INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

ILLINOIS CENTRAL RAILROAD

CHAMPAIGN, ILL.

DECEMBER 3, 1936

INVESTIGATION NO. 2125

SUMMARY

Inv-2125

Railroad:	Illinois Central		
Date:	December 3, 1936		
Location:	Champaign, Ill.		
Kind of accident:	Head-end collision		
Trains involved:	Freight	:	Freight
Train numbers:	Extra 1754	:	Extra 1939
Engine numbers:	1754	:	1939
Consist:	60 cars and caboose	:	92 cars and caboose
Speed:	12-18 m.p.h.	:	2-12 m.p.h.
Track:	1^{o} curve; slight ascending grade for north-bound trains.		
Weather:	Cloudy		
Time:	7:01 p.m.		
Casualties:	1 killed and 4 injured		
Cause:	Route changed directly in front of approaching train as a result of failure properly to identify such train		

February 5, 1937.

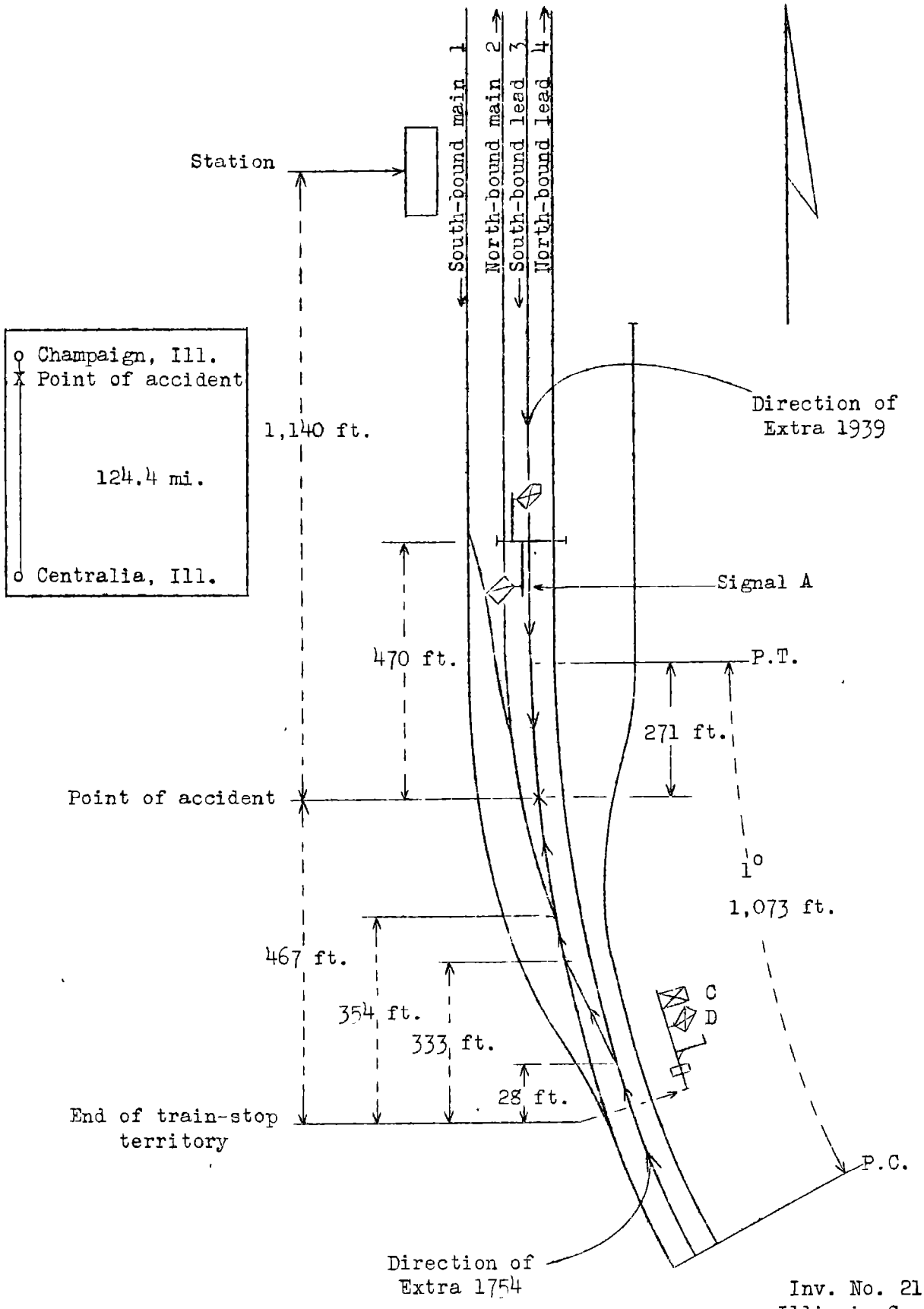
To the Commission:

On December 3, 1936, there was a head-end collision between two freight trains on the Illinois Central Railroad at Champaign, Ill., which resulted in the death of 1 employee and the injury of 4 employees. The investigation of this accident was made in conjunction with a representative of the Illinois Commerce Commission.

Location and method of operation

This accident occurred on the Champaign District of the Illinois Division which extends between Champaign and Centralia, Ill., a distance of 124.4 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders, automatic block signals and a continuous automatic train-stop system with 2-indication cab-signals; on this portion of the line extra trains are not required to display classification signals. At Champaign the freight yard parallels the main tracks on the east, with two lead tracks extending from the freight yard for a distance of more than 1 mile to a point about 1,650 feet south of the passenger station where they converge with the main tracks. The tracks are designated from east to west as follows: 4, north-bound freight lead; 3, south-bound freight lead; 2, north-bound main and 1, south-bound main. The accident occurred on track 3 at a point approximately 1,140 feet south of the passenger station. Approaching this point from the south the track is tangent for a distance of more than 1 mile, followed by a 1° curve to the right 1,073 feet in length, the accident occurring on this curve at a point 271 feet from its northern end. Approaching from the north the track is tangent for more than 1 mile, followed by the curve on which the accident occurred. The grade for north-bound trains is 0.4 percent ascending at the point of accident.

The automatic signal involved, located at the point where the two freight lead tracks converge with the main tracks, 467 feet south of the point of accident, is a 2-arm, 3-position signal of the upper quadrant semaphore type; signal C, the top arm, governs through movements over the north-bound main and normally displays a stop indication. Signal D, the lower arm, governs movements from the north-bound main to the north-bound freight lead track and normally displays an approach indication; forty-five or ninety degree positions of the arm govern the route to the interlocking signal located 2,715 feet to the north. Night indications



Inv. No. 2125
Illinois Central
Champaign, Ill.
Dec. 3, 1936

are green, yellow and red. This signal location, C and D, also marks the northern end of automatic train-stop territory. The switches in the immediate vicinity are of the low-stand, hand-operated type, normally set and locked for the north-bound and south-bound freight leads. It is necessary to line three switches at this point for a continuous route over the north-bound main track, these switches being located 28 feet, 333 feet, and 354 feet respectively, north of the signal. When the first switch located just north of the signal is reversed, signal D displays a stop indication; all three switches must be lined for a through movement over the north-bound main track before signal C will display a proceed indication.

Automatic signal A, located on a signal bridge 470 feet north of the point of accident, governs movements from the south-bound freight lead to the south-bound main track; this signal is a 2-position, upper-quadrant semaphore signal, and normally displays an approach indication.

The weather was cloudy at the time of the accident, which occurred about 7:01 p.m.

Description

Extra 1754, a north-bound freight train, consisted of 60 cars and a caboose, hauled by engine 1754, and was in charge of Conductor Winters and Engineman Feathergill. This train departed from Centralia, 124.54 miles from Champaign, at 12:30 p.m., passed Tolono, 9.3 miles from Champaign, at 6:48 p.m., according to the train sheet, and on approaching Champaign at a speed of about 18 miles per hour a green indication was displayed by both the cab-signal and signal D, which changed to red when the train was about 4 or 5 car lengths from signal D. The route having been improperly lined, the train then entered the cross-over and collided with south-bound Extra 1939 on track 3 at a point 467 feet beyond the signal while traveling at a speed estimated to have been between 12 and 18 miles per hour.

Extra 1939, a south-bound freight train, consisted of 92 cars and a caboose, hauled by engine 1939, and was in charge of Conductor Parks and Enginenan Shelley. This train departed from the freight yard at Champaign at 6:55 p.m., according to the train sheet, passed signal A displaying a yellow indication and collided with Extra 1754 while traveling at a speed estimated to have been between 2 and 12 miles per hour.

The engines were locked together, the front end of engine 1754 telescoping the front end of engine 1939 and shoving it backward a distance of about 70 feet; both engines were derailed. The tender of engine 1754 was derailed and badly damaged; the first car was demolished; the second car was slightly damaged; the third and fourth cars were derailed but not damaged. The tender and first four cars in Extra 1939 were derailed and badly damaged, the third car being demolished. The employee killed was the head brakeman of Extra 1754, and those injured were the engineman and fireman of Extra 1754 and the conductor and flagman of Extra 1939.

Summary of evidence

Engineman Feathergill, of Extra 1754, stated that on approaching Champaign he shut off steam and made two or three light brake pipe reductions, reducing the speed from 25 to 18 miles per hour. He observed the green indications displayed by signal D and the cab signal, indicating that the route was lined for the north-bound freight track. When his engine was within 4 or 5 car lengths from the signal he saw the indication change to stop and he also saw that the switch had been thrown. He immediately sounded four blasts on the whistle, thinking that whoever threw the switch would throw it back; this was not done, however, and the engine entered the crossover; he immediately applied the air brakes in emergency and saw the train ahead. Engineman Feathergill also stated that the cab signal changed from green to red when the switch was thrown and he operated the acknowledging lever and forestalled an automatic air brake application. He thought his train traveled about 4 car lengths after he applied the brakes in emergency and estimated the speed to have been 12 or 13 miles per hour at the time of the accident. Engineman Feathergill further stated that he did not remember whether he sounded the station whistle or any whistle signals except the four blasts just prior to the accident as when the signals indicate that the route is clear he considers it unnecessary to sound the whistle. The air brakes had been tested at Centralia and functioned properly en route.

Fireman Barham, of Extra 1754, stated that he saw the green indication displayed by signal D, and about the time it disappeared from his view the engineman sounded the engine whistle, and he applied the air brakes in emergency as they entered the cross-over. He estimated the speed of his train to have been 18 or 20 miles per hour at the time of the accident. The engineman did not sound any other whistle signal on approaching Champaign except the one just prior to the accident. Conductor Winters and Flagman Martin,

of Extra 1754, estimated the speed of their train to have been between 15 and 18 miles per hour just prior to the stop at Champaign and due to the easy stop made they were unaware of the accident until later.

Engineman Shelley, of Extra 1939, stated that he received a yellow indication at signal A, the most favorable indication displayed by this signal, and when about 7 car lengths beyond the signal his fireman and brakeman called to him to apply the brakes in emergency. Due to the curve he was unable to see the approaching train, but when he got off his engine he saw that the opposing train had started through the crossover. Engineman Shelley stated that he had been operating his train at a speed of about 8 miles per hour and thought possibly this may have been somewhat reduced at the time of the accident. The headlight on his engine was burning and the air brakes had been tested before leaving the yard.

Fireman Maxfield, of Extra 1939, stated that he observed the yellow indication displayed by signal A; he then put in a fire and as he returned to his seatbox he thought the engine was about 3 car lengths beyond the signal and the brakeman asked him if the approaching train could be Train No. 2. He said that he did not think so, and the brakeman then said that the signal had been taken away from the north-bound train. Fireman Maxfield said he looked ahead to see if the switches were properly lined for his train and as he did so he saw the north-bound train coming through the crossover. Both he and the brakeman called a warning to the engineman. He estimated the speed of his train to have been about 8 or 10 miles per hour and thought it had been reduced to 2 or 3 miles per hour at the time of the accident.

Head Brakeman Schwabe, of Extra 1939, stated that his engine was about 4 or 5 car lengths beyond signal A when he noticed the headlight of a north-bound train and from its reflection he could see the north-bound signal displaying a clear indication for track 4. While he was watching it, however, it changed to stop position, and in a very short time he saw the north-bound train enter the crossover, and he then called to the engineman to apply the brakes in emergency.

Conductor Parks and Flagman Stitcher, of Extra 1939, estimated the speed of their train to have been between 6 and 12 miles per hour at the time of the accident.

Car Inspector Kruse stated that while he is employed as a car inspector it is also his duty to handle the switches for passenger trains entering and leaving the passenger shed. On the evening of the accident he went to the dispatcher's

office at 5:15 p.m. for information concerning Train No. 2, a north-bound passenger train scheduled to arrive at Champaign at 5:55 p.m. From information he received, he figured that Train No. 2 would arrive at 7:10 p.m. He later returned to the dispatcher's office for further information on this train, and the dispatcher then told him that a coal drag was ahead of them but that he did not know whether or not they would make it and would probably be in about 7:15 or 7:20 p.m. Car Inspector Kruse then left the dispatcher's office about 6:45 p.m., proceeded to the switches about 1/4 mile distant, this consuming about 6 minutes, and after waiting 3 or 4 minutes he saw a headlight of an approaching train about 1 mile distant; he looked at his watch and it was "55". As the train approached he was unable to tell whether it was a freight or a passenger train, but he expected to hear the usual four blasts sounded on the whistle if it was a freight train; not hearing the whistle he thought he would make a test to find out if it was Train No. 2, and he threw the south cross-over switch, at which time he thought the train was about two city blocks away. He then waited a short time and when he did not receive a whistle signal he decided that it was Train No. 2 approaching. He then walked northward toward the other two switches and had covered a distance of about 200 feet when he heard the whistle from the north-bound train; he turned to go back and had taken only a few steps when the train entered the switch. He estimated the speed of this train to have been about 20 miles per hour as it passed him. He knew that the south-bound extra was approaching, but he did not throw the switch against it as this train had already passed under the signal bridge. Car Inspector Kruse stated that he had been handling these switches for the past ten years; when he first took over this duty he was instructed by the trainmaster and traveling engineer regarding this work but he had never been examined on the operating rules. He had been given a physical examination by the railroad sometime ago, but no examination had been made of his eyesight. He stated that while his watch is not a standard railroad watch, it keeps fairly accurate time. He is 71 years of age and has fairly good eyesight.

Dispatcher Weatherford stated that Car Inspector Kruse came to his office about 5 p.m., at which time he told the inspector that Train No. 2 was 1 hour 15 minutes late and that there were three freight trains ahead of this train. At 6:45 p.m. when the car inspector returned to the office Dispatcher Weatherford informed him that Extra 1754 was still ahead of Train No. 2 and that the extra train might let Train No. 2 pass at Pesotum, 14.1 miles from Champaign. Dispatcher Weatherford stated that in figuring the average running time it appeared that the extra might not have time to reach Champaign ahead of Train No. 2.

Switch Tender Summers, employed from 11:30 p.m. to 7:30 a.m., stated that he handles the switches near Springfield Avenue, in the vicinity of the point of accident, and that the station whistle signal is usually sounded in the vicinity of Hessel Blvd., about 3/4 mile south of Springfield Avenue, by all north-bound trains and that four short blasts are sounded by the freight trains for the interlocking plant, located north of the station, when the trains are in the vicinity of Green Street, about 2 blocks south of Springfield Avenue, although some of the enginemen wait until they have passed Springfield Avenue before they sound the signal for the interlocking plant. Switch Tender Summers also stated that his last examination on the transportation rules was in 1934 and he was also physically examined about that time. Prior to 1934 he had been examined at intervals of 3 years.

General Yardmaster Granger stated that he knew of no written instructions governing the work performed by switch tenders and does not know if they are required to take periodical examinations. He stated, however, that switch tenders are required to carry standard watches, but he did not know whether Car Inspector Kruse was required to do so. There is no rule which requires an engineman to give a switch tender a whistle signal on approaching the lead tracks, stating that the 4 short blasts referred to by other witnesses is for the information of the leverman in the interlocking tower.

Discussion

The evidence indicates that Car Inspector Kruse who was handling the switches for passenger trains at Champaign at the time of the accident, mistook Extra 1754 for Train No. 2, a passenger train, and when the train was only a short distance away, lined the first switch for this train to enter the passenger shed, resulting in the train entering the cross-over and proceeding onto track 3 where it collided with south-bound Extra 1939. According to the statements of the car inspector, the first information he received from the dispatcher relative to Train No. 2 was that it was 1 hour 15 minutes late, which would make its arrival time at Champaign at 7:10 p.m. At 6:45 p.m., the dispatcher told him that Extra 1754 was ahead of Train No: 2 but he did not know whether or not the extra would reach Champaign ahead of that train. Car Inspector Kruse was standing at the first switch to be lined for the passenger route when he saw an approaching train about 1 mile distant; he looked at his watch and it was 6:55 p.m. Not hearing the whistle signal usually sounded by approaching freight trains, he opened the switch thinking that the passenger train might be approaching and upon still not hearing-

the whistle signal after he had opened the switch, he proceeded toward the other switches. From the information Car Inspector Kruse received from the train dispatcher, he should have realized the possibility of Extra 1754 reaching Champaign ahead of Train No. 2 and if there was any doubt in his mind, as indicated, he should have made positive identification of the approaching train before changing the route. However, regardless of the identity of the north-bound train, Car Inspector Kruse should not have lined the route for a cross-over movement, after the south-bound train had passed signal A under an approach indication, without first making sure that that train was stopped before fouling the south-bound freight lead switch; furthermore the car inspector said that the figure he received from the dispatcher regarding the arrival of Train No. 2 was 7:15 or 7:20 p.m. While there was evidence to the effect that many enginemen of freight trains sound four blasts on the whistle when approaching Champaign, this signal is intended as information for the towerman in the interlocking plant located beyond the station, and there is no rule requiring enginemen to sound a whistle signal to switch tenders.

According to the statements of Engineman Feathergill, signal D changed to stop when his engine was 4 or 5 car lengths from it. However, he expected the switch to be thrown back; he operated the acknowledging lever and forestalled an automatic application of the air brakes by the automatic train stop device when the cab signal changed to red, but upon seeing that the switch was not restored, he applied the air brakes in emergency; it was then too late to stop his train in time to prevent the accident.

The evidence indicates that Car Inspector Kruse is not required to carry a standard railroad watch, nor had he been given an examination on the operating rules at any time. He had been instructed only with respect to the handling of these switches about 10 years previously when the duty was first assigned to him in addition to his regular duties, and had not been given a physical examination for sometime. He is 71 years of age.

Conclusion

This accident was caused by a route being changed directly in front of an approaching train as a result of failure properly to identify such train.

Respectfully submitted,

W. J. PATTERSON,
Director.