

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE CHICAGO GREAT WESTERN RAILROAD AT CANNON FALLS,
MINN., ON JULY 21, 1927.

August 30, 1927

To the Commission:

On July 21, 1927, there was a head-end collision between a light engine and a gasoline motor car hauling a mowing machine on the Chicago Great Western Railroad at Cannon Falls, Minn., resulting in the death of five employees.

Location and method of operation

This accident occurred on the Fourteenth District of the Northern Division, extending between Osage and Randolph, Minn., a distance of 141.1 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. Trains moving in the same direction are spaced 10 minutes apart at stations. The accident occurred within the yard limits of Cannon Falls, on a curve and in a small cut, about 4 feet in height, at a point about one half mile east of the depot, or about 1,860 feet west of the east yard limit board. Approaching the point of accident from the east the track is tangent for 2,860 feet, followed by a 4° curve to the left 675 feet in length, the accident occurring on this curve at a point 125 feet from its western end. Approaching from the west there is a 2° 30' curve to the left 600 feet in length, then 215 feet of tangent, followed by the curve on which the accident occurred. The grade is 0.6 per cent ascending for westbound trains at the point of accident.

Owing to a growth of weeds and brush on the embankment of the cut, the view across the inside of the curve from the fireman's side of a westbound engine is restricted to about 250 feet while rounding the curve, and from the engineer's side on the outside of the curve to about 100 feet.

The weather was cloudy at the time of the accident, which occurred at about 4.10 p.m.

Description

The gasoline motor car involved was a four-wheel, heavy-duty, two-cylinder car weighing about 1,200 pounds, and was in charge of Track Supervisor Halling and Section Foreman Olson. At the time of the accident it was hauling a push car, on which was mounted a weed-cutting machine. Track Supervisor Halling, Section Foreman Olson and Section Laborers Wenz, Johnson and Elde constituted the crew. While moving eastward, at a speed of about 4 or 5 miles per hour, cutting weeds along the south side of the track on the curve, it was struck by engine 231.

Westbound extra 231, running light, en route from Red Wing, 20.9 miles east of Cannon Falls, to Randolph, 6.3 miles west thereof, to relieve a disabled engine on the Thirteenth District, was in charge of Engineman Van Dusen and Fireman Peterson. This engine departed from Red Wing at 3.30 p.m., passed the east yard limit board at Cannon Falls and on reaching a point about 1,860 feet beyond collided with the mowing machine outfit while traveling at a speed estimated to have been about 25 miles per hour.

The gasoline motor car, its trailer and the mowing machine were shoved ahead of the engine and badly damaged. The pilot of engine 231 was slightly damaged; the engine was not derailed and was brought to a stop at a point approximately 695 feet west of where the motor car was struck. There was no damage to the track. The employees killed were the track supervisor, section foreman and the three section laborers.

Summary of evidence

Engineman Van Dusen, of light engine 231, stated that he received an order at Red Wing to run extra to Randolph. He said he knew that as a rule section men would not know about an extra, therefore, he kept a sharp lookout around all curves and told the fireman to watch out on his side. Approaching Cannon Falls he said that he snuff off steam, about 300 or 400 feet east of the curve on which the accident occurred, and sounded the station whistle signal, after which he opened the bell ringer and the fireman reached for the cord to start the air-operated bell to ringing. Immediately afterwards the fireman shouted a warning of danger; Engineman Van Dusen applied the air brakes in emergency and opened the Sanders, and then the accident occurred. He estimated the speed to have been about 25 miles per hour at the time of the accident. He just caught a glimpse of the motor car as the accident occurred. He said that at no time after leaving Red Wing was the speed of the light engine in excess of 30 miles per hour. Engineman Van Dusen understood that the rules require light engines to approach and move within yard

limits under control, and that under control meant to be able to stop within one half of the distance the track is seen to be clear. He thought he was complying with the yard limit rule, traveling at a speed of 25 miles per hour, so far as looking out ahead for trains or the rear end of a caboose was concerned, saying that had a train or a rear end been at the point where the gasoline motor car was he could have seen it over the top of the embankment before the light engine reached the east end of the curve. The engine was in good condition and the air brakes, whistle and automatic bell ringer worked properly. Engineman Van Dusen further stated that he had not received instructions from anyone to make a special effort to hurry on this trip.

The statements of Fireman Peterson coincided in substance with those of Engineman Van Dusen; Fireman Peterson also said that he was maintaining a sharp lookout ahead while rounding the curve, that he saw the motor car when his engine was about three car lengths from it, and that all of the men on the motor car appeared to be engrossed in the operation of the mowing machine and none of them was looking ahead. He was of the opinion that the yard limit rule was being complied with on this occasion and thought that the rear end of a train, an engine, or a box car could have been seen across the inside of the curve from the cab of the light engine from a point about one half to three fourths of a mile east of where the accident occurred.

Agent Barber, stationed at Cannon Falls, stated that it was the custom of Section Foreman Olson to get a line-up of trains before going out on his section in the morning, also at other times during the day when he happened to be in the immediate vicinity of the office. On the day of the accident the section foreman came to his office at 8. a.m. and was given a line-up, but at that time he had no information that extra 231 was to be run; the section foreman then left and he did not again come to the office to obtain information as to trains, nor did any other member of the crew of the mowing machine outfit. Prior to the accident the dispatcher called and asked the agent whether the light engine had arrived and was told that it had not; the agent then listened for the extra and at about 4.10 p.m. he heard the station whistle signal sounded for Cannon Falls, then he called the dispatcher and told him that the engine was coming.

Section Laborers Knutson and Green, of the Cannon Falls section, were at the tool house sharpening tools at the time of the accident. According to their statements Section Foreman Olson usually made inquiry regarding train movements before going out on his section, which extended from Randolph to a point nearly 4 miles east of Cannon Falls, and also inquired as to train movements at other times during the day when he was in the vicinity of the office. On the day of the accident the section foreman obtained such information at 8 a.m. Shortly afterwards Section Foreman Olson, Section Laborer Knutson and another section laborer went to Randolph, 6.3 miles west of Cannon Falls, on a motor car to get some planks and then they returned to Cannon Falls at about 9.20 a.m. The section foreman did not leave on the trip eastward until about 10.30 a.m. At about 3 p.m. work of mowing weeds with hand scythes was finished between Mineral Springs, a flag stop located about $3\frac{1}{2}$ miles east of Cannon Falls, and the east end of the section. Foreman Olson instructed Laborers Knutson and Green to continue mowing west of Mineral Springs with hand scythes and said that he would proceed to the east end of the section to meet Track Supervisor Halling, who had been working with the mowing machine on the section immediately east of the Cannon Falls section; they said that the machine works over the entire division. Shortly afterwards, about 5 or 6 minutes later, Foreman Olson returned and Track Supervisor Halling and some section men were with him. The foreman then instructed Laborers Knutson and Green to take the Cannon Falls motor car and push car to Cannon Falls and grind a sickle, and Track Supervisor Halling personally came over to the push car and placed the sickle on it. Laborers Knutson and Green then departed for the tool house. At about 4 p.m. they heard the mowing machine approaching the east switch of the passing track at Cannon Falls, located about 800 or 900 feet east of the tool house, and the mowing machine outfit was turned and started eastward cutting weeds on the south side of the track. At the time the outfit was turned none of the crew came down to the tool house nor did any of them go to the office. Shortly afterwards Laborers Knutson and Green were informed of the accident by Foreman Peterson. Laborers Knutson and Green said they heard the exhaust from the engine as extra 231 approached but that they were grinding the sickle and did not recall having heard the whistle sounded, also, that the mowing machine makes considerable noise while in operation, so much in fact that the whistle of an engine could not be heard by the crew of the weed cutting outfit unless the engine was only a short distance away at the time it was sounded.

Engineer Maintenance of Way Groth stated that the gasoline motor car and mowing machine could have been easily removed from the track by the five men composing the crew had they known that the light engine was coming. He said that his instructions in regard to performing work with the mowing machine is for the track supervisor to accompany the mowing machine and keep a close line-up on trains at all times, when it is possible to do this, to flag in each direction. Also, under the rules it is the duty of track men to flag at all times against light engines and extra trains when moving around curves and dangerous places. Mr. Groth produced several bulletins, in circular form and numbered, that had been issued by him prior to the accident and cautioning the employees to do all possible to prevent just such an accident as occurred on this occasion. One of these circulars in particular, Circular No. 330, dated St. Paul, Minn., July 31, 1920, was issued by Mr. Groth and quoted a circular letter that had been issued by Track Supervisor Halling, it read as follows:

"ALL SECTION FOREMEN:

The following is a circular letter that O. Halling has put out to his men. It applies to all sections and I am, therefore, giving you a copy of it:

'We have had several motor car accidents the last few weeks. Five cars hit by trains and light engines, and in all cases it was caused by carelessness. The instructions that have been issued from time to time were not lived up to.

'I have been told personally by both the Superintendent and the Engineer Maintenance of Way that the very first Foreman that has his motor car hit after this will be taken out of service when accident is caused by Foreman not getting a line-up, or if unable to get a line-up, that he fails to flag himself around curves and all dangerous places. Most all motor accidents could have been avoided, if the proper care on the Foreman's part had been taken.

'If you are in a position that there is no way to get a line-up, you must send a man ahead around all curves and dangerous places and if this is always done, you will have no motor cars hit.'

W. C. Groth,
Engr. M. of W."

Mr. Groth also stated that three men can operate the gasoline motor car and mowing machine, one on the motor car and two on the mower; in this instance, however, there was a crew of five men operating the weed mowing outfit.

Conclusions

This accident was caused by the operation of the mowing machine outfit around a curve without protection, for which Track Supervisor Halling and Section Foreman Olson are responsible, and by the failure of Engineman Van Dusen to approach and operate the light engine within yard limits under control, as required.

Under the rules no notice will be given of extra trains, and employees must protect themselves accordingly. The safety rules provide that particular caution must be exercised in operating motor cars and other track vehicles around curves, and flagman must be sent out in advance, if necessary, a sufficient distance to insure full protection. The rules also require that engines must approach and move within yard limits under control, which is defined as to be able to stop within one half of the distance the track is seen to be clear. And that in case of doubt or uncertainty the safe course must be taken.

Track Supervisor Halling was regarded as one of the strong advocates of safety on the division and bulletin instructions issued by him to his force would indicate this to be a fact. In this instance, however, it does not appear that he conformed to the instructions which he had himself issued to cover just such situations. Whether or not he and Section Foreman Olson were depending on the yard limit rule for protection is not known. They were both men with years of railroad experience. Section Foreman Olson made no inquiry regarding train movements after 8 a.m., at which time no information concerning the extra involved in this accident was available, although he did not leave Cannon Falls on the trip eastward until 10.30 a.m., and when he returned to the east switch of the passing track at Cannon Falls at 4.p.m., to turn the mowing machine outfit, he still made no effort to obtain information on trains although he was then only about 1,400 feet from the telegraph office. It seems that a proper conception of the importance of obtaining such information would have prompted him to go to the office even though he was depending on the yard limit rule for protection, as he had obtained no information on train movements for several hours and should have known that an extra train might be started out at any time. On this occasion the mowing machine crew consisted of five men, whereas three men can operate the outfit; one or two of the laborers could and

should have been utilized for flag protection purposes in view of the fact that work was being performed in a dangerous place and that the weed cutting machine made considerable noise while in operation. Apparently the entire mowing machine crew were thoroughly engrossed in the operation of the outfit, however, and none of them was even maintaining a lookout. Had Track Supervisor Halling and Section Foreman Olson exercised proper precaution the accident could have been averted.

While Engineman Van Dusen, of the light engine, understood that the rules require light engines to move within yard limits under control, and that under control means to be able to stop within one half the distance the track is seen to be clear, he considered that he was complying with the rule while traveling at a speed of 25 miles per hour within yard limits, the speed that he estimated his engine to be traveling at the time of the accident. Had he complied with the rules and operated the light engine under proper control within yard limits, as required, and especially so when negotiating the curve involved, his view around the outside of which was restricted to about 100 feet, the accident could have been prevented.

The fact that the light engine traveled a distance of approximately 693 feet after striking the mowing machine outfit and on a slightly ascending grade with the air brakes applied in emergency and the sanders open, indicates that the light engine was traveling at a higher rate of speed at the time of the accident than the estimate of 25 miles per hour made by Engineman Van Dusen.

Track Supervisor Halling entered the service of this railroad as a section laborer in the year 1897, was promoted to section foreman in 1907, and to track supervisor in 1921. Section Foreman Olson entered the service as section foreman in 1907. Engineman Van Dusen entered the service as a fireman in 1902 and was promoted to engineman in 1908. At the time of the accident none of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. Borland,

Director.