

INV. 877
August 7, 1915.

IN RE INVESTIGATION OF A COLLISION WHICH OCCURRED AT THE INTERSECTION OF THE TRACKS OF THE IDAHO & WASHINGTON NORTHERN RAILROAD AND THE SPOKANE & INLAND EMPIRE RAILROAD AT McGUIRES, IDAHO, ON JULY 1, 1915.

On July 1, 1915, an electric passenger train on the Spokane & Inland Empire Railroad collided with a freight train on the Idaho & Washington Northern Railroad at the intersection of the railroads at McGuires, Idaho, which resulted in the injury of 27 passengers and 7 employees. After investigation of this accident the Chief of the Division of Safety submits the following report.

In the vicinity of the accident both railroads are single track. The Spokane & Inland Empire line extends east and west, and the Idaho & Washington Northern crosses the track of the Spokane & Inland Empire, at grade, at an angle of about 45 degrees. Approaching this crossing from the east on the Spokane & Inland Empire track, the view is unobstructed for about 1 mile, and there is a grade of .8 per cent. ascending westward. Trains on both roads are operated by time table and train order, no block system being used. The use of this crossing by trains, is governed by a gate, located in the south-east angle formed by the tracks, and so constructed that it can be swung across the track of either road. Normally the gate is locked across the track of the Idaho & Washington Northern Railroad, and trains of that road are required to stop and swing the gate across the track of the Spokane & Inland Empire, before using the crossing. Trains of the Spokane & Inland Empire are

not required to stop if the gate is set against the opposing line and the way is seen to be clear. At night the position of the gate is indicated by a lamp mounted on a mast on top of the gate. This lamp displays a green light to trains having the right of way, and a red light to trains which are required to stop. At the time of the accident the weather was clear and the moon was shining.

Idaho & Washington Northern freight extra, consisting of engine 5523 and 27 loaded and 5 empty cars, en route from Spirit Lake, Idaho, to McGuires, Idaho, was in charge of Conductor Heinzer and Engineman Marvin, and arrived at McGuires about 11.15 p.m. The train stopped before the engine reached the crossing, and a brakeman went ahead, unlocked the gate and changed its position to stop trains on the Spokane & Inland Empire Railroad. The train then started and was passing over the crossing at a speed of about 4 miles per hour when it was struck between the eighteenth and nineteenth cars by westbound passenger extra 43 on the Spokane & Inland Empire Railroad.

Spokane & Inland Empire eastbound passenger extra, consisting of motor-passenger car 43 and one trailer carrying a party of "Fraternal Order of Eagles" en route from Coeur d'Alene, Idaho, to Spokane, Wash., in charge of Conductor Henry and Motorman McDevitt, left Coeur d'Alene, 10 miles east of McGuires, about 11.15 p.m. and while running at a speed of about 25 miles per hour collided about 11.35 p.m. with Idaho & Washington Northern freight extra 5523 as it was passing over

the intersection of the tracks at McGuires.

When the train came to a stop, the forward end of the motor car was 6 or 7 feet west of the crossing. The force of the collision pushed two cars loaded with cement, from the rails of the Idaho & Washington Northern track, and they came to rest at right angles with the electric track. Motor car 43 and the trailer were derailed and both were badly damaged. Each of the electric cars was reinforced with 4 steel floor beams extending the entire length of the car. The fact that the accident did not result more seriously, is undoubtedly due to the presence of these beams.

Conductor Heinzer of extra 5523 stated that his train arrived at McGuires about 11.15 or 11.20 p.m. Immediately upon arrival, the head brakeman went forward to open the crossing gate, and after the gate had been placed across the Spokane & Inland Empire track he noticed that the signal lamp was burning. At the time of the accident he was standing on the opposite side of his train and did not see or hear the electric train approaching. He stated that on one occasion, about three months ago he found this signal light extinguished.

Engineman Marvin of extra 5523 stated that he noticed that the signal lamp on the gate at McGuires was burning when Brakeman Hook turned the gate. He estimates that from 4 to 6 minutes elapsed from the time the gate was turned until the collision occurred. He does not recall ever having found the signal light on this gate extinguished.

Fireman Mothersbaugh of extra 5523 stated that he

saw the light burning on the gate after it was thrown across the Inland Empire track by Brakeman Hook, and that he saw the approaching electric train as it came around the curve at Pont Falls, (1.5 miles east of McQuires) and at that time the headlight was burning brightly. He also stated that he saw a brakeman on top of his train swinging a stop signal with a lantern to the electric train as it approached, but that its speed did not seem to slacken until just before the collision occurred. Fireman Mothersbaugh said that during the last year he recalls having found this signal light extinguished on three or four occasions.

Brakeman Hook of extra 5523 stated that upon arrival of his train at McQuires, he got off the engine, went to the gate and changed its position, placing it across the track of the Inland Empire road and at that time the signal lamp was burning.

Brakeman Holtz of extra 5523 stated that as his train was pulling across the crossing at McQuires, he was riding on the forward steps of the caboose and upon looking eastward he saw the electric train approaching about a mile distant. When the train got within about 12 car lengths of the crossing, he swung a stop signal to the electric train with his lantern but it did not appear to be heeded. He estimates the speed of the electric train to have been 25 or 30 miles per hour as it approached the crossing.

Brakeman Schurch of extra 5523 stated that at the time of the accident he was riding on the second car from the

engine. He first saw the headlight of the electric train when it was about one mile away and at that time he thought it was an automobile, but as it came nearer it grew brighter and he decided that it was an electric train. As it approached he looked over the side of his train at the signal light on the gate and saw that it was burning. He estimates the speed of the electric train to have been about 40 or 45 miles per hour.

Motorman McDevitt of extra 43 stated that approaching the crossing, his train was running at a speed of about 35 miles per hour. He was looking for the signal light on the crossing gate but did not see it. When within 400 or 500 feet of the crossing his headlight revealed a train on the Idaho & Washington Northern track. He immediately applied the emergency brake but was unable to stop in time to prevent the collision. At the time of the accident, he estimates the speed of his train to have been 25 miles per hour. He stated that his train was equipped with a combination electric and automatic brake and that the brakes on this occasion were in good working order. In his opinion a two car train running at a speed of 35 miles per hour would require 500 or 600 feet in which to stop. With reference to his view approaching the point of accident he stated that the headlight of his motor was in pretty good order and that with it, obstructions could be seen 500 or 600 feet distant. He stated that under ordinary conditions the red light on the crossing gate can be seen about half a mile but when the green light is displayed, it cannot be seen until nearly up to the gate. He stated that

"lots of times" he has found the signal lamp on this gate extinguished and he has found it in this condition at least two or three times since March of this year. He is positive that at the time of the accident no light was displayed.

Motorman McDavitt stated that when his train left Coeur d'Alene a yardmaster and three or four other persons were in the motorman's compartment with him, but that three or four minutes after leaving, all except he and the yardmaster returned to the baggage car. He stated that he was not conversing with the yardmaster at the time of the accident, but that he may have exchanged a few words with him after leaving Post Falls. He stated that under the rules he should have slowed down approaching the crossing and ascertained if the crossing was occupied but in this instance he did not do so as he did not see any lights as he approached.

Conductor Henry of extra 43 stated that just after leaving Post Falls, he saw the yardmaster and two or three passengers in the compartment with the motorman. He stated that when his train was within 400 or 500 feet of the crossing, he felt the application of the brakes and he looked ahead but could see nothing. He does not believe that he could have seen the signal light if it had been burning. He stated that in several instances he has found this signal light extinguished and on one occasion he found the light extinguished and the gate swung across the electric track. In that instance his train was brought to a stop within 8 feet of the gate.

Brakeman Stambler of extra 43 stated that approaching

McGuire he was standing in the front vestibule of the trailer. The first intimation which he received of the impending accident was the application of the brakes about 500 feet from the crossing. He estimates the speed of his train at that time to have been 40 or 45 miles per hour and in his opinion the speed of the train was not materially reduced before the accident occurred.

W. J. Burdick, a motorman employed by the Spokane & Inland Empire Railroad, stated that he has been running over the territory where the accident occurred, since the first of June and within the last month he has found the signal light on the gate at McGuire extinguished four or five times, but in each instance failed to report it.

Sectionman Medley, who is an employee of the Spokane & Inland Empire Railroad, stated that he has occasion to pass over the section of track where the accident occurred 2 or 3 nights each week, and on several occasions has found the signal light on the crossing gate at McGuire extinguished. He stated that at the time of the accident he was just west of the crossing and he is positive that the signal lamp was not burning.

Section Foreman Nelson, employed by the Idaho & Washington Northern Railroad, and who has charge of the signal lamp at McGuire crossing, stated that the signal lamp at the point of accident is equipped with a long time burner and that on the Saturday prior to the accident he personally poured out the oil from this lamp and cleaned and refilled it. He

stated that within the last two years he has found this signal lamp extinguished approximately 6 times.

This accident was caused by the failure of Motorman McDevitt properly to control the speed of his train approaching the crossing at McGuires, and to know the position of the gate governing the use of the crossing.

General Rule 164 (a) and time table rule 19 of the Spokane & Inland Empire Railroad read in part as follows:

164.(a). All trains must approach terminals, the ends of double tracks, junctions, railroad crossings at grade, drawbridges and tunnels, prepared to stop, and must not proceed until switches or signals are seen to be right, or the track seen to be clear.

19. The normal position of the gates will be against the opposing lines. All trains must approach these crossings prepared to stop unless the way is seen to be clear, and the gates set against the opposing lines, in which case it will not be necessary to make the usual crossing stop.

Under these rules Motorman McDevitt should have approached the crossing at McGuires at such a speed that he could have stopped his train clear of the crossing had the signals been set against him or had the crossing been obstructed.

The preponderance of evidence is to the effect that the signal lamp on the crossing gate was burning at the time of the accident. However, in the event of no light being visible as claimed by Motorman McDevitt, he should have been governed by General Rule 140, which reads:

A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a stop signal and the fact reported to the Superintendent.

(This rule required that had no signal been visible to Motorman McDevitt, he should have treated it as a stop signal and brought his train to a stop before reaching the crossing. According to his own statement he had found the light on this signal extinguished several times and experience should have prompted him to approach it expecting to find no light burning. His statement indicates that under ordinary conditions the green light was not visible until quite near the signal, and at the speed he was running it would require 800 or 900 feet in which to bring his train to a stop. Notwithstanding this, he allowed his train to proceed to within 400 or 500 feet of the crossing at a speed of 35 miles per hour without knowing the position of the signal.

Special Bulletin No. 40 re-issued January 1, 1915 reads as follows:

Effective at once no person except the motorman will be permitted to ride in the motor cab of any train between the terminal station and Inland Junct., and all unauthorized persons are prohibited from riding in the motor cab at other points on the line. Motormen will be held responsible for a strict observance of these instructions.

Motorman McDevitt also violated these instructions, by permitting an unauthorized person to occupy the motorman's compartment with him. The presence of such a person may have contributed to his failure to observe the position of the crossing gate and to have his train under proper control approaching the crossing.

There is no excuse for such dereliction of duty as

was exhibited by Motorman McDevitt in this instance and as long as employees disregard rules and regulations that are provided for their safety and protection, accidents such as this will continue to occur.

Yardmaster Donohue is subject to criticism in connection with this accident, in that he violated special instructions which were promulgated for the express purpose of promoting safety, when he allowed himself to occupy the motorman's compartment, and thereby created a condition which would tend to invite Motorman McDevitt's attention away from his duty.

The matter of creating a condition which is apt to distract the attention of any employee charged with the important duty of keeping look out, is one of vital importance and all rules designed to prevent such occurrences should be rigidly enforced.

This investigation discloses that the method employed by the Spokane & Inland Empire and the Idaho & Washington Northern railroads to control the use of the grade crossing at McQuires by trains, is inadequate and does not afford proper protection.

Any rule that permits a train to approach a railroad crossing at grade, expecting to be given the right of way and not being required to stop if the track is found to be clear, is an invitation for employees in charge of trains, to approach such crossings at speed, expecting to find the crossing clear, and cannot help but result in disaster, as is evidenced by this accident.

The safety of the traveling public would seem to require the installation of derails properly controlled by interlocking mechanism, on each railroad at this crossing.

In several states, laws have been enacted which require, that in the absence of derails and interlocking, all trains shall come to a stop before passing over a railroad crossing at grade. While such a regulation does not afford absolute protection against accidents of this character, if properly observed, it furnishes a higher degree of safety than the present regulations governing the use of this crossing, and until such time as derails and interlocking are installed, all trains should be brought to a stop before passing over this crossing.

Motorman McDevitt has had 8 years' experience as motorman with this company and at the time of the accident had been on duty 5 hours and 15 minutes.