IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE TONOPAH & TIDEWATER RAILROAD NEAR DUMONT, CALIF., ON JANUARY 14, 1921.

March 11, 1921.

On January 14, 1931, there was a head-end collision on the Tonopah & Tidewater Railroad near Dumont, Calif., which resulted in the death of 3 employees and the injury of 3 employees. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

Location.

This accident occurred on the district extending between Lualon and Death Valley Junction, Calif., a distance of 121.41 miles, which is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. In the vicinity of the point of accident there are many curves and the view is materially restricted. Approaching the point of accident from the south the track is tangent for several hundred feet, followed by a curve to the right of 80 approximately 1,100 feet in length, the accident occurred near the northern end of this curve. Approaching from the north the track is tangent for several hundred feet, followed by the The grade is 1.42 curve on which the accident occurred. per cent descending for northbound trains. The weather was clear.

## Description.

Northbound mixed train No. 9, consisting of 8 freight cars, 1 combination baggage car and coach, and 1 Pullman

sleeping car, hauled by engine 10, was in charge of Conductor Trenkle and Engineman Cahill. It left Ludlow, 73.6 miles from Dumont, at 5.37 a.m., 47 minutes late, left Silver Lake, the only open telegraph office between Ludlow and the point of accident, at 7.35 a.m., 35 minutes late, and collided with work extra 1 while travelling at a speed of about 30 miles an hour.

Work extra 1, which was moving southward at the time of the accident, consisted of 3 freight cars, engine 1 and a caboose, in the order named, and was in charge of Conductor Thompson and Engineman Green. Work extra 1 had tied up the preceding night at Sperry, 4.73 miles north of Dumont. Prior to leaving Sperry on the day of the accident, Conductor Thompson had inquired of the dispatcher concerning train No. 9 and had been informed that it left Silver Lake 35 minutes late. Work extra 1 departed from Sperry at about 7.55 a.m., proceeded southward to a bridge where 3 cars of sand were unloaded, and then proceeded toward Dumont, picked up the flagman who had been protecting the train while it was unloading the sand, and had started around the curve when it collided with train No. 9.

Engine 10, of train No. 9, was derailed and overturned; the first two cars were derailed, while the next three cars were demolished. In work extra 1, the three flat cars in front of the engine were demolished, while the front end of the engine was considerably damaged. The employees killed were laborers who were riding on the flat cars of

work extra 1.

Summary of evidence.

The crew of train No. 9 held no train orders relative to work extra 1 and the first knowledge any of them had of its approach was when Figureman Cahill saw smoke across the curve; ne immediately applied the air brakes in emergency, the collision occurring almost immediately thereafter. His statements were practically corroborated by Fireman Wisman.

The investigation disclosed that work extra 1 was being operated on the time of train No. 9 without flag protection and on information given to Conductor Thompson by Dispatcher Sherraden that train No. 9 was 35 minutes late in leaving Silver Lake; it also appeared that the work order held by the crew of work extra 1 was not issued in accordance with the rules. According to Dispatcher Sherraden, there is only one wire available on this railroad and when wire trouble develops there are no means of making other temporary arrangements for the issuing of orders. This work extra had been working daily for the past few months and at first it was the custom for the conductor to call the dispatcher each morning and receive a copy of train order No. 1 for that date, specifying the points between which the train was to work. Finally a time came when on account of wire trouble the conductor and dispatcher could not get in communication with each other until night; at that time the dispatcher asked the

conductor what he had done that day and was told that he had worked under flag protection. In a few days wire trouble again developed, and, both the dispatcher and the conductor realizing that the work train was working without orders, although under flag protection, the dispatcher suggested to the conductor who was then in charge of the work extra that the dispatcher give him a block of orders. The dispatcher did this. writing about 50 orders with the date left blank and sending them to the conductor with instructions that if they were out of communication with each other the dispatcher would protect the order each day between the working limits shown thereon, and that if the conductor could get in communication with the dispatcher he would complete the order. Dispatcher Sherraden stated, however, that at the time of this investigation these work orders were not being made complete to the conductor more than 20 per cent of the time, that the order held by the crew of work extra 1 to work between Dumont and Shoshone, within which territory this accident occurred, was not made complete to Conductor Thompson on the day of the accident here under investigation, and that the work extra was working on this day on the authority of one of these orders written by the dispatcher in the manner above In making this arrangement for the handling described. of train orders, Dispatcher Sherraden has acted entirely on his own initiative and had said nothing about it to the superintendent.

The statements of the crew of work extra 1 indicated that they were familiar with this method of handling work train orders. After unloading the three cars of sand their train proceeded southward toward Dumont, picking up the flagman and proceeding without any effort being made by any member of the crew to provide proper flag protection, although they were aware of the fact that they were occupying the main track on the time of train No. 9 and that they held no order against that train.

## Conclusions.

This accident was caused by work extra 1 being operated against train No. 9 without orders and without proper flag protection for which Conductor Thompson and Engineman Green are responsible.

Conductor Thompson and Engineman Green were familiar with the method of operating work extras authorized by the dispatcher and had been operating this work train in this manner for some time, both of them having been in this work train service about 4 weeks. Under these circumstances, when occupying the main track on the time of an overdue superior train, it was their duty to see that their train was provided with proper flag protection. The investigation disclosed that Dispatcher Sherraden violated the rules in issuing the work order to extra 1, and that Dispatcher Sherraden, acting on his own initiative, had made it a practice to issue work train orders in a manner not provided for by the rules.

Conductor Thompson was employed as a brakeman in 1910 and promoted to conductor in 1913. In 1914 he was discharged for carrying passengers without transportation, being ree-ployed as a brakeman and extra conductor in 1919. Engineman Green was employed as fireman in 1906; he resigned in 1917 and was reemployed in 1918. For the past 6 months he had been employed as an extra engineman.

Dispatcher Sherraden was employed as an agent-operator in 1913, promoted to agent-dispatcher in 1914, and to chief dispatcher in 1918.

The crew of work extra 1 had been on duty less than 1 hour, after about 14 hours off duty. The crew of train No. 9 had been on duty about 4 hours, after 72 hours off duty.