

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHICAGO, BURLINGTON & QUINCY RAILROAD NEAR
EARLVILLE, ILLINOIS, ON SEPTEMBER 16, 1917.

October 31, 1917.

On September 16, 1917, there was a rear-end collision between two eastbound freight trains on the Aurora Division of the Chicago, Burlington & Quincy Railroad near Earlville, Illinois, resulting in the death of 7 persons and the injury of 10 persons. After investigation of this accident, the Chief of the Bureau of Safety reports as follows:

The Aurora Division extends between Aurora and Galesburg, Illinois, a distance of 125 miles. It is a double-track line, and between Aurora and Mendota, a distance of 25 miles, it is equipped with automatic block signals of the two-position, lower-quadrant type. It was upon this portion of the road about 10 miles east of Mendota that the accident occurred.

The trains involved were extras 5006 and 5307, the former composed of 60 cars of live stock one wooden coach containing stock & retakers, and a caboose; and the latter composed of 67 cars of dead freight and a caboose. Extra 5006 was hauled by engine 5006 and was in charge of Conductor Fisher and Engineman Eekdahl, and extra 5307 was hauled by engine 5307 and was in charge of Conductor Carlson and Engineman Carlson.

Extra 5307 left Galesburg at 12.45 p. m., and arrived at Mendota, 20 miles east of Galesburg, at 10.00 p. m. At this point it was overtaken and passed by extra 5006, which train left Galesburg at 6.25 p. m. and arrived at Mendota at 10.05 p. m. Extra 5006 left Mendota at 10.33 p. m. and arrived at Earlville about 10.55 p. m., at which point it was stopped by an extra ahead which was setting out its train at Earlville. While standing at this point with its rear end about 200 feet east of an automatic signal in the danger position, it was struck by extra 5307 running at a speed of 23 miles per hour as indicated by the speed recorder on engine 5307. The collision occurred sometime between 11 and 11:10 p. m. The night was dark but the weather was clear.

The force of the collision telescoped the caboose and end wooden coach on the rear end of extra 5006, completely

demolishing them. The two rear cars of stock were derailed and turned over to the south of the track, and the 6th and 7th cars from the rear end of the train were derailed but remained upright on the roadway. Engine 5307 was entirely derailed but suffered comparatively little damage. Ten cars in the train of extra 5307 were demolished, due to buckling of the train about 25 cars back of the engine.

Approaching the point of the accident from the west, there is a slight descending grade for about one mile before reaching it and the track is straight for a distance of 6 miles; there is a fill of about 4 feet in depth where the accident occurred. There is nothing to obscure the view of the engine of extra 5307. The automatic signal 200 feet in the rear of train 5006 was in the danger position and the distant signal located 2640 feet further west indicated caution. These signals are located on bridges extending over both tracks, and are plainly to be seen for a long distance.

Engineman Carlson of extra 5307 stated that his train followed extra 5006 out of Mendota about 6 or 7 minutes after that train left, and that they were still in sight when he pulled out. After leaving Mendota, and until his train reached Meriden, a station about 5 miles further east, engineman Carlson said that all the automatic signals passed were in the clear position. He did not call any of these signals to the fireman, nor the fireman to him, and had no conversation with the fireman or brakeman relative to the signals. He stated that the rear lights of extra 5006 were out of sight before he reached Meriden, and that he was fully awake when passing through that station, as he had some conversation with the fireman at that time; he did not call the position of signals to him, however, nor say anything to him about the rules requiring that to be done. He said he did not call the signals because the brakeman was an experienced man who was familiar with the signals, and the fireman was new, and as he was having some trouble with his fire he did not want to bother him. After passing Meriden, Engineman Carlson said that he remembered whistling for one road crossing, after which he fell asleep, and did not awaken until he saw the rear lights of extra 5006 about 10 cars ahead of him; he immediately applied the air brakes in emergency and jumped. He stated that just as he woke up he heard either the fireman or the brakeman say something, and about the time he applied the brakes, they both jumped. He said that his train was running 20 or 22 miles per hour, and his engine was working steam at the time he woke up; that his air brakes were in good working condition, and

if he had been flagged, or had been awake 40 car lengths from the rear end of the stock extra, he could have stopped his train in time to have avoided the collision. Previous to going out on this trip Engineman Carlson had been off duty for a trip on account of a bad cold. He stated that this cold in his head caused him to feel drowsy, but he had never before had sleep take hold of him as it did then; he thought that his drowsiness might have been due to some tablets he took to relieve his cold. These tablets were obtained at a drug store upon the recommendation of the druggist. Engineman Carlson stated that he did not know what they contained but that he took six or seven of these tablets after leaving Galesburg, the last two on arrival at Mendota.

Head Brakeman Hickman, who was on the fireman's seat box stated that after leaving Mendota all the caution signals between there and the point of accident were against them and that all home signals were clear. After passing Meriden he did not talk with engineman Carlson nor did he notice Carlson saying anything to the fireman. He stated that he was wide awake and fully cognizant of the fact that they were following extra 5006. He admitted that they passed three distant signals set at caution but did not call Engineman Carlson's attention to them; neither could he remember whether or not Engineman Carlson whistled for road crossings. He said that when his train reached a point 15 or 20 car lengths west of the danger signal at the rear of train 5006 he first noticed the flagman who was about 10 car lengths from the rear end of his train flagging with red and white lights and he waited a minute before calling Engineman Carlson's attention to the flag. He said that Engineman Carlson was sitting on the seat in his regular position, and while he did not answer the flag, he presumed that the engineman saw it and would stop before colliding with the train ahead. When he made up his mind that his train would not stop in time, he called out to Engineman Carlson and told the fireman that the trains were going to hit and to jump off. He himself jumped first and is positive in his statement that the flagman of train 5006 was not more than 10 car lengths from the rear end of his train at the time. Brakeman Hickman said that at one point between Meriden and Earlville his train passed a signal with the light not burning. The position of the blade on this signal indicated clear, and he did not call the engineman's attention to the absence of the light, although it should have been regarded as a stop signal under the rules. He stated that he could see the rear lights on extra 5006 practically all the way from Meriden, but although he was fully awake and cognizant of what was taking place he did not give any warning to the engineman nor call his attention to the train ahead until he was within about 15 car lengths from the danger signal, at which time his train was running about 25 miles per hour and the engine was still working steam.

Fireman Long of engine 5307 had had very little experience and was making his first trip on this division. He had no knowledge of the operation of automatic block signals. He stated that he remained on the deck of the engine after leaving Mendota and after passing Meriden did not have any conversation with Engineman Carlson or pay any particular attention to him. He could not say whether Engineman Carlson whistled for road crossings or stations. He did not notice the markers of extra 5306 nor the position of any of the automatic signals after leaving Mendota and had no intimation of impending danger until Brakeman Hickman called to him that the train could not stop before hitting extra 5306 and told him to jump off. He said that they were about 2 telegraph poles from the rear end of 5306 when he alighted on the eastbound track and that the brakeman of the train ahead was not more than 2 car lengths west of him.

Conductor Fisher of extra 5306 stated that he rode in the body of the caboose after leaving Mendota and that Brakeman Johnson rode in the cupola. He said that he was fully aware that extra 5307 was following them out of Mendota and that their electric head light was in view at all times. The speed of his train was reduced to about 8 or 10 miles an hour during the last mile or two prior to stopping at Earlville, and Conductor Fisher stated that Brakeman Johnson remarked to him that extra 5307 was following pretty close, but he did not drop off a fusee or make any effort to protect his train between Meriden and the point of accident. After his train came to a stop he said that Flagman Johnson went back immediately and a minute or two later he could see him from the rear of the caboose at a distance of 15 or 20 car lengths running back and thought that possibly he got back as far as 25 or 30 car lengths. He noted that the engine of 5307 was still working steam and realized he was not going to stop. He at once entered the caboose and coach and warned the passengers to get out as quickly as possible. He stated that his train stopped at 11.07 and it was his judgment that the collision occurred at 11.11 or 11.12 p.m.

Flagman Johnson of extra 5306 stated that he rode in the cupola of the caboose but did not notice the position of the automatic signals in advance of his engine before reaching them. He stated that his train slowed up about 2 miles before it stopped and drifted on into Earlville. He looked back before stopping at Earlville and saw the electric head light of extra 5307 following his train. It did not occur to him that he should have lighted and dropped a fusee when his train slowed up because he said that he did not expect his train was going to stop; he thought the train ahead would pull into the siding and get out of the way and his train would keep right on going. When his train stopped he stated that he left the way-car to flag with a red and white light and fusees and torpedoes in his possession and said that he was about 25 car

lengths back of the way-car when the engine of train 5307 passed him. He had not lighted a fusee nor put down any torpedoes. He said that his train was about under the signal bridge when he started back and when he got back 7 or 8 car lengths he noticed that train 5307 was coming pretty fast and he then started to run and kept on running back flagging with his lantern until he got within about 8 or 10 feet of the engine when he got off the track out of the way. He admitted that he was flagging on the block signal for the protection of the rear end of his train and did not think it was necessary to use both torpedoes, he also admitted that if he had started running back immediately he would have been able to get back 40 or 50 car lengths. The thought occurred to him that he should have placed a torpedo on the rail but the train was too close to him to permit that to be done. Engine 5307 was working ahead at the time it passed him and he could not say whether the brakes were applied before the collision occurred or not. He thought the engine was running about 15 or 20 miles an hour when it passed him. He admitted that the flagging rules of the company were just as necessary to be obeyed in block signal territory as on portions of the road where there were no block signals. He thought all the while that his train was not going to stop as he expected the train ahead to take the siding or get out of the way and also based upon the fact that the following train was a train of local freight with rather a slow schedule and did not realize that there was any danger until it was too late.

Engineer Landon of train 5006 stated that after leaving Tennota he ran along at a fairly good rate of speed until he got up close to Carlville and then slowed down and was finally required to stop on account of the train ahead of him. The signals between Meriden and Carlville were clear until he got to the distant signal approaching Carlville. This signal was in the caution position and the home signal on the bridge immediately west of where the accident occurred was red. The light on a signal between Meriden and Carlville was not burning but he did not stop for it as required by rule. He said he was flagged by the extra ahead but did not remember whether or not he whistled out a flag when his train stopped and thinks his train at or about 5 or 8 minutes previous to the collision. Engineer Landon stated that the time his train stopped at Carlville was 10.55. He did not know exactly what time the accident happened but thought about 11 o'clock.

Brakeman Fink of extra 5006 stated that his train had been standing at Carlville about 4 or 5 minutes before the accident occurred. He stated that the engineer did not whistle out a flag when his train stopped and did not whistle for Carlville station because they were following another train so closely.

Conductor Carlson of train 5307 stated that he rode in the caboose of his train and does not know whether Engineer Carlson whistled approaching stations or road crossings and did not think he could hear the whistle at that distance from the engine and could not notice the position of the automatic signals ahead of the engine. He noticed the first intermediate signal west of Earlville when his caboose passed it and the light was out. He understood that the rules required a signal with the light out to be regarded as a danger signal but did not know whether the engineer noted the light out or not. He said that he figured that the light might have gone out after the engineer got by. He said that the first intimation he had of the accident was when the slack on the train came back hard and he and the brakemen got down on the floor of the caboose and found that the air was all gone. He immediately looked at his watch and it was 11.05 or 11.06 and remarked that evidently their train had gotten into somebody. He made his way to the head end as quickly as possible and found that his train had collided with train 5006. He did not see anything of the extra ahead of him after leaving Mendota previous to the accident. In his judgment his train was moving at a speed of about 10 miles per hour between Mendota and Earlville.

Brakeman Burkhalter of extra 5307 stated that he rode in the cupola of the Caboose after the train left Mendota. He did not notice the signals, and nothing unusual occurred to attract his attention until the sudden stop at Earlville, due to an emergency application of the brakes followed by the collision. The shock threw him out of the cupola onto the floor of the caboose; he said he looked at his watch after picking himself up and lighting lights, 2 or 3 minutes after the shock, and it was then 11.05. He thought the accident occurred about 11.02 or 11.03. He said that as soon as they got re-lighted out after the collision he took his flashlight, equipment and went back to protect the rear end of his train, and Conductor Carlson went towards the head end.

The direct cause of this accident was the failure of Engineer Carlson of extra 5307 to observe and be governed by the indication of signals affecting the movement of his train.

Contributing very materially to the accident was the failure of Flagman Johnson of extra 5006 properly to protect the rear end of his train and of Conductor Fisher to require this to be done. Had Flagman Johnson gone back immediately after his train came to a stop and put down a torpedo, as he should have done, there can be no doubt that Engineer Carlson would have been awakened in time to have stopped his train before the collision;

Engineman Carlson stated that if he had been awake 40 car lengths from the rear end of extra 5006 he could have stopped his train in time to prevent the collision. When his train slowed down approaching Earlville Flagman Johnson should have dropped off a fusee, as the Rules require, and he should have placed a torpedo far enough in the rear of his train to insure full protection. He admitted his failure to comply with the rules, and acknowledged that he was depending on the automatic signals to protect his train. Conductor Fisher was fully cognizant of Flagman Johnson's neglect to perform his duty, and should have taken measures to insure that his train was fully protected.

Contributing also to the accident was the failure of Brakeman Hickman of extra 5007 to arouse Engineman Carlson and see that he took proper measure to stop his train. If Brakeman Hickman was awake and in possession of his senses, as he insists he was, his failure to make sure that Engineman Carlson was awake is inexcusable. Brakeman Hickman was a promoted conductor, and was thoroughly familiar with the rules, and with all matters pertaining to the safe operation of his train; yet he admits that he made no effort to call Engineman Carlson's attention to the danger signal in the rear of the standing train or to the lights on the rear end of that train. He also saw the flagman of extra 5006, and noted that Engineman Carlson failed to answer his stop signals, yet he permitted the flagman to give emergency stop signals for a period of one minute, according to his own statement, before calling the engineman's attention to it, and did not call to him until the engine was about 15 or 20 car lengths from the danger signal, while still working steam and running at least 20 miles per hour.

This investigation disclosed an extremely lax observance of rules on this division of the Chicago, Burlington & Quincy Railroad. Rule 34 of the Book of Rules of this railroad requires enginemen and firemen "when practicable" to communicate to each other the indications of all signals affecting the movement of their trains. This rule was not observed by the enginemen of either train involved in the accident, and Engineman Ekdahl failed to whistle out a flag when his train stopped. Neither was any attention paid to an unlighted signal between Meriden and Earlville, although it was observed by Engineman Ekdahl of extra 5006 and Conductor Carlson and Brakeman Hickman of extra 5007, and the rules required that it should be observed as a stop signal, that being its most restrictive indication.

Engineman Carlson entered the service of the Chicago, Burlington & Quincy Railroad as a fireman in 1900 and was promoted to engineman in August, 1906. He was discharged for burning crown sheets on an engine in December, 1907, and reinstated as fireman in July, 1908, and again promoted to engineman in October, 1909. He was censured for carelessness in connection with a rear end collision in Galesburg Yard on February 15, 1914, and cautioned by the General Superintendent, since which date his record is clear.

Brakeman Hickman was employed as a brakeman on January 20, 1906, and was promoted to freight conductor on October 27, 1912. His record is clear.

Flagman Johnson was employed as a brakeman on February 6, 1906, and was promoted to freight conductor on October 30, 1912. His record is good.

Conductor Fisher was employed as a brakeman on August 26, 1897, and was promoted to conductor on April 6, 1907. On October 21, 1910, he was censured for failure to observe the requirements of the flagging rule, resulting in a collision. Otherwise his record is good.

At the time of the accident the crew of extra 5307 had been on duty about 11 hours and the crew of extra 5006 had been on duty about 5 hours.