

INTERSTATE COMMERCE COMMISSION

- REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO GREAT WESTERN RAILROAD NEAR ARISPE, IOWA, ON SEPTEMBER 5, 1926.

October 25, 1926.

To the Commission:

On September 5, 1926, there was a head-end collision on the Chicago Great Western Railroad between a passenger train and a light engine near Arispe, Iowa, resulting in the death of one employee and the injury of four employees.

Location and method of operation

This accident occurred on the Sixth District of the Southern Division, extending between South Des Moines and Conception, Iowa, a distance of 119 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 block-signal system being in use. The accident occurred at a point about 2.2 miles east of the east switch of the passing track at Arispe, on a 60 foot fill, about 200 feet east of a cut; approaching the point of accident from the west the track is tangent for 2,700 feet, followed by a 2° curve to the right 1,900 feet in length, the accident occurring on this curve at a point about 1,000 feet from its western end. Approaching from the east the track is tangent for a distance of about 1,700 feet, followed by the curve on which the accident occurred. The grade at the point of accident is 1.66 per cent descending for eastbound trains. Owing to numerous cuts and the curvature of the track the view of the point of accident is restricted.

The weather was clear at the time of the accident, which occurred at about 4 p.m.

Description

Eastbound passenger train No. 54 consisted of one deadhead baggage car, one combination coach and baggage car, one coach, and one cafe-parlor car, in the order named, hauled by engine 901, and was in charge of Conductor Smith and Engineman Cook. The first car was of wooden construction and the others were of all-steel construction. At Diagonal, 13.3 miles west of Arispe, the crew received copy of train order No. 81, Form 31, reading as follows:

"No. 54 meet Extra 340 Light West
at Arispe".

Train No. 54 departed from Diagonal at 3.33 p.m., according to the train sheet, 19 minutes late, and made a stop at Arispe. Instead of remaining at this point in order to meet extra 340, as required by train order No. 81, train No. 54 departed and on reaching a point about 2.2 miles east of Arispe, while traveling at a speed estimated to have been between 18 and 20 miles an hour, it collided with the light engine.

Westbound light engine extra 340 was in charge of Engineman Mullahey and Fireman Richards. While passing Lorimor, 16 miles east of Arispe, at 3.30 p.m., the crew received a copy of train order No. 81, Form 19, previously referred to, and collided with train No. 54 while approaching Arispe at a speed estimated to have been about 25 miles an hour.

The head ends of the engines were jammed together, each being telescoped a distance of about 3 feet, but although they were derailed and badly damaged they remained upright on the roadbed. The deadhead baggage car was demolished, and the second car partly derailed and slightly damaged. The employee killed was the fireman of light engine 340.

Summary of evidence

Conductor Smith, of train No. 54, stated that at Diagonal he received train order No. 81 and read it back to the operator, after which he personally delivered a copy to Engineman Cook, who read it back to him and apparently understood it thoroughly. The train departed from Diagonal about 3.33 p.m., and made a stop at Shannon City, 8 miles east of Diagonal, at which point about five passengers were unloaded. Conductor Smith said that between Shannon City and Arispe, 4.3 miles apart, he collected fares and answered questions, but forgot to sound the meeting-point signal when approaching Arispe. He was about in the middle of the rear car when the train stopped at Arispe, and continued walking ahead until he reached the forward end of the second car, where he saw the brakeman assisting passengers off the train. Conductor Smith said that he stood on the steps of the coach and noticed that the train-order board was displaying a clear indication, the office at this point being closed as it was Sunday, and after the station work had been finished the brakeman gave the engineman a hand signal to proceed and the train departed, the meet with extra 340 having been entirely overlooked. He felt the air brakes apply in emergency immediately prior to the accident, at which time the speed of his train was about 35

miles an hour, and he estimated that it had been reduced to between 18 and 20 miles an hour at the time of the accident. Conductor Smith further stated that he had given his copy of the train order to the brakeman, who read the order aloud to him. It further appeared that he thought of the order once between Diagonal and Shannon City, but did not think of it again until after the accident had occurred, and he said the accident was caused by the entire crew of his train overlooking the meet with extra 340.

The statements of Brakeman Collins corroborated in substance those of Conductor Smith. Brakeman Collins also stated that he thought of train order No. 81 once after leaving Diagonal but that he did not know at just what point. He remembered the station whistle signal having been sounded approaching Arispe, but when this was not followed by the sounding of the meeting-point whistle signal it did not occur to him that the communicating whistle signal had not been sounded calling the attention of the engineman to the meet. At Arispe he saw the conductor standing on the steps of the coach and he said he remarked to the conductor as to how late their train was running, about 18 minutes; he then gave the engineman a proceed signal and the train departed, the crew having entirely overlooked the meet.

Engineman Cook, of train No. 54, stated that he had the meet order in mind after leaving Diagonal up until the time the engine reached the first curve west of Arispe, at which point a soft spot in the track, caused by heavy rains, was encountered. He took out pencil and paper, made a note of the track condition, and on reaching Arispe he handed the memorandum to Fireman De Toskey and requested him to give it to the operator at Afton Junction, the next open office, 7.7 miles east of Arispe. Shortly afterwards Engineman Cook received a hand signal to proceed and departed, having completely overlooked the meet order. Engineman Cook stated that when he first saw the light engine the speed of his train was about 50 miles an hour; he applied the air brakes in emergency and sounded the whistle, then watched for a signal from the cab of the light engine but he said that he did not see either the engineman or fireman, and just before the collision occurred he jumped. Engineman Cook further stated that after Conductor Smith handed him the train order at Diagonal he boarded the engine ahead of the fireman and that he turned around and handed the train order to Fireman De Toskey, before departing from Diagonal, and that the fireman returned it to him later. Engineman Cook also said that he had no conversation with the fireman relative to the order, that there was nothing about the condition of the engine to distract his attention, that he was thoroughly familiar with the territory in the vicinity of the point of accident and

understood the contents of train order No. 81, and that undoubtedly the reason he overlooked the order was on account of thinking of the soft spot in the track and endeavoring to make an immediate report of the track condition. He also stated that it was his custom to sound the meeting-point whistle signal as required, but on this occasion he did not do so as he was busy writing the memorandum relative to the soft spot in the track.

Fireman De Toskey, of train No. 54, stated that at Diagonal he saw Conductor Smith and Engineman Cook talking, and saw the conductor deliver a train order to the engineman. After receiving the proceed signal Engineman Cook climbed aboard the engine and he followed the engineman, but the engineman did not hand him the train order, nor did he ask him for it at that time, and after departing from Diagonal he forgot to do so as he was thinking about the fire. On arrival at Arispe he attended the fire and was still working on it as the train departed. He was sitting on his seat box just prior to the accident and was unaware of anything wrong until the engineman applied the air brakes in emergency and sounded the whistle, and on crossing over to the engineman's side of the cab he saw the light engine a short distance away, and jumped just before the collision occurred. Fireman De Toskey admitted that it was his duty to familiarize himself with the contents of train orders and that he is required under the rules to read them aloud to the engineman. He further stated that Engineman Cook usually showed him all train orders received, but that occasionally he would have to ask the engineman to let him see an order, in which event the engineman willingly complied.

The only employees on engine 340 were the engineman and fireman; the latter was killed, while the engineman was so seriously injured that he could not be interviewed at the time of this investigation.

Conclusions

This accident was caused by the failure of the crew of train No. 54 to comply with the requirements of train order No. 81 and meet extra 340 at Arispe.

In this instance the crew of train No. 54 received train order No. 81 only about 30 minutes prior to the accident. Conductor Smith, Engineman Cook, and Brakeman Collins admitted that they thoroughly understood the contents of the train order, and were familiar with the territory in the vicinity of the point of accident, but that they entirely overlooked the meeting point with the light engine. Engineman Cook gave as his reason the fact that there was a soft spot in the track west of Arispe due to recent heavy rains, and that in his endeavor to make an

immediate report of the track condition his mind was taken off the meet with the light engine. Conductor Smith and Brakeman Collins testified that they each thought of the meet order on one occasion after leaving Diagonal but then it slipped their minds entirely and even when the accident occurred they at first thought their train had collided with the rear end of some preceding train and did not definitely realize what had actually taken place until after they got out on the ground. Had any member of this crew attended to his duties properly the accident would have been averted.

Had an adequate block-signal system been in use on this line this accident probably would not have occurred; an adequate automatic train stop or train control device would have prevented it.

All of the employees involved had had years of experience. At the time of the accident the crew of train No. 54 had been on duty 5 hours and 20 minutes, prior to which they had been off duty 17 hours.

Respectfully submitted,

W. P. BORLAND,

Director.