably 1,100 feet or more from where his engine stopped; had his train remained where it was, instead of pulling ahead and starting in on the passing track, it is possible Train No. 274 might have been stopped in time to avert the accident.

During the 30-day period prior to the occurrence of this accident this line operated an average of about 8½ trains daily, but quite often it handles a heavy volume of traffic due to the detouring of trains from other railroads because of washouts, slides, etc. It is more or less of a low-grade line, favorable

for sustained speed, but with many curves to obscure the view, and it is thought that consideration should be given to the question of providing the greater safety in train operation which would be afforded by the block system.

Respectfully submitted,

W. J. PATTERSON,

Director.

