

INTERSTATE ~~COMMERCE~~ COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
BALTIMORE & OHIO RAILROAD AT EAST ST. LOUIS, ILL.,
ON JANUARY 6, 1929.

March 28, 1929.

To the Commission:

On January 6, 1929, there was a head-end collision between two freight trains on the Baltimore and Ohio Railroad at East St. Louis, Ill., which resulted in the death of three employees and one trespasser, and the injury of three employees.

Location and method of operation

This accident occurred on the Illinois Sub-division of the St. Louis Division extending between East St. Louis and Shops, Ill., a distance of 165.3 miles, in the immediate 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 accident occurred within the yard limits of East St. Louis terminal, at a point 2,693 feet west of the east yard-limit board. Within this territory there are two classification yards, one known as Cone yard and the other as Mounds yard, the latter being located a short distance west of the point of accident, and about 4 miles east of Cone yard. The line is double-track between Cone yard and a point 114.1 feet west of the west switch at Mounds yard, it is then single track eastward to and beyond the point of accident. Approaching the point of accident from the west the track is tangent for a distance of more than 1 mile, followed by a 1° curve to the right 2,985 feet in length, the accident occurring on this curve at a point 144.8 feet from its western end. Approaching from the east the track is tangent for a distance of 6,942.9 feet, followed by the curve on which the accident occurred. The grade at the point of accident is 0.11 per cent ascending for eastbound trains. Telegraph poles located on the inside of the curve on which the accident occurred interfere with the range of vision from trains approaching in either direction.

At a point 420.8 feet west of the eastern end of double track a single track line of the Alton and Southern Railroad crosses the tracks of the Baltimore and Ohio Railroad, and from a point some distance west of Mounds yard the tracks of the Pennsylvania Railroad parallel those of the Baltimore and Ohio Railroad on the north. H. N. interlocking tower and

block station is located immediately west of the Alton and Southern track and between the tracks of the Pennsylvania and Baltimore and Ohio Railroads. Prior to leaving Cone yard conductors of eastbound freight trains are required to communicate with the operator at H. N. Cabin and will proceed to the latter point when authorized by Form A, clearing first-class trains as required by the rules.

The weather was cloudy at the time of the accident, which occurred at about 7.15 p.m.

Description

Eastbound freight train No. 90 consisted of 32 cars and a caboose, hauled by engine 2720, and was in charge of Conductor McEvilly and Engineman Utterback. This train left Cone yard, 4 miles west of H. N. Cabin, at 7 p.m., on time, received a clear signal indication at H. N. Cabin and as it passed that point the operator delivered three Form 19 orders to the crew, none of which related to extra 2791. The train then entered upon the single track just east of the tower and shortly afterwards it collided with extra 2791 while traveling at a speed estimated to have been between 20 and 30 miles per hour.

Westbound freight train extra 2791 consisted of 29 cars and a caboose, hauled by engine 2791, and was in charge of Conductor Fitzpatrick and Engineman Chattin. At O'Fallon, 10.9 miles east of H. N. Cabin, the crew received, among others, a copy of train order No. 678, Form 19, directing train No. 90 to wait at H. N. Cabin until 7.30 p.m. Extra 2791 departed from O'Fallon at 6.56 p.m., passed Caseyville, 7.8 miles beyond, at 7.11 p.m., under a clear signal indication, and after passing the east yard-limit board near Mounds yard it collided with train No. 90 while traveling at a speed estimated to have been about 30 miles per hour.

Both engines were overturned and considerably damaged. The first four cars in both trains were derailed, together with the 15th to the 19th cars, inclusive, in the train of extra 2791. Eleven of these cars were destroyed while the other derailed equipment, as well as three cars which were not derailed, sustained more or less damage. The employees killed were the enginemen of both trains and the head brakeman of extra 2791.

Summary of evidence

Fireman Hastings, of train No. 90, stated that as the train approached H. N. Cabin he noticed that the distant interlocking signal was displaying a yellow indication and the home signal a lunar white, or permissive indication, and as the train passed the tower at a speed of about 15 or

20 miles per hour train orders were handed to the head brakeman, which were read by the engineman, brakeman and himself. His first intimation of something irregular was when he noticed the engineman acting as if he intended to shut off steam and then changed his mind. Shortly afterwards, however, the engineman suddenly raised up and shut off steam and Fireman Hastings said it was his opinion that the engineman had seen a train approaching but was not certain whether it was on the Baltimore and Ohio or the Pennsylvania tracks. Fireman Hastings estimated the speed of his train at the time steam was shut off at 30 miles per hour and thought it had been reduced to the extent of 5 or 10 miles per hour at the time of the collision.

Brakeman Pride, of train No. 90, substantiated the statements of Fireman Hastings as to the indications displayed by the distant and home signals at H. N. Cabin and as to the handling of the orders which were received when the train passed the tower. He said that upon reaching a point approximately 1 mile beyond that point and while standing behind the engineman, who was sitting on his seat-box looking ahead, the engineman suddenly raised up, and upon looking over the engineman's shoulder Brakeman Pride noticed the headlight of an approaching train. At that time he thought it was a Pennsylvania train and did not discover that it was on his own line until it had come around the curve a sufficient distance for the light to shine on the rails, he said the engineman applied the brakes in emergency only a few seconds before the collision occurred. Brakeman Pride jumped off as soon as the brakes were applied, at which time the speed was about 30 miles per hour, he did not know to what extent it had been reduced at the time of the accident.

Conductor McEvilly, of train No. 90, stated that before departing from Cono he communicated with the operator at H. N. Cabin who informed him there were three orders for his train, one being a wait order on westbound passenger train No. 21 while the other two were bulletin orders. The train-order signal was displayed at H. N. Cabin and as the train passed that point, moving at a speed of about 10 miles per hour, the orders were handed to the flagman, no order was received pertaining to extra 2791. Conductor McEvilly said the train gained speed after passing the tower and was traveling at about 30 miles per hour when the air brakes were applied in emergency, followed by the collision about 10 or 15 seconds later. In conversation by telephone with the operator at H. N. Cabin shortly after the accident the operator told him that there was a Form 31 order at the tower but that he had forgotten it. The statements of Flagman Rittenhouse, of train No. 90, added no additional facts of importance.

Fireman Tharp, of extra 2791, stated that he was familiar with the train order requiring train No. 90 to

wait at H. N. Cabin until 7.30 p.m. The head brakeman and himself were riding on his seatbox looking ahead while the train was approaching the point of accident and when a headlight came into view he was of the impression that it was a yard engine in Mounds yard. He kept watching this light and it appeared to be getting closer but he was not certain that it was approaching on the main track until the reflection shone on the rails of the curve. As they had received a clear block at Caseyville he still thought that it was a yard engine which had pulled out on the main track and intended to go ahead of his train. As soon as he realized that a collision was inevitable he shouted a warning and then started back over the tender. He did not know whether the brakes were applied prior to the accident and could not estimate the speed at the time of its occurrence. Fireman Tharp further stated that he had not noticed the distant signal of the interlocking plant which is located approximately 800 feet beyond the point of accident and should have been in the stop position, while the engineman's view of this signal is restricted on account of the curvature of the track.

The statements of Conductor Fitzpatrick and Flagman Long, of extra 2791, were to the effect that they were aware their train had until 7.30 p. , to clear the main track for train No. 90 at H. N. Cabin and that their train entered the block at Caseyville under a clear signal indication. They received no warning of anything wrong as neither of them felt an application of the brakes prior to the accident; they estimated the speed at the time it occurred at 20 or 30 miles per hour. Conductor Fitzpatrick stated that at some points on the Illinois Sub-division third class and extra trains are required to move within yard limits under control but this did not apply approaching H. N. Cabin providing a clear signal was received at Caseyville.

Operator Jackson, on duty at H. N. Cabin at the time of the accident, stated that prior to the departure of train No. 90 from Cone he received three train orders involving the movement of that train. They were No. 675, Form 19, directing train No. 21 to wait at Caseyville until 7.25 p.m. and at H. N. Cabin until 7.30 p.m., No. 678, Form 31, which directed train No. 90 to wait at H. N. Cabin until 7.30 p.m., and No. 679 Form 19, which extended the wait for train No. 21 at Caseyville until 7.33 p.m. and at H. N. Cabin until 7.38 p.m., together with two orders, Nos. 6014 and 6015, relating to certain conditions at various points en route. Train order No. 678 was addressed to the crew of train No. 90 and to the operator; Operator Jackson copied this order in triplicate and sent the "X" response at 6.31 p.m., and being of the opinion that it would not be necessary to deliver the order he hung it on a hook with the intention of annulling it after the extra had passed his station. When the conductor of train No. 90 called from Cone for the block he informed the conductor

that all trains due at 7 p.m. had arrived and departed except train No. 21. As soon as train No. 90 struck the bell he displayed the train order signal and lined the interlocking signals for the movement of that train through the plant without having secured a clear block from the operator at Caseyville which he neglected to do for the reason that he was anxious to keep train No. 90 moving in order to enable it to get up the hill to Caseyville without further delay to train No. 21. He said that after lining the plant he left the tower and as train No. 90 passed he handed to the crew the copies of order No. 679 in addition to the two bulletin orders issued on Form 19; he did not deliver orders Nos. 675 and 678 as he considered the former had been superseded by order No. 679, while he entirely overlooked order No. 678. He then returned to the tower, which was at 7.12 p.m., and started to call the operator at Caseyville to report train No. 90 by, but found the Caseyville operator already on the wire for the purpose of reporting that extra 2791 had entered the block; it was not until then that he realized both trains had been admitted to the block. He had no record of extra 2791 on his block sheet, although this was contrary to his usual practice and could not recall whether the operator at Caseyville had asked for the block, and he said that if this had been done it was some period of time before the arrival of train No. 90. Operator Jackson further stated that possibly one reason for his oversight and failure to deliver order No. 678 was the fact that it has been the practice in some cases to hold such orders until after the train has departed, providing the time limit has elapsed, and then they would be annulled at some later time by the dispatcher. He knew this procedure was not in accordance with the rules but said it was done in order to avoid delay and that he had never been criticized for this practice. Operator Jackson's statements in connection with this method of handling train orders read as follows:

Q. Jackson, can you give any reasonable explanation for your oversight other than in a hurry to try and get 90 up the hill?

A. I can explain the oversight of the 31 order. We have been in the habit of holding these 31 orders until after the train has left.

Q. Did dispatcher tell you to let 90 go after west-bound train had cleared and tell you he would annul the order?

A. He just left it up to me to do it on my own hook.

Q. Did you ever ask him about annulling order before letting eastbound train go?

A. Sometimes I do.

Q. Why didn't you just hold the train or have them sign for it?

A. I should have but I realized he expected me to use my judgment and I took it upon myself to do so.

Q. Jackson, of course regardless of his expecting you to use your judgment that is not according to book of rules?

A. It is not but we have been doing this for three or four years.

Q. There is nothing wrong with putting order out and holding it as hold order until train is clear and then annulling it according to book of rules is there?

A. There is something badly wrong in waiting until after train is gone to annul it.

Q. That was your own fault was it not?

A. I don't consider it so altogether.

Q. Did he ever criticize you for letting train go and then calling his attention later on?

A. Never in three or four years.

Q. Have you ever called his attention to it and he immediately gave you number to annul order before train departed?

A. Yes, we have a good many of them annulled before train leaves.

Q. Suppose for instance No. 90 had been back a mile or so and not struck interlocker, steel run passing, possibly just clearing when 90 hit the bell, would you have turned 90 loose without delivering that order or having it annulled?

A. In this case I don't think I would.

Q. In any case?

A. In case where time had expired I would if block clear and dispatcher busy I would.

Q. Why?

A. Would consider the order already dead and dispatcher busy and in order to avoid delay to eastbound train.

Q. Have you any rules or regulations to go by in taking upon yourself the responsibility to do a thing of that kind?

A. No, sir, but have done it for three or four years and never been criticized.

.

Q. I believe you stated that it was a practice for the dispatcher to put this order out daily and to annul it after the train had left?

A. Yes sir.

Q. Can you give us a definite date when such a procedure took place?

A. Yes sir, December 7th, train 92 passed H. N. Cabin 9.38, the holding order 706, 31 order, order annulled 10.46 p.m.

Q. Do you remember what time this train was to wait until?

A. No. 92, engine 2743 wait at H. N. Cabin until 9.29 p.m., 92 passed H. N. Cabin at 9.38 p.m.

Q. That order was dead 9 minutes before No. 92 reached there?

A. Yes sir.

Q. Why didn't you have it annulled?

A. I figured it was up to the dispatcher to annul orders.

Q. Did you say anything to him about it?

A. I don't remember it but I always left it up to him.

Q. Did you just deliberately let 92 pass there without saying anything to him about holding that order?

A. He knew I had it.

Q. Did you clear 92 holding that 31 order to wait there until 9.39? (Questioner apparently means 9.29)

A. Yes, have been doing that for four or five years.

Q. You say you never asked him about it or he never criticized you for doing it?

A. No sir.

Q. Can you give us another date when such a procedure took place?

A. December 14th, train 92 order 714, 92 by at 10.14 p.m., order annulled 10.15 p.m., that order said, "92, engine unknown wait at H. N. until 9.29."

Q. How did it happen that dispatcher annulled that order then, did you call his attention to it?

A. No, I think I waited for him to annul it.

Operator Jackson further stated that the westbound distant signal of the interlocking plant would automatically display a stop indication as soon as an eastbound train entered the interlocking zone, regardless of the position of the levers in the tower, and that that signal was apparently in the stop position at the time extra 2791 approached it as at about midnight he inspected this signal and found it displaying a stop indication. Under such circumstances, according to other statements appearing in the record, it would have been necessary for extra 2791 to stop before passing this distant signal and then proceed with caution to the home signal.

Operator Felthoven, on duty at Caseyville, stated that he received a clear block from the operator at H. N. Cabin for extra 2791 at about 6.40 or 6.45 p.m. When the train approached he displayed a clear signal and it passed his station at 7.11 p.m. He then attempted to call the operator at H. N. Cabin to report the train by but was unable to get in touch with him at that time. Shortly afterwards he again called and at this time found the operator at that point trying to communicate with him. Upon informing Operator Jackson that extra 2791 had entered the block the latter remarked that train No. 90 had also been admitted to the block. Operator Felthoven further stated that westbound trains are admitted to the block under a clear signal unless a yard engine is working at Mounds yard, in which event he admits them under a caution signal. Whenever a yard engine uses the main track between H. N. Cabin and Mounds yard he is informed of this fact by the operator at H. N. Cabin but no record is kept on the block sheet at Caseyville covering such movements, although Operator Jackson stated that a record was kept at H. N. Cabin.

Dispatcher Cox, on duty at the time of the accident, stated that train order No. 678 was put out at H. N. Cabin for the purpose of holding train No. 90 on the double track until extra 2791 had arrived. At the time he issued the order he thought train No. 90 would be late and that as soon as extra 2791 had passed that point he would annul the order, thus avoiding delay to train No. 90. At about 7.15 p.m., the operator at H. N. Cabin reported the accident, and upon

being questioned as to its cause the operator stated that he overlooked the wait order and gave train No. 90 a clear block. Dispatcher Cox further stated that he had been working with Operator Jackson for about a year and during that time he received no complaint about his work. He did not remember whether he had ever said anything to Operator Jackson about permitting trains to pass H.N. Cabin without delivering orders still in effect, although his statements indicated that he knew it had occurred in some instances and that it was in violation of the rules. He said such orders are annulled as soon as he can get in communication with the operator at H.N. Cabin but at times it is difficult to get in touch with him on account of the operator's other work.

Conclusions

This accident was caused by the failure of Operator Jackson to deliver train order No. 678 and by his failure to secure the block before permitting train No. 90 to enter it.

According to the evidence train order No. 678 was issued to extra 2791 at O'Fallon and was put out at H. N. Cabin for train No. 90 on Form 31. This order was delivered to the crew of extra 2791 but was not delivered to train No. 90. Operator Jackson, on duty at H.N. Cabin, stated that when he received the order he did not think it would be necessary to deliver it consequently he hung it on a hook and at the time he delivered other orders to the crew of train No. 90 he failed to include this order as he had entirely forgotten about it. He said that in some cases wait orders, the time limit of which had expired, were not delivered or annulled before the train involved had departed and this practice may have contributed to his oversight. His reason for his failure to ascertain that the block was clear was due to his anxiety to keep train No. 90 in motion so that it could ascend the grade beyond his cabin without further delay to train No. 21. Operator Jackson was not positive whether he gave the block to the operator at Caseyville and said that if he did so he did not remember it.

It appears that the employees riding on the engines of both trains were on the alert and that the headlights were seen some distance apart but on account of the physical characteristics in that locality, it was not definitely ascertained that these trains were approaching each other on the same track until it was too late to avert the accident. The evidence indicates that the brakes were applied on train No. 90 only a few seconds before the collision occurred while it did not appear that they were applied on extra 2791 prior to the accident.

One of the paragraphs of special instruction No. 24 contained in the time-table in effect at the time of this accident reads as follows:

On single track, whether manual block rules are in effect or not, when a "middle order" so called, is addressed to the operator at the intermediate train order office, there will be a train order signal displayed, at that office in every case and Rule 208 govern until the order has been delivered by the operator to trains affected until all have arrived from one direction. The operator is not relieved from such delivery, even though the time of a "wait order" has elapsed, unless the order addressed to the operator has been annulled by the Train Dispatcher.

The evidence developed at the investigation of this accident indicated that it was a practice for the operator at H. N. Cabin not to deliver a wait order if the time had expired, but at some later time, after the passage of the train to which the order was addressed, he would obtain an annulment from the dispatcher. Apparently this is precisely the practice intended to be prevented by the special instructions above quoted. Violations of the rules of such a character can be uncovered at any subsequent time by a check of the records, and it is a matter of difficulty to understand why responsible officials of the operating department whose duty it is to know that the rules and instructions are being obeyed should have been ignorant of the existing situation; possibly they were not in ignorance of it, but in either event it does not appear that they have fully discharged their duty when such a situation can exist for a period of several years, as stated by the operator, without any effective steps having been taken towards its correction. The practice of operators retaining orders in their possession, not delivering them to the trains addressed even though no annulment has been received, was involved in the accident which occurred on the Denver & Rio Grande Western Railroad near Granite, Colo., on August 20, 1925, and in the report covering the investigation of that accident it was pointed out that it was the duty of operating officials not only to provide safe and adequate rules for the operation of trains but to enforce obedience to those rules on the part of all concerned, that statement is equally applicable in the case of the accident here under investigation.

All the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,
Director.