

COMMISSIONER *Fitch*

CIRCULATED *7/29*

July 29, 1918.

MEMORANDUM TO THE COMMISSION:

FOR INFORMATION.

Herewith is circulated a report prepared by the Chief of the Division of Safety regarding accident which occurred on the line of the Southern Pacific Company at Oswego, Oregon, on May 31, 1918.

McChord.

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE - 5C  
LINE OF THE SOUTHERN PACIFIC COMPANY AT OSWEGO, ORE.,  
ORE., ON MAY 31, 1918.

July 19, 1918.

On May 31, 1918 there was a head-end collision between two freight trains on the line of the Southern Pacific Company at Oswego, Ore., which resulted in the death of one employee and the injury of three employees. After investigation, the Chief of the Bureau of Safety reports as follows:

That part of the Newberg Branch of the Southern Pacific Company, upon which this accident occurred, extends between Oswego, Ore., and Cook, Ore., a distance of 3.8 miles. It is a single-track line, and trains are operated by both steam and electric power. Train movements are governed by time-table and train orders, no block system being in use.

In the vicinity of the accident the track follows the north side of Oswego Lake and is made up of a series of curves. Approaching the point of accident from the east there is a  $2^{\circ}$  curve to the right, 1,400 feet long, then 578 feet of tangent track, then a  $4^{\circ}$  curve to the left, 1,844 feet long, the accident occurring about 1,500 feet in on this curve. Approaching the point of accident from the west there is a  $2^{\circ}$  curve to the left, 821 feet long, then 653 feet of tangent track, leading to the curve on which the accident occurred. Proceeding westward from Oswego toward the point of accident, the grade is ascending about .01% for approximately one mile; it is then .3% ascending for 2,500 feet, then level for 150

feet to the point of accident. Approaching from the west the grade is level for a distance of 8,500 feet. Due to a dense growth of timber on both sides of the track, the range of vision approaching from the west is restricted to about 600 feet and approaching from the east it is restricted to about 300 feet. The accident occurred in a cut about 1,200 feet long. The walls of the cut are from 10 to 30 feet high.

Eastbound local freight train No. 234, en route from McMinnville, Ore. to Portland, Ore., via the West Side Branch to Beaverton, Tigard Branch to Cook, and Newberg Branch from Cook to Wilsonia, consisted of 30 loaded cars, 5 empty cars and caboose, hauled by locomotive 2911, in charge of Conductor Dickie and Engineman Knight. This train left McMinnville at 10.15 p.m., May 30th. At Beaverton the crew received train order No. 226, reading as follows:

No. 234 eng 2911 has right over No. 231 Beaverton to Oswego.

By time table classification train 231 is superior by direction to train 234. Order 226 temporarily suspended the time table classification and <sup>also</sup> gave train No. 234 rights over a section of track over which train 231 did not run. On arrival of electric passenger train No. 355 at Cook, train No. 234 left that station about 10.22 a.m. and had reached a point about 2.2 miles east of Cook, the junction point of the Newberg and Tigard Branches, when it collided with train No. 231.

Westbound local freight train No. 231 consisted of locomotive 2512, two loaded cars, one empty car and caboose and

was en route from Brooklyn Yard, Portland, Ore., to Corvallis, Ore., via Wilsonia and the Newberg Branch, and was in charge of Conductor Fredericksen and Engineman Davis. Before leaving Portland the crew received train order No. 226, quoted above. The train left Brooklyn Yard at 9.45 a.m., following electric passenger train No. 355 from Wilsonia to Oswego, arriving at Oswego at about 10.15 a.m. At Oswego the train had to wait from five to seven minutes before following train No. 355, during which time the conductor and engineman checked the train register together. The train then left Oswego at 10.23 a.m., overlooking order No. 226, and at 10.30 a.m., while running at a speed estimated to have been about 20 miles per hour, collided with train No. 234 at a point about 1.6 miles west of Oswego. Engineman Knight, of locomotive 2911, was instantly killed and the fireman and conductor of train 234 were slightly injured. Engineman Davis and Fireman Cakes of locomotive 2512 were seriously injured. The force of the collision raised the front ends of both locomotives, the smokebox of locomotive 2911 being telescoped by the front end of locomotive 2512. The left cylinders and frame of locomotive 2512 were broken off back to the front drivers, the rear drivers remaining on the track. The cab was demolished, the tank frame was broken in two and the trucks bunched near the rear end of the locomotive. The first car in train No. 231 came to rest on top of the tender and was practically destroyed. Locomotive 2911 was considerably damaged; the rear drivers

remained on the track, but the tank was thrown to the right of the track, its frame and trucks jammed together close to the rear of the boiler, and the cab was badly damaged. In train No. 234 the first three cars were piled on top of the truck and frame of the tank; a box car immediately behind the locomotive was demolished and the front trucks of the second car were derailed. Two empty oil tanks and a flat car were demolished, one car of lumber was derailed but stood upright and another car of lumber had its forward trucks derailed. The weather at the time was clear.

Due to the severe injuries sustained by Engineman Davis, of train 231, and his removal to a hospital after the accident, his statements could not be obtained at the investigation held to determine the cause of this accident.

Conductor Fredericksen, of train 231, stated that his train left Brooklyn at 9.45 a.m., after receiving order No. 226 giving train No. 234 rights over his train from Beaverton to Oswego, together with a clearance card, and that he understood the order. He stated that it is not customary for the conductor to read the orders to the engineman, but that he delivered the orders in person to him and commented on them and the engineman replied that he understood them. After reading the orders, the engineman handed them to the fireman, and the fireman later said that the engineman had showed him the orders and that he understood them. The conductor did not hand the orders to the brakeman, but left them on the desk in the

caboose, as was his usual custom; he admitted it was his duty to show the orders to all members of the crew, but the brakemen were busy with other work and did not look at them. Arriving at Oswego, they received a clear train order signal, but were detained about 5 minutes waiting for 10 minutes space interval on electric train No. 355, which they had followed from Wilsonia and were to follow from Oswego. At this point the conductor and engineman checked the train register with their time-table against first class trains, but the conductor did not make out a register check on account of the engineman being with him. When checking the register, it did not occur to them that train 234 was not on the register. The conductor gave as a reason for overlooking train No. 234 the fact that it usually arrives at Brooklyn and is into clear for them before they leave there, and when main line trains are on time they usually receive nothing but a clearance card at Brooklyn; orders reversing the rights of these trains are usually received at Oswego. The conductor said that, strictly speaking, order No. 226 should have given train No. 234 rights over their train "from Cook to Oswego," instead of "from Beaverton to Oswego," as his train did not run to Beaverton, and thought the order should have been put out at Oswego, in which case he did not think they would have overlooked it. His train left Oswego at 10.23 a.m. He estimated their speed at 20 miles per hour and stated that the air brakes were operative, but did not notice their application before the accident.

Fireman Oakes of train No. 231 stated that at Brooklyn Engineman Davis gave him the orders and that he read and understood them. At Oswego the engineman left the engine and with the conductor checked the train register, then returned to the engine and told him he did not get a register check, on account of being in there with the conductor; the engineman told him all trains had arrived and departed, then asked him if he wanted a register check, the fireman replying: "No, that is all right with me, if you checked the register, that is all that is necessary." The fireman said it is customary for the engineman to read the orders and then ask the fireman if they are understood by him; in this case he did not remember this being done, but he understood that 234 had rights over them to Oswego. He estimated their speed at fifteen or eighteen miles per hour and did not see train 234 until just before the collision.

Head Brakeman Thompson of train No. 231 stated that he should have asked to see the orders after the conductor had checked the register at Oswego. He estimated their speed at about 20 miles per hour and did not observe any application of the air brakes before the accident.

Brakeman Bell, of train No. 231, stated that he knew the rules require him to see the orders and the conductor usually hands him the orders; at Brooklyn he did not ask the conductor to see them and assumed that they had a clearance

and the fact that they usually received a clearance only, at that place, was partly the reason he overlooked the orders. After the accident he found the orders lying on the conductor's desk in the caboose, the clearance card among them, with order No. 226 noted thereon. Brakeman Bell stated that at Brooklyn an air brake test was made and the air brakes worked satisfactorily and the train was not separated after leaving there. He estimated their speed at about 20 miles per hour and did not notice an application of the brakes before the accident.

Rear Brakeman Culp, of train No. 231, stated that the conductor usually shows the orders to the trainmen, either handing them to them in person, or depositing them on either the desk or table in the caboose; but the brakeman made no effort to see the orders out of Brooklyn, although he understood that it was his duty to do so. He was sitting at the table in the caboose before the accident, estimated the speed at about 20 miles per hour and did not observe any application of the air brakes before the collision.

Fireman Erickson of train No. 234 stated that at Beaverton he saw the order giving his train rights over train 231; they were running at a speed of about 20 miles per hour when the engineman saw the opposing train about five car lengths away and immediately applied the emergency and reversed the engine. In his opinion the air brakes were in good condition.

Head Brakeman Earls of train 234 stated that his crew had a copy of order No. 226; he was riding on the engine



and estimated the speed at about 25 miles per hour; the engine was working steam. He saw train No. 231 approaching when not over 400 feet away and the engineman shut off steam and applied the air. The air brakes were apparently taking hold in good shape.

Rear Brakeman Burton of train No. 234 stated that the brakes appeared to hold all right. He was riding in the cupola of the caboose at the time of the accident and noticed an application of the brakes in emergency just before the collision. He estimated the speed at 20 miles per hour.

This accident was caused by the failure of Engineman Davis and Conductor Frederickson to hold their train at Oswego until the arrival of train No. 234, as required by train order No. 226. Rule 752 of the Southern Pacific Company reads as follows:

Conductors and enginemen are required to show their train orders to the brakemen and firemen who must read and return them, and, should there be occasion to do so, they will remind the conductor or enginemen of their contents. Conductors must not verbally inform enginemen of the contents of train orders, but should obtain from them an understanding of all train orders restricting their rights, if practicable, before they are acted upon.

Conductor Frederickson violated this rule. Had the rule been observed, the accident might have been prevented. The three brakemen were negligent in their duty for leaving the initial terminal and working part way over the division without any knowledge as to the orders affecting their train.

Rule No. 83B provides as follows:

Train registers will be provided at stations designated on the time-table. The information called for must be properly inscribed thereon by those acting in the capacity of conductor, unless relieved of such duty by rule or train order, in which case registering tickets, Form 2642, may be accepted by operator, who will personally certify to the registering. Enginemen, before leaving register stations, except the initial point of their run, will require from the conductor a memorandum on prescribed form showing the numbers of all superior trains, and stating he has checked the register and that they have all arrived or departed, as the case may be.

Although the conductor and engineman of train No. 231 personally checked the train register at Oswego, they failed to note that train No. 234 had not arrived. Both violated the rule. Had the regular form of train register check been made out, the fact that train No. 234 had not arrived would have been discovered. There can be no excuse for such carelessness in train operation as was evidenced in this case, particularly on the part of the conductor and engineman, who were directly responsible for the safety of their train. |

The investigation developed the fact that no block signal system is used between Oswego and Cook. The track between these stations consists of many curves and cuts, the right of way being bordered by considerable timber growth. The time table shows that 18 trains run between Oswego and Cook between the hours of 7.15 a.m. and 7.30 p.m. Appropriation for the installation of automatic block signals west of Oswego was recently granted, but in view of the density of traffic and existing curvature, it is believed that a manual

block system between Oswego and Cook should be used until the automatic signals are installed.

Engineman Davis had been employed as engineman since June, 1905. Conductor Fredericksen had been employed as conductor for nine years.

At the time of the accident the crew had been on duty less than two hours, following 13 hours off duty.

July 29, 1918.

Aitchison, No. 88.

MEMORANDUM TO COMMISSIONER OF THE CHIEF

I have yours of today circulating a report proposed by the Chief of the Division of Safety regarding an accident which occurred on the line of the Southern Pacific at Oswego, Oregon, on May 31, 1918.

While I was a member of the Oregon Commission a similar accident took place at almost the same spot. The result was that the Commission recommended very strongly that automatic block signals be installed upon this whole line. The state commission was given to understand, in writing, by the Southern Pacific Company, that this would be done. I believe a division superintendent got in trouble for making this statement to the Commission. However, it was a fact which I believe will be substantiated by the records that the Oregon Commission in writing recommended the installation of block signals such as this report indicates would have avoided this accident.

As you know, I have not been a member of the Oregon Commission for more than two years. The recommendation therefore is an old one. It was being pressed by the Oregon Commission when I left the service.

Under the circumstances I think the Division of Safety ought to look into this phase of the situation and its report should attach the blame impartially where it elongs. I believe there is a criminal neglect upon the part of the

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Southern Pacific Company in failing to install automatic block signals upon the line between Oswego and Cook, and that this Commission should so find and state.

Aitchison.

cc to other Commissioners for information.