

# INTERSTATE COMMERCE COMMISSION

## REPORT OF THE CHIEF OF THE BUREAU OF SAFETY COVERING INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE BALTIMORE & OHIO RAILROAD NEAR WOLF LAKE YARD OFFICE, SOUTH CHICAGO, ILL., ON JUNE 14, 1920

JULY 20, 1920

*To the Commission*

On June 14, 1920, there was a head-end collision between a passenger train and a freight train of the Pere Marquette Railway on the line of the Baltimore & Ohio Railroad, near Wolf Lake Yard Office, approximately 2 miles east of South Chicago depot, resulting in the death of 1 Pere Marquette employee, and the injury of 4 passengers, 4 Marquette employees, and 3 other persons. After investigation of this accident, which investigation was participated in by the Public Utilities Commission of Illinois, I respectfully submit the following report:

This accident occurred on the West Subdivision—Chicago Division—of the Baltimore & Ohio Railroad. Pere Marquette trains are operated over the Baltimore & Ohio tracks from Pine Junction to Rock Island Junction, 9.7 and 0.2 miles, respectively, east of South Chicago depot. This is a double-track line, and trains are operated by time-table, train orders, and an automatic block-signal system. Train-order offices are located at Pine Junction and at Whiting, 5.2 miles west of Pine Junction, Whiting being the last train-order office east of the point of accident. An operator is located at Wolf Lake Yard Office, 2.6 miles west of Whiting, but there is no train-order signal at that point. Rock Island Junction is 1.7 miles west of Wolf Lake Yard Office.

The signals on this line are of the three-position upper-quadrant, semaphore type, a train receiving the stop indication of an automatic block-signal is required to come to a stop and is then permitted to proceed under caution.

Approaching the scene of the accident from the east beginning at Whiting tower, there is a tangent 5,700 feet long, followed by a 50-foot curve toward the right or north 900 feet in length, a tangent 5,400 feet long, and a curve to the left or south of 1° for approximately 1,000 feet, the track is then tangent extending to Rock Island Junction. The accident occurred on tangent track 200 feet west of the west end of the 1° curve and about 700 feet west of Wolf Lake Yard Office. The grade is slightly ascending for westbound trains. The track from Whiting westward is all within the yard limits,

the view was obscured on account of the curve and by a line of poles on the inside of the curve. The accompanying diagram shows the relative location of the tracks and stations in the vicinity of the point of accident. The weather was cloudy.

The trains involved in this accident were Pere Marquette east bound freight train extra 1005 and westbound passenger train No 10, which is shown in the Baltimore & Ohio time-table and operated over the Baltimore & Ohio tracks as train No 61. This train, known as the "Resort Special," was making its second trip of the season, the first trip having been made on June 10. It was en route from Grand Rapids, Mich., to Chicago. Extra 1005 consisted of engine 1005 and 59 cars, with Conductor Franzler and Engineman Lindsay in charge. Train No 61 consisted of engine 725, 1 steel-under frame baggage car, 1 wooden coach, 1 wooden club car, and 4 steel-under-frame sleeping cars in the order named, with Conductor Batema and Engineman Bekkering in charge.

On the morning of June 14 the westbound main track was blocked by extra 4316 on account of a pulled-out drawbar, between Whiting and Wolf Lake Yard Office, to avoid delay, westbound passenger trains Nos 51 and 15 were diverted to the eastbound track at Whiting and operated over that track against the current of traffic to Calumet River Bridge, just east of Rock Island Junction, where they were crossed back to the westbound track. These trains passed Rock Island Junction at 6 58 and 7 08 a m., respectively. In the meantime the disabled car in extra 4316 had been set out and that train proceeded westward, followed by Pere Marquette extra 910, this train having passed Wolf Lake Yard Office on the westbound main track at about the time Baltimore & Ohio train No 15 passed on the eastbound track. Shortly after train No 15 had passed Rock Island Junction, Pere Marquette freight train extra 1005, which had been held at that point since about 6 58 a m., was permitted to proceed. In the meantime, however, the dispatcher, who understood that the westbound main track was still blocked and eastbound trains were being held at Rock Island Junction, had sent a message to the crew of Pere Marquette train No 61 at Pine Junction directing that train to cross over at Whiting and use the eastbound main track to Calumet River Bridge. This train proceeded westward from Whiting at 7 15 a m. and the accident occurred at about 7 24 a m. The speed of train No 61 at the time of the accident was variously estimated at from 20 to 35 miles an hour, while extra 1005 was running at about 10 miles an hour.

In addition to the engineman and fireman, the conductor and head brakeman were riding on the engine of extra 1005. The block signal at One hundredth Street was in clear position for this train but the signal near Wolf Lake Yard Office was in the stop position, and on

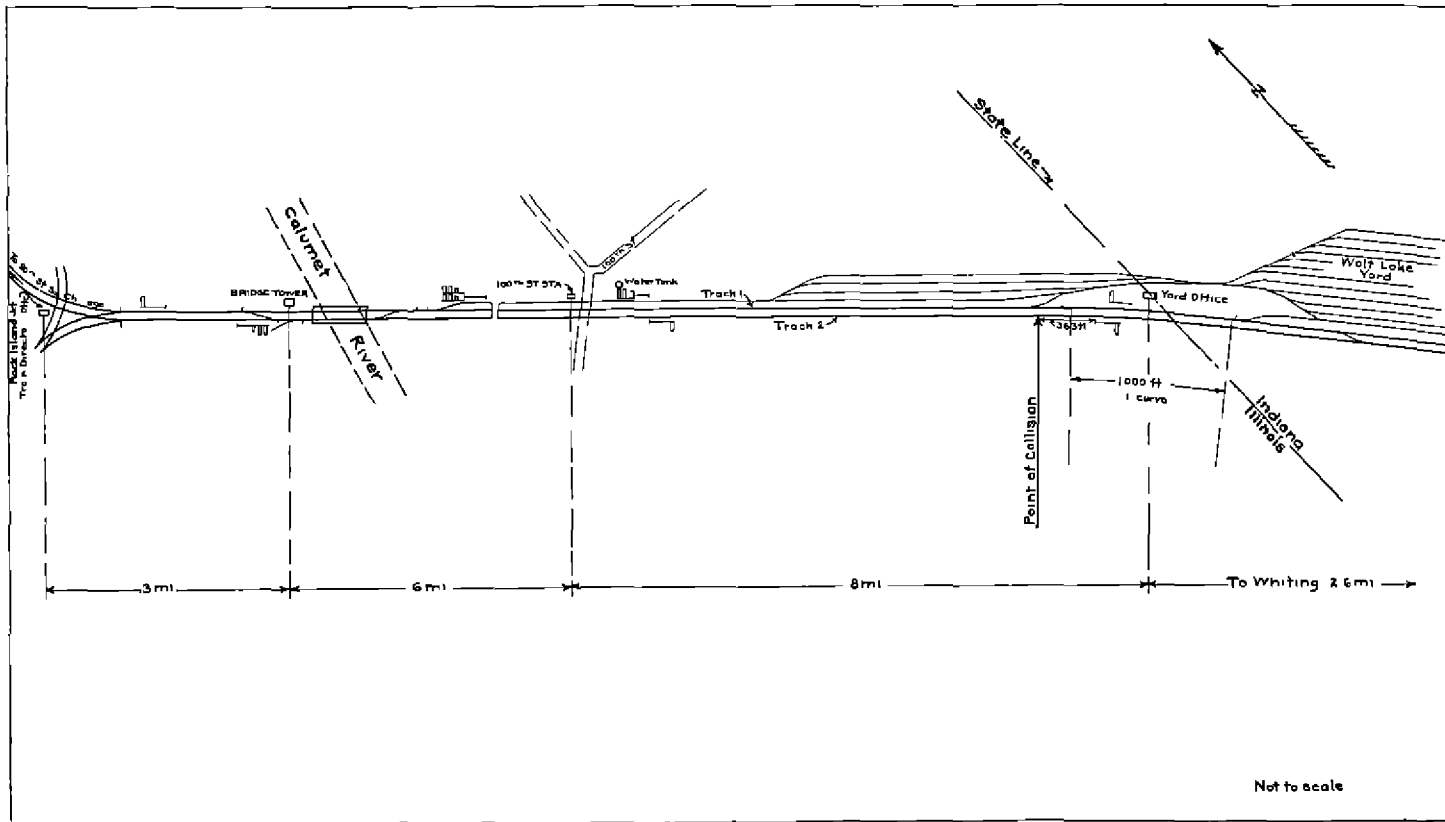


FIG 1—Diagram showing track layout in vicinity of point of accident.

approaching this signal the engineman applied the brakes. The employees on the engine saw the passenger train approaching but did not know that it was on the eastbound track until it came around the curve and was only a short distance away. The engineman then applied the brakes in emergency, and all of them jumped off the engine before the trains collided. The point of accident was 363 feet west of the block signal.

As train No. 61 was approaching the end of the curve near Wolf Lake Yard Office, the fireman saw extra 1005 when it was 25 or 30 car-lengths distant, he called a warning to the engineman and then jumped off. The engineman applied the brakes in emergency, went over to the fireman's side and saw the freight train ahead, then tried to reverse the engine but was unable to do so, and jumped off when the two trains were only a few car-lengths apart. Except that the brake on one sleeping car was cut out, the brakes on this train were in good condition and the engineman thought if the opposing train had been stopped when he first saw it he could have stopped his train in time to avoid the accident.

As a result of the impact the engines were locked together, the front end of the smoke box on the passenger engine was driven into the smoke box of the freight engine and the frames and cylinders were broken. The engines remained upright, with the pony trucks of both engines under engine 725. The accompanying illustration shows the position of the two engines after the accident. The tender of engine 725 was pushed its full length into the baggage car behind it the opposite end of this car telescoping the first coach about half its length, tearing the roof and one side entirely off for this distance. The four sleeping cars and the club car were not derailed or damaged. The tender of engine 1005 was pushed into the box car behind it the sixth, seventh, seventeenth, eighteenth, nineteenth, twentieth, and twenty-first cars were badly damaged or destroyed. Four rails were damaged, each having a short bend downward evidently caused by the impact or by the engines rearing up and dropping back. Conductor Batema of train No. 61 was killed.

Baltimore & Ohio Railroad rule 93 provides in part as follows:

On double track, within yard limits, when necessary to make movements against the current of traffic, engines or trains will secure written instructions from the employee authorized by special instructions before doing so, and will, while using the same, proceed with caution.

When Dispatcher Hontz was informed the westbound main track was blocked by extra 4316 due to a drawbar having been pulled out he sent a message to Operator Carter at Wolf Lake Yard Office, addressed to Terminal Train Master Huggins, as follows:

GARRETT, 6/14/20

R R H

4316 at Wolf Lake on westbound main with drawbar out and P M 51 behind him. Arrange to handle 51 get by 4316.

(Signed)

H S C, 6 22 a m

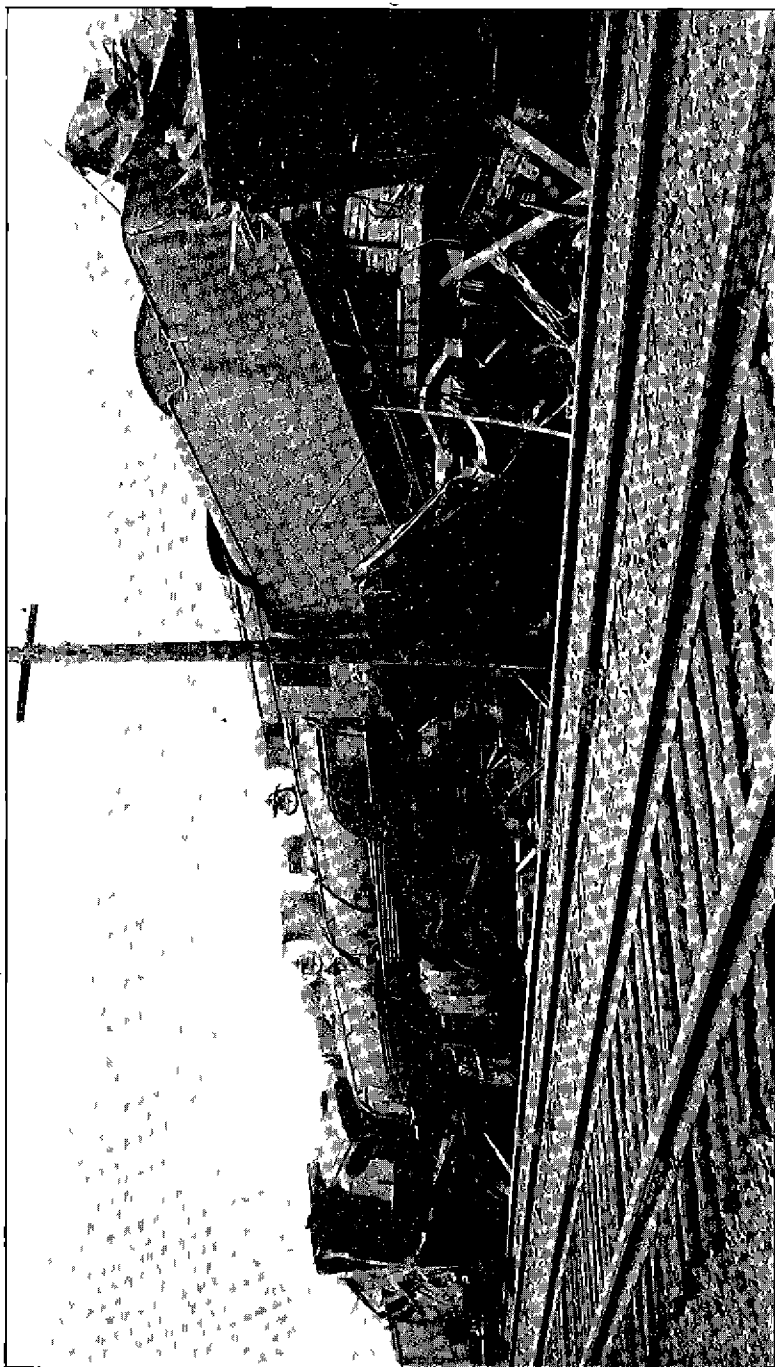


FIG. 2—View of engines and tenders at point of accident

Upon receipt of this message Operator Carter advised the dispatcher that the night yardmaster had gone home, the day yardmaster had not arrived, and there was therefore no one at that office to handle it. Acting upon instructions from the dispatcher he then telephoned this message to Yardmaster Mann at Ninetieth Street. Yardmaster Mann immediately started to make arrangements to detour Pere Marquette train No 51 on the eastbound track from Whiting to Rock Island Junction. When he called Whiting tower train No 51, which had been flagged by the preceding train, was already backing up toward the tower.

In the meantime Baltimore & Ohio Yard Clerk Berg arrived at Wolf Lake Yard Office at 6:30 a. m., learned that the westbound main track was blocked by extra 4316 with a drawbar out, and arranged with Whiting and Rock Island Junction to detour train No 51 over the eastbound main track. He stated Yardmaster Mann was on the telephone at that time, overheard the conversation, and said he would notify the operator at Rock Island Junction to hold everything until trains Nos 51 and 15 passed. Yard Clerk Berg then notified Whiting that train No 51 could come. After train No 51 passed, the dispatcher asked Operator Carter to find out how trains Nos 15 and 61 were going to be handled and Operator Carter, who had overheard Yard Clerk Berg's part of the conversation over the telephone, reported to the dispatcher "All set to run wrong main between Whiting and Rock Island Junction." The dispatcher then asked if there were any switching engines or trains on the main tracks between Pine Junction and Whiting. Yard Clerk Berg referred this inquiry to Yardmaster Mann and, upon learning that there were no engines or trains on that track, Operator Carter reported to the dispatcher "All set to run wrong main Pine to Rock Island Junction." The dispatcher understood this referred to Baltimore & Ohio train No 15 and Pere Marquette train No 61 and he then sent messages to those trains at Whiting and Pine Junction, respectively, as follows:

Back over at Whiting and use No 2 track to Calumet River Bridge

(Sd) L N H 7 K AM

Yard Clerk Berg assumed it was the dispatcher's purpose to cross train No 15 over at Pine Junction, as the movement could be handled more promptly at that point than at Whiting. He then notified Calumet River Bridge that train No 15 would use the eastbound track from Pine Junction to Rock Island Junction and to hold all trains until train No 15 arrived. He thought train No 15 passed Wolf Lake Yard Office at about 7 a. m. and extra 4316 on the westbound track passed at about the same time. At about 7:05 a. m. Rock Island Junction called up, stating that an eastbound Pere Marquette freight train was waiting at that point and wanted to know how

train No 61 was going to run Yard Clerk Berg advised Rock Island Junction that the westbound main track was clear and that train No 61 would run over that track He said he did not issue specific directions to Rock Island Junction to allow extra 1005 to proceed, but he assumed that train would proceed, as there was no longer any need of detouring trains, the westbound main track being clear He said he had no information regarding orders or instructions issued by the dispatcher to train crews to run over the eastbound main track from Pine Junction or Whiting to Rock Island Junction, except that he heard the operator say he overheard a message to Pine Junction for train No 15 to run over the eastbound main track to Rock Island Junction He did not know the time of train No 61, as it was a new train, but assumed that it would run over the westbound main track unless a detour was arranged by Wolf Lake Yard Office with Whiting tower

Operator Trowe at Whiting reported to the dispatcher when he heard train No 15 coming, and the dispatcher gave him a message for train No 15 to run on track 2 from Whiting to Calumet River Bridge Train No 15 arrived at 6 55 a m, crossed over and departed on track 2 at 7 a m He then reported train No 61 coming, and the dispatcher instructed him to cross it over, saying that instructions for that train had been issued at Pine Junction Train No 61 crossed over at 7 12 a m and departed at 7 15 a m

Leverman Hanert at Calumet River Bridge, at about the time train No 15 was passing, heard Wolf Lake Yard Office and Rock Island Junction talking over the telephone He did not know who it was at Wolf Lake Yard Office, but instructions were issued to allow the eastbound freight train to proceed after train No 15 cleared, and train No 61 would run on the westbound main track Train Director Hammer at Rock Island Junction then repeated these instructions to him, and he gave extra 1005 a signal to proceed He said extra 4316 followed train No 15 into South Chicago, and the westbound main track was clear when extra 1005 proceeded eastward

Dispatcher Hontz did not notify Trainmaster Huggins or the yardmaster at Wolf Lake Yard Office that he had issued the message to train No 61 to run on track 2 He considered that after receiving the information conveyed to him by the Wolf Lake Yard Office operator the movement could be made safely The dispatcher stated, however "He did not say 15 or 61, but he said 'them'" He did not make messages of the transactions with the Wolf Lake Yard Office operator for the reason that it was not customary to write down conversations When asked as to the custom of handling detour movements within yard limits the dispatcher said that such movements were handled under instructions from the yardmaster and that his purpose in issuing the messages to trains Nos 15 and 61 to cross over and use track 2 was to facilitate the movement

Yard Clerk Beig had been employed at Wolf Lake Yard Office for about 14 years, it has always been the practice during that time for the yardmaster to arrange detours between Whiting and Rock Island Junction. Several times previously he has made arrangements for detour movements similar to those arranged for on the morning of this accident and in the absence of the yardmaster from the office it has been the custom for the clerk to act in his place. He said he had never been authorized by the terminal trainmaster or the yardmaster to do this, but he handled the trains as he thought the yardmaster would do. He was fully aware of the responsibility involved in arranging for a detour and realized that it was necessary to have both ends protected before allowing a detour to be made. When the eastbound extra at Rock Island Junction was released he knew there were two other westbound passenger trains due shortly, but he did not know how they were running and did not make any effort to ascertain their location, assuming that no further detours would be made without consulting the yardmaster or trainmaster. He later admitted, however, that in releasing extra 1005 he practically overlooked train No 61. He had received no report regarding train No 61 and did not know the exact time it was due. He had never known of any case where the dispatcher issued an order or instructions to trains in a detour movement from Whiting to Rock Island Junction, the dispatcher always requiring that such movements be handled by the trainmaster or yardmaster.

Operator Carter had no conversation with the first-trick operator who relieved him, made no transfer either oral or written, and did not convey to the first-trick operator any information as to what arrangements had been made for detouring trains Nos 15 and 61. He thought that if a transfer had been made it was possible the first-trick operator might have taken steps to prevent the accident, but he said that it had not been customary for any of the operators at Wolf Lake Yard Office to make a transfer during the three months he had been there. He had gone off duty before trains Nos 15 and 61 passed.

Operator Trowe stated that detours in this territory are usually arranged by the trainmaster upon request of the dispatcher, and instructions are received from the yardmaster at Wolf Lake Yard Office, in this case, however, he received no instructions from Wolf Lake Yard Office and he carried out orders of the dispatcher. He did not communicate with Wolf Lake Yard Office, as it is not customary to report trains coming to them unless they request that information. He did not have any telephone conversation with Calumet River Bridge on Rock Island Junction prior to the accident, and he did not overhear any telephone conversation relative to the detour movement. He knew of no special instructions having been issued.



relative to detours, yard engines are sometimes detoured without communicating with the dispatcher

Assistant General Yardmaster Mann, who was on duty at Ninetieth Street, stated that he made no arrangements for detouring train No 61 and did not have any intention of detouring that train at that time. He did not know that he was talking with Yard Clerk Berg over the telephone while arranging the detours for trains Nos 51 and 15, but thought he was talking with the operator at Wolf Lake Yard Office. He was on duty until about 7 10 or 7 15 a m, and at about 7 a m he learned from Wolf Lake Yard Office that extra 4316 was moving. He did not notify anybody that the westbound main track was clear and did not make arrangements with Rock Island Junction to release the eastbound Pere Marquette train held there. After he received information that trains were moving on the westbound track and he saw extra 4316 coming in over Ninety-first Street he went home.

Yardmaster Kernan, on duty at Wolf Lake Yard Office, stated that his hours on duty were from 7 a m to 7 p m. On the day of the accident he did not come on duty until about 7 10 a m and knew nothing of train No 61 being detoured on track 2 against the current of traffic until he saw it going by his office on that track. He had not been instructed as to who was authorized to arrange a detour, but supposed that the yardmaster or trainmaster would have that authority. He had made necessary arrangements for such movements, and he thought this had also been done in his absence by his clerk, he had never taken exception to anyone other than himself arranging for detour movements in his district during his absence, although he had not specifically authorized anyone to make such arrangements. On account of eastern time being adopted in Chicago, he and Night Yardmaster Zeller had made a tentative arrangement to relieve one another on city time instead of standard time, but he did not understand that this arrangement was to go into effect until after the terminal trainmaster had been consulted, and therefore he did not come on duty until the regular time on the morning of this accident. Night Yardmaster Zeller, however, understood that he would be relieved at 6 o'clock standard time instead of 7 o'clock on the morning of the accident and left Wolf Lake Yard Office before Day Yardmaster Kernan arrived.

Night Yardmaster Zeller stated that the yardmaster alone is authorized to arrange for detours, and he had no knowledge of any other person at Wolf Lake Yard Office having made arrangements for such movements. He stated that in the absence of the yardmaster it would be necessary to wait until he could be communicated with before making arrangements for a movement of that character. The necessity for detouring trains arose after he had gone home and

he had no knowledge relative to arrangements made for these detours.

General Yardmaster McNellis, located at Ninetieth Street, stated that he had never received any instructions as to the manner of handling detoured trains, but believed that he was authorized to make arrangement for such movements. He stated that no one other than the yardmaster was authorized to arrange for a detour, and in the absence of the yardmaster it would be necessary for the clerk to find him.

Terminal Trainmaster Huggins said that so far as he knew no special instructions regarding the method of detouring trains within yard limits preferred to in rule 93 had been issued, but it had been a practice of long standing for the local yardmaster in charge of the territory in which such operations were made to arrange detours of trains, and that in practice this was done at the request of the dispatcher. Yardmasters had no authority to delegate this duty to clerks or other employees, but he was aware yardmasters frequently were assisted by clerks in making the necessary arrangements, the yardmasters assuming all responsibility for the detour. He stated that necessary instructions are issued over the telephone by the yardmaster, and it is not the practice to issue written instructions to the crews of the trains being detoured as required by rule 93. He had never had any occasion to instruct yardmasters under his jurisdiction or question them in regard to detouring trains within this territory. In the absence of the yardmaster at Wolf Lake Yard Office the assistant general yardmaster at South Chicago at night, or the general yardmaster at South Chicago in daytime, would be required to make arrangements for detouring trains in this territory.

This accident was caused by Dispatcher Hontz directing that a train be diverted to another track and operated against the current of traffic without ascertaining positively or taking measures to insure that opposing trains were being held to protect this movement, and by Yard Clerk Berg permitting opposing trains to proceed without first ascertaining definitely that other trains were not being diverted and operated against the current of traffic.

While Dispatcher Hontz's error resulted from his endeavor to facilitate the movement of trains Nos. 15 and 61, he was not justified in basing any action affecting the movement of trains upon the statements made to him by Operator Carter which did not specify any trains by number. In view of the fact that under rule 93 it was the practice for the yardmaster to direct and make necessary arrangements for detouring trains in this territory, with which practice the dispatcher was thoroughly familiar, Dispatcher Hontz should not have issued any instructions to trains Nos. 15 and 61 except upon request of the yardmaster and upon receipt of a message signed by him specifying the measures taken to insure protection for the movement.

Yard Clerk Berg assumed the authority of the yardmaster, his superior, who was absent from Wolf Lake Yard Office, and took it upon himself to make arrangements for detouring trains Nos 51 and 15 without instructions, notwithstanding that he soon learned Yardmaster Mann at Ninetieth Street was also engaged in making arrangements to the same end. The investigation developed that Yard Clerk Berg had performed similar duties upon previous occasions with the knowledge of and without criticism by the yardmaster in charge of Wolf Lake Yard Office. Yard Clerk Berg was at fault in this case for the reason that after the passage of train No 15 he permitted the eastbound train being held at Rock Island Junction to proceed without first ascertaining positively that other trains were not being diverted and operated on track 2 against the current of traffic. Had he taken the precaution to communicate with the dispatcher or the operator at Whiting before releasing the train at Rock Island Junction the accident could have been averted.

Operator Carter, at Wolf Lake Yard Office, was at fault for giving the dispatcher information regarding arrangements which had been made to protect trains being operated against the current of traffic, concerning which arrangements he himself had very incomplete knowledge, obtained by overhearing Yard Clerk Berg's portion of a conversation over the telephone, also for his failure to make a transfer as required by the rules or inform the operator relieving him of the arrangements which had been made for diverting trains Nos 15 and 61 to track 2. He was the only employee at Wolf Lake Yard Office who was aware of these arrangements, and had he conveyed this information to the relieving operator or to Yard Clerk Berg it is probable that the accident would have been averted.

Night Yardmaster Zeller was at fault for going off duty before the day yardmaster arrived, leaving Wolf Lake Yard Office without anyone in authority for nearly an hour. Had he remained on duty he would have been in position himself to make necessary arrangements for detouring trains in this instance, and the misunderstanding which led to this accident might not have occurred.

Day Yardmaster Kernan is also subject to criticism for the reason that he was aware his clerk had on previous occasions made arrangements for detouring trains without consulting him and without having any instructions in the matter.

Assistant General Yardmaster Mann is also subject to criticism for the reason that when called upon to make arrangements for detouring trains in this instance he did not assume full charge in the matter, and when he learned that arrangements were also being made from Wolf Lake Yard Office he did not ascertain definitely who was making such arrangements and that there was no yardmaster on duty at that point. He apparently left arrangements to be com-

pleted by Wolf Lake Yard Office without ascertaining who was on duty at that point, as notwithstanding the fact that he had arranged to hold eastbound trains at Rock Island Junction, he did not release those trains before going off duty when he had been informed the westbound main track was clear.

The paragraph of rule 93 of the Baltimore & Ohio Railroad, previously quoted, which relates to movements of this character, contemplates that special instructions relative to detours shall be issued covering each location and requires that written instructions from the employee authorized by such special instructions to arrange detours will be issued to engines or trains being detoured. The investigation disclosed that no such special instructions had been issued by the Baltimore & Ohio Railroad, and the method of handling detours followed in this case was in accordance with a practice which had grown up in service and which was of long standing. In addition to the unwarranted assumption of authority by Yard Clerk Berg and the error on the part of the dispatcher in issuing an order directing the movement of a train over a track which was directly under the jurisdiction of the yardmaster, the fact that the night forces were being relieved by day employees just at this time, orders relative to detour movements were being issued from three different points, and the lack of proper transfers and understanding between men who were going off duty and the employees relieving them, contributed to this accident. The investigation disclosed extremely lax operating practices which rendered this accident possible and which proper supervision should have disclosed. Notwithstanding these practices, had proper precaution been exercised in the arrangements for detouring train No. 61 several of the employees involved were in position to have detected the error in time to have prevented the accident.

Dispatcher Hontz entered the service of the Baltimore & Ohio Railroad as an operator in 1907 and was promoted to extra train dispatcher in 1914. He had served in that capacity for approximately 3 years. Yard Clerk Berg entered the service of the Baltimore & Ohio Railroad as a messenger in 1906, and had served as yard clerk and utility clerk since 1908, having been located at Wolf Lake Yard Office since 1913. Operator Carter was employed on March 18, 1920, having had about 25 years' experience as a telegraph operator. Yardmasters Zeller, Keenan, and Mann were men of long experience and were thoroughly familiar with operating practices in the locality where this accident occurred. None of the employees involved was on duty contrary to the provisions of the hours of service law.

Respectfully submitted

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*Chief, Bureau of Safety*