

FEBRUARY 14, 1916.

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE GULF, COLORADO & SANTA FE RAILWAY
NEAR MULLEN, TEXAS, ON DECEMBER 28, 1915.

On December 28, 1915, there was a head-end collision between two freight trains on the Gulf, Colorado & Santa Fe Railway near Mullen, Tex., which resulted in the death of three employees and injury to seven employees. After investigation the Chief of the Division of Safety reports as follows:

The Lampasas District of the Southern Division of the Gulf, Colorado and Santa Fe Railway, on which this accident occurred, extends from Temple to Brownwood, Texas, a distance of 100 miles. The line is single track, the movement of trains being governed by time table and train orders which are transmitted by telephone, no block signal system being in use.

The trains involved in this accident were northbound freight extra 768 and southbound third class local freight train No. 71. A meeting point at Mullen between these two trains had been fixed by train order No. 6, which was placed at Goldthwaite for train No. 71, but which was not delivered.

Extra 768 consisted of 20 loaded cars and a caboose, hauled by locomotive 768, and was in charge of Conductor Brittain and Engineman Carpenter. At Brownwood, its initial station, the train was given train order No. 63, reading as follows:

"Extras 768 and 746 north meet extra 778 south at Bicker, No. 71 engine 874 at Mullen, Extra 767 south at Goldthwaite, and Extras 178 and 188 coupled, south at Cometa."

Extra 768 departed from Brownwood at 4:05 p.m., and after pro-

ceeding about 20 miles and while running at a speed of 25 or 30 miles per hour, collided with train No. 71 at a point about 4.6 miles south of Mullen.

Train No. 71 consisted of locomotive 674, 3 loaded, 5 empty cars and a caboose, and was in charge of Conductor Randall and Engineman Brown. It left Temple, its initial station, at 7:40 a.m. and arrived at Goldthwaite, 10.3 miles north of Mullen at 4:20 p.m. The train order signal was in the clear or proceed position and after unloading some local freight the train departed at 4:28 p.m. Train No. 71 arrived at Mullen at 4:45 p.m., at which point the train order signal was also in the clear or proceed position. After completing the local work the train departed and while running at a speed of 15 or 20 miles per hour collided with extra 768 at 5:15 p.m.

The collision locked the two locomotives together, practically demolishing them, and they came to rest on their sides on the west side of the track. Two cars in train No. 71 and 3 cars in extra 768 were badly damaged.

The track in the vicinity of the accident follows the base of a hill which is on the west. The point where the collision occurred is in the middle of a 3-degree curve to the west 3,058 feet in length. At this point the track is laid in a cutty varying in depth from two to seven feet, and there is a grade of 1.2 per cent ascending northward. The engineman of train No. 71, being on the inside of the curve, could see an approaching train about 1,315 feet, while the engineman of extra 768 was unable to see No. 71 until just before the collision occurred. The weather at the time of the accident was clear.

Conductor Randall, of train No. 71, stated that his train arrived at Goldthwaite at 4:18 p.m. He went to the telegraph office and asked Operator Polansky if there were any orders for his train, to which he replied, "No." His train left Goldthwaite at 4:25 p.m., and at that time the train order signal was in the clear or proceed position; they arrived at Mullen about 4:45 p.m., and departed about 5:00 p.m. At the time of the accident he was riding in the caboose and had no warning of the approaching train.

Engineman Brown, of train No. 71, stated that approaching the point of the accident he saw extra 768 when they were about 15 car lengths distant, at which time the speed of his train was about 25 miles per hour. He immediately made an emergency application of the brakes and jumped. He estimated the speed of his train to have been about 15 miles per hour at the time the collision occurred.

Brakeman Allen, of train No. 71, state that upon arrival of his train at Goldthwaite he went to the telegraph office and asked for the waybills, and also asked Operator Polansky if there were any orders for his train, to which Polansky replied, "Nothing." He stated that at the time of the accident he was riding on the locomotive behind the engineer and he saw the approaching train when it was 7 or 8 car lengths distant.

Conductor Brittain of extra 768 stated that at the time of the accident he was riding in the caboose and had no knowledge of the approaching train until the accident occurred. The engineer and fireman of extra 768 were killed in the accident.

Operator Polansky stated that he came to Goldthwaite as operator in September, 1912, and that at the present time his regularly assigned hours of duty are from 7:00 a.m. to 12:00 noon; from 1:00 p.m. to 5:30 p.m.; and from 6:30 p.m., to 10:00 p.m. He stated that he received order No. 63, addressed to extra 778 and train No. 71, making 5 copies, and after delivering two copies to extra 778, at about 3:10 p.m., he tore the three remaining copies off and placed them on the hook file underneath the telegraph table, overlooking the fact that the order was addressed and still undelivered to train No. 71. He also stated that when train No. 71 approached his station, he asked Dispatcher Dobrowolski if he had any orders for train No. 71 and the dispatcher replied, "No, let them go," whereupon he cleared the train order signal. Upon the arrival of train No. 71, one of the brakemen came to the office and asked if he had any orders, and he replied, "Nothing." He stated that after the train departed, but while it was still within sight, he reported its arrival and departure to the train dispatcher, who said "O.K." About 5:15 p.m. the dispatcher called him and asked him if he had order No. 60, and upon looking on his file he found the order, addressed to train No. 71, and at that time discovered his oversight. Operator Polansky further stated that he copied and repeated only that part of the order relating to the movement of the two trains addressed at his office as he understood and had been told by one of the train dispatchers on a previous occasion that in such instances it was unnecessary to copy the entire order.

Train Dispatcher Curtis stated that on December 27, 28, and 29, due to the illness of one of the regular dispatchers, he remained on duty from 4:00 a.m. until 4:00 p.m.; that on the day

of the accident he issued order No. 63 at 2:58 p.m., addressing it to extra 778 and train No. 71 at Goldthwaite. Operator Polansky repeated the entire order and delivered it to extra 778. He stated that in accordance with verbal instructions, when making a transfer to a relieving dispatcher the retiring dispatcher should show on the transfer the numbers of all orders in effect, not executed, and if any of the outstanding orders had not been signed, a notation to that effect should be entered against such orders. He stated that in this instance order No. 63 was included in the transfer, but he failed to make a notation against it, calling attention to the fact that it was still undelivered. This oversight on his part he attributes to his attempting to handle a heavy rush of business and at the same time compile a transfer. Dispatcher Curtis stated that he did not consider the practice of placing a notation in dispatcher's transfer against undelivered orders an additional safeguard, as there is a possibility that the relieving dispatcher will rely on the transfer instead of the original order. He stated that when this system was put in effect it was his opinion and the opinion of other dispatchers that this method offered an opportunity for dispatchers to make two errors, whereas without the notation there was but one. Dispatcher Curtis further stated that Operator Polansky had caused him a great deal of trouble in the way of inattention to the telephone, as he did not consider that he met or filled the general requirements of the Santa Fe Railway in regard to the required standard for the qualifications of train order operators.

Dispatcher Dobrowolski stated that on the day of the accident he assumed duty about 4:13 p.m., and in reading over the

orders transferred to him, he did not look to see if order No. 63 had been delivered as no notation appeared against it in the transfer and he depended entirely upon that. He stated that the operator at Goldthwaite did not ask him if there were any orders for train No. 71, and the first intimation he received that the order had not been delivered was when the train was reported as leaving Mullen. Dispatcher Dobrowolski stated that he did not consider Operator Polansky a first class operator, but of about the average efficiency. He further stated that in some instances he has permitted operators, when repeating train orders, to omit repeating parts of the particular train for which the order was being copied.

Operator Magill and Operator Bigham, stationed at Lemota and Temple yard offices, respectively, stated that in some instances they had omitted repeating parts of an order which did not directly concern the movement of the train for which they were copying the order.

Superintendent Hull stated that about three years ago verbal instructions were issued requiring dispatchers, when making a transfer, to enter a notation against orders undelivered, the idea being to make a double check between the dispatchers, but notwithstanding this method, Dispatcher Dobrowolski should have checked all orders for the signatures.

The direct cause of this accident was the failure of Operator Polansky to deliver train order No. 63 to train No. 71.

Contributing to the cause was the failure of Train Dispatcher Curtiss to make a notation on the transfer against order No. 63 to indicate that it had not been delivered to train No. 71, and the failure of Dispatcher Dobrowolski to check the outstanding

orders for signatures.

This accident again calls attention to the inherent weakness and dangers of the train order method of operation. Had there been an adequate block system in operation on this line this accident probably would have been prevented.

The evidence indicates that a practice prevails whereby operators are permitted to omit repeating parts of train orders which do not concern the movement of the train for which they are copying the order, and, while not directly involved in this accident, such a practice is dangerous and tends to weaken the respect of operators and dispatchers for the strict observance of rules in connection with the handling of train orders.

The method used by train dispatchers in making transfers, one to another, was put in effect by verbal instructions given about three years prior to the accident, and according to Superintendent Hall, by its operation, Dispatcher Debrowski was not excused from examining each order to ascertain if it had been delivered, while on the other hand Dispatcher Debrowski stated that he depended entirely upon a notation being made against each undelivered order. Where instructions or regulations are issued with the intention that they are to remain permanent, proper regard for safety would seem to require that such rules or regulations should be in writing in order that they may be kept before the employee in tangible form and thereby rendered subject to definite interpretation.

Attention is called to the fact that in this accident the dispatcher primarily at fault had been on duty 12 hours each day for two successive days; and that the regular assigned hours

of duty of the operator who failed to deliver the order were from 7:00 a.m. until 10:00 p.m., and was divided into three tours of duty, covering a period of fifteen hours, the service being broken by two off-duty periods of one hour each for meals.

Operator Polansky entered the service of the Gulf, Colorado and Santa Fe Railway as clerk in June, 1911, at the age of 17, and was promoted to ~~dispatcher~~ operator in September, 1912. On July 14, 1914, he was disciplined for failure to deliver a train order and again disciplined on January 7th, 1915, for the same offence. Dispatcher Curtis entered the service as dispatcher January 18, 1911, while Dispatcher Dobrowski entered the service as a dispatcher on April 1, 1912; each had a clear record.