

INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE UNION PACIFIC RAILROAD AT GOTHENBURG, NEBR., ON MARCH 14, 1913.

APRIL 16, 1913.

TO THE COMMISSION:

On March 14, 1913, there was an accident on the Union Pacific Railroad at Gothenburg, Nebr., which resulted in the death of 4 passengers and the injury of 13 passengers.

Eastbound passenger train No. 4 was en route from San Francisco, Cal., to Chicago, IL. It consisted of 1 refrigerator car, 1 mail car, 3 baggage cars, 2 chair cars, and 1 sleeping car, in the order given, all cars being of steel construction excepting the first and last cars, which were of wood. The train was hauled by engine No. 153, and was in charge of Conductor Hull and Engineman O'Brien. Train No. 4 left North Platte, Nebr., 35.4 miles west of Gothenburg, at 2:18 a. m., 2 hours and 58 minutes late, passed Brady Island, 12.7 miles from Gothenburg, and the only open telegraph office between North Platte and Gothenburg at 3.15 a. m., 3 hours and 17 minutes late, and arrived at Gothenburg at 3.35 a. m. At about 3.37 a. m., while the necessary station work was being done, the rear end of train No. 4 was struck by train No. 12. Eastbound train No. 12 was en route from Denver, Colo., to Chicago, IL. It consisted of 1 mail car, 1 baggage car, 2 coaches, and 2 sleeping cars. The baggage car and the first sleeping car were of wood, while the last sleeping car had a steel underframe; the rest of the cars were of steel construction. The train was hauled by engine No. 133, and was in charge of Conductor Harding and Engineman Weinberger. It left North Platte at 2:34 a. m., 16 minutes behind train No. 4, passed Brady Island at 3.19 a. m., 4 minutes behind train No. 4, and collided with that train at about 3.37 a. m., as above stated.

Train No. 4 was driven forward about 100 feet by the force of the collision. The wooden sleeping car at the rear end of train No. 4 was demolished, as is shown by illustration No. 1. With the exception of the vestibule, the steel coach immediately ahead of it was very little damaged. The condition of this car is shown by illustration No. 2. The mail car in train No. 4 and the forward end of engine No. 133 were slightly damaged. The speed of train No. 12 was probably about 15 miles per hour at the time of the collision. Estimates as to how long train No. 4 had been standing at the station at Gothenburg varied from one to two minutes, the majority placing it at the latter figure.

This division of the Union Pacific Railroad is a double-track line, train movements being governed by automatic block signals, so arranged that when a block is occupied the home signal governing the entrance to that block shows red and yellow, the danger signal, and indicates stop; the distant signal at the entrance of the preceding block shows yellow and green, the caution signal, and indicates proceed under control; while the signal at the entrance of the second preceding block shows double green, signifying clear, and permits full speed. When out of order the signals stand at danger. In the vicinity of the point of accident the track is straight for several miles in either direction, with a slight descending grade for eastbound trains. The track, roadbed, and signal equipment were well constructed and in excellent condition. The first block signal west of the station governing the movements of eastbound trains, No. 2556, is located 1,069 feet west of the station. The next signal, No. 2562, is located 2,427 feet west of No. 2556; signal No. 2572 is located 5,680 feet west of signal No. 2562, while the next signal is more than a mile west of signal No. 2572. During the night in which this accident occurred the automatic signals governing the

single-track bridge across the Platte River, which is about 1 mile east of North Platte and about 34 miles west of Gothenburg, were out of order and stood at danger throughout the night, all trainmen being notified accordingly. A condition of this nature is governed by rule No. 504, which reads as follows: When a train is stopped by a block signal it may proceed when the signal is clear. On single tracks, send a flagman in advance immediately; wait the full time indicated by special rules on the timetable (which is five minutes) after the flagman has started, and then proceed under control to the next clear signal, or, if the signal in advance is in plain view and the track ahead is seen to be clear, proceed under control not to exceed 6 miles per hour. Train No. 4 obeyed this rule and consumed 17 minutes in crossing the bridge. On the arrival of the train at Gothenburg, Flagman Frosch dropped off the rear end of the train and started back to take his position 60 feet from the rear of his train as required by rule. When he had gone back nearly the required distance he heard a whistle, indicating the approach of a train, and he at once lighted a red fusee and began running back, waving the lighted fusee as he did so. He testified that his signal was seen and answered by the engineman of train No. 12. When train No. 12 stopped after the collision Flagman Frosch was about 1 car length west of the rear end of that train.

Supt. Cahill stated that several years ago instructions were issued to passenger-train flagmen reading about as follows:

On passenger frame where working time-card shows a regular station stop, flagman will immediately take his position 60 feet from the rear of his train with proper flagging equipment and be prepared to protect his train should an emergency arise requiring protection. After waiting five minutes, if his train does not depart, flagman will immediately go back with proper flagging equipment and protect his train as per rule No. 99. Flagman will go back without waiting to be whistled out by his engineman and will remain back until recalled by the engine whistle or relieved by another flagman. At any intermediate stop between stations flagman will go back at once with proper flagging equipment and prepare to protect his train as per rule No. 99.

Gothenburg is a regular station stop for train No. 4, and Flagman Frosch complied with the instructions applicable at the time.

At the time of the accident a blizzard was raging, said to be the worst in many years, with a heavy snow falling and a high wind. On this account the conductor of train No. 12, finding the signals out of order at the Platte River Bridge, instructed his engineman to carry the flagman on the engine and proceed slowly across the bridge in this manner, not deeming it safe for the flagman to walk across the bridge ahead of the train on account of the storm. This plan was carried out and train No. 12 consumed about 10 minutes in making the crossing, thus gaining 7 minutes at this point on train No. 4. As previously stated, the two trains were 16 minutes apart leaving North Platte, and they were therefore 9 minutes apart when leaving the east side of the Platte River, while the interval between the two trains was further shortened on account of train No. 12 making no stops on route. Engineman Weinberger stated that on approaching signal No. 2582 he found it to be in the caution position, but before passing it, it changed to clear. Signal No. 2572 was also found to be in the clear position, while signal No. 2562 was found to be at caution. He at once shut off steam and applied the air brakes, reducing the speed of his train to about 20 miles per hour. On account of the wind carrying smoke and snow to the south, he missed signal No. 2556 entirely, and while drifting along and trying to locate his position suddenly saw the red fuses being waved by the flagman of

train No. 4. He at once applied the emergency brakes, just after which the collision occurred. On account of having some little difficulty in keeping up steam, the fireman of engine No. 153 saw none of the signals during the run from North Platte to the point of accident, and the first intimation he had of trouble was when he noticed the red fuses as he reached up to put on the blower.

Rule No. 302 of the Union Pacific book of rules provides as follows:

Enginemen finding a distant signal at "caution" must immediately bring their trains under control, and be prepared to stop before reaching the home signal. They are reminded that although the distant signal indicates the position of the home signal, the home signal may assume the stop position after the distant signal has given the clear indication, and while the train is between the distant and home signal. For this reason enginemen and trainmen must be on the alert, prepared to bring the train to a stop if the home signal indicates stop, and be governed by rule 504. That part of rule No. 504 to which rule No. 302 refers reads as follows: On double track, a train may proceed after waiting one minute, running under control. Rule No. 508 provides that when an engineman enters a block under these rules he will be held responsible in case of an accident caused by overtaking the preceding train. Under these rules Engineman Weinberger is responsible for the collision, for he failed to have his train under control and was not prepared to stop at the home signal, which was in the stop position; in fact, according to his own testimony, he ran his train by this home signal without seeing it. On account of the caution distant signal, Engineman Weinberger knew that the home signal at that time indicated danger, meaning that the next block was not clear for the safe passage of his train, and, in view of the unusually severe weather conditions prevailing at the time, he should have been particularly careful to have had his train under such control as to have been able to see the home signal and be governed by its indication. Engineman Weinberger had been employed as such by the Union Pacific Railroad since October 25, 1899, previous to which he had had more than eight years' experience as a fireman. His record was good, the only demerits charged against it being for causing the delay of a passenger train on one occasion. His reputation was excellent. At the time of the accident he had been on duty 2 hours and 17 minutes, previous to which he had been off duty more than 30 hours.

Respectfully submitted.

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Chief Inspector of Safety Appliances.