

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
MISSOURI PACIFIC RAILROAD AT BARTON CROSSING, ARK.,
ON MARCH 18, 1929

July 16, 1929.

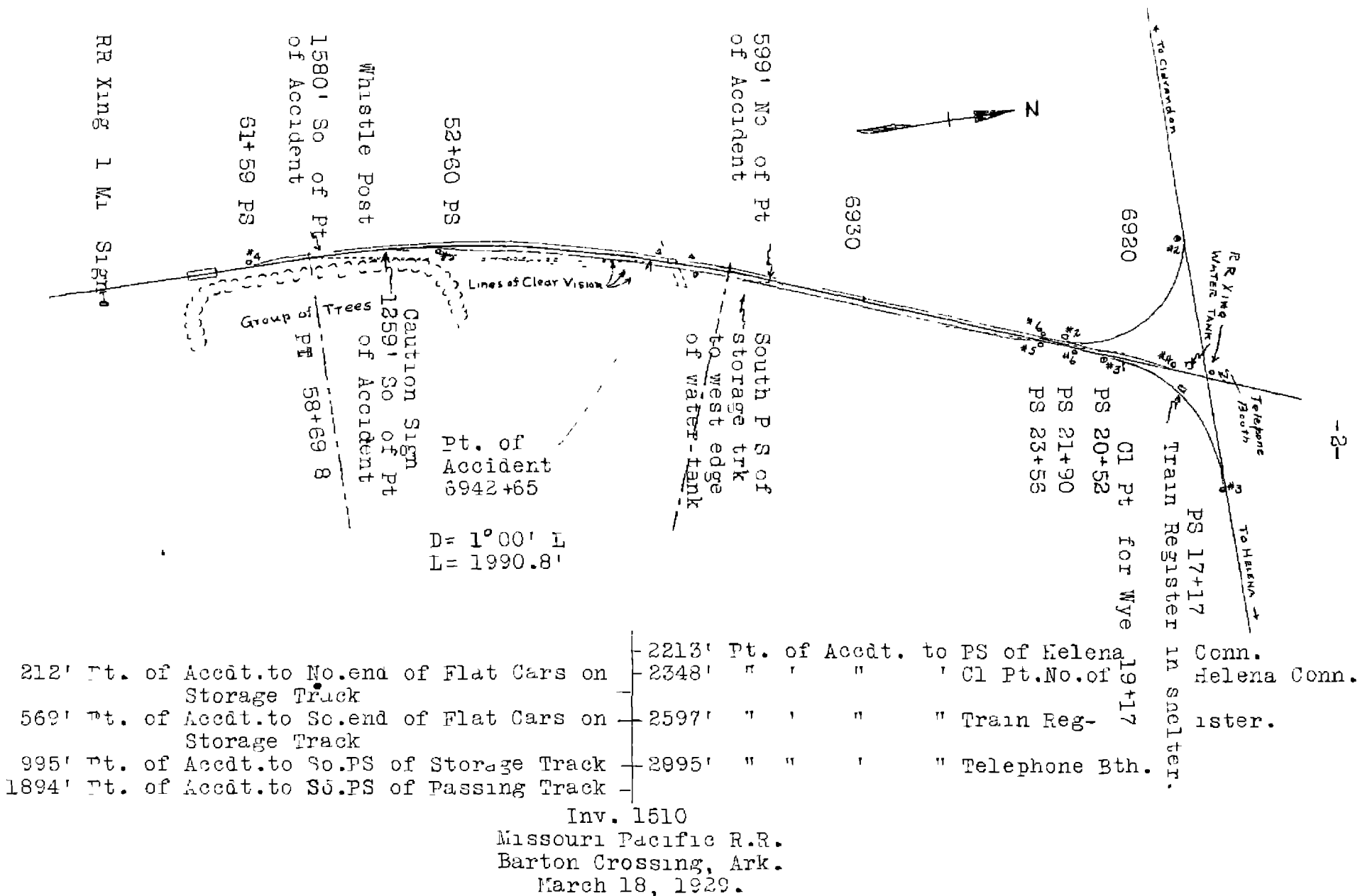
To the Commission:

On March 18, 1929, there was a head-end collision between a passenger train and a freight train on the Missouri Pacific Railroad at Barton Crossing, Ark., which resulted in the death of 1 employee, and the injury of 11 passengers and 4 employees.

Location and method of operation

This accident occurred on the Latour District of the Memphis Division, which extends between Lexa and McGehee, Ark., a distance of 82 56 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. At Barton Crossing this line crosses the line of the Clarendon District, with connections between the two lines. The accident occurred at a point 2,727 feet south of this crossing, approaching this point from the north the track is tangent for a distance of 6,420.5 feet, followed by a 1° curve to the left 1,990.8 feet in length, the accident occurring on this curve at a point 386 feet from its northern end. Approaching from the south the track is tangent for more than 8 miles, followed by the curve on which the accident occurred. The grade is 0.20 per cent descending for southbound trains at the point of accident. Owing to trees located on the inside of the curve on which the accident occurred a clear view of opposing trains can not be had until they are within approximately 1,850 feet of each other.

At Barton Crossing there is a passing track 4,442 feet in length which parallels the main track on the west, the north switch of this track being located 179 feet south of the crossing. There is also a storage track at this point on the east side of the main track, the switches of which are located between those of the passing track. A train register is kept in the passenger shelter located in the southeast corner of the intersection of the two branch lines, and at a point 384 feet south of this shelter there



is a switch leading to the Clarendon District, a trailing-point switch for Latour District southbound trains.

The weather was clear at the time of the accident, which occurred at about 3.10 p.m.

Description

Southbound freight train extra 1255 consisted of 80 cars and a caboose, hauled by engine 1255, and was in charge of Conductor Wood and Engineman Webb. This train departed from Lexa, 3.78 miles north of Barton Crossing, at 2.50 p m., and collided with train No. 334 at Barton Crossing while moving at a low rate of speed.

Northbound passenger train No. 334 consisted of one combination mail and baggage car, one coach and one chair car, all of steel-underframe construction, hauled by engine 7513, and was in charge of Conductor Brown and Engineman Faust. This train operates into Barton Crossing on the Latour District as train No. 334 and departs over the Clarendon District as train No. 835. This train left Oneida, 5.97 miles south of Barton Crossing and the last open office at 3 p m., 35 minutes late, and was approaching the station at Barton Crossing when it collided with extra 1255 while traveling at a speed estimated to have been between 20 and 30 miles per hour.

Both engines were derailed and badly damaged, engine 1255 coming to rest upright and engine 7513 on its right side. The forward end of the mail and baggage car in train No. 334 was telescoped for about 10 feet and the coach was slightly damaged. The second and third cars in extra 1255 were considerably damaged, the fourth car slightly damaged and the fifth car was broken in two, no other cars in this train were derailed or damaged. The employee killed was the engineman of train No. 334, the employees injured were the fireman, conductor, brakeman, and baggage and express messenger of train No. 334.

Summary of evidence

Engineman Webb, of extra 1255, whose only previous trip in this territory had been on March 14, stated that before reaching Barton Crossing the conductor, who was riding on the engine, instructed him to pull by slowly, saying that he would get off and check the register and if all overdue trains had arrived and passed he would signal the fireman and they could then proceed at slow speed until the engine reached the south passing-track

switch, so as to enable the conductor to board the caboose, and then speed could be resumed. Upon arrival at Barton Crossing the conductor got off, went to the register booth and shortly afterwards Engineman Webb observed the conductor give a signal to pull on down, Engineman Webb being located on the deck of the engine at the time. When his engine reached a point about 50 or 60 car-lengths beyond the crossing the fireman warned him that a passenger train was approaching, whereupon he applied the brakes in emergency and got off, he had not seen the opposing train up to this time but when he got off it was then about 8 or 10 car-lengths distant. He estimated the speed of his train at the time it reached the crossing at 4 miles per hour but this speed had been increased to about 10 miles per hour before he was warned of the approaching train. After the accident he asked the conductor as to what was wrong and the conductor replied that he was not certain, unless he had misread the train register. Engineman Webb further stated that he knew the rules required that trains must not pass junction, etc., until it has been ascertained that all trains due have arrived or left, also that the rules require conductors to furnish enginemen with train register slips unless the enginemen check the register themselves, but was of the opinion that the former rule was not violated as the speed of his train was such that he could have brought it to a stop short of the switch of the connection leading to the Clarendon District if the conductor had given him a stop signal instead of a proceed signal, while in the latter case he felt that it was just as safe to act on the conductor's signal as though a register slip had been delivered to him. The statements of Fireman Koonce and Head Brakeman Griffin brought out nothing additional of importance except that the head brakeman estimated that two minutes elapsed from the time the conductor got off until he gave a slow proceed signal after checking the train register, at which time the engine was about 40 feet north of the clearance point of the Clarendon District connection.

Conductor Wood, of extra 1255, stated that the train orders received at Lexa included a check of the train register at Barton Crossing until 2.20 p.m. While en route he informed the engineman that he would check the register at Barton Crossing and if Latour District trains Nos. 334 and 335 had arrived and departed he would give him a proceed signal. Upon arrival at Barton Crossing he got off and ran to the register booth, found train No. 334 had registered in and train No. 335 had registered out, and gave a proceed signal to his crew, he could not remember, however, whether he registered his own train before this

signal was given or afterwards. He did not supply the engineman with a train-register slip as there were no forms available, and he said it was not the custom to have the engineman check the register at points where there were no forms on hand. After the accident he went to the telephone booth, which was located on the opposite side of the track from the register booth, and notified the dispatcher and superintendent as to what had occurred, which required not more than two minutes, after which he immediately proceeded to the head end of the train without again returning to the register booth. He did not see any one else in the vicinity of that booth at any time. Conductor Wood further stated that at the time he examined the register he observed that the same conductor's name appeared as operating both trains Nos. 334 and 335, but he did not think this unusual as sometimes crews are exchanged, although he could not recall a case of this kind at Barton Crossing. He did not know whether Clarendon District trains Nos 834 and 835 were registered, these being the time-table numbers of Latour District trains Nos. 335 and 334, respectively, not thinking about it, as well as being anxious to keep his own train moving in order not to delay the Clarendon local train. Upon examining the register at the time of the investigation he stated that it appeared as though an attempt had been made to alter some of the figures, some erasing had been done, as well as some retracing, but the figures "334" seemed to be the same as it was on the day of the accident, while the handwriting looked to be the same. He admitted that the register showed it had been tampered with but steadfastly maintained that he did not do it, nor did he know of any reason why any one else would be interested in doing so unless with the intention of hurting him, and he did not remember telling his engineman after the accident that he did not know what was wrong unless he had misread the register. The statements of Middle Brakeman Kelly and Flagman Martin, of extra 1255, who were riding in the caboose at the time of the accident, brought out no additional facts of importance.

Fireman Crews, of train No. 334, stated that the usual stops were made en route and that the brakes functioned properly. He was riding on his seatbox as the train approached the point of accident and when it reached a point just beyond the south passing-track switch he observed the section foreman who was standing on the passing track, give a slow signal, which lead him to believe there was a motor car on the main track. On account of the noise he did not call to the engineman but crossed over to the right side of the cab and told the engineman to look out for a motor car, and at this time he noticed the freight train. Assuming that it was on the passing track he returned to his side of the cab to check the engine number when his own train passed. He looked ahead and noticed that the engine of

that train did not appear to be in its proper place and on leaning out he discovered that it was on the main track, about 400 or 500 feet distant. He immediately called to the engineman to apply the brakes and at the same time jumped across the cab and shoved the brake-valve handle around, after which he jumped from the left side of the engine. He said that steam had been shut off and the train was drifting at about 45 miles per hour when the brakes were applied in emergency, which reduced the speed to about 25 miles per hour at the time of the accident.

Conductor Brown, of train No. 334, stated that a running test of the brakes was made after leaving McGehee and were working properly. His first intimation of anything wrong was when the brakes were applied in emergency approximately 150 feet from the point of collision, he estimated the speed at the time of the accident as between 25 and 30 miles per hour. After rendering assistance he proceeded toward the station, about 10 minutes after the accident, and met Conductor Wood on the west side of the track. He inquired of Conductor Wood as to what was the matter and the conductor replied that "they registered wrong up there." Conductor Brown then called the superintendent by telephone, and at the superintendent's request he immediately took charge of the register. He examined it and found that train No. 334 had been registered, signed by Conductor Waddell and Engineman Campbell, he noticed at this time that a part of this entry had been traced. He said that the register booth is not locked and that it is not the custom to keep it locked, also that there was no one in that vicinity when he arrived. Conductor Brown also said that although there were some flat cars on the storage track south of the point of accident they did not interfere with the range of vision, but due to the curve it was his opinion that an engineman would have difficulty in determining whether extra 1255 was on the main track or on the passing track until the trains were very close together.

Section Foreman Evans stated that his crew was working near the frog of the south storage-track switch when he observed the freight train approaching, and as he had heard a whistle signal sounded by train No. 334 he became alarmed and upon looking towards the north passing-track switch he could not see the target displaying a red indication, which would have been the case had extra 1255 been entering the switch, so he instructed a laborer to go around the curve to see if the freight train was on the main track or on the passing track. The laborer first boarded a flat car, then got off and started northward,

and as soon as he had reached a point where he could see he started running towards that train while Section Foreman Evans in turn started giving slow signals to the crew of the passenger train, which was then approximately 300 yards from him, and continued to give such signals until the train passed him. He said that the engine of train No. 334 was still working steam when it passed and was traveling at a speed of at least 45 miles per hour. Section Foreman Evans thought the accident could have been prevented had he given stop signals instead of slow signals but did not do so as he was not certain that the freight train was on the main track, and was not aware that the crews of these trains did not hold a meet order at this point.

Dispatcher Backs, on duty at the time of the accident, stated that at about 3.11 or 3.12 p.m. Conductor Wood called him by telephone and reported that extra 1255 and train No. 334 had collided at Barton Crossing, the conductor remarking that Conductor Waddell had registered in as "334" instead of "834". Upon examining the register, Dispatcher Backs stated that it looked as though the figures "334" had been erased and marked over, the time of arrival changed, and the balance of the entry traced over, this being done with a different colored pencil.

Conductor Waddell stated that he operated train No. 834 from Helena to Barton Crossing and upon arrival at the latter point he registered his train arriving as train No. 834 and departing on the Latour District as No. 335, using the same pencil in making both entries. There was no one around the register while his train was at that point. He examined the register book taken from Barton Crossing after the accident occurred and identified the handwriting of the entry for train No. 335 as his own but said the entry for train No. 834 had been altered. The train number had been changed to "334" and the engine number from "7514" to "7512". He further stated that he has been registering at Barton Crossing for about 20 years and during that time his attention had never been called to any irregularities in the way he registered. The only motive he could ascribe for the changing of the register was for the purpose of placing on him the responsibility for the occurrence of the accident.

Mrs. Southard, a resident of Barton Crossing, stated that she arrived at the scene of accident about 5 or 10 minutes after its occurrence and in passing the passenger shelter she noticed a man, who appeared to be very much excited, enter it, and after walking a short distance toward the point of collision she looked back and noticed this man

had the register book in his hand and was doing something with it but she could not determine whether or not he was writing in it. She described this party and his wearing apparel, but when Conductor Wood was dressed in the same clothes he was wearing on the day of the accident she could not positively identify him as the same person.

Gilbert Yeager, a handwriting expert, stated that it clearly appeared that the information entered on the register for train No. 834 had been erased in some respects and words traced over in other respects, which indicated there had been some attempt to eradicate all of this information and that it was later decided to restore it as nearly as possible to the original entry, doing so with a pencil having a softer lead. There had been an entire obliteration of the train number and it had been substituted with the figures "334". The original engine number was almost entirely erased and the figures "7512" substituted, although the figure "4" in the former number could be plainly seen. These figures indicated that they were recorded on this sheet by some individual who was apparently very excited and extremely nervous. He said he also examined the handwriting of Conductor Wood in register books at Lexa on former dates and some characteristics in connection with the figures and letters corresponded with those which were substituted in the register book at Barton Crossing and he was of the opinion that Conductor Wood was the party who made the changes on this record.

On March 25, vision tests were made in the vicinity of the point of accident, using the same types of engines as those involved in the accident. The freight engine was placed 599 feet north of the point of accident and the passenger engine 1,259 feet south of the same point, both engines were in clear view but it could not be determined whether the freight engine was on the main or passing track. Another test was made by placing the freight engine at the point of accident and moving the passenger engine northward towards it, at a point 900 feet south of the freight engine it could be seen from the fireman's side of the passenger engine by leaning out the window but it could not be determined definitely whether the freight engine was on the main track, at a point 762 feet distant it could be plainly seen as being on the main track, while at a point 690 feet distant it could be determined from the engineman's side that the freight engine was on the main track. This test was conducted with flat cars on the storage track at the same location as on the day of the accident, these cars preventing the engineman from seeing the main-track rails until the last-mentioned point was reached.

Conclusions

This accident was caused by extra 1255 occupying the main track on the time of an overdue superior train, due either to the failure of Conductor Wood properly to check the train register or to errors in making an entry in the train register.

The schedule numbers of trains arriving at Barton Crossing from one district are changed when they depart on the other district. Train No. 335 arrives on the Clarendon District and departs as train No. 834 on the Latour District, while train No. 334 moving in the opposite direction over these districts leaves Barton Crossing as train No. 835. Both of these trains are scheduled to depart from that point at 2.35 p.m.

Extra 1255 arrived at Barton Crossing at about 3.05 p.m., and had no orders to proceed beyond that point against train No. 334, which was then overdue. Conductor Wood, of extra 1255, stated that he checked the register and found trains Nos. 334 and 335 had registered. On the other hand, Conductor Waddell said he registered his train arriving at Barton Crossing as train No. 834 and departing as train No. 335 over the Latour District, and it is believed that this statement is correct. Examination of this register, however, clearly showed that the information recorded by Conductor Waddell for train No. 834 had been altered by being erased in some places and traced over in others with the evident purpose of showing the arrival of train No. 334. After the accident the enginemen of extra 1255 asked Conductor Wood what was wrong and he quoted the conductor as saying he did not know, unless he had misread the register. Conductor Wood said he did not remember making such a statement and also denied that he made any changes on the register after the accident, but unless the register was tampered with prior to the accident, which is very unlikely, it would appear that the accident was due to the failure of Conductor Wood to check the register correctly.

The rules provide that enginemen must check train registers at intermediate stations, when practicable, and if not they must require from conductors a register check, Form 4562, unless provided by train order, Form N. Engineman Webb did not hold a Form N order and therefore it was necessary for him either to check the register at Barton Crossing or be supplied with a register check. He did not check the register personally, and so far as receiving a register slip is concerned he said he considered it as safe to rely on information received from

the conductor as it would be if a register slip had been delivered to him. The occurrence of this accident, however, is a sufficient illustration of the necessity for the rule, and emphasizes the fact that employees should obey strictly the rules governing their own actions instead of depending on others to perform their duties properly.

The employees involved were experienced men, although the engine crew of extra 1255 were not familiar with this particular territory, at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.