

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED
ON THE ATCHISON, TOPEKA AND SANTA FE RAILWAY
AT FOWLER, COLO., ON AUGUST 13, 1923.

September 12, 1923.

To the Commission

On August 13, 1923, there was a head-end collision between two passenger trains on the Atchison, Topeka and Santa Fe Railway at Fowler, Colo., resulting in the death of 5 employees, and the injury of 41 passengers, 1 express messenger, 1 mail clerk, 1 news agent and 4 employees.

Location and method of operation

This accident occurred on that part of the First District of the Colorado Division extending between La Junta and Pueblo, Colo., a distance of 64 miles, which in the vicinity of the point of accident is a single-track line over which trains are operated by time-table, train orders and a manual block-signal system. The accident occurred on the main track about 1,130 feet north of the north passing-track switch at Fowler. Approaching from the south the track is tangent for over a mile, followed by a 1 degree curve to the left 1,736 feet in length, the collision occurring 518 feet from the southern end of this curve. Approaching from the north the track is tangent for over a mile, followed by the curve on which the accident occurred; the grade is undulating, being slightly ascending for south bound trains at the point of accident. The weather was clear at the time of the accident, which occurred at 4.32 a.m.

Description

Northbound passenger train No. 6 consisted of two baggage cars, one smoking car, one chair car, one coach, four Pullman sleeping cars and two business cars, in the order named, hauled by engine 1349 and was in charge of Conductor Pegan and Engineman Hansen. At Rocky Ford, 17.5 miles from Fowler, the crew received a copy of train order No. 318, on Form 19, providing in part for a meet with train second No. 13 at Elder, 3.1 miles south of Fowler, and at Manzanola, 5.5 miles from Elder, a copy of train order No. 324, Form 19, was received, reading as follows:

"No 6 eng 1349 meet second No 13
eng 351-327 coupled at Hamlet
instead of Elder."

The train left Fowler, 4.4 miles from Hamlet at 4.30 a.m., and the last open telegraph office, after receiving a permissive card, and had proceeded a little over one-half mile when it collided with train second No 13, while running at a speed estimated to have been between 20 and 30 miles an hour.

Southbound Colorado and Southern passenger train No. 609, on account of washouts, was being detoured over the Santa Fe from Pueblo to Trinidad, running as train second No. 13, and consisted of one baggage car, one mail car, one baggage car, two coaches, three Pullman sleeping cars and two business cars, in the order named, hauled by engines 351 and 327; to serve the purposes of a pilot, a Santa Fe engine crew was placed in charge of the leading engine, the crew of the second engine and of the train being Colorado and Southern employees. As thus made up, the train was in charge of Conductor Staley and Enginemen Schmanke and Gray. At Nepesta, 7.1 miles from Fowler, the crew received a copy of train order No. 324, on Form 19 previously quoted, together with clearance and permissive cards^{do} for the meet at Hamlet. There are no buildings at or approaching Hamlet, which is a blind siding, 2.7 miles from Nepesta, the station board being located 2,600 feet from the head-in switch approaching the station. The train passed Nepesta at 4.22 a.m., and instead of taking the siding at Hamlet continued on the main track, and collided with train No. 6, while running at a speed estimated to have been about 35 or 40 miles an hour.

The three engines were derailed but remained upright with their head ends badly damaged. The tender of the second engine together with the first car of train second No. 13 were overturned to the right, while the second car was telescoped a distance of about 20 feet, the third car was slightly damaged and the fourth car, of wooden construction, was destroyed, while the remaining six cars were not derailed. The second and third cars of train No. 6 were telescoped and badly damaged but the remaining nine cars were not derailed. The employees killed were the engineman, fireman and baggageman of train No. 6 and the two enginemen of train second No. 13.

Summary of evidence

Conductor Staley, of train second No. 13, said he was not familiar with the road and received a message at Pueblo to the effect that a Santa Fe engine crew would pilot his train to La Junta and that Engineman Schmanke would operate the lead engine. An order was received at Nepesta, establishing a meet with train No. 6 at Hamlet, together with a clearance and permissive card, and the brakeman signalled the engineman that they had been received. He read the order to the brakeman and from his time card noted that it was the next siding, 2.7 miles from Nepesta. The train left Nepesta and he figured that it would require four and one-half to five minutes to make the run to Hamlet and he said he listened for the whistle signal indicating the approach to the siding but after the expiration of six or seven minutes, hearing no whistle signal and as the train did not slow down, he became uneasy, when he heard a whistle and pulled the air cord giving a signal indicating a meeting point and hearing no whistle in response, sounded the signal again and looked out, at which time he saw train No. 6 approaching and he then pulled the conductor's valve and in two or three seconds the collision occurred. He estimated the speed to have been between 25 and 30 miles an hour at the time of the accident. Flagman Pierce said he was in the rear Pullman and was not familiar with the physical conditions when he heard a whistle and saw a light and the train began to slow down, he thought it was for the siding at Hamlet, but when the crash came he knew that they had collided with train No. 6.

Fireman Heath, of lead engine 351, said he caught the hoop at Nepesta and handed the train order to the engineman, who read it and remarked, "We meet them at Fowler," and gave him the order to read and he read it, "Second No. 13 meet No. 6 at Fowler instead of Elder," he did not see a permissive card or clearance card. He said the speed began to pick up leaving Nepesta and he did not recall having heard the engineman sound a whistle signal approaching Hamlet and when nearing Fowler he was looking out of the window and saw a light which he at first supposed was an automobile on the highway but when it was about one-fourth of a mile distant he realized that it was train No. 6 and at about the same time the engineman made an air brake application to stop at the switch and had not released when he sprouted to the engineman and jumped, at which time the train was running about 30 miles an hour,

he did not know whether or not the engineman made an emergency application. Fireman Heath said he did not think that the remark of the engineman to the effect that they were to meet at Fowler influenced him to read the order incorrectly and was unable to account for his failure. Fireman Chewing, of the second engine, said he caught the order hoop at Nepesta and gave the order to Engineman Gray who read it, while he began to work on the fire; the engineman did not give it to him to read nor did the engineman tell him what the order contained. After finishing his work, Fireman Chewing looked out and saw a light, shouted to the engineman, and jumped. He said the train was being handled by the pilot engineman on the lead engine, and that at no time did he hear the air brakes applied or feel any perceptible slackening of the speed before the collision occurred. Neither of these fireman had noticed any signal sounded on the air signal whistle.

Conductor Pegan, of train No. 6, said an order was received at Manzanola, changing an order previously received, to meet train second No. 13 at Hamlet instead of Elder, and after passing Fowler, where a permissive card was received, the speed began to pick up quickly and shortly afterward he felt an emergency air-brake application, followed by the collision, at which time the speed was about 20 or 30 miles an hour. Flagman Burck said that on his way out to flag after the accident, Fireman Heath overtook him and in answer to his question concerning the order, Fireman Heath said, "We had orders to meet you here, I think."

Operator Cole, at Nepesta, said he displayed the train-order board in the stop position for train second No. 13 and when that train passed his station at a speed of about 15 miles an hour, he handed a copy of the train order, clearance and permissive cards by means of a hoop to both engineman, the conductor and flagman. Operator Burkepile, at Fowler, said that he handed a permissive card to the engineman, conductor and flagman of train No. 6 when that train passed his station, and was out gathering up the hoops when he heard the crash of the collision.

The copies of train order No. 324 were issued to the crew of each train on Form 19, this being permissible in manual block-signal territory under a rule in the current time-table.

Conclusions.

This accident was caused by failure to obey a train order establishing a meeting point, for which Pilot Engineman Schmanke and Fireman Heath are responsible.

From the statements of Fireman Heath, it is apparent that both he and Engineman Schmanke misread the order, reading Fowler for Hamlet. The train order removed from Engineman Schmanke's clothing, owing to its condition, could not be identified, but his copy of the permissive card, together with the copies of the train order as held by the conductor, flagman and operator, were found to be legibly written, and it is difficult to assign any reason why both engineman and fireman failed to read the order correctly.

This accident again emphasizes the weakness of the human element. Had an adequate automatic train control system been in use on this railroad this accident undoubtedly would not have occurred.

The employees involved were experienced men and none of them had been on duty in violation of the hours of service law.

Respectfully submitted,

W. P. BORLAND

Director.