

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHICAGO & NORTH WESTERN RAILROAD, NEAR IRVING PARK,
ILL., ON JANUARY 20, 1919.

February 21, 1919.

On January 20, 1919, there was a rear-end collision between two passenger trains on the Chicago & North Western Railroad near Irving Park, Ill., which resulted in the death of 1 passenger and 1 employee and the injury of 1 employee and 55 passengers. After investigation, the Chief of the Bureau of Safety reports as follows:

The Wisconsin Division of this railroad extends between Chicago, Ill., and Janesville, Wis., a distance of 104.7 miles. That part of the division between Chicago and Hunting Avenue, a distance of 71 miles, upon which the accident occurred, is a three-track line over which train movements are governed by time-table and train orders, supplemented by an automatic block signal system. The signals are of the three position semaphore type, giving their indications in the upper quadrant and are mounted on bridges spanning the tracks.

Northbound passenger extra 1517, consisting of engine 1517 and 10 steel coaches, in charge of Conductor Van Aken and Engineman Ralph, received at Chicago Form 19 train order No. 203, reading as follows:

"Eng. 1517 run extra Chicago to Waukegan."

This extra left Chicago station at 6:18 a. m., and at 6:45 a. m., while running about six miles an hour, its rear end was struck by train No. 609 which crossing the bridge over Kedvale Avenue, near Park station, 2430 feet north of signal 707.

Northbound train No. 609, consisting of engine 1322, 1 combination car and 5 empty coaches, all of wooden construction, departed from Erie Street coach yard, Chicago, and came on to the main line at Division Street at 6:26 a. m. After stopping for home signal at Wood street interlocking plant, 1.3 miles north of Division Street, it proceeded northward, and, at 6:45 a. m., while running at a speed variously estimated at from 12 to 25 miles an hour, collided with the rear end of extra 1517, as above stated.

Engine 1322 was considerably damaged. Its tender was shoved into the front end of the combination car behind it for a distance of about ten feet, crushing the superstructure for that distance, but only slightly damaging the underframe of this car. The underframe of the rear car of extra 1517 came to rest on top of the end beam and frame of engine 1322, with the steel beams of the platform resting against the saddle.

The front end of the boiler passed over the platform of this coach crushing the vestibule in, but did not reach the end of the car. This end of the car was about one foot to the left of center and the edge of its body rested on the top of a girder on the west side of the bridge. The platform at the front end of this car passed under that of the coach ahead of it. The ends of both these cars were crushed in at that point. The flagman of extra 1517 was found on the pavement of the avenue below, with a white and a red lantern, he either having jumped or been thrown from the rear end of the last coach where he had been riding prior to the collision.

The track at the point of accident and for approximately three miles south thereof is straight and practically level. At the time of the collision a dense fog prevailed.

Conductor Van Aken of extra 1517 stated that his train had stopped for signals 705 and 707 as the engineman could not see their indications on account of the fog, and that the train ran very slowly between signal 707 and the point of collision. The conductor said that at the time the collision occurred he was in the fourth car from the rear of the train and was collecting tickets. When he felt the jar of the collision his first impression was that the train had broken in two. He went immediately to the front of the train, found the trouble was in the rear, went back and discovered that No. 609 had run into them. He said his train was moving about 5 or 6 miles an hour when it was struck, and that on account of the fog an object as large as the rear of a train could be distinguished only about 25 or 30 feet and then only dimly. Extra 1517 came to a stop with its engine about four car lengths south of the Home Signal at Hunting Avenue interlocking plant. Conductor Van Aken stated that he personally had seen that his flagman had proper flagging supplies that morning and had especially warned him on account of the fog to take no chances on any accidents, but to be on the alert every minute. He also stated that his flagman was a competent man, and that the marker lights on his train were burning at the time of the accident.

Engineman Ralph of extra 1517 stated that going from the Round House to the Terminal Station the fog was not very dense and he could see two signals ahead, but weather conditions got steadily worse. He stopped his train for signal 705, which is located just south of Avondale Station. The signal was in clear position, but no light was visible. He stated that he could only see the position of the semaphore about a car length away, and did not want to take any chances so he came to a stop. He then proceeded slowly and stopped again at signal 707. He said he was not quite sure whether or not he had passed one of the signals in the fog, so he got down from his engine to find out definitely just where he was,

to be sure whether he was at signal 707 or the bridge of Hunting Avenue interlocking plant. After finding that he had not run by a signal but was at signal 707 he proceeded with caution at about 15 or 20 miles an hour. Approaching Hunting Avenue he made a light application of the brakes and as he was going by Irving Park station he held them up a little more and cautioned the fireman to look out carefully for the Home Signal to the interlocking plant. When the engine was about four car lengths north of Irving Park Subway, which is just north of Irving Park Station, the brakes were suddenly applied in emergency from some other part of the train. Extra 1517 was moving about 5 or 6 miles an hour at the time and moved forward about 30 or 40 feet after the air had been set.

Fireman Little of extra 1517 stated that his train left the Terminal Station at 6.20 a. m., after an air brake test had been made. The brakes were working properly. The fog became more dense as the train proceeded. At signal 707 the engineman stopped the train and got down off his engine to ascertain the position of the signal, because it was so foggy he could not see it from the engine. Extra 1517 then proceeded northward and was slowing down for the home signal at the interlocking plant at Hunting Avenue when train No. 609 collided with its rear end. He stated that at the time of the collision he and the engineman were both looking out of the side windows trying to observe the signals.

Conductor Peck of train No. 609 stated that he was riding in the combination car, which was the car next to the engine, and was looking out of the window trying to determine just where they were when he felt the engineman slow down a little. A moment later he felt the air brakes applied and about the same time the jar of the collision. The conductor said that he immediately looked to see that his flagman was going out to protect his train, then, having satisfied himself on this point, he went forward to find out what damage had been done and telephoned the dispatcher. He said that he next sent his head brakeman down to the towerman at Hunting Avenue with a flag to find out if the center track was clear and to inform the towerman of the accident.

Collector Morgan of train No. 609 stated that as the train proceeded north the fog seemed to become more dense. He said he was in the head car at the time of the accident. He estimated the speed of the train at about 18 miles an hour and stated that the rear end of a train could be seen a distance of about 120 feet. He said he noticed no slowing down of No. 609 until the emergency application of the brakes just about the time the collision occurred.

Brakeman Smith of No. 609 stated that the last stop made by his train prior to the accident was at Clybourn for

the home signal at Wood Street interlocking plant. At the time of the accident he was riding in the last seat of the rear coach and noticed no application of the brakes until the collision occurred. He then went back immediately to flag. He said that at that time he could see an approaching train about one car length away.

Brakeman Edgecomb of train No. 609 stated that his train did not stop between Claybourn and the point of accident, and that he did not think the brakes were applied anywhere between these two points. He stated that at the time and place of the accident the rear end of a train could be seen only about a car length distant. As soon as the collision occurred he went forward immediately to flag.

Engineman Anderson of train No. 609 stated that an air brake test was made on his train before its departure and the brakes were all working properly. He said that on account of the fog he could not very plainly see the signals between Division Street, and that he made only one stop between Division Street and the point where the collision occurred. He said the further north he went the denser became the fog. He stated that just as he went by signal 705 he saw the light and it appeared to him to be green. The semaphore appeared to be either at 45 degrees or 90 degrees. He thought the indication was a clear one. After passing this signal he got lost in the fog and did not know when he passed signal 707 and did not realize that he had passed this signal until he saw the rear end of extra 1517. Its markers were burning. He said he was about one car length distant when he first saw extra 1517 and he was running about 12 or 15 miles an hour. He immediately attempted to set the brakes, but before he got them set the collision occurred. He further stated that he did not see any fusees on the track.

Fireman Willard of train No. 609 stated that the only stop his train made after leaving Division Street and prior to the accident was at Claybourn for the Wood Street interlocking plant as that signal was against it. This train left Wood Street with a clear signal. At this time he could see only 15 or 20 feet from the engine. He was looking out for signals. Signal 705 appeared to be green, but he could not get the position of the semaphore. The train was moving about 15 or 20 miles an hour. After passing signal 705 they got lost in the fog and did not locate themselves until they saw the rear end of extra 1517. This train was then barely two car lengths distant. He called to the engineman who applied the brakes in emergency. He stated that he had not seen any fusees nor had the train exploded any torpedoes between Wood Street and the point of the collision.

The primary cause of this accident was the failure of Engineman Anderson of train No. 609 properly to control the

speed of his train during foggy weather.

The first rule incorporated in time table No. 519 of the Wisconsin Division reads as follows:

When storms and foggy weather prevail so that signals cannot be clearly observed, trains must move under such control as to insure signals are not passed without the indication being clearly seen.

Enginemen and Trainmen must be particularly alert under such conditions, so that the train may be fully protected.

During fogs or bad storms in Chicago Terminals and other congested districts, freight and switch engine movements should be kept off the main lines entirely so far as practicable. When movements are absolutely necessary, full protection must be given by flagmen using fuses and other signals.

Under the conditions above mentioned, delays are expected, and it should be understood by all that 'Safety' is the first consideration.

Rules 27, 110 and 1048 of the Book of Rules read as follows:

27. 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 train dispatcher.

110. In all cases of doubt or uncertainty the safe course must be taken and no risks assumed.

1048. Enginemen must know the indications of all fixed signals before passing them. At railroad crossings, drawbridges, junctions, or train order offices, they will in addition require the fireman to observe and communicate the indication of all signals.

Engineman Anderson did not move his train under such control as to insure being able to observe the indication of all signals. He passed signal 707 without seeing it and without even realizing that he had done so. Had he exercised due care in operating his train, the accident would not have happened.

Conductor Peck is equally responsible with Engineman Anderson for the accident. He did not know where his train was after leaving Clybourn, did not see any signals, and thought

they were moving about 25 miles an hour in a fog so dense that he could not tell where he was. Fireman Willard and Brakeman Smith and Edgcomb failed to call the attention of the engine-man and conductor to the fact that the rules were being violated, and to this extent were at fault.

Rule 99a reads as follows:

At night, or in foggy weather, should the speed of a train be reduced under circumstances in which it may be overtaken by another train, a burning red fusee must be thrown off to insure safety.

The engine crew of No. 609 are positive in their statements that no fusees were seen and no torpedoes exploded by that train. The flagman of extra 1517 was killed in the collision and there is no direct testimony as to whether he threw off any fusees. At the time of this accident extra 1517 was on the time of No. 609 about five minutes, and this fact in itself should have made him extremely careful to observe this rule; it is probable that had he complied with it, the collision would not have occurred.

With the exception of Brakeman Carney and Fireman Little, all the employees involved were experienced men.

At the time of the accident the train crew of extra 1517 had performed an aggregate service of 9 hours and 5 minutes during the 24-hour period. Engineman Ralph had been on duty 2 hours and 25 minutes after 8 hours and 40 minutes off duty. Fireman Little had been on duty 3 hours after 33 hours and 15 minutes off duty.

The train crew of No. 609 had been on duty 45 minutes after a rest period of 10 hours and 15 minutes. Engineman Anderson and Fireman Willard had been on duty 1 hour and 30 minutes after off-duty periods of 32 hours and 25 minutes and 11 hours and 15 minutes, respectively.

A. H. C.