BURZAU OF SAFETY

REPORT NO. 1995

Railroad: Northern Pacific

Date: July 17, 1935

Location: Welland, Wash.

Kind of accident: Head-end collision

Trains involved: Passenger : Freight

Train numbers: No. 348 : No. 907

Engine numbers: 2100 : 1351

:

Consist: 4 cars : 21 cars

Speed: 27-35 mph. : Undetermined

Track: Succession of short curves and tangents: view limited; ascending

grade for west-bound trains.

Weather: Clear

Time: 9:08 p.m.

Casualties: 2 killed and 13 injured

Cause: Failure of Train No. 907 to clear the

time of opposing superior train.

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE NORTHERN PACIFIC RAILWAY NEAR WELLAND, WASH., ON JULY 17, 1935.

September 21, 1935.

To the Commission:

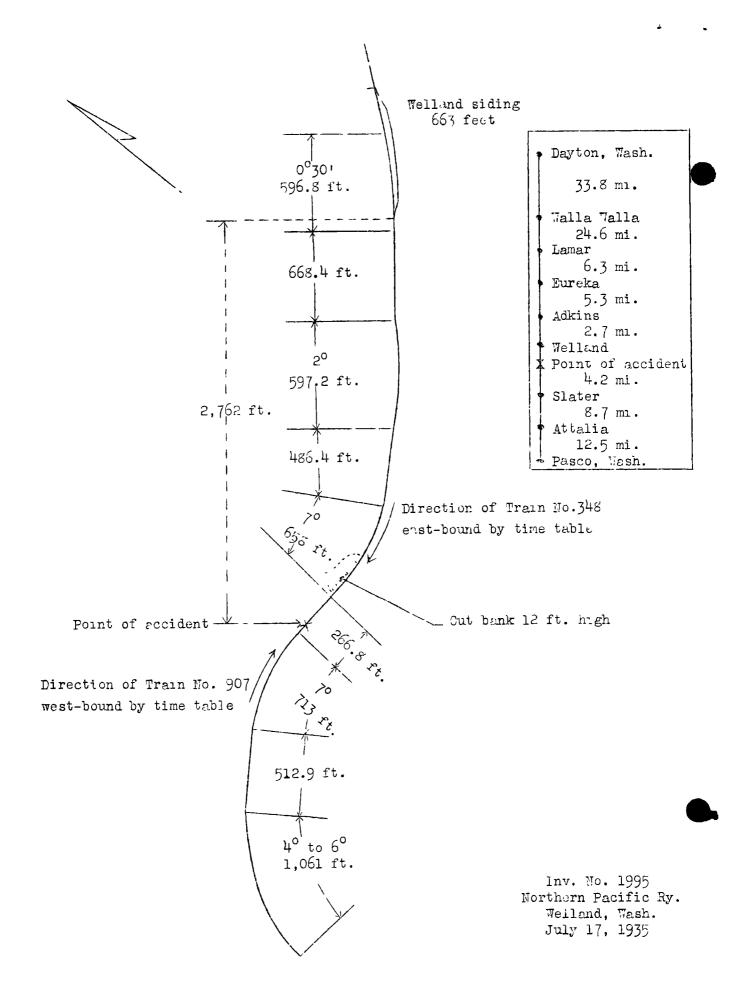
On July 17, 1935, there was a head-end collision between a passenger train and a freight train on the Northern Pacific Railway near Welland, Wash., which resulted in the death of 1 trespasser and 1 employee, and the injury of 6 passengers, 4 trespassers, and 3 employees. The investigation of this accident was made in conjunction with a representative of the Department of Labor and Industries of the State of Washington.

Location and method of operation

This accident occurred on the Ninth Subdivision of the Idaho Division, which extends between Pasco and Dayton, Wash., a distance of 98.1 miles. In the vicinity of the point of accident this 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. The accident occurred at a point 2,762 feet east of the east passing-track switch at Welland; approaching this point from the West, there is a 70 curve to the right 658 feet in length, followed by tangent track for a distance of 266.8 feet, the accident occurring on this tangent approximately 40 feet from its eastern end; approaching from the east, there is a 70 curve to the right 713 feet in length, followed by the tangent on which the accident occurred. The grade is 1.02 percent ascending for west-bound trains.

Due to the track being laid in a cut 12 feet in depth and 300 feet in length on the curve just west of the tangent on which the accident occurred, the view had by the engineman of an east-bound train is limited to 434 feet to the point of accident and the fireman's view is 260 feet. The view had by the engineman of a west-bound train is unobstructed from the time he enters the 7° curve east of the point of accident for a distance of approximately 750 feet.

The speed is limited by special instructions to 40 miles per hour for steam passenger trains and 35 miles per hour for freight trains. There is a permanent restricted—speed board located 885 feet west of the point of accident restricting the speed to 25 miles per hour for a distance of 1 mile eastward.



The weather was clear at the time of the accident, which occurred about 9:08 p.m.

Description

Train No. 907, a west-bound third-class freight train, consisted of 20 cars and a caboose, hauled by engine 1351, and was in charge of Conductor Lewis and Engineman Johns. This train left Pasco, its initial terminal, 25.4 miles east of Welland, at 8 p.m., according to the train sheet, 3 hours and 20 minutes late, and was approaching Welland when it collided with Train No. 348.

Train No. 348, an east-bound passenger train, consisted of l baggage car, I coach, I refrigerator car, and a caboose, in the order named, hauled by engine 2100, and was in charge of Conductor Holderied and Engineman Cowan. The first two cars were of all-steel construction while the last two had steel underframes. This train departed from Walla Walla, 38.9 miles west of Welland, at 7:40 p.m., according to the train sheet, on time, passed Welland at 9:06 p.m., on time, and collided with Train No. 907 while traveling at a speed estimated to have been about 30 miles per hour.

The front ends of the engines were telescoped for a distance of about 4 feet, raising the front end of engine 2100, of the passenger train, and causing considerable damage to both engines; the tender of engine 2100 was considerably damaged and the tender frame of engine 1351 was destroyed. The first, seventh, eighth and ninth cars in the freight train were derailed, the first and eighth being destroyed, while five other cars were slightly damaged. Only slight damage was received by the equipment in the passenger train. The employee killed was the engineman of the passenger train; those injured were the fireman of the passenger train and the engineman and conductor of the freight train.

Summary of evidence

Engineman Johns, of Train No. 907, stated that after the terminal air-brake test had been made at Pasco the conductor handed him his orders, informed him of the work to be performed, and they compared time, but no mention was made as to where they would go for Train No. 348, which was a scheduled train, and there were no train orders concerning it. The fireman read the orders and the engineman said it was customary to put them on a clip board and throw them in his seat box, and that is/where he carried them on this occasion. They left Pasco between 7:45

and 7:50 p.m., and several stops were made on route, the last stop being made at Attalia, 12.9 miles from Welland, where the conductor went in to register. On approaching the east switch at Slater, 4.2 miles east of Welland, the engineman looked at his watch and read the time as 8:40 p.m., which gave him 26 minutes to go to Welland and 20 minutes to Adkins, 2.7 miles beyond Welland. He stated that he had Train No. 348 in mind and that he intended to meet that train at Welland, where he would put out a flag because it would be necessary to saw by at that point. He did not have any conversation with either the fireman or the brakeman relative to Train No. 348, nor did he consult his time table, as he knew the time of that train. His train was making good time and was traveling at a speed of 30 miles per hour when he saw the neadlight of Train No. 348 around the curve about 300 feet distant. He immediately applied the air brakes in emergency and jumped off, stating that he thought the train had practically stopped at the time of the accident. He stated that he did not sound the meeting point whistle for the reason that he was not close enough to Welland. Engineman Johns said he found afterwards that he had misread his watch about 20 minutes but he was unable to account for this error. It had been compared with the standard clock at the roundhouse before leaving Pasco, at which time there was a variation of 2 or 3 seconds, and on the following morning his watch showed about the same variation when he compared time with Assistant Superintendent Colby.

Fireman Whitney, of Train No. 907, stated that as the conductor was in the act of giving the train orders to the engineman ho left the engine and when he returned the orders were not in sight and he did not ask to see them, and on being questioned further as to the reason he did not request to see the orders, he stated that he had confidence in the engineman and did not want the engineman to think he mistrusted him by asking for the orders. He was occupied with the fire en route, but on passing some side tracks he asked the brakeman if they were passing Slater and was informed that they were. Shortly thereafter he looked at his watch, saw that it was about 9 o'clock and then looked at his time table. He then looked at nis watch again and it was 9:06 p.m., turned to the brakeman and said that Train No. 348 was due out of Welland, started across the cab, and saw the reflection of the headlight of that train, but by that time the engineman had applied the brakes in emergency. Fireman Whitney stated that he knew Train No. 348 was the only scheduled train they would meet, and while he was familiar with this branch, he had not been over it for some time and this was his first trip with Engineman Johns in years.

Head Brakeman Hubbard, of Train No. 907, stated that he noted the time they left Attalia, which was 8:33 p.m., and said that on passing Slater it was 8:55 p.m. He had looked at his time table before leaving Pasco and was aware of the fact that they would have to meet Train No. 348, but assumed that the engineman had time on that train when he did not stop at Slater. He did not see the train orders nor did he ask the engineman about Train No. 348, saying that if the orders are not hanging on the boiler head he very seldom asks the engineman for them.

Conductor Lewis, of Train No. 907, stated that he registered at Attalia, showing his train as leaving at 8:26 p.m., and had in mind that they would meet Train No. 348 at Slater. He was working at his desk when Flagman Aggson called down to him from the cupola of the caboose that they were going through Slater, and he at once jumped up, went to the rear door, and saw that they were then passing the east switch. He looked at his watch, which showed the time to be between 8:54 and 8:55 p.m., and then looked at his time table. The train was making good time, however, probably about 30 miles per hour, and he figured that the engineman knew where he was going, but at the same time he remarked to the flagman that Welland was a poor place to meet Train No. 348 as they would have to saw by and also were on short time. On approaching Welland he became uneasy and went to the front end of the caboose with the intention of applying the air brakes; he did not apply them, however, and in a very short time the accident occurred. He stated that the reason he did not apply them was that he figured the engineman knew he could make Welland for Train No. 348. He thought the speed had been reduced by the emergency application of the brakes just before the collision but was unable to estimate the speed and thought he neard the engineman sound the station whistle signal for Welland. Conductor Lewis further stated that he is thoroughly familiar with this branch, and that while his regular job at present is braking, he had been the conductor on this train on seven occasions in July prior to the date of this accident.

Flagman Magson, of Train No. 907, stated that he read the train orders and that he and the conductor discussed the fact that they had plenty of time to reach Slater for Train No. 348. On passing through Slater he called the conductor's attention to that fact and they both went to the rear of the caboose; the conductor stated that they would have to saw by at Welland, but no mention was made that they were on short time. Flagman Magson stated that he had looked at his watch while in the cupola before going to the rear platform of the caboose, but

failed to see the time, and did not again look at his watch nor did he look at his time table. He returned to the cupola and was there at the time of the accident.

Fireman Neitzel, of Train No. 348, stated that the engineman had applied the air brakes on the second curve west of the point of accident, and that the first intimation he had of anything wrong was when the engineman left his seat; Fireman Neitzel then saw the train ahead and jumped off. He stated that the engineman applied the brakes again just before the collision and estimated the speed of their train to have been

Conductor Holderied, of Train No. 348, stated that his train passed Welland at 9:06 p.m., on time, and was traveling at a speed of 27 or 30 miles per hour when he saw a flicker of light; he was sitting on the right side of the second car, and on placing his head out of the window he saw the reflection of the headlight of the approaching train.

about 30 or 35 miles per hour.

Discussion

Engineman Johns, of Train 907, stated that he looked at his watch on approaching the east switch at Slater, the last point at which he could have cleared for Train No. 348, and that his watch showed the time as being 8:40 p.m. Conductor Lewis and Head Brakeman Hubbard, however, stated they looked at their watches at Slater and saw the time to have been 8:55 p.m., while Fireman Whitney stated that shortly after leaving Slater he looked at his watch and it was then about 9 o'clock. Comparison of the watches of all of the members of the crew either before or after the accident, however, indicated that their watches were keeping accurate time, there being only a slight variation, and it was not determined how Engineman Johns happened to misread his watch.

There was no mention made at any time by the members of the engine crew as to Train No. 348. The fireman did not have the time of this train clearly in mind until too late to prevent the accident, while the head brakeman assumed the engineman had an order relative to this train; each of these men said he had not seen the train orders. The conductor knew they were on short time yet failed to take any action when the flagman called his attention to the fact that they were passing Slater, the conductor saying he thought the engineman knew where he was going. Engineman Johns was the only regularly assigned employee on this train, the other members being extra men, and it is quite evident that there was an utter lack of cooperation between the engineman and the other members of the crew. The rules require inferior trains to clear opposing superior trains

by at least 5 minutes, and had any one beside the engineman paid attention to the rule, this accident could have been avoided in spite of the engineman's error.

Conclusion

This accident was caused by the failure of Train No. 907 to clear the time of an opposing superior train.

Respectfully submitted,

W. J. PATTERSON,

Director.