

INV. 293.  
October 25, 1915.

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE LINE OF THE SOUTHERN PACIFIC COMPANY, NEAR  
RIVERDALE, OREGON, AUGUST 20, 1915.

On August 20, 1915, there was a head-end collision between two extra freight trains on the line of the Southern Pacific Company near Riverdale, Ore., which resulted in the death of two employees and the injury of one employee. After investigation of this accident, the Chief of the Division of Safety submits the following report:

The accident occurred on the Airlie Branch of the Southern Pacific Company, which is a single track line, trains being operated by time-table and train orders, which are transmitted by telephone. No form of block system is in use.

There are two lines of the Southern Pacific Company involved in this accident, one known as the Airlie Branch, extending from Portland, Ore., along the west bank of the Willamette River southward through Jefferson Street to Oswego, a distance of about eight miles, thence southwestward to St. Joseph, Ore. The other line, known as the main line, after leaving Portland, follows the east bank of the river southward through Brooklyn to Willsburg Junction, a distance of about 6 miles, where a connection extending westward, about 3 miles in length, connects with the Airlie Branch at Oswego, thus forming a loop. Along this loop are located several industrial sidings.

The trains involved were extra 215E, which was making a round trip between Cochrane, Ore., and Jefferson Street, via

Oswego, and extra 2130, which was doing local work on the loop between Brooklyn and Jefferson Street via Oswego.

Extra 2138 was in charge of Conductor Ortschild and Engineman Kotthoff, and its work consisted of local switching between Cochran, Ore., and Jefferson Street Station, Portland, Ore. The train had completed the eastward trip from Cochran to Jefferson Street, and it was on the return trip that the accident occurred. Before leaving Jefferson Street, the crew received train order No. 258, reading:

"Engine 2138, run extra Jefferson St., Depot, to Hillsboro via Tigard. Extra 2138 west on first trip after three 3 p.m. has right over extra 2194 east Oswego to Cook."

Extra 2138 westbound left Jefferson Street at 3:15 p.m. and arrived at Oswego at 4:55 p.m. From that point the train was required to return with several cars of logs to Cemetery, a station midway between Jefferson Street and Oswego, at which point no operator is employed, but which is provided with facilities whereby trainmen may obtain orders by telephone. To make this movement, they were given train order No. 272, at Oswego, reading:

"Engine 2138 run extra Oswego to Cemetery, trains due at Oswego before four forty-five 4.45 p.m. have arrived and left."

The train departed from Oswego eastbound at 5:15 p.m. After completing the work at Cemetery, the train, consisting of engine 2138, backing up and pulling six empty flat cars and a caboose, departed for Oswego about 6:20 p.m. The train had reached a point about one mile west of Cemetery and was running

at a speed of about 15 miles per hour when it collided with extra 2130 east at 6:25 p. m.

Extra 2130, in charge of Conductor Best and Engineer Corbett, left Brooklyn at 5:30 p.m., after having received train order No. 266, reading as follows:

"Engine 2130 run extra Brooklyn to Jefferson street depot. Extra 2130 west on first trip after 4:00 p.m. has right over extra 2134 east Brooklyn to Oswego."

This train proceeded southward on the main line to Willsburg Junction; thence westward on the Willsburg branch to Oswego, where it was to use the Airlie Branch, from Oswego to Jefferson Street. The train left Oswego eastbound at 6:00 p.m., engine 2130 backing up, pushing the caboose behind the engine and pulling a flat car loaded with logs. The train had proceeded about 3.4 miles eastward when it collided with extra 2138 west while running at a speed of 8 or 9 miles per hour.

The tender of engine 2138 entirely demolished the caboose car of extra 2130 and the force of the collision turned engine 2138 partly over on its left side.

In the vicinity of the accident the track follows the course of the Willamette River. On the south is a slope to the river bank 60 feet below; on the north is an embankment rising 30 feet above the track. The accident occurred at the west end of a tangent 110 feet in length, west of which is a six-degree curve to the south, 260 feet in length. East of the tangent is a three-degree 30-minute curve to the south 275 feet in length. Approaching the point of accident from either direction the range of vision is restricted to about 250 feet by

physical surroundings. The weather at the time of the accident was clear.

Conductor Ortschild, of extra 2138, stated that when his train was about ready to leave Cemetery on the second trip, he went to the telephone, called the dispatcher and said "Extra 2138 will be ready to leave here in a few minutes." The dispatcher then made some inquiry as to what work the extra had to do. At this juncture the operator at Sherwood, a station about 10 miles east of Oswego, broke in on the conversation with the dispatcher, to get the complete on a train order. The dispatcher held some conversation with the operator at Sherwood and by that time Conductor Ortschild's train was ready to go. He stated that he then broke in and said to the dispatcher, "We are going now," whereupon the dispatcher replied, "All right." Conductor Ortschild then went to the engine and repeated the conversation with the dispatcher to the engineman and gave an "all right" signal, and the train departed. Conductor Ortschild stated that he had been conductor on this run for nearly a month and that on several occasions it had been necessary to return to Cemetery to complete the work, but the day of the accident was the first time he had not been given a return order. He also stated that when the dispatcher said, "all right," he believed that the dispatcher wanted his train to return to Oswego on its original running order No. 258, which he had already used in running from Jefferson Street to Oswego. Conductor Ortschild said that prior to this occasion, he had

never executed a similar movement on a verbal order.

Engineman Kotthoff, of extra 2138, stated that when his train was ready to leave Cemetery on the second trip, Conductor Ortschild came to the engine and repeated the conversation he had held with the dispatcher and, from the "all right" given by the dispatcher, he inferred that the dispatcher intended the train to return to Oswego on its original order. He stated that when he first saw extra 2130, they were about 150 feet distant and at that time his train was running at a speed of 15 or 20 miles per hour. He immediately applied the brakes, but was unable to stop before the collision occurred.

Fireman Erickson of extra 2138 stated that he heard the conversation between Conductor Ortschild and Engineman Kotthoff, and that Conductor Ortschild said, "The dispatcher wants to get us over to Timber before the 15 hours are up, and he says it is all right to go."

Train Dispatcher Cantrell stated that when extra 2138 left Oswego for Cemetery on the second trip, he gave the crew and order to Cemetery only, anticipating the movement of Extra 2130 and intending to wait until Extra 2130 had passed Cemetery, and then gave the return order to the conductor by telephone. He stated that about 8:18 p.m., Conductor Ortschild called him on the telephone from Cemetery and said that his train would be ready to go in five minutes; at that time the operator at Sherwood was giving him the signatures to a train order and before completing the order he hesitated a moment undecided whether or not to change meeting point, but finally said "all right, no

more, Sherwood." He stated that he then called Oswego to ascertain if extra 2130 had departed, and while thus engaged he heard some one hang up their receiver. When Oswego answered, the operator reported that Extra 2130 had departed at 8:00 p. m. He stated that he then had no means of calling Conductor Ortschild, but when he heard the receiver hang up thought that Conductor Ortschild had been called away temporarily and would return in a few minutes and get the order. He stated nothing further was heard from Conductor Ortschild until he called on the public telephone and reported the accident, and said "We overlooked the transfer engine." Dispatcher Cantrell stated that he has never issued verbal orders for train movements or authorized an extra to make more than one trip on the same train order.

Engineman Corbett stated that the first intimation he had of the approaching train was when his firemen shouted to him; at that time the trains were about 3 car lengths apart. He immediately applied the brakes and reversed the engine, but was unable to stop his train before the accident occurred. He estimates the speed of his train to have been about 3 miles per hour when the collision occurred. He stated that the caboose was being pushed ahead of the engine at the direction of Conductor Best, in order to save switching at Jefferson Street.

This accident was caused by an extra train running on the main track without being authorized to do so by train order, for which Conductor Ortschild and Engineman Ketthoff are responsible.

General Rules 97, 103 and 201 of the Southern Pacific Company read as follows:

97. Extra trains must not be run without orders orders from the Superintendent.

103. Messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

201. For movements not provided for by timetable, train orders will be issued by authority and over the signature of the train dispatcher. They must contain neither information nor instructions not essential to such movements.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

Under these rules extra 3158 should not have left Cemetery without having written train orders in the prescribed form.

The statements of Conductor Ortschild and Engineman Kotthoff indicate that they did not overlook the fact that they had no orders, but that they assumed the "All right" which was given them by the dispatcher, was authority for them to proceed. Their statements also indicate that they were conversant with the rules and that no practice or custom existed upon which to base such an assumption. Accidents such as this are bound to occur so long as employees violate and disregard rules and regulations which are provided for their safety.

Conductor Ortschild entered the service of the Southern Pacific Company June 9, 1909, and was promoted to conductor December 20, 1912. Engineman Kotthoff entered the service of the Southern Pacific Company as fireman May 14, 1904, and was promoted to engineman December 21, 1912. They had been on duty 12 hours and 25 minutes when the accident occurred.