INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO & NORTH WESTERN RAILWAY NEAR JANESVILLE, WIS., ON APRIL 25, 1930.

May 16, 1930.

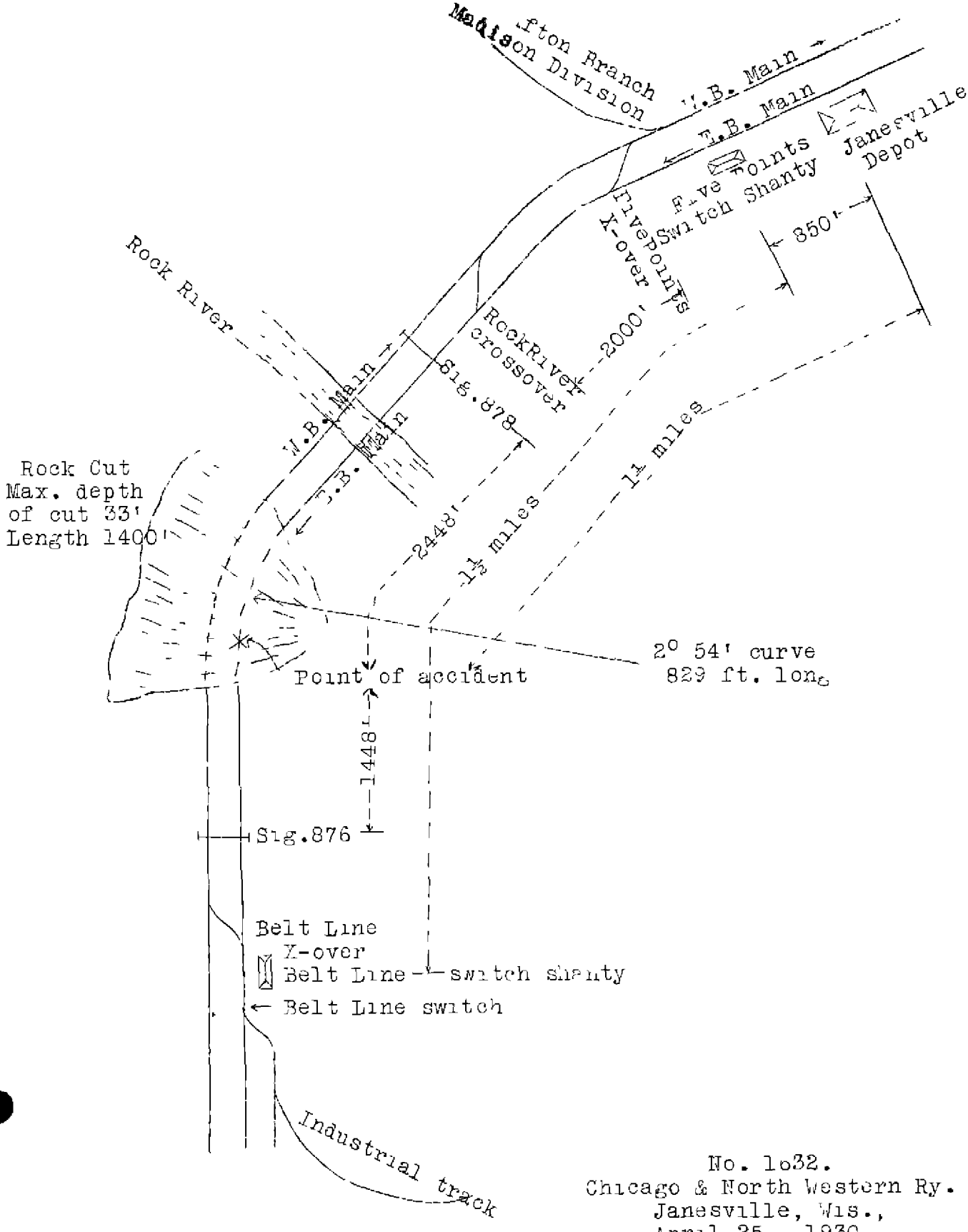
To the Commission:

On April 25, 1930, there was a head-end collision between a freight train and a switch engine on the Chicago & North Western Railway near Janesville, Wis., resulting in the death of one employee and the injury of one employee.

Location and method of operation

This accident occurred on Sub-division 5 of the Wisconsin Division, extending between Janesville, Wis., and Harvard, Ill., a distance of 28.64 miles, in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system, movements with the current of traffic keep to the left. The accident occurred on the eastbound main track, within yard limits, and on a curve extending through a cut known as Rock Cut, at a point about 1¼ miles east of the passenger depot at Janesville, the west yard-limit board is located several hundred feet west of the depot; Rock Cut is about 1,400 feet in length and has a maximum depth of 33 feet. Approaching the point of accident from the west, the track is tangent for a distance of 1,594 feet, followed by a 2° 54′ curve to the left 829 feet in length, the accident occurring on this curve at a point 233 feet from its eastern end. Approaching from the east, the track is tangent for a distance of 1,230 feet, followed by the curve on which the accident occurred. The grade for eastbound trains is 0.39 per cent ascending at the point of collision.

The automatic signals involved are eastbound signals 878 and 876, of the three-position, upper-quadrant, semaphore type, placed on signal bridges and directly above the track involved; night indications are red, red and green, and green, for stop, caution, and proceed, respectively. Signal 878 is located 2,448 feet west of the point of collision, while signal 876 is located 1,448 feet east thereof.



No. 1032.
Chicago & North Western Ry.
Janesville, Wis.,
April 25, 1930.

There is a switchtender's shanty, known as Five Points switch shanty, located about 850 feet east of the passenger depot at Janesville, while another switchtender's shanty, known as Belt Line switch shanty, is located about 1½ miles east of Five Points switch shanty, both of these switch shanties are located on the north side of the tracks. Between Five Points switch shanty and signal 878 there are two crossovers, both of which are trailing-point crossovers and connect the westbound and eastbound main tracks. These crossovers are known as Five Points crossover and Rock River crossover; they are located about 3,000 feet apart, Rock River crossover being about 350 feet west of signal 878. At Belt Line switch shanty, a track known as the Belt Line switch leads off the eastbound main track toward the north and parallels the main tracks, a short distance east of that switch, another track leads off the Belt Line switch to the north to an industrial track; both of these switches are facing-point switches for eastbound movements.

The view of the point of accident around the curve from either an eastbound or a westbound engine is restricted to about 550 feet, as the cut in about the center of the curve is very narrow and at its maximum depth, it is also spanned by an overhead highway bridge at that point.

The weather was clear at the time of the accident, which occurred about 7.45 p.m.

Description

Switching was being performed in the vicinity of Belt Line switch shanty and at the time of the accident, switch engine 2032, in charge of Foreman Skelly and Engineman Gestland, headed east and coupled to the west end of 47 empty cars, was hauling the cars westward against the current of traffic on the eastbound main track, far enough to clear the Belt Line switch, so that they could then be placed on the industrial track, switch engine 3182, headed west and in charge of Foreman Dulin and Engineman Seivert, was coupled to the east end of these cars, in order to assist engine 2032, and it was while switch engine 2032 was bringing the cars to a stop, preparatory to placing them on the industrial track, that the rear end of its tender was struck by extra 2333.

Eastbound freight train extra 2333 consisted of 30 cars and a caboose, and was in charge of Conductor Vethe and Engineman Trimble. It arrived at Janesville over the Afton Branch, Madison Division, as a westbound train, it was then backed through the Five Points crossover to the eastbound main track of the Wisconsin Division, after which the engine was cut off, run around the train, backed through the Rock River crossover, and coupled to the rear end of the caboose, in order to haul the train eastward toward the Belt Line switch shanty. While this latter movement was in progress and after extra 2333 had moved its train about one-half mile, traveling at a speed estimated to have been from 5 to 10 miles per hour, the rear end of the tender collided with the rear end of the tender of switch engine 2032.

The tenders of both engines were badly damaged and the caboose of extra 2333 was telescoped and shoved on top of the front end of its engine, being so badly damaged that it was later destroyed; none of the other equipment in either train was derailed or damaged, nor was either engine or tender derailed. The employee killed was a switchman on switch engine 2032, while the employee injured was the engineman of that engine.

Summary of evidence

Foreman Dulin, of switch engine 2182, stated that he went to the Belt Line switch shanty and arranged by telephone with Switchtender Griffin, at Five Points switch shanty to make a movement against the current of traffic on the eastbound main track, far enough so that the 47 cars could be placed on the industrial track, and to hold all eastbound trains, which was agreed to. Foreman Dulin thought this conversation took place between 7.15 and 7.20 p.m., and said that Foreman Skelly, of switch engine 2032, was in the shanty with him at the time. Foreman Dulin stated that he and Foreman Skelly then stepped out of the shanty, and shortly afterwards, as switch engine 2182 passed them during the progress of switching, they both advised Engineman Seivert, of switch engine 2182, that the block had been obtained from the switchtender at Five Points and that it was all right to make the movement against the current of traffic. Foreman Dulin went to a point east of the Belt Line switch, where some loaded cars stood, and made a coupling, remaining at that point while switch engine 2032 started to make the movement against the current of traffic with the 47 cars, and he said that when the last car passed him the shanty being on the opposite side of the moving

cars from where he stood, he walked back to the shanty and joined Foreman Skelly, saying that this brief interval was the only time he had been separated from Foreman Skelly after the block had been obtained, until the accident occurred, and that Foreman Skelly had not used the telephone while in his company. Foreman Dulin said he had no conversation with Foreman Skelly regarding the block, other than to advise him that he had obtained it from the switchtender at Five Points and that it was all right to make the movement against the current of traffic. Foreman Dulin stated that movements similar to the one contemplated had been made a number of times before, i.e., whenever a superior train was due on the westbound main track and the movement could not be made through the Belt Line crossover and on the westbound main track ahead of that train. During the 14 years he had been working in Janesville yard, it had been the practice, on verbal instructions, that all movements against the current of traffic between Belt Line and Five Points be made only on positive block protection or by flag protection. Foreman Dulin further stated that it was customary for him to identify himself and to learn the identity of the party from whom the block was obtained; that he had never released the block when making a reverse movement until the movement was completed, that he had never released the block when some one else had obtained it, nor had he ever permitted another party to release the block that he had personally obtained, and in this particular case, Foreman Dulin said he had no understanding to the effect that Foreman Skelly would release the block, intending to take this action himself after the contemplated movement had been completed.

Foreman Skelly, of switch engine 2032, stated that he was in the shanty at Belt Line when Foreman Dulin arranged for the block with the switchtender at Five Points, which he thought took place between 7.20 and 7.30 p.m. Foreman Skelly maintained that as his engine made the movement against the current of traffic, he stood outside the Belt Line switch shanty and counted the cars as they passed; they were brought to a stop, and then switch engine 2182 coupled to the east end of these cars. Foreman Skelly maintained that he then lined the Belt Line switch for the movement to the industrial track and remained at the switch until switch engine 2182 and about 14 of the cars had passed in off the main track, at which time he went into the shanty and released the block to the switchtender at Five Points, at about 7.30 p.m. Foreman Skelly maintained that about 20 minutes after Foreman Dulin had obtained the block, he advised Foreman Dulin that he

would release the block at the proper time, and that the only time he used the telephone was at the time he released the block. Foreman Skelly stated that it was customary for the party who obtained the block from Five Points to release it, saying that he never allowed another party to release a block that he had obtained himself nor had he ever before released a block obtained by someone else. It was common practice to make a movement against the current of traffic, when a movement with the current of traffic would interfere with superior trains, or could not be made ahead of superior trains without delay, and in this instance the movement was made against the current of traffic as there was not sufficient time to make it on the westbound track ahead of a first-class train. Foreman Skelly further stated that the back-up headlight on the rear end of the tender of switch engine 2032 was burning brightly when the movement was started.

Switchman Franzen, of switch engine 2032, stated that before the movement had started, he went into the Belt Line switch shanty and at that time Foreman Skelly was using the telephone. Switchman Franzen then went outside and started to count the empty cars as they passed westward, and Foreman Skelly came out of the shanty after from 5 to 8 cars had passed. When about 20 cars had passed, he heard Switchtender Rawlinson, who was on duty at the shanty, conversing over the telephone, and as the last car passed, he again heard Foreman Skelly using the telephone, Switchman Franzen, however, did not overhear any of these conversations. Switchman Franzen also stated that when he acted as foreman of a switch engine, he never released the block when it had been obtained by someone else, nor had he ever permitted anyone else to release a block that he had obtained.

Switchtender Rawlinson, on duty at Belt Line switch shanty, stated that he heard Foreman Dulin arrange for the block by telephone with Switchtender Griffin at Five Points switch shanty. Switchtender Rawlinson was in the shanty when Switchman Franzen came in, but did not remember where Foreman Skelly was at that time. Switchtender Rawlinson maintained that while the movement against the current of traffic was in progress, Switchtender Griffin telephoned and inquired whether the eastbound main track was still being used, also advising that extra 2333 was at Five Points. Switchtender Rawlinson replied that the eastbound main track was still in use, and would probably continue to be used for about 10 or 15 minutes longer, saying that this was the only conversation that he had during these switching movements.

Switchtender Griffin, on duty at Five Points switch shanty, stated that Foreman Dulin requested by telephone that the eastbound main track be protected in order to make a movement against the current of traffic, which was agreed to, this conversation took place prior to 7.20 p.m., and before extra 2333 arrived at Five Points over the Afton Branch of the Madison Division. Switchtender Griffin lined the Afton Branch switch for extra 2333 to enter upon the westbound main track and telephoned Switchtender Rawlinson and inquired whether the eastbound main track was still being used at Belt Line, being informed that it was, although it was not known how much longer it would be used. Switchtender Griffin stated that he said nothing whatever about extra 2333. Shortly afterwards, just before the arrival of extra 2333, when it was about one city block from the Afton Branch switch, he heard a signal sounded on the engine whistle, and at about that time received a telephone call and was told by Foreman Skelly to release the block. Switchtender Griffin said, however, that before extra 2333 departed from Five Points, merely as an extra precaution, he told Conductor Vethe to watch out, as switching was being performed around the Belt Line switch, Switchtender Griffin taking this precaution for the reason that the block was sometimes released to him before a movement had been completed. Switchtender Griffin further stated that it was not always the practice for the block to be released by the same person who obtained it, and in this instance, when Foreman Skelly released the block, he considered it to have been properly released, this being the only conversation he had over the telephone with Foreman Skelly.

Engineman Gestland, of switch engine 2032, thought that the movement against the current of traffic was started about 7.35 p.m., and the first intimation he had of anything wrong was about the time he brought the cars to a stop, at which time Fireman Marshall shouted a warning of danger, Engineman Gestland then saw the white lantern on the rear end of the tender of engine 2333, the collision occurring immediately afterwards. Engineman Gestland further stated that at no time during the back-up movement was a speed of 5 miles per hour exceeded, and that he was proceeding under control, prepared to stop. Fireman Marshall had been looking eastward for a stop signal, and when it was observed he called it to the engineman, then looked westward, and almost immediately he saw engine 2333 about 60 feet away; he estimated the speed of that train to have been between 8 and 10 miles per hour at the time of the collision, saying that in his opinion his own engine had come to a stop when the collision occurred.

Engineman Tramblie, of extra 2333, thought that his train departed from Five Points about 7.35 p.m., signal 878 was displaying a caution indication when his engine passed it, therefore he knew that the track ahead at that time was clear as far as signal 876. The speed of his train did not exceed 10 or 12 miles per hour between Rock River crossover and the point of accident. While rounding the curve through the cut he saw the reflection of the rear headlight of switch engine 2032, when about 8 or 10 car-lengths distant, but thought it was approaching on the opposite track. On definitely realizing that it was moving against the current of traffic on the track his own train was occupying, he immediately made an emergency air-brake application, reducing the speed to about 4 or 5 miles per hour at the time of the collision. Fireman Mickey stated that he first saw switch engine 2032 when it was about 2 or 3 car-lengths distant, and estimated that the speed of his train had been reduced from about 10 miles per hour to about 6 miles per hour at the time of the collision. Conductor Vethe stated that before departing from Five Points, at about 7.35 p.m., Switchtender Griffin advised him to watch out for engines working at Belt Line, but did not inform him, nor did he ask on which track they would be working, and nothing was said about the block having been given to Belt Line to permit a movement on the eastbound track against the current of traffic. Conductor Vethe did not say anything to Engineman Tramblie about the engines working at Belt Line, as he figured that signal 876, just west of that point, would give the engineman proper indication of track conditions ahead, and furthermore a clear view could be had of that signal for a considerable distance.

Conclusions

This accident was caused by Foreman Skelly, of switch engine 2032, releasing a block which had been obtained for a movement against the current of traffic, before the movement had been completed.

The testimony is conflicting in various respects Foreman Skelly maintained that he had an understanding with Foreman Dulin that he, Skelly, would release the block, although he had never previously released a block obtained by someone else, but Foreman Dulin maintained that no such understanding existed. There was also considerable conflict as to the time that the block was obtained and released, as to the location of Foreman Skelly while the movement against the current of traffic was being made, and as to who was using the telephone and when they were using it. The fact remains, however, that Foreman Skelly released the block long before the movement had cleared the eastbound main

track, and that he had no business taking any such action. There was testimony to the effect that the block was sometimes released before a movement similar to the one in question had been completed, such a practice could lead only to the occurrence of an accident of this character. Foreman Skelly should have waited until the main track was clear before releasing the block, and this would apply even had he obtained the block himself.

Rules 93 and 93-a, of the book of operating rules of this railway, read in part as follows

> 93. Within yard limits the main track may be used, protecting against first class trains.
>
> *** extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.
>
> 93-a. *** Within these limits the main track may be used by yard engines against second and third class trains, protecting when view is obscured ***

In this locality, however, it has been the practice, based on purely verbal instructions which had been in effect for many years, to permit movements against the current of traffic between Belt Line and Five Points under positive block, or flag protection. A uniform understanding did not exist among the employees as to obtaining and releasing the block for such a movement, some of them being of the opinion that the block could be released by anyone, and others being of the opinion that it could be released only by the party who obtained it. The proper officials should immediately see to it that no difference in understanding exists among the employees as to how a movement against the current of traffic, without flag protection, should be made.

When movements against the current of traffic are to be made, a positive block is established at either Belt Line or Five Points, protecting only movements on the track that is to be used. Rock River crossover is an intermediate crossover and there appears to be nothing in the established practice to prevent a westbound engine or train from using the westbound main track with the current of traffic between Belt Line and

this crossover, and then crossing over and returning with the current of traffic on the eastbound main track, against some engine that might be using the eastbound main track against the current of traffic under the protection of the block at Five Points.

Since the occurrence of the accident, plans for the installation of additional automatic block signals, for greater protection on the curve, have been given consideration by the officials.

All of 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.