

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHICAGO & ALTON RAILROAD AT CHICAGO, ILL., ON
DECEMBER 31, 1927.

March 3, 1928.

To the Commission:

On December 31, 1927, there was a rear-end collision between two passenger trains on the Chicago & Alton Railroad at Chicago, Ill., which resulted in the death of 1 passenger and the injury of 56 passengers, 1 of whom died the following day, and 2 employees. The investigation of this accident was made in conjunction with a representative of the Illinois Commerce Commission.

Location and method of operation

This accident occurred on the Chicago Terminal District of the Northern Division, which extends between Argo, Ill., and the Union Station at Chicago, a distance of 13.1 miles, and is a double track line. Between Argo and A. T. & S. F. crossing, locally known as Corwith, a distance of 6.5 miles, automatic block signals are in service, but from Corwith to the Union Station, within which territory this accident occurred, train movements are governed by the rules in the rule book and in the Chicago Terminal time-table. Rules 7 and 9 of the Chicago Terminal time-table reads as follows:

Rule 7. All trains and all engines in the Chicago Terminals will proceed only after the way is seen or known to be clear. When a train or engine stops or is delayed, the flagman must go back immediately with stop signals, a sufficient distance to insure full protection. Firemen will flag when necessary. This does not relieve engineers from exercising, within the Chicago Terminal, every precaution required by the rules within yard limits.

Rule 9. Delayed northward passenger trains keep sharp lookout for empty coach trains at Kedzie Avenue, Brighton Park and at Halsted Street.

Rule 93 of the rules of the operating department relates to the movement of trains within yard limits, and reads in part as follows:

All trains will reduce speed in passing through yard limits, and will proceed only after the way is seen or known to be clear.

There is also a rule governing the territory in which this accident occurred which restricts the speed of trains to 30 miles per hour. The tracks run directly east and west but the time-table directions are north and south, respectively, and the latter directions are those used in this report.

This accident occurred 120 feet north of the bridge over Kedzie Avenue, at the southern end of Brighton Park yard, approaching this point from the south, beginning at Corwith, which is located about 2,875 feet from the point of accident, the track is on a curve to the right of $1^{\circ} 31'$ which extends northward for a distance of 1,075 feet, followed by about 1,800 feet of tangent to the point of accident, this tangent continuing for more than 1 mile northward. The grade is 0.64 per cent ascending, occasioned by the elevation of the tracks above the streets, beginning at this point.

There was a light snow falling at the time of the accident, which occurred at about 9.34 a. m.

Description

Northbound passenger train No. 78 consisted of four baggage cars, two mail cars, one combination baggage and smoking car, one chair car and five Pullman sleeping cars, in the order named, hauled by engines 656 and 622, and was in charge of Conductor Van Meter and Enginemen Brewer and Strawser. The first car in this train had steel center sills and wooden sheathing, the second car was of wood with steel sheathing, and the third car had a steel underframe with wooden sheathing; the fourth, seventh and eighth cars were entirely of wooden construction, while the other seven cars were of all-steel construction. This train passed Corwith at 9.27 a. m., 3 hours and 5 minutes late, was flagged at Kedzie Avenue on account of another train immediately ahead of it, and came to a stop with the rear end about 120 feet north of Kedzie Avenue, it had been standing at this point from three to five minutes when its rear end was struck by train No. 10.

Northbound passenger train No. 10 consisted of two baggage cars, one combination car, one chair car, one dining car and two Pullman sleeping cars, in the order

named, hauled by engine 629 and was in charge of Conductor Flomerfelt and Engineman Van Ness. The first car in this train was of wooden-underframe construction with steel sheathing, the second and third cars had steel underframes with wooden sheathing, the fourth car had a steel underframe with steel sheathing, the fifth car was entirely of wooden construction, and the last two cars were of all-steel construction. This train passed Corwith at 9.33 a. m., 1 hour and 35 minutes late, and shortly afterwards it struck the rear end of train No. 78 while traveling at a speed estimated to have been between 40 and 45 miles per hour.

Engine 629 crushed in the rear vestibule of the rear car of train No. 78, while the forward end of this car was telescoped a distance of about 20 feet by the car immediately ahead of it. The rear truck of each of these cars was derailed but the cars remained upright. Engine 629 and its tender were derailed, the tender telescoping the first car of train No. 10 a distance of about 10 feet. None of the other equipment in either train was derailed.

Summary of evidence

Engineman Brewer, of the lead engine of train No. 78, stated that after leaving Argo his train traveled at an average speed of from 13 to 15 miles per hour, making almost a complete stop at Corwith and shortly afterwards it came to a full stop a short distance north of Kedzie Avenue, at 9.33 a. m. He estimated that his train had been standing at this point about three or four minutes when it was struck by train No. 10. He stated the low speed of his train after leaving Argo was due to the weather conditions, as it was cold and snowing, with the wind blowing smoke and steam into his face. It further appeared from Engineman Brewer's statements that before his train came to a stop at the point of accident he sounded the whistle signal for the flagman to protect the train.

Conductor Van Meter, of train No. 78, stated that he and the train porter were in one of the baggage cars when the train stopped, and upon opening a door on the right side and looking back toward the rear of the train the porter said he could see the flagman going back to flag. Conductor Van Meter then crossed over to the right side of the car to look out of the door and he said that at about this time he heard train No. 10 whistling for Corwith. Judging from the sound of the exhaust he estimated the speed of that train to have been about 30 or 35 miles per hour. At about this time a switch engine backed by and smoke blew across and obstructed his view of the rear of his train. Conductor Van Meter stated he then jumped off, as the engine of train No. 10 was still working steam and he knew there was going to be an accident. He thought that his train had been standing about five minutes before the accident occurred.

Flagman Salmons, of train No. 78, said he got off the rear of the train before it stopped, at the northern end of the bridge over Kedzie Avenue, put down a torpedo and then ran to catch the train, he did not hear any whistle signals given to protect the train. As he approached the train it came to a full stop and he then started back to flag and also picked up the torpedo, and in passing a telephone booth located just north of Kedzie Avenue some one came out and said that train No. 10 was following closely. Up to this time the view back as far as Corwith had been good, but he saw smoke suddenly blow across the track from a switch engine located approximately 15 car-lengths south of Kedzie Avenue, the fireman apparently having put in a fire. This smoke obscured the view entirely and he then began to run, and at about the same time some one came running out of the telephone booth with a red flag and ran by him. Flagman Salmons stated he was south of Kedzie Avenue bridge, or about 300 feet from the rear of his train, when the accident occurred, about two minutes after his train had stopped. He estimated the speed of train No. 10 to have been 25 or 30 miles per hour when it passed him. Flagman Salmons further stated that he thought that in order to have stopped train No. 10 it would have been necessary for him to have reached a point beyond the switch engine from which the smoke was coming, and he did not think that he had had time to go back far enough to avert the accident, even if he had not gone back to his train before starting out again to flag.

Engineman Van Ness, of train No. 10, stated that all signals were clear from Joliet through Corwith, at which latter point the speed of his train was 40 or 45 miles per hour. On rounding the curve at Corwith he could see that the track was clear as far as the crossover south of Kedzie Avenue. A switch engine was standing south of the crossover and the smoke and steam coming from this engine obscured his vision of the tracks to a certain extent. It was not until after passing through this smoke and steam, without any appreciable reduction in speed, that he saw train No. 78 ahead of him, apparently about six or seven passenger car-lengths distant. At about the same time he saw some one flagging him from a point just north of the bridge, or about two and one-half or three car-lengths south of train No. 78, and he immediately applied the air brakes in emergency, the accident occurring shortly afterwards. To the best of his knowledge the air brakes were in good condition. Engineman Van Ness further stated that he did not think he was operating his train too fast to enable him to comply with the rules in so far as they related to his being able to see that the way was clear, although he admitted that the smoke and steam from the switch engine interfered with his view to some extent. The statements of Fireman Beatty corroborated those of Engineman Van Ness, except that he

stated he did not see a flagman at any time, he also stated that he saw the engineman of the switch engine give what he thought was a "hello" signal, and that he answered the engineman in a similar manner. The statements of Conductor Flomerfelt brought out nothing additional of importance.

Switchtender Minnette, who was in the telephone booth just north of Kedzie Avenue, said he saw the flagman of train No. 78 put down a torpedo at the northern end of the bridge and then get back on the train. Switchtender Minnette called the operator at Corwith, was told that train No. 10 had passed that point, and immediately picked up a flag and started out to stop the train, and as he did so the flagman again got off the train and the switchtender told him that train No. 10 was coming, he was positive that the flagman at no time reached a point south of Kedzie Avenue bridge. Switchtender Minnette also said that there was considerable smoke and steam coming from the switch engine but that he could see train No. 10 when it reached the tangent track approaching the point of accident. He estimated its speed to have been about 50 miles per hour. It also appeared from his statements that when he had reached the crossover switch south of Kedzie Avenue some one got off the caboose attached to the cars being handled by the switch engine and tried to flag train No. 10. Switchtender Minnette expressed the opinion that had Flagman Salmons started back immediately as soon as his train stopped he would have had time enough to get back beyond the point where the view was obscured by the smoke and steam coming from the switch engine.

Switchman Gilmore, a member of the crew of the switch engine, which was handling five cars and a caboose, said he was on the caboose and saw train No. 78 stop, and that it then moved ahead and stopped a second time at the point where the accident afterwards occurred. The flagman got off when the train first stopped, then got back on and got off a second time when the next stop was made. At about this time Switchman Gilmore heard the whistle of train No. 10, picked up a red flag and started southward to flag the train, which passed him at a speed he estimated to have been 40 miles per hour. He estimated that the flagman of train No. 78 had gone back a distance of about three car-lengths at the time he himself started out to stop train No. 10.

Switchman Hettwer, also a member of the crew of the switch engine, stated that he was standing near the rear end of train No. 78 and that he saw the flagman of that train put down a torpedo and then stand there for a minute or two. When informed that train No. 10 was com-

ing this flagman picked up the torpedo and ran southward and he thought the flagman was beyond the bridge when train No. 10 passed him, the switchtender, however, was ahead of the flagman. Switchman Hettwer also stated that he observed some one leave the caboose of his own train and run southward to flag the approaching train, in other words, there were three persons flagging that train, but with smoke and steam blowing across the track in front of them.

The statements of Engineman Coyle, of the switch engine, brought out nothing additional of importance except that steam and smoke from a nearby foundry were being blown across the tracks and he did not think that the steam and smoke from his own engine were sufficient to obstruct the view. He stated also that he gave the fireman of train No. 10 a stop signal with his arm. The statements of Yard Foreman O'Neil brought out nothing additional of importance.

Conclusions

This accident was caused by the failure of Engineman Van Ness, of train No. 10, to operate his train under proper control within the Chicago Terminal, and by the failure of Flagman Salmons, of train No. 78, properly to protect his train by flag.

The rules of the Chicago Terminal time-table require all trains and engines within the terminal to proceed only after the way is seen or known to be clear, and it is also required that enginemen observe all the precautions required by the yard-limit rules, rule 93 of the book of rules is similar to the Chicago Terminal rule and requires all trains to reduce speed when passing through yard limits and to proceed only after the way is seen or known to be clear. These rules, together with that establishing a speed limit of 30 miles per hour for the particular portion of the Chicago Terminal within which this accident occurred, were not observed by Engineman Van Ness, who stated that the speed of his train was from 40 to 45 miles per hour, that he could see as far as Kedzie Avenue, that smoke and steam from the switch engine then obscured his view, and that it was not until after passing through this smoke and steam at practically undiminished speed that he was able to see the rear end of train No. 78. The provisions of the rules were adequate to cover the situation, and had Engineman Van Ness governed himself accordingly he would have been able to stop his train in time to avoid the accident.

The evidence indicates that train No. 78 came nearly to a stop and then proceeded a very short distance before coming to a full stop at the point where the accident occurred. There is a conflict of opinion as to just

what steps were taken by Flagman Salmons for the protection of his train and as to his exact location at various times, but the evidence seems to indicate that when his train came nearly to a stop he got off and put down a torpedo, and then ran back for the purpose of boarding the train, although it does not definitely appear whether or not he did so. In either event, however, the train came to a full stop at about the time he had returned to the rear end and he then went back a short distance and, when warned that train No. 10 was approaching, started to run, stopping to pick up the torpedo previously placed on the rails, according to his own statements he was not more than 300 feet from the rear of his train when the accident occurred. Train No. 78 passed Corwith at 9.27 a.m., and it seems probable that it came to a stop at about 9.30 a. m., which would have given Flagman Salmons about four minutes in which to provide protection. Not only did Flagman Salmons lose time in returning to his train after putting down the torpedo, but it also appears that he did not make use of all the time at his disposal after the train finally came to a stop. The rules require flagmen to protect their trains in this territory whenever they are stopped or delayed, and had Flagman Salmons acted quickly, going back as far as possible within the few minutes in time which were available, he should have been back far enough to enable Engineman Van Ness to bring his train to a stop in time to prevent the accident.

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.