

INV. 266  
September 8, 1915.

**IN RE INVESTIGATION OF AN ACCIDENT WHICH  
OCCURRED ON THE CHICAGO, ROCK ISLAND &  
PACIFIC RAILWAY NEAR WAVELAND, ARK., ON  
AUGUST 1, 1915.**

On August 1, 1915, there was a head-end collision between two freight trains on the Chicago, Rock Island & Pacific Railway, near Waveland, Ark., which resulted in the injury of 7 employees. After investigation of this accident the Chief of the Division of Safety reports as follows:

The division on which this accident occurred is a single track line; train movements are protected by the manual block signal system. The accident occurred at a point 660 feet east of the east switch at Waveland. Approaching the point of accident from the west the track is on a tangent for a distance of 2,699 feet and on an ascending grade of one-half of one per cent. Approaching from the east there are 4,411 feet of tangent, followed by a curve of one degree to the right about 1,000 feet in length, limiting the view of westbound engine crews to about 400 feet. The tangent is on a descending grade of 1%, while the curve is on an ascending grade of nearly 1%.

Westbound freight train extra 1783 consisted of 35 cars and a caboose, hauled by locomotive 1783, and was in charge of Conductor Scott and Engineman McDonald. It left Biddle, Ark., at 3:00 a.m., and when passing Danville, Ark., 63.7 miles west of Biddle, the crew in charge received train

order No. 111, reading as follows:

"No. Ninety-two 92 Eng. 1776 wait at Waveland until twelve 12 noon Havana until twelve ten 12:10 p.m. for Ex. 1783 west. Oia passing track until twelve fifty five 12:55 p.m. East leg wye Oia until one naught five 1:05 p.m. Birta until one twenty-five 1:25 p.m. Casa until one thirty-five 1:35 p.m."

They also received "Clearance Card form 'A' and Block Restrictions Card," stating that there were no block restrictions. Extra 1783 passed Havana, 9.3 miles beyond Danville, at 11:36 a.m., according to the block sheet, and at 11:56 a.m. collided with eastbound train No. 92, east of the east switch at Waveland.

Eastbound fast freight train No. 92 consisted of 27 cars and a caboose, hauled by locomotive 1776, and was in charge of Conductor Wolfe and Engineman Haney. It left Booneville, Ark., at 11:10 a.m., 3 hours and 25 minutes late, having received several train orders and a clearance card, form A, which contained no block restrictions. Among the train orders received was order No. 111. One car was set out of the train at Magazine, 6.7 miles from Booneville, departing from there at 11:35 a.m. The train passed Blue Mountain, 5.7 miles beyond Magazine, at 11:47 a.m. and collided with extra 1783 at a point just east of Waveland, which is 4.9 miles beyond Blue Mountain. The speed at the time of the collision was probably in the neighborhood of 30 miles per hour, while the speed of extra 1783 is believed to have been about 6 miles per hour.

Both locomotives were badly damaged, while 4 freight cars were destroyed and 4 others badly damaged.

Engineman Haney, of train No. 92, stated that just prior to starting from Booneville he damaged his watch by striking it against the reverse lever and therefore had to depend upon the fireman's watch. He did not know what time his train passed Blue Mountain, but stated that it was in the neighborhood of 11:47 a.m. When the train reached the top of the hill, two miles from Waveland, he asked the fireman what time it was and he replied that it was 11:55 a.m. After whistling approaching Waveland station, he received a proceed signal from the rear of the train and when rounding the curve coming into Waveland he again asked the fireman what time it was. The fireman was busy putting in a fire and said "Just a minute," but he never told the engineman what time it was, and the latter did not know what time his train passed Waveland. When the locomotive had reached the station he began to work steam and stated that he thought it passed the east switch at a speed of about 20 miles per hour. He stated that he overlooked the wait order and was not thinking of it at all when passing Waveland. Engineman Haney further stated that before he broke his watch he compared it with the fireman's watch and that the fireman's was then keeping correct time. Afterwards the fireman told him that the collision had

occurred at about 30 seconds after 12:00 noon. As far as he himself was concerned, however, he stated that he did not know whether it occurred at 11:58 a.m. or 12:03 p.m. Engineer Haney also stated that if he had any conversation with the engineman and conductor of extra 1783, after the accident, he did not know anything about it, saying that for 15 or 20 minutes he did not know what was going on.

Fireman Hawkins stated that when pulling out of the yard at Booneville the engineman said he would have to go by his watch, as his own had been struck against the reverse lever and he did not know whether or not it was correct. He did not know what time the train passed Blue Mountain, but stated that it was 11:55 a.m. when the train reached the top of the hill between Blue Mountain and Waveland; this was the last time he looked at his watch and also the last time that he thought anything of the wait order. Passing Waveland he was putting in a fire and overlooked the order. The engineman did not ask him what time it was at this point; if he did, he did not hear him. He estimated the speed through Waveland to have been about 25 miles per hour and said that it was increased after the station had been passed. Fireman Hawkins further stated that he had not compared his watch since it was last inspected; that he did not compare it with anyone at Booneville and that he did not know whether or not it was correct.

Conductor Wolfe, of train No. 22, stated that he compared his watch with the standard clock at Booneville and it was 20 seconds slow. He also compared time with the

engineer and the engineer's watch was 5 seconds faster than his own. When the engineer whistled for the station at Waveland the flagman called out the name of the station. He arose from his desk, went to the rear platform of the caboose and, after looking at his watch, told the flagman that it was 12 o'clock and to give a proceed signal. At this time the caboose was close to the west switch. He then returned to his desk, the collision occurring a few seconds afterwards. He estimated the speed at the time to have been about 30 miles per hour. Conductor Wolfe further stated that he compared his watch with Engineer Hancy's watch at the station at Waveland about two hours after the occurrence of the accident, at which time there was a difference of five minutes in the time while that night the engineer's watch showed a difference nearly one and one-half hours.

Head Brakeman Sparks, of train No. 92, stated that he looked at his watch when the train came over the hill between Blue Mountain and Waveland, at which time it was 11:57 a.m. He did not look at his watch again as he knew their time would be up before passing the station. His watch had not been inspected since June on account of his having been off duty, but when he returned to work he compared it and it was all right. This was his second trip since returning to work. After the accident he compared his watch with that of Engineer Hancy, at which time it was 12:03 p.m. At this time Engineer Hancy acted as if he did not know what he was doing. Brakeman Sparks

further stated that they were talking about the time that night and Engineman Haney said that his watch was 5 minutes out of the way.

J. C. Clouser, middle brakeman, stated that he was riding in the caboose coming into Waveland. After the engineman had whistled, the flagman called out the name of the station. The conductor arose and instructed the flagman to give a proceed signal, saying that their time would be up when they reached the switch. He further stated that the locomotive passed the station at 12:00 noon.

Flagman Mitchell stated that he gave the engineman a proceed signal, having been instructed to do so by the conductor who said that the time was up. After the accident, <sup>as</sup> he was going back to flag, he looked at his watch when at the station, a short distance behind the rear of his train, and it was 12:03 p.m.

Special Officer Morrow, who was riding in the caboose of train No. 92, stated that approaching Waveland the flagman, who was riding with him in the cupola, called out the name of the station. The conductor, who was sitting at his desk, looked at his watch, said that it was 12 o'clock, that the time was up, and to give a proceed signal. After the collision occurred he went to the forward end of the train. He saw Engineman Haney and asked him one or two questions, but the engineman did not seem to know that he was talking to him. Shortly afterwards he met Engineman Haney and Conductor Scott walking beside the train.

Conductor Wolfe joined them and he heard Conductor Wolfe ask Conductor Scott what in the world he meant and in reply Conductor Scott said that "Your own engineer says he overlooked his wait order." Conductor Wolfe then replied "Damn it, don't say that, man!" He thought this latter remark was addressed to Conductor Scott. Special Officer Marlow stated that he then continued on his way and did not hear any more of the conversation.

Engineman McDonald, of extra 1783, stated that he received a clear block signal at Havana. When passing the station he looked at his watch and it was 11:33 a.m., and he figured that he had time enough in which to go to Waveland and clear train No. 92 by five minutes, as required by the rules. When at the top of the hill, about two miles from Waveland, he looked at his watch and it was then 11:43 a.m. He stated that the collision occurred at about 11:56 a. m., at which time, according to the rules, his train should have been into clear or protected by flag. He stated that after the accident Engineman Haney of train No. 92 took out his watch and that they held their watches close together, at which time it was 11:57 a.m. He did not examine Engineman Haney's watch to see if it was damaged, as the engineman did not say anything to him about it. He asked Engineman Haney what was the matter,--if he did not have the wait order,--and Engineman Haney replied that he had forgotten it. Conductor Scott, of Extra 1784, then came up and they compared watches again. It was then 11:58 a. m.

The Conductor also asked Engineman Haney what was the matter and again he replied that he had forgotten the wait order. Engineman Haney seemed to be very badly frightened and said that he did not know what he was talking about.

Fireman Snyder, of extra 1783, stated that he looked at his watch about four or five minutes after the occurrence of the accident, at which time it was 12:01 p.m. His watch was then about one minute faster than the watches of the others.

Conductor Scott, of extra 1785, stated that he compared his watch at Biddle before starting on the trip, at which time it was seven seconds fast. The caboose of his train passed Havana, at 11:34 a.m., it thus having 31 minutes in which to go to Waveland and get into clear 5 minutes before train No. 92 was due to leave that point. When he looked at his watch, immediately after the collision, it was 11:56 a.m. He then ran to the forward end of the train and compared watches with Engineman McDonald and it was then 11:58 a.m. He saw Engineman Haney's watch when they compared time, but did not hear the engineman say anything about having damaged it or of having to depend upon the fireman's watch. At this time the enginemen of both trains were with him and both of them stated that it was 11:58 a.m., which was the time shown by his own watch. He also stated that Engineman Haney said he had overlooked his orders.

E. R. Weiss, agent and operator at Waveland, stated that he was not on duty at the time the accident occurred. As it was Sunday he had asked the dispatcher shortly after 9:00 a.m. if he could be excused until 4:00 p.m., and this request had been



granted. When he went off duty, however, he did not clear the block with the operators on either side of him, as required by the rules, merely cutting the telephone and clearing the block signal. When questioned as to how often he had been excused, as in this case, and had gone off duty without clearing the block with the operators on either side of him, he replied "Nearly every Sunday." When asked why he did not clear with the operators on either side of him, he stated that he did not know he was supposed to do so, although he said that when the operator at Blue Mountain went off duty that operator would notify him of the fact.

Agent Weiss further stated that at the time train No. 92 passed Waveland he was in his house, located about 100 yards from the station. He saw the train and estimated its speed at the time to have been from 30 to 35 miles per hour, and stated that the locomotive was working steam. He heard the noise of the collision and came out of the house to the porch. In a few seconds he walked over to the station and for a minute or so talked about the accident with a man who was standing there. He started to go to the scene of the accident, then decided to notify the dispatcher. He estimated that at least three or four minutes had elapsed between the time of the accident and the time he notified the dispatcher. After notifying the dispatcher he started toward the wreck. He met Conductor Wolfe at the caboose and they started forward. Then they met the engineman and fireman of train No. 92 and talked with them.

When the tool house was reached, 1100 feet from the station the conductor took out his watch and asked the agent what time he had. Agent Weiss replied that it was 12:08 p.m. by his watch. Later on the dispatcher asked him what time train No. 92 passed Waveland and he stated that he did not know, as he had neglected to look at his watch, and he stated that the dispatcher broke it on the wire and told him that it was 12:01 p.m. when he reported the occurrence of the accident. He did not hear any of the members of the crews talking about the time the accident occurred.

On account of Agent Weiss at Waveland having been excused, the block extended from Havana, the next station on the east, to Blue Mountain, the next station on the west, a distance of 10.7 miles. The next block station west of Blue Mountain was Magazine, 5.7 miles distant, and the next was Booneville, 6.7 miles beyond Magazine. The operator at Blue Mountain, W. A. Blankinship, stated that he was at the station and on duty when train No. 92 passed under a clear block at 11:47 a.m., according to the station clock. He stated that he was not asked for the block for train No. 92, but that he obtained the block in advance for that train at 10:28 a.m. He stated that the office at Magazine was usually closed on Sunday morning and that the block west of his station would then extend to Booneville instead of to Magazine. He had heard the dispatcher talking with the operator at Booneville as to the time train No. 92 would leave and he put this time 10:10

a.m., on his block sheet as the time train No. 92 entered the block at Booneville, even though he had not been asked for the block by anyone, and also regardless of the fact that he should have blocked with Magazine instead of with Booneville. Shortly after the time train No. 92 was due to leave Booneville, according to the time they were called, 10:10 a.m., he asked the operator at Havana, 10.7 miles east of Blue Mountain for the block for train No. 92 and secured a clear block. He stated that he blocked with Havana because he could not raise the agent at Waveland, who had gone off duty without notifying him of the fact. As a matter of fact, train No. 92 did not leave Booneville, according to the block sheet at that office and also according to the train sheet, until 11:10 a.m., 42 minutes after Operator Blankinship had obtained the block in advance for them. It was after 11:00 a.m. when the operator at Magazine asked him for the block for train No. 92. He did not show on his block sheet the time the operator at Magazine asked for the block, however, leaving on the sheet the time he had originally put there, 10:10 a.m., which was the time he heard the operator at Booneville say that train No. 92 would probably leave that point. Operator Blankinship stated that if the operator at Havana had notified him that extra 17E3 was in the block, he would have given a caution card to train No. 92. As it was, he did not know that the extra was in the block and stated that he had not been asked for the block for that train. After the accident he talked with Conductor Wolfe over the telephone and

stated that the latter wanted to know what time his train passed Blue Mountain.

W. H. Gunn, the agent and operator at Havana, stated that he blocked for train No. 92 at 10:27 a.m., with Blue Mountain and that the train was reported to him as being in the block at 11:47 a.m. In the meantime, he stated that at 11:25 a.m. extra 1783 entered the block at Belleville, the first station east of Havana, and that at this time he asked for the block in advance and someone replied: "All right." He stated that he expected to get this block from the operator at Blue Mountain but did not know who gave it to him, as on Sundays they seldom knew with whom they were working. He stated that when asking for the block for extra 1783 he should have found out where train No. 92 was but failed to do so. When asked how often he blocked trains in that manner, he replied "Not very often; only on Sundays." No reason was advanced by him, however, as to why he should not work the block on Sundays in the same manner as on other days. Extra 1783, according to his block sheet, passed Havana at 11:26 a.m. under a clear block.

Dispatcher Latham stated that when the agent at Waveland first notified him of the occurrence of the accident it was a few seconds after 12 o'clock.

The excusing of operators and agents on Sundays is in accordance with an agreement that as far as possible telegraphers will be excused on Sundays without reduction in pay,

and that at stations where the agent is also a telegrapher and no other telegraphers are employed, the agent will not be required to work more than six hours on Sundays. If required to work more than six hours, they are to receive over-time for the service so performed.

This accident was caused by the failure of the crew in charge of train No. 92 to wait at Waveland until 12 o'clock noon, as required by train Order No. 111. Although the statements of the members of the crew of train No. 92 are to the effect that their train did not pass Waveland before 12:00 noon, the time named in the wait order, the fact that the agent at Waveland notified the dispatcher of the occurrence of the accident between 12:00 noon and 12:01 p.m., and that 3 or 4 minutes elapsed between the time of the accident and the time of this notification, indicates that the accident happened at about the time stated by the crew of extra 1763, that is, 11:56 a.m.

A contributing cause of this accident was the violation by the crew of extra 1763 of that part of rule No. 87 of the operating rules which requires that extra trains must clear the time of opposing regular trains at least 5 minutes. According to train order No. 111, train No. 92 was to have waited at Waveland until 12:00 noon, and therefore, extra 1763 should have been clear of the main track at Waveland not later than 11:55 a.m. According to their own statements, however, the collision occurred at 11:56 a.m.

Agent Gunn, located at Havana, is open to severe censure

for the manner in which he handled the block. At 10:27 a.m. he gave the block to the operator at Blue Mountain for train No. 92, and at about 11:25 a.m. he asked for the same block for extra 1783, making no attempt to recall the block already pledged to train No. 92 and making no attempt to find out where that train was. He claimed that when he asked for the block for extra 1783, some one replied "All right." The identity of this party was unknown to him and was not afterwards discovered.

Operator Blankinship, on duty at Blue Mountain, is also open to censure and criticism for the lax manner in which he handled the block. He heard the operator at Booneville inform the dispatcher that train No. 92 would be ready to leave at 10:10 a. m., and entered this time on his block sheet as the time that train entered the block west of Blue Mountain, although no one had asked him for the block and regardless of the fact that he should have blocked with Magazine and not with Booneville. When the operator at Magazine called for the block for train No. 92, after 11:00 a.m., he did not show this time on the block sheet, as required by the rules, but left on the sheet the time he had first placed there, 10:10 a.m. Operator Blankinship is also to be censured for obtaining the block with Havana for train No. 92 at 10:28 a.m., 42 minutes before train No. 92 left Booneville and 1 hour and 19 minutes before it passed Blue Mountain. Under rule No. 320 he should not have asked for the block until notified that the train had

entered the block in the rear, which, in this case, began at Magazine.

All of the employees involved were experienced men, with good records, and none had been on duty in violation of any of the provisions of the hours of service law.

The investigation of this accident revealed the fact that the rules governing the operation of the manual block signal system are not obeyed or fully understood by the employees and that apparently they are not enforced by the officials. An accident was recently investigated on this same railway, near Platte River, Mo., where the rules governing the operation of the manual block signal system were not obeyed by the operators and contributed to causing a serious accident under very similar circumstances. In the report covering the investigation of that accident it was stated that "The block system as operated at this point is inefficient, improperly operated, and fails entirely to accomplish the purpose for which the block system is intended. The lax methods of block signal operation disclosed, involving a violation of the most primary requisites of safety, can not be too strongly condemned." While not directly responsible for the occurrence of the accident here under investigation, the lax methods of block operation shown to have existed, when coupled with the condition which was shown to have existed in connection with the Platte River accident, raises a serious question as to whether the manual block system as operated on this railway can be depended upon to serve the pur-

pose for which it is supposed to be intended. The manual block system is utilized by many railroads for the purpose of preventing accidents due to the carelessness or forgetfulness of train employees, accidents due to failing properly to protect trains, overlooking train orders, running on short time, etc., but when the rules governing its operation are not obeyed, and in fact no pretense of obeying them is made in some cases those charged with the enforcement of those rules can not escape their share of the responsibility, while the system itself is rendered almost useless. In previous accident investigation reports attention has been called to the apparent lack of proper and adequate supervision on many railroads, and to the absolute necessity of responsible officials knowing that the rules are obeyed. Until the officials take active steps looking to a proper understanding and obedience of rules, and until they know that the rules are understood and obeyed, accidents such as this may be expected to occur.