

Inv-2152

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT OF THE DIRECTOR  
BUREAU OF SAFETY  
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ACCIDENT ON THE  
CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS  
RAILWAY

-----  
McCOY, IND.  
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FEBRUARY 22, 1937  
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INVESTIGATION NO. 2152

SUMMARY

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Inv-2152

Railroad: Cleveland, Cincinnati, Chicago &  
St. Louis

Date: February 22, 1937

Location: McCoy, Ind.

Kind of accident: Rear-end collision

Trains involved: Freight : Freight

Train numbers: No. 51 : No. 99

Engine numbers: 1575 : 2926

Consist: 8 cars, caboose : 33 cars, caboose

Speed: Standing : 8-10 m.p.h.

Track: 1° right curve 1,618 feet, then tangent  
2,900 feet to point of accident; 0.25  
percent ascending grade.

Weather: Cloudy and somewhat hazy.

Time: 7:23 p.m.

Casualties: 2 injured

Cause: Failure properly to observe and obey  
signal indications; failure properly  
to protect standing train.

April 23, 1937.

To the Commission:

On February 22, 1937, there was a rear-end collision between two freight trains on the Cleveland, Cincinnati, Chicago & St. Louis Railway at McCoy, Indiana, which resulted in the injury of two employees. This accident was investigated in conjunction with representatives of the Public Service Commission of Indiana.

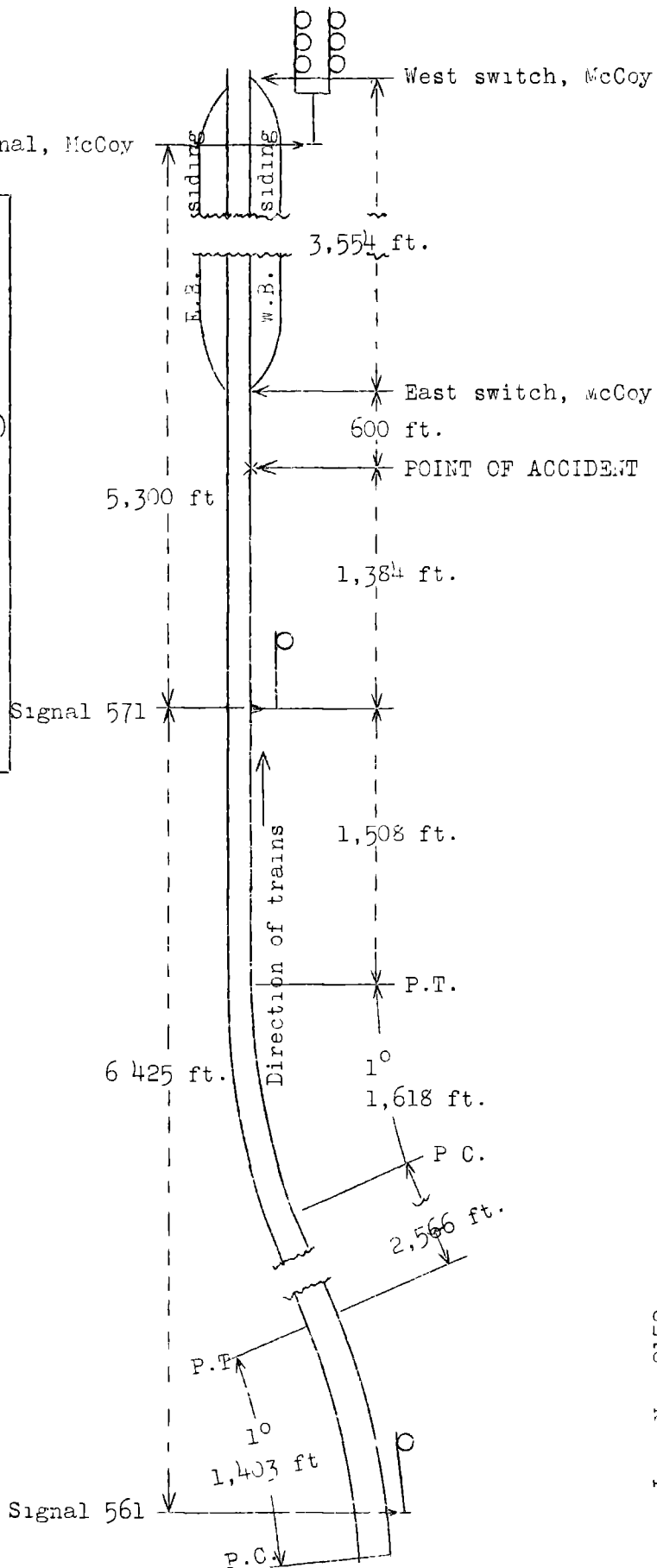
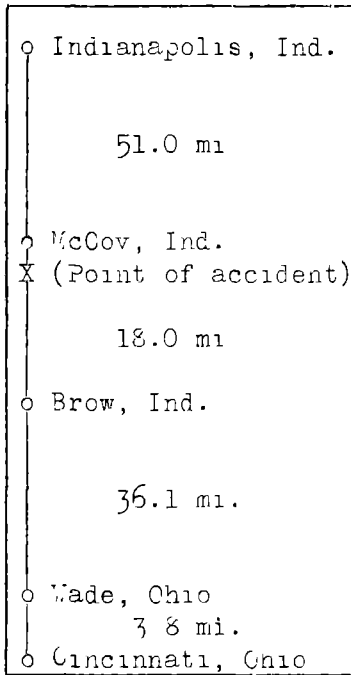
#### Location and method of operation

This accident occurred on that part of the Indiana Division extending between Cincinnati, Ohio, and Indianapolis, Indiana, a distance of 108.9 miles; in the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. At McCoy, there is a west-bound passing track, 3,554 feet in length, paralleling the west-bound main track on the north; the accident occurred on the west-bound main track, 600 feet east of the east switch of this passing siding.

Approaching this point from the east, the track is tangent for a distance of 2,566 feet, followed by a 1° curve to the right 1,618 feet in length and then tangent for a distance of 2,892 feet to the point of accident and for more than 2 miles beyond. The grade for west-bound trains is practically level for nearly 2 miles to a point within 1,500 feet of the point of accident and is then 0.25 percent ascending for a distance of 3,200 feet. The maximum authorized speed for freight trains in this vicinity is 50 miles per hour.

The automatic signals involved in this accident are signals 531, 551, 561, and 571, located 4 miles, 2.6 miles, 7,809 feet and 1,384 feet, respectively, east of the point of accident. These signals are of the approach lighted, color-light, single-unit type, displaying the following indications: Green, proceed; Yellow, proceed at speed not to exceed one-half the maximum authorized speed at point involved (not exceeding 30 miles per hour) prepared to stop at next signal; Red, stop then proceed at restricted speed.

There was formerly an interlocking plant at McCoy which has since been abandoned and the interlocking home signals have been converted to automatic signals; these signals are still referred to as the "home signals at McCoy"



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 C.C.C. & St. L. Ry.  
 McCoy, Indiana  
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and the west-bound signal at this point will be similarly referred to in this report.

It was cloudy and somewhat hazy at the time of the accident, which occurred about 7:23 p.m.

#### Description

Train No. 51, a second-class west-bound local freight train, consisted of 8 freight cars and a caboose, hauled by engine 1575, and was in charge of Conductor Bohnen and Engineman Main. This train left Wade, west end of Riverside yard, Cincinnati, at 9:25 a.m., 2 hours and 55 minutes late; passed Brow, Ind., 39.9 miles west of Cincinnati, the last open office, at 5:08 p.m., according to the train sheet, and stopped on the main track near the east switch of the west-bound passing track at McCoy at about 7:17 p.m., to set out a car; it was standing at this point when struck by Train No. 99.

Train No. 99, a second-class west-bound freight train, consisted of 33 cars and a caboose, hauled by engine 2926, and was in charge of Conductor Bussell and Engineman Welsh. This train departed from Wade at 5:43 p.m., 43 minutes late; passed Brow at 6:56 p.m., according to the train sheet, passed signals 551 and 561 displaying approach indications, passed signal 571 displaying a stop-and-proceed indication, at an estimated speed of 25 to 30 miles per hour, and collided with the rear end of Train No. 51 at a point 1,384 feet beyond, while traveling at an estimated speed of 8 to 10 miles per hour.

The caboose of Train No. 51 was demolished and the car ahead of it was derailed parallel to the track and slightly damaged; none of the other cars in Train No. 51 was derailed or damaged. Engine 2926 was not derailed but the front end was slightly damaged; none of the cars was derailed or damaged. The employees injured were the engineman and head brakeman of Train No. 99.

#### Summary of evidence

Conductor Bohnen, of Train No. 51, stated that his train stopped east of the east switch of the westward passing track at McCoy for the purpose of dropping a car upon that track. After the train stopped, the flagman and foreman-brakeman immediately left the caboose and he assumed the flagman had gone back to flag and that the foreman-brakeman

and head brakeman would make the drop of the car. He had no conversation with the flagman as to how the work was to be performed but on various occasions he had instructed him to flag at all times. Conductor Bohnen did not hear the engine whistle sounded for the flagman to go back and flag; his train had been standing about 3 or 4 minutes, during which time he was engaged in the completion of some reports and on looking up he observed the reflection of a headlight. Upon going to the caboose door he saw Train No. 99 approaching very close, and he barely had time to get off before the collision occurred. He estimated the speed of Train No. 99 to have been about 25 or 30 miles per hour at the time of the collision. It was dark at the time and his caboose markers were burning. He thought his flagman could have gotten back a distance of 15 car lengths if he had gone back immediately.

Flagman Malone, of Train No. 51, stated that he was a promoted man and the regular flagman of Train No. 51. After the train stopped at McCoy, he accompanied Foreman-brakeman Bishop to the head end of the train and rode the car when the running switch was made at the time the car was set out; he observed the headlight of Train No. 99 about the time he stopped the car. He knew his first duty was to protect his train while on the main line and he also knew that they were on the time of Train No. 99 and were going to stop at McCoy, but he did not drop off a fusee and was unable to account for his failure to flag other than to say that he must have forgotten to protect the rear of his train.

Engineman Main, of Train No. 51, stated that after his train stopped at McCoy, the head brakeman cut the train line; he saw two lights coming from the caboose toward the head end of the train and also thought that he saw a light go behind the caboose, which he assumed was the flagman going back to flag so he did not whistle out a flag. He realized that he was on the time of Train No. 99, but knowing there was a man still on the rear end of the train, he felt certain that the rear end was being protected. He estimated that the train had been standing 5 or 6 minutes before the accident occurred, which would have been sufficient time for the flagman to have gotten back to protect the train and said that the accident occurred at 7:23 p.m.

Foreman-brakeman Bishop, Head Brakeman Reber and Fireman Fosnot added nothing of importance to the investigation; Head Brakeman Reber thought his train had been standing about 5 minutes when the accident occurred.

Engineman Welsh of Train No. 99 stated that the air brakes on his train were tested by car inspectors at Riverside; the first use he made of the brakes was to control the train when approaching Ross, 25.9 miles from Riverside, and they worked properly at that time. As he approached signal 531 it was displaying an approach indication and he closed the throttle; the indication changed to proceed before he reached the signal. The succeeding signal, No. 551, was displaying a red indication when he first observed it but the indication changed to approach when he was still quite a distance from the signal and was displaying that indication when he passed it; signal 561 was displaying an approach indication when it came into view and also when he passed it and he reduced speed to about 30 miles per hour. When he reached a point about 1/2 mile east of signal 571, from which point the signal was first visible, it was displaying a red indication and both he and the fireman called its indication. He assumed that the train ahead was running at about the same speed as his own train and expected the indication of signal 571 to change to approach as the preceding signals had done; he had just started to apply the brakes and had made about a 7-pound reduction when he looked beyond and thought he saw the west-bound home signal at McCoy flash a red indication and he thought the train ahead had entered that block; he then released the brakes, the speed of his train being about 15 or 20 miles per hour at the time. There was a strong wind and the weather was hazy and he did not see the markers of the train ahead until he was within 8 or 10 car lengths from the caboose. He immediately placed the brake valve in emergency position, but due to having just released, a full emergency effect of the brakes was not obtained; he estimated the speed of his train to have been about 12 miles per hour when the collision occurred. He was thoroughly familiar with the rules governing the use of automatic signals and knew how his train should be operated under the various signal indications and said that in this instance he had taken a chance but this was the first time he had ever taken a chance with respect to signal indications.

Fireman Bostwick, of Train No. 99, stated that the air brakes were tested by the car inspectors at Riverside and seemed to function properly whenever used thereafter. He corroborated the statement of Engineman Welsh regarding the indications of the signals encountered to the point of accident. Signal 571 was displaying a red indication as his train approached it at a speed of 30 or 35 miles per hour and he called the indication when about 25 or 30 car lengths from the signal; Engineman Welsh hesitated an instant and then

made a light application of the air brakes which slightly reduced the speed of the train and he released them a few seconds later. About the time the engine passed this signal, at a speed of 25 or 30 miles per hour, he saw the markers of Train No. 51 and called a warning to Engineman Welsh who applied the brakes in emergency, but they failed to give an emergency response due to having just been released. The visibility was good at the time of the accident and Fireman Bostwick had experienced no difficulty in observing all signal indications. He did not see the indication of the west-bound home signal at McCoy tower nor did he see any flagman at the rear of Train No. 51. He estimated the speed of his train at the time of the accident as being from 10 to 15 miles per hour. He had been firing for Engineman Welsh about four months and had never before noticed him crowding the signals.

Head Brakeman Barnes, of Train No. 99, stated that he was on the seat box behind the fireman and observed the yellow indication of signal 551, which was called by the engineman, the fireman and himself; he estimated the speed of the train at this time to have been about 60 miles per hour; the engineman shut off steam and slightly reduced the speed. Approaching signal 561, which was also displaying a yellow indication, the engineman again shut off steam and passed the signal at a speed of about 50 miles per hour. After passing this signal Head Brakeman Barnes crossed to the right side of the engine to observe the train as it rounded the curve and did not see the indication of the next signal, No. 571. The engineman was leaning out of the side window approaching this signal and the fireman called a red indication when the train was about 500 feet from the signal, the speed of the train at that time being about 40 miles per hour; the engineman shut off steam and applied the brakes when he was about 100 feet from the signal, but the speed was reduced very little as the train passed it. The fireman then called to the engineman that there was a rear end ahead and looking out Head Brakeman Barnes saw the marker lights on the caboose; he did not see any fusee nor did he see anyone flagging. He estimated the speed of the train at the time of the accident to have been from 35 to 40 miles per hour. He experienced no difficulty in observing signal indications en route.

Conductor Bussell, of Train No. 99, stated that the air brakes were tested by the car inspectors at Riverside yard and appeared to function properly whenever used en route. On approaching signal 531 it was displaying a yellow indication



and the engineman reduced speed to about 30 miles per hour; the next signal displayed a yellow indication and the speed was again reduced; as the train approached signal 571, it was displaying a red indication and the brakes were applied when the engine was about a train length from the signal, reducing the speed to about 15 or 20 miles per hour; the brakes were then released and as his view was obscured by smoke from the engine he lost sight of the signal. The fact that the train did not stop at this signal led him to believe that the signal had changed from red to yellow. He stated that he had been working with Engineman Welsh for quite a long time and had never before experienced any difficulty with him in respect to obeying signal indications. He did not see Engineman Welsh before leaving Riverside but had talked to him after the accident and at that time he appeared normal, although somewhat unnerved and excited.

Flagman Guill of Train No. 99 corroborated the statements made by Conductor Bussell with respect to the movement of the train between signals 531 and 571. The speed of the train approaching signal 571 was between 30 and 35 miles per hour; the air brakes were applied and he thought that the train was being brought to a stop; later it came to an easy stop and he did not know there had been an accident.

Trainmaster Wiegele stated that he arrived at the scene of the accident on the wreck train; approaching the point of accident from the east on the east-bound main track, he had observed the indications displayed by the two signals on the west-bound main track just east of the point of accident, and both signals displayed the proper indications. He talked to Engineman Welsh and inspected the engine and the track, also the point where the drop of the car was made. His conversation with Engineman Welsh, after the accident, disclosed the fact that Train No. 99 passed signal 571 while displaying a red indication and collided with Train No. 51, which was standing on the west-bound main track without flag protection. He further stated that he conducted book of rules classes once a year and during such instruction classes, he stressed the fact that the flagging rule and rules applying to the operation of signals must be thoroughly understood and complied with and that at no time while a train was occupying the main track would the crew be relieved from protecting; the flagman is required to protect his train unless relieved by some other member of his crew. Flagman Malone had a clear service record and had never been reprimanded or disciplined.

Signal Maintainer Haag, stated that he examined and tested signals 561 and 571 about 9:00 a.m., February 23, and nothing was disclosed to indicate that the signals had not been functioning properly and he had not received any reports in regard to the signals in this vicinity failing to function properly, either before or after the accident. He had made no repairs of any kind in the vicinity of these signals.

General Signal Inspector McGill, stated that he made a number of tests of the signals in the vicinity of the point of accident in company with three other signal employees on the morning of February 26 and found nothing to indicate that any of the signals had failed to function properly, nor did he discover anything about them that would have contributed in any way to the cause of the accident.

#### Discussion

Rule 99 of this railroad provides that when a train is stopped under conditions in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection.

Automatic block signal rules provide that a train receiving an approach signal should proceed at a speed not to exceed one-half the maximum authorized speed involved (not exceeding 30 miles per hour) prepared to stop at next signal; a train receiving a stop-and-proceed signal must stop, then proceed at slow speed prepared to stop short of train in block, broken rail, etc.

This investigation disclosed that when Train No. 51 stopped on the main track east of the passing track at McCoy to set out a car, the flagman went ahead to assist in making the switch although there were two other trainmen to do this work, instead of going back to furnish protection for his train and the conductor remained in the caboose working on reports instead of seeing that the flagman was properly performing his duties; the engineman did not give the whistle signal for the flagman to go back, saying that he thought he saw a lantern disappear behind the caboose, which he assumed was the flagman going out and therefore believed that the train was protected.

The engineman of Train No. 99 had been running on approach signal indications for a number of miles, having observed some of them change from a stop to approach ahead of

his train; from this he assumed that the train ahead was running at about the same speed as his own train. Signal 531 was displaying an approach indication when he first observed it, the indication changing to proceed before he reached the signal; signal 551 was displaying a red indication and changed to an approach indication before he reached it and signal 561 was also displaying an approach indication when he first observed it as well as when he passed it at a speed of about 30 miles per hour. When signal 571 became visible, at which time he was about 1/2 mile from it and running at a speed of 15 or 20 miles per hour, he was expecting the indication to change to approach as the preceding signals had done; when his engine was near the signal he made a 7 pound brake pipe reduction and about the same time thought he saw the next signal in advance displaying a stop indication. Thinking that the train ahead had entered that block he released the brakes, then immediately saw the caboose of the preceding train about 3 or 10 car lengths away; he placed the brake valve in emergency position but due to having just released the brakes, a full emergency effect was not obtained and he was unable to stop before colliding with the rear of the train ahead. He did not see the markers on the rear of Train No. 51, which the evidence indicates were burning properly, nor did he see the rear end of that train until it was only 3 or 10 car lengths distant although the track approaching the point of accident is tangent for nearly 3,000 feet and the headlight of his engine was burning brightly.

Engineman Welsh was promoted to engineman in 1903 and thoroughly understood the requirements of the rules and of signal indications. An inspection of the signals involved, made after the accident, disclosed them to be functioning as intended. It was not contended by any of the employees involved that the signals failed to function properly; neither was there anything wrong with the brakes of Train No. 99.

The practice of running on approach signal indications without taking immediate action to reduce speed at the caution signal has been discussed at length in many previous reports issued by this Bureau and there is nothing new to be said at this time.

#### Conclusion

This accident was caused by failure properly to observe and obey signal indications and failure properly to protect the rear of a standing train.

Respectfully submitted,

W. J. PATTERSON,  
Director.