INTERSTATE COMMERCE COMMISSION

CORRECTION OF REPORT NO. 1335

On page 1 of the report covering the investigation of the accident which occurred on the Colorado and Southern Railway near Uva, Wyo., on April 28, 1927, under the heading "Location and Method of Operation" the statement was made that "trains are operated by time-table, train orders and a manual block-signal system". This statement was made in error and should have read "trains are operated by time-table and train orders", with no reference to a block-signal system since the rules only provide for a 10-minute time interval between following trains at open telegraph offices.

In the next to the last paragraph on page 5, the statement that "had an adequate automatic block-signal system been in use on this line, this accident probably would not have occurred, etc"., should have read "had an adequate block-signal system been in use on this line this accident probably would not have occurred, etc".

W. P. BORLAND,

Director, Bureau of Safety

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE COLORADO AND SOUTHERN RAILWAY NEAR UVA, WYO., ON APRIL 28, 1927.

May 28, 1927.

To the Commission:

On April 28, 1927, there was a head-end collision between a passenger train and a light engine on the Colorado and Southern Railway near Uva, Wyo., which resulted in the death of 3 employees, and the injury of 28 passengers, 3 Pullman porters and 2 employees.

Location and method of operation

This accident occurred on the Cheyenne and Wendover Subdivision of the Northern Division, which extends between Cheyenne and Wendover, Wyo., a distance of 128.8 miles. In the vicinity of the point of accident this is a single track line over which trains are operated by time-table, train orders and a manual block-signal system. The point of accident was approximately three-quarters of a mile south of Uva; approaching this point from the north the track is tangent for a distance of 4,290 feet, followed by a 6° curve to the right 1,980 feet in length, the accident occurring in about the center of this curve. Approaching from the south there is a tangent 1,650 feet in length, followed by the curve on which the accident occurred. The grade at the point of accident is 0.64 per cent ascending for southbound trains. On account of an embankment on the inside of the curve the range of vision is materially restricted.

The weather was cloudy at the time of the accident, which occurred at about 1.18 a.m.

Description

Southbound passenger train No. 30 consisted of one baggage car, one combination mail and baggage car, one coach, one chair car, and three Pullman sleeping cars, all of steel construction, hauled by C.B.& Q. engine 2911, and was in charge of Conductor Clark and Engineman Morgan. The crew had in their possession, among others, a copy of train order No. 4, Form 31, directing them to

wait at Uva until 1.15 a.m. for northbound extra 645. This train departed from Dwyer, 9.81 miles north of Uva, at 12.48 a.m., seven minutes late, stopped at Uva until the time specified in train order No. 4 had expired, departed from that point and shortly afterwards collided with extra 645 while traveling at a speed estimated to have been between 25 and 35 miles per hour.

Northbound extra 645 consisted of engine 645, and was in charge of Engineman Carter and Fireman Morgan. At Wheatland, the last open office, 7.16 miles south of Uva, the crew received a copy of train order No. 4, Form 19, previously mentioned, together with a clearance card and also a permissive card indicating that the block was occupied by northbound extra 630. Extra 645 passed Wheatland without stopping at 12.56 a.m., according to the train sheet, and was approaching Uva when it collided with southbound passenger train No. 30 while traveling at an undetermined rate of speed.

Both engines were partly derailed and came to rest in an upright position, badly damaged. The forward truck of the baggage car in train No. 30 was derailed and slight damage was sustained by the balance of the equipment in this train. The employees killed were both enginemen, and the fireman of extra 645.

Summary of evidence

Fireman Wildman, of train No. 30, stated that at Wendover his conductor handed him the train orders and he immediately stepped to the engineman's side of the cab and read them to the engineman. He did not know at what time his train arrived at Uva nor the time at which it departed, but as they had taken water at that point, which required about five minutes, in addition to a short delay in applying grease to a hot driving pin, together with the fact that the engineman looked at his watch at the time the train was started, Fireman Wildman felt satisfied that the train did not depart before 1.15 a.m. The first knowledge he had of an approaching train was when he observed a classification light and the reflection of about one-half of the headlight shining through the front cab window of his engine, at which time the two trains were only a short distance apart. Fireman Wildman did not recall whether or not he called a warning to the engineman.

Conductor Clark, of train No. 30, stated that before leaving Casper he compared his watch with a standard clock, at which time it was about 10 seconds fast. He received an order to wait at Uva until 1.15

a.m. for extra 645 and said his train arrived at that point between 1.08 and 1.09 a.m. Water was taken, and after waiting for a short time the train departed at 1.15 a.m.; he was quite positive as to the time of departure. Very shortly before the occurrence of the accident the brakes were applied in emergency and he heard one blast of an engine whistle, followed by the impact of the collision. Just as soon as he arose, after having been thrown from his feet, he looked at his watch and it was then 1.18 a.m. He estimated the speed of his train at the time of the accident at about 30 or 35 miles per hour.

The statements of Brakeman Lester and Flagman Likes were in substance practically the same as those of Conductor Clark, both being certain their train did not depart from Uva until 1.15 a.m. In a memorandum the Pullman conductor said he looked at his watch either when the train was standing at Uva or just as it started from that point and it was then 1.15 a.m.

Operator Weybright stated that he was on duty at Wheatland at the time the accident occurred, and as extra 645 was approaching his station he notified the dispatcher who instructed him to deliver train order No. 4, together with a clearance card and a permissive card, using a hoop for that purpose, the dispatcher further advising that by keeping the train in motion it would be able to reach Uva in time to clear train No. 30. Operator Weybright knew of no reason why extra 645 should have been delayed after passing his station and thought the crew had ample time under train order No. 4 to proceed to Uva for train No. 30.

Road Foreman of Engines Shaughnessy stated that he was at the scene of the accident at the time the bodies of the dead employees were removed from the wreckage, accompanied the undertaker to Wheatland and assisted him in removing their clothing. He saw the watches taken from their clothing and made a record of the time shown by each, which showed that the watch of Engineman J.R. Morgan, of train No. 30, stopped at 1.08,25, that of Engineman Carter, of extra 645, at 1.18.25, and that of Fireman C.H. Morgan, of extra 645, at 1.11.20. He observed that Engineman Morgan's watch had a broken crystal and that the back was badly dented, but no damage was noticeable to the other watches. Foreman Shaughnessy further stated that in order to remove the body of Engineman Morgan from his engine it was necessary to place a rope around his waist, which disturbed his clothing and might have moved the minute hand of his watch,

due to the broken crystal.

Watch Inspector Titus stated that he examined the watches of the dead employees and found them to have been damaged to such an extent that they must have stopped immediately after the damage resulted; he found that the time shown by them agreed with the record of Foreman Shaughnessy. He also said that Fireman Morgan's watch had been wound within two hours of the time at which it stopped, although he had been on duty for a considerably longer period. Inspector Titus further stated that Engineman Morgan had been at this office at 11 a m., on the day prior to the accident and compared time, and at that time his watch was eight seconds slow.

The time-comparison register signed by the deceased employees showed that they compared their watches prior to going on duty on April 27, this register, however, did not show the number of seconds fast or slow in the spaces provided for that purpose, but merely showed them as being "O.K."

Conclusions

This accident was caused by the failure of Engineman Carter and Fireman Morgan, of extra 645, to keep their train clear of the main track on the time of an overdue superior train.

The evidence indicated that the crew of train No. 30 had received train order No. 4 requiring that train to wait at Uva until 1.15 a.m., and apparently this train did not depart from that point until the time specified. It also appeared that the crew of extra 645 was in possession of a copy of the same order, together with a permissive card showing that the block was then occupied by a northbound train, although it is not known whether Engineman Carter was familiar with the contents of the order as the Commission's inspectors were informed that it was found in the possession of Fireman Morgan after the accident. Had these employees failed to read the order, however, its only effect would have been to require their engine to clear train No. 30 at an earlier time.

No explanation can be advanced for the fact that the watch of the engineman of train No. 30 stopped at 1.08 a.m., and that of the fireman of extra 645 at 1.11 a.m. The watch of the engineman of extra 645 stopped at 1.18 a.m., which checks with the statements of the surviving members of the crew of train No. 30 as to the approximate time of the accident.

Had an adequate automatic 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 were experienced men. At the time of the accident Engineman Carter and Fireman Morgan had been on duty approximately 7¾ hours, prior to which they had been off duty 17 hours.

Respectfully submitted,

W. P. BORLAND

Director.