

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE INTERNATIONAL-GREAT NORTHERN RAILROAD NEAR OVERTON, TEXAS, ON JANUARY 28, 1924.

April 7, 1924.

To the Commission.

On January 28, 1924, there was a head-end collision between a passenger train and a work train on the International-Great Northern Railroad near Overton, Texas, which resulted in the death of one employee, and the injury of eight passengers and two employees.

Location and method of operation.

This accident occurred on the Longview Subdivision, extending between Longview Junction and Palestine, Texas, a distance of 81.3 miles; 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 point of accident was about 3.5 miles south of Overton; approaching from the north the track is tangent for about 4,287 feet, followed by a 30° curve to the right 1,033 feet in length, the accident occurring on this curve, 618 feet from its northern end. Approaching the point of accident from the south the track is tangent for about 3,293 feet followed by the curve on which the accident occurred. The grade for southbound trains is 1.04 per cent descending for about 2,600 feet, level for about 700 feet, and then 0.82 per cent descending for about 865 feet to the point of accident. The grade for northbound trains is 1.07 per cent ascending for about 1,400 feet, level for about 200 feet, 0.87 per cent descending for about 800 feet, level for about 200 feet, and is then 0.82 per cent ascending for about 335 feet to the point of accident. The accident occurred on a 6-foot fill and at each end of the curve on which the accident occurred there is a deep cut which restricts the range of vision until approaching trains are about 1,665 feet apart. It was raining and nearly dark at the time of the accident, which occurred about 8.55 a.m.

Description.

Southbound passenger train No. 3 consisted of two storage mail cars, one combination mail and baggage car, one baggage car, one coach, one chair car and one Pullman sleeping car, in the order named, the first and second cars being of steel underframe construction, the third and last cars of all-steel construction and the remainder of wooden construction, hauled by engine 355, and was in charge of Conductor Devers and Engineman O'Connor. This train left Longview

Junction at 6.10 a.m., 1 hour and 40 minutes late, according to the train sheet, at which point a copy of train order No. 9, Form 31, was received, reading as follows:

"No 3 Eng unknown run one 1 hour and thirty 30 mins late Longview Jct to Hume and one 1 hour and twenty 20 mins late Hume to Palestine."

This train left Overton, the last open telegraph office, at 6.48 a.m., one minute late on the run-late order, and collided with work extra 401 while traveling at a speed of about 25 miles an hour.

Northbound work extra 401 consisted of 15 cars and a caboose, hauled by engine 401, and was in charge of Conductor McWhorter and Engineman Giddings. This train left Palestine as an extra at 4.45 a.m., holding running orders to Troup, including a copy of train order No. 9, above quoted, and upon arrival at Troup, which is 13.5 miles from Overton, was created a work extra and also received a copy of train order No. 14, Form 19, addressed to them as extra 401 north, reading as follows:

"No 3 Eng unknown wait at Kilgore until six fifty nine 6.59 am Reeds until seven ten 7.10 am Overton until seven twenty five 7.25 a.m."

also copy of train order No. 20, Form 19, addressed to them as work extra 401, reading as follows:

"No 3 Eng unknown run one 1 hour and thirty 30 mins late Longview Jct to Hume."

Before extra 401 arrived at Troup, train order No. 14 was annulled to the operator at Troup by train order No. 16, Form 31, reading as follows:

"Opr Exa 261
Order No fourteen 14 and fifteen 15 are annulled."

The operator at Troup failed to notice that the annulment order was addressed to him, as well as to extra 261, and delivered train order No. 14 to work extra 401. This train departed from Troup at 6.30 a.m., according to the train sheet, and collided with train No. 3 while traveling at a speed estimated to have been about 20 or 25 miles an hour.

The engines telescoped each other for a short distance and were derailed but remained upright, being badly damaged, and the tanks of both engines were detached from their frames. The first car of train No. 3 was telescoped for a considerable distance, but with the exception of the front truck of the second car none of the other cars in this train was derailed. The first and second cars of the work extra were demolished

and the third car badly damaged, none of the other cars of this train being derailed or damaged. The employee killed was the fireman of the passenger train.

Summary of evidence.

Operator Anders, at Troup, said he had not noticed that train order No. 16, annulling train orders No. 14 and 15, was addressed to the operator as well as to extra 261, and he was unable to account for his failure properly to execute the order. Extra 401 arrived at Troup three or four minutes after he gave the dispatcher "complete" to train order No. 16, and he included among the train orders delivered to the crew of that train a copy of train order No. 14, having failed to note that the order had been annulled by train order No. 16. Operator Anders further stated that although he usually made a practice of repeating to the dispatcher the order numbers shown on a clearance card when clearing a train, he did not do so when clearing work extra 401.

Dispatcher Talcott said he did not address the annulment order to work extra 401 as he knew that train had not reached Troup when he issued it; that operators are not required to report to the dispatcher the numbers of the orders shown on a clearance card when clearing a train, although it was sometimes done, and that the operator at Troup did not so report to him the clearance delivered to work extra 401. He also said that when he issued train order No. 14 it was his intention to run extra 401 from Troup to Longview Junction as an extra north, thus accounting for train order No. 14 being addressed to "extra 401 north" instead of to "work extra 401", the order creating the work extra being issued at a later time, and he said the conductor and engineman of that train should have refused to accept the order addressed to extra 401 north inasmuch as they were cleared as work extra 401. Chief Dispatcher Yarbrough also said the crew should not have accepted the order, also that this train, being newly created at Troup, should have been furnished with a train order register check; Dispatcher Talcott, however, said the rules did not require him to issue a register check to the crew of the work extra.

Conductor McWhorter, of work extra 401, said he checked the numbers of the train orders with the clearance card, but failed to note that train order No. 20, which was made complete at 6.22 a.m., gave him less time on train No. 3 than train order No. 14, which was made complete at 5.29 a.m. Conductor McWhorter admitted that under the rules he should not have accepted train order No. 14 addressed to extra 401 north but said he thought that on account of having engine 401 there was nothing irregular in the address of the order. He was unable to say whether or not an air-brake application was made prior to the accident and estimated the speed to have been about 20 or 25 miles an hour at the time of the accident.

Flagman Chapman, who was riding in the cupola, said he read the train orders but his attention was not directed to anything wrong with them.

Engineman Giddings said he noticed train order No. 14 was addressed to extra 401 north but considered it proper to accept the order as he had engine 401 and because it had been customary to accept like orders between register stations. The time shown complete on train order No. 14 and train order No. 20 did not make him suspicious that there was anything irregular about the orders and he used train order No. 14 to make Overton for train No. 3. His first intimation of the approach of that train was when the fireman shouted to him while passing through the cut south of the point of accident, at which time the speed of the train was about 25 miles an hour, and he shut off steam, applied the air brakes in emergency, and jumped, he thought the speed had been reduced to about 20 miles an hour when the collision occurred. Fireman Bradley said he noticed nothing about the orders that was irregular. He was on the inside of the curve approaching the point of accident when he discovered the approach of train No. 3, about $\frac{1}{4}$ mile distant, and notified the engineman. Brakeman Chapman, who was riding in the fireman's side of the cab, thought train No. 3 was about 150 or 200 yards distant when the fireman first gave warning.

Conductor Devers, of train No. 3, said a stop was made at Overton, and the train departed from that point one minute late on the run-late order, which was the only order which they held. His first intimation of the accident was when he felt a jar a few seconds before the accident occurred, at which time he estimated the speed to have been about 25 miles an hour. Engineman O'Connor was unable to estimate the distance his train was from the work extra when he first saw it, but said his own engine was on the curve, moving at a speed of 45 or 30 miles an hour, and after shutting off steam, he applied the air brakes in emergency and jumped.

Conclusions.

The primary cause of this accident was the delivery of train order No. 14 to the crew of work extra 401 by the operator after this order had been annulled.

The rule on this railroad covering the annulment of train orders reads as follows:

"If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled but his own, and write on that: 'Annulled by order No ____.'"

Operator Anders in conformity with this rule should have destroyed all copies but his own and should have made the proper notation on the copy he retained. Instead of complying with this rule Operator Anders delivered train order No. 14 to the crew of the work extra; he offered no excuse for his omission except that after having copied the order he did not again notice it was addressed to the operator.

The crew of work extra 401 were equally at fault for accepting and using this order. It resulted in their being in possession of two orders giving them time against train No. 3, train order No. 14, made complete at 5.29 a.m., provided that train No. 3 would wait at Overton until 7.25 a.m., making it 2 hours and 8 minutes late at that point, while train order No. 20, made complete at 6.22 a.m., directed train No. 3 to run 1 hour and 30 minutes late. The conductor however, did not notice this discrepancy in the orders, while the engineman said he did not think there was anything irregular about it and that he could use the wait order in running against train No. 3. The receipt of these two orders should have caused a doubt to arise in the minds of the crew as to just how much time they had against train No. 3, and had either of them raised any question with the operator concerning the matter the error would have been discovered and this accident would not have occurred.

Although not involved in the accident, it is to be noted that the statements of the dispatcher and of the chief dispatcher conflict as to whether or not a register check should have been furnished, the rule provides in substance that a train must not leave its initial station until it has been ascertained whether all trains due, which are superior or of the same class, have arrived or left.

The rules provide that train orders for a train must be addressed to the conductor and engineman, as well as to any one acting as pilot, extras being designated by the engine numbers and the direction, as "extra 401 north". Among the orders involved there were irregularities in the addresses, train order No. 16 was issued to "exa 261" whereas it should have been addressed to the conductor and engineman of that train, while the time-table direction should also have been included. Train order No. 14 was addressed to "extra 401 north," the conductor and engineman not being included in the address. Other similar irregularities were noted in the train order book.

This accident again calls attention to the liability of error under the train order method of operation and to the necessity for automatic train control, the use of which would have averted this accident.

The employees involved were experienced men, none of whom had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.