

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE  
NEW YORK, CHICAGO & ST LOUIS RAILROAD AT EDWARDS-  
VILLE, ILL , OF MARCH 26, 1929.

July 30, 1929.

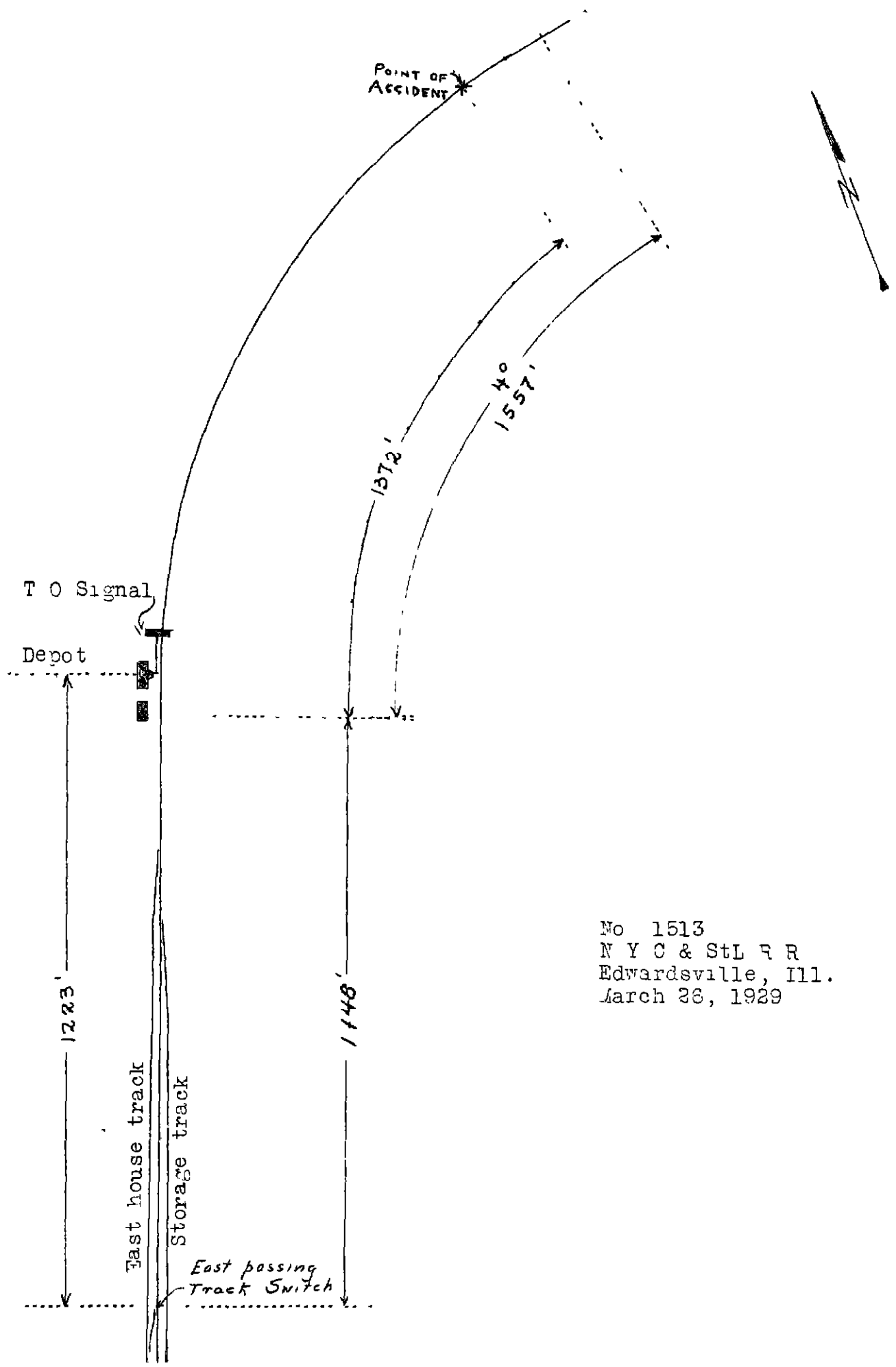
To the Commission:

On March 26, 1929, there was a head-end collision between two freight trains on the New York, Chicago & St. Louis Railroad at Edwardsville, Ill., resulting in the death of three employees and the injury of two employees.

Location and method of operation

This accident occurred on that part of Subdivision 4 of the Clover Leaf District extending between Madison, Ill , near St. Louis, Mo , and Charleston Yard, Ill., a distance of 128.1 miles, in the vicinity of the point of accident 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 accident occurred at a point 1,297 feet east of the depot at Edwardsville or 2,520 feet east of the east switch of the passing track; the passing track is 3,323 feet in length and parallel the main track on the north. Approaching the point of accident from the west, beginning at the east switch of the passing track, the track is tangent for a distance of 1,148 feet, followed by a 40° curve to the right 1,557 feet in length, the accident occurring on this curve at a point 185 feet from its eastern end. Approaching from the east the track is tangent for more than 1 mile, followed by the curve on which the accident occurred. The grade for eastbound trains is 0.50 per cent descending at the point of accident.

The depot at Edwardsville is located on the north side of the track, about 1,200 feet east of the east switch, and the train-order signal is right in front of the depot, the normal position of the train-order signal is at stop, and enginemen of approaching trains are required to call for the signal by sounding four short blasts on the whistle; if rules and conditions permit,



No 1513  
 N Y C & StL F R  
 Edwardsville, Ill.  
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the operator places the signal at proceed and the engine-men then acknowledge the change of position by sounding two short blasts on the whistle. In addition to the train-order signal, it is required that auxiliary train-order signals will be used at all train-order offices to indicate the form of train order to be delivered; a red banner by day, and in addition a red light by night, indicating "31" orders, and a yellow banner by day, and in addition a yellow light by night, indicating "19" orders. At this particular office when the auxiliary signal is displayed it is placed on the mast of the train-order signal at a point about 8 feet above the station platform, in this instance the auxiliary signal was not displayed.

On account of buildings and trees on the inside of the curve neither engine crew could see the opposing engine until within a few hundred feet of each other.

The weather was clear at the time of the accident, which occurred between 5.46 and 5.48 p.m.

#### Description

Westbound freight train extra 904 consisted of 53 cars and a caboose, hauled by engine 904, and was in charge of Conductor Callahan and Engineman Smith. It was given a train order to run as a "traffic extra" from Charleston Yard to Madison, the term "traffic extra" indicates that it is a preferred train and must not be delayed. This train left Charleston Yard at 12.50 p.m., according to the train sheet, and at Alhambra, 13.3 miles from Edwardsville, a copy of train order No. 191, Form 19, was received, directing train first No. 44 to wait at Edwardsville until 5.50 p.m. Extra 904 left Alhambra at 5.28 p.m., according to the train sheet, passed Fruit, 4.9 miles from Edwardsville, at about 5.40 p.m., according to testimony given by members of the crew, and was approaching Edwardsville at a speed variously estimated to have been between 15 and 35 miles per hour when it collided with train first No. 44.

Eastbound second-class freight train first No. 44 consisted of 36 cars, hauled by engine 860, and was in charge of Conductor Rennels and Engineman Franklin. This train left Madison, its initial terminal, 14.2 miles from Edwardsville, at 5.15 p.m., according to the train sheet, 15 minutes late. As it approached Edwardsville the whistle was sounded calling for the train-order signal and a proceed indication was then displayed by the operator. The train passed the

office at 5.48 p.m , according to the train sheet, 13 minutes late on its time-table schedule and without receiving a copy of train order No. 191, previously mentioned, and collided with extra 904 while traveling at a speed of about 35 miles per hour.

Both engines were badly damaged, but remained upright, 12 cars were destroyed. The employees killed were the engineman, fireman and head brakeman of train first No. 44; the employees injured were the engineman and fireman of extra 904.

#### Summary of evidence

Engineman Smith, of extra 904, said he thought that train first No. 44 would be at Edwardsville right on the time shown in the wait order, 5.50 p.m , and that his own train would be able to reach the east switch at that point by 5.46 or 5.48 p.m., at which time the head brakeman could protect by flag while the train was heading in on the passing track. He operated his train from Alhambra to the point of accident at a speed higher than that permitted by the rules, in fact, according to his figures he consumed only five minutes in traveling the distance of nearly 5 miles between Fruit and Edwardsville. When approaching Edwardsville he encountered two torpedoes which has been put down by some preceding train and the speed of his own train had been reduced to about 15 or 20 miles per hour when the fireman warned him of the approach of train first No. 44 and he at once applied air brakes in emergency. Engineman Smith further stated that he fully expected to violate the rule requiring him to clear the time of the opposing superior train at least five minutes and he said that it was the practice to make such movements and then to protect by flag while moving into clear. Had he known, however, that the wait order had been put out to the crew of train first No. 44 at the waiting point, which he said was not a common thing for a dispatcher to do, he would have remained at Fruit instead of trying to reach Edwardsville.

Conductor Callahan, of extra 904, said that when the train order was received at Alhambra he thought his train would have a chance to reach Edwardsville, although he realized that it could not be into clear five minutes before the time expired. The statements of Flagman Snyder, Fireman Tittle and Head Brakeman Middlesworth brought out nothing additional of importance. Engineman Smith thought the accident occurred about 5.46 p.m., while Conductor Callahan said it was 5.47 p.m.

The only surviving members of the crew of train first No. 44 were Conductor Rennels and Flagman Davis. They estimated the speed of their train to have been about 35 miles per hour when the accident occurred. They also stated that the caboose stopped opposite the train-order signal, which was displaying a clear indication, and it was not until he went into the office that Conductor Rennels found that an order had been issued for his train at that point. He fixed the time of the accident as about 5.47 or 5.48 p.m.

Operator Rufty, on duty at Edwardsville, was getting some coal and on his return to the station he found that the station agent had copied train order No 191 and he said the station agent told him that the dispatcher wanted to be advised when train first No. 44 was seen approaching, as he was going to lift the order so as to avoid stopping the train. The train-order signal was in the stop position at this time but the auxiliary train-order signal was not displayed and when train first No 44 approached the station, at 5 42 p m , it then being about 800 feet distant, Operator Rufty endeavored to get in communication with the dispatcher but was unable to do so and he said he then cleared the train-order signal just before the engine reached the station, taking this action because of the instructions conveyed to him by the station agent that the dispatcher did not want to stop train first No. 44. It further appeared from the operator's statements that the order was not a proper one to put out at Edwardsville and that this was the first time he had ever received such an order.

Station Agent Childress said he copied the wait order in the absence of the operator, and after he had repeated the order he was told by the dispatcher that the latter wanted to know when train first No. 44 was coming. Station Agent Childress said he called the order to the attention of the operator on the latter's return to the office, told him what the dispatcher had said, and then left the office for his home, at about 5.35 p.m., without displaying the auxiliary train-order signal. It further appeared from his statements that he had not copied more than 20 orders within the past two years, and although familiar with operating rules and practices it did not occur to him that Edwardsville was not the place at which to put out an order of this character.

Dispatcher Green, on duty at the time of the accident, said the operator at Madison kept him advised concerning train first No. 44 and after that train had departed from Madison at 5.15 p m he issued train

order No 191 at Edwardsville on Form 31, the address not including the operator, and at Alhambra on Form 19, these orders being put out at 5 18 p.m. The sole purpose of the orders was to advance extra 904 as far as Fruit, and in view of the normal running of trains of the character involved it never occurred to him that extra 904 would try to reach Edwardsville on the order or that train first No 44 would arrive at that point before the time named in the order had expired. Dispatcher Green knew it was the station agent at Edwardsville who had copied the order for train first No 44 and he said he told the station agent that he wanted to take up the order before the train reached it; that as soon as the order was dead he wanted to take it up so as <sup>not</sup> to stop train first No. 44 and he denied saying that he wanted to be advised as soon as train first No. 44 approached Edwardsville. At about 5.45 p.m. he left his desk and went to the city telephone for the purpose of making a personal call, returning to his desk at about 5.48 p.m. so as to be in readiness to take care of train first No 44. It further appeared from the statements of Dispatcher Green that the order was not put out in proper form since he failed to include in the order a provision to the effect that train first No. 44 was to get the order at Edwardsville, and his only reason for not issuing the order in accordance with the rules was the fact that his purpose was to assist the extra, and not to restrict train first No 44; had he desired to restrict this latter train, he would have put out the order at Madison.

#### Conclusions.

This accident was caused primarily by extra 904 being operated against an opposing superior train on short time, for which Conductor Callahan and Engineer Smith are responsible.

Extra 904 did not pass Alhambra, according to the train sheet, until 5 28 p.m., and in order to clear train first No. 44 at Edwardsville by five minutes, as required by the rules, it would have been necessary for it to be into clear at that point not later than 5.45 p.m. In other words, extra 904 had 17 minutes in which to travel 13.3 miles, stop, and head in on the passing track at Edwardsville. The crew used 11 or 12 minutes in traveling the distance of 8.4 miles from Alhambra to Fruit, or at an average speed of at least 42 miles per hour. This left them only five or six minutes in which to travel the additional distance to Edwardsville of

4.9 miles and get into clear at that point. Undoubtedly they were influenced in their action by the fact that their train was designated as a "traffic extra", but there is nothing in this designation which authorizes a crew to run wild over the road, disregarding the rules which long experience has shown must be strictly observed if trains are to be moved in safety under the time-table and train-order system.

Operator Rufty had an order on Form 31 in his possession for delivery to the crew of train first No. 44, requiring them to wait at his station until 5 50 p.m., but apparently he became confused when the train was approaching the station and after trying to get in communication with the dispatcher he cleared the train-order signal and allowed the train to proceed. Operator Rufty also failed to see that the auxiliary train-order signal was displayed, this signal being required under the rules of this railroad for the purpose of indicating the form of train order to be delivered. Operator Rufty should have displayed both of these train-order signals and have left them displayed until the order had been made complete and delivered to the crew, although in this particular case it is possible that such action on his part <sup>not</sup> would have prevented the accident since the train was already beyond the east switch, at which point its rights were restricted. No adequate reason can be given to explain Operator Rufty's actions in failing to see that the proper signals were displayed and in then clearing the train-order signal with an order on Form 31 in his possession for delivery.

Dispatcher Green is open to criticism for his method of handling train order No. 191. He said his only purpose in issuing the order was to help extra 904 in moving as far as Fruit, 4.9 miles east of Edwardsville, and that in view of the running time he thought would be made by train first No. 44 that train would not reach Edwardsville until after 5.50 p.m., the time specified in the wait order, and he would then be able to annul the order and thus avoid stopping the train. While his primary purpose was not to restrict the rights of train first No. 44, yet that is exactly what he did when he issued the wait order. Not only should a restrictive order not be put out to an east-bound train at Edwardsville, in view of the fact that the train-order signal is more than 1,200 feet east of the east switch, but the rule governing the general issuance of such orders definitely provides that they must not be sent to the superior train at the meeting point if it can be avoided and when so sent that fact must be stated in the order. In this case, the crew of extra 904 did not know that train first No. 44 was to get the order at the waiting point and there is a possibility that had they been in possession of this

information they might not have attempted to clear the train at that point.

It did not appear that it was a practice to issue restrictive orders to eastbound trains at Edwardsville effective at that point, nor did it appear to be a practice for operators to fail to deliver train orders. According to the statements of Engineman Smith, however, it was a somewhat general practice to run on short time to the extent of using some of the five minutes clearance time required by the rules. This practice has resulted in the occurrence of many accidents in the past, is recognized as dangerous, and immediate steps should be taken for its discontinuance.

There are 6 first-class trains operated over this territory daily or daily except Sunday, and 7 second-class trains daily, as well as 2 other second-class trains which are operated on three days of each week; the total train movements during the 30 days preceding the date of the accident averaged slightly more than 23 trains daily. Traffic of this density on a single-track line is sufficient to warrant the installation of some form of protection to guard against the occurrence of those accidents which experience has shown are likely to occur under the train-order system of operation, and it is believed that the responsible officials of this company should give immediate consideration to this question with a view to providing for an adequate block-signal system.

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.