

RAILROAD ACCIDENT INVESTIGATION

Report No 3897

CHICAGO, BURLINGTON AND QUINCY RAILROAD COMPANY

NODAWAY, MO

AUGUST 22, 1960

INTERSTATE COMMERCE COMMISSION

Washington

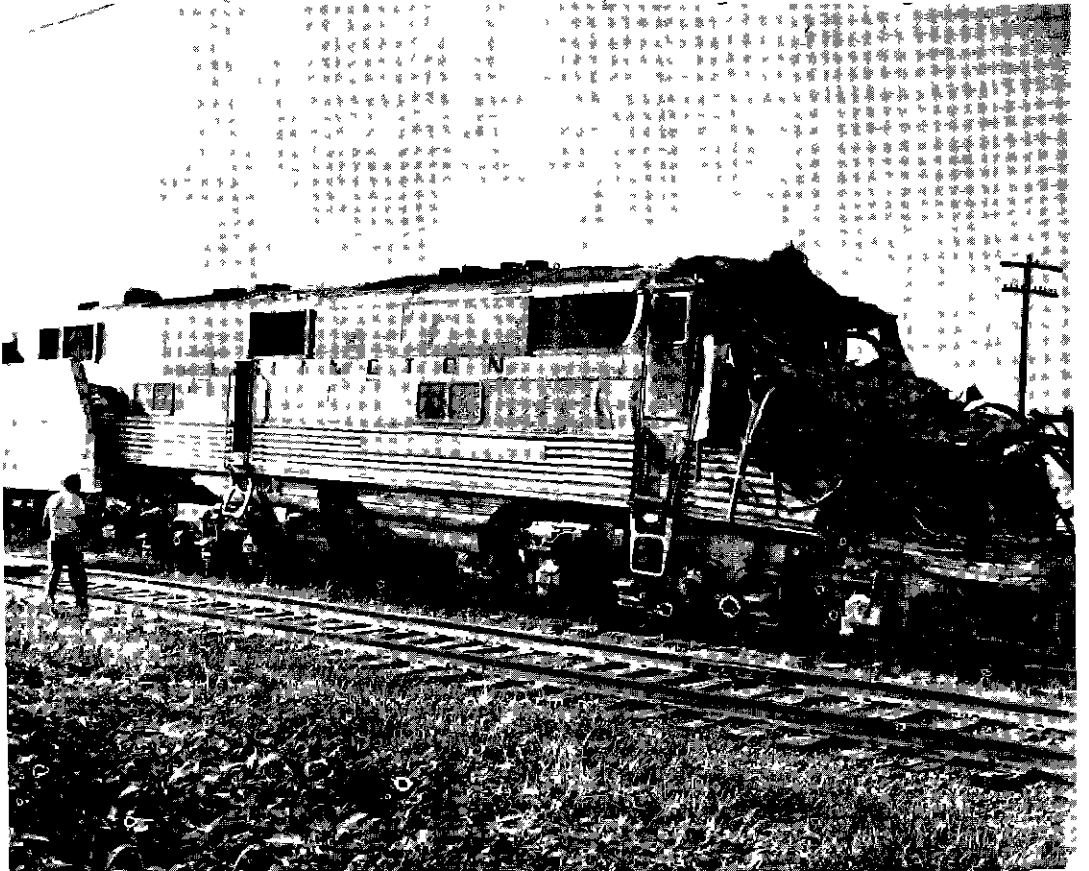
SUMMARY

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DATE	August 22, 1960	
RAILROAD	Chicago, Burlington and Quincy	
LOCATION	Nodaway, Mo.	
KIND OF ACCIDENT	Head-end collision	
TRAINS INVOLVED	Freight	Passenger
TRAIN NUMBERS	70	23
LOCOMOTIVE NUMBERS	Diesel-electric units 125A, 125B	Diesel-electric unit 9914B
CONSISTS	31 cars, caboose	14 cars
SPEEDS	Undetermined	Standing
OPERATION	Signal indications	
TRACK	Single, tangent, 0.05 percent descending grade southward	
WEATHER	Clear	
TIME	1:59 a. m.	
CASUALTIES	12 injured	
CAUSE	Failure to line a proper route for opposing trains at a meeting point, and failure to control properly the speed of the freight train	
RECOMMENDATION	That the carrier take the necessary action to enforce its rules and instructions requiring trains on sidings to proceed at Reduced Speed prepared to stop short of another train or obstruction, or anything that may require the speed of a train to be reduced	



First diesel electric unit of No. 70 shown at right of picture. Torn-off control compartment of this unit is on ground at the left, after having been removed by wrecking operations from top of front end of the locomotive of No. 23. Second unit of the locomotive of No. 70 is shown beyond the torn-off control compartment.



Locomotive of No. 23

INTERSTATE COMMERCE COMMISSION

REPORT NO 3897

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER
THE ACCIDENT REPORTS ACT OF MAY 6, 1910

CHICAGO, BURLINGTON AND QUINCY RAILROAD COMPANY

January 25, 1961

Accident at Nodaway, Mo , on August 22, 1960, caused by failure to line a proper route for opposing trains at a meeting point, and failure to control properly the speed of the freight train

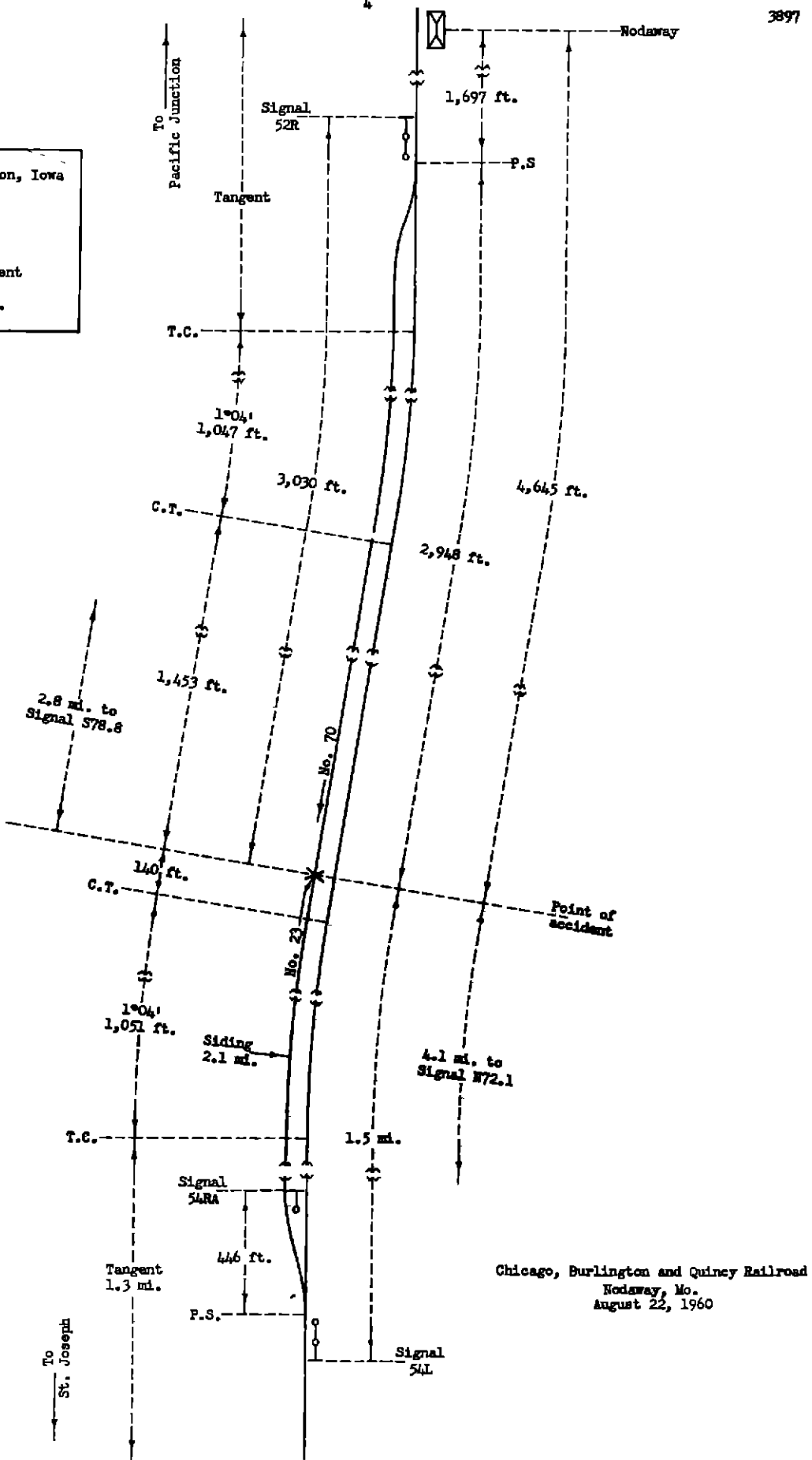
REPORT OF THE COMMISSION¹

WINCHELL, Commissioner

On August 22, 1960 there was a head-end collision between a freight train and a passenger train on the Chicago, Burlington and Quincy Railroad, which resulted in the injury of 2 passengers, 3 railway mail clerks and 7 train-service employees

¹Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Winchell for consideration and disposition

- Pacific Junction, Iowa
76.8 mi.
- Napier, Mo.
20.4 mi.
- Nodaway
0.9 mi.
- ✕ Point of accident
15.7 mi.
- St. Joseph, Mo.



Chicago, Burlington and Quincy Railroad
Nodaway, Mo.
August 22, 1960

Location of Accident and Method of Operation

This accident occurred on that part of the Ottumwa Division extending between St Joseph, Mo , and Pacific Junction, Iowa, 113.8 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by signal indications of a traffic-control system. At Nodaway, Mo , 15.6 miles north of St Joseph, a siding 2.1 miles in length parallels the main track on the west. The north switch of this siding is located 1,697 feet south of the station.

The accident occurred on the siding at Nodaway, at a point 4,645 feet south of the station and 2,948 feet south of the north siding-switch. From the north on the main track there are, in succession, a tangent of considerable length, a 1°04' curve to the right 1,047 feet, and a tangent 1,453 feet to the point of accident and 140 feet southward. From the south on the main track there are, successively, a tangent 1.3 miles in length, a 1°04' curve to the right 1,051 feet, and the tangent on which the accident occurred. The grade for southbound trains at the point of accident is 0.05 per cent descending.

The switches of the siding at Nodaway are power-operated and are controlled from a traffic control machine located at St Joseph and operated by an operator under the jurisdiction of the train dispatcher at Ottumwa, Iowa.

Automatic signal S78.8 and controlled signal 52R, governing southbound movements, are located 2.8 miles and 3,030 feet north of the point of accident, respectively. Automatic signal N72.1 and controlled signal 54L, governing northbound movements, are located 4.1 miles and 1.5 miles south of the point of accident, respectively. These signals are of the color-light type and are continuously lighted. The aspects applicable to this investigation, and the corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
52R 54L	Red-over-yellow with spacing of 7'9" between units	Proceed at Reduced Speed to make any Reduced Speed movement * * *	Restricting
N72.1 S78.8	Yellow	Approach next signal prepared to stop	Approach

These signals form part of a traffic-control system, which extends between St Joseph and Napier, Mo , 37 miles north of St Joseph, and is controlled from the traffic-control machine at St Joseph. The controlling circuits are so arranged that when the route is established for a northbound movement to enter the Nodaway siding at the south switch, signal N72.1 displays an Approach aspect, and signal 54L displays a Restricting aspect. When the route is established for a southbound movement to enter the siding at the north switch, signal S78.8 displays an Approach aspect, and signal 52R displays a Restricting aspect. No track circuits are provided on the siding between the clearance point at the north end of the siding and the clearance point at the south end, consequently, routes may be established for opposing movements on the siding. In the event that such routes are established, signals 52R and 54L may simultaneously display Restricting aspects and signals N72.1 and S78.8 may simultaneously display Approach aspects, regardless of occupancy of the siding between the clearance points.

Controlled signal 54RA, governing southbound movements on the main track, is located 446 feet north of the south siding-switch.

The traffic-control machine is equipped with a track diagram. Route and time locking are provided. Indicator lights on the panel of the machine indicate track occupancy, whether each controlled signal is displaying a Stop aspect or an aspect less restrictive than Stop, and the position of each power-operated switch and whether the switch is locked. Graph equipment is provided to record movements of trains and the times when a controlled signal displays a Stop aspect or an aspect less restrictive than Stop. The signal levers and the switch levers are of the 3-position and the 2-position type, respectively. A set of three indicator lights, consisting of one red light with a green light on each side, is associated with each signal lever. A set of two indicator lights, consisting of a white light and a red light, is associated with each switch lever. A pushbutton is associated with each set of signal and switch levers and when depressed it initiates a code (electrical impulse) to actuate the signal and the switch in accordance with the position of the respective signal and switch levers. An amber light is located above each switch lever and when illuminated it indicates that the switch is locked, either because a signal is clear, the track section in the immediate vicinity of a controlled signal and switch is occupied, or that a time relay set for 6 minutes 30 seconds is operating. The normal position of a signal lever is that position which causes the corresponding controlled signal to display a Stop aspect. When signal 52R is displaying such aspect, the red indicator light associated with the signal lever is illuminated. When this signal is displaying an aspect less restrictive than Stop, the green indicator light on the right side of the set of indicator lights associated with the signal lever is illuminated. The normal position for a switch lever is that position which causes the corresponding controlled switch to be lined and locked in normal position for movement on the main track. When the switch is so lined and locked, the white indicator light associated with the switch lever is illuminated. In the event it is desired to establish a route for a southbound train to enter the Nodaway siding at the north switch, the lever controlling the north switch of the siding must be moved to reverse position, and the lever controlling signal 52R must be moved to "right" position, after which the pushbutton associated with these levers must be depressed to actuate the code which causes the switch to move to reverse position and the signal to display a Restricting aspect. If the code received from the field station associated with the switch and the signal indicates that the north switch of the siding is lined and locked in reverse position, the white indicator light associated with the switch lever is extinguished and the red indicator light for that lever is illuminated. If the responding code also indicates that signal 52R is displaying a Restricting aspect, the green indicator light on the right side of the set of indicator lights associated with the signal lever is illuminated and the red indicator light is extinguished. In the event it is desired to establish a route for a southbound train to proceed southward on the main track beyond signal 52R, the lever controlling the north switch of the siding must be placed in normal position, and the lever controlling signal 52R must be moved to "right" position. The pushbutton associated with these levers must then be depressed to actuate the code. If the responding code from the field station indicates that the north switch of the siding is lined and locked in normal position for movements on the main track and signal 52R is displaying an aspect less restrictive than Stop, the white indicator light for the switch lever is illuminated, and the green light on the right side of the set of indicator lights associated with the signal lever is illuminated.

The operating rules of this carrier read in part as follows:

Restricted Speed -Proceed prepared to stop short of train, obstruction, or switch not properly lined and to look out for broken rail

Reduced Speed -Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced

S-17(b) When trains meet within Centralized Traffic Control limits, and it is not necessary to stop for opposing train, headlight will be dimmed instead of extinguished when on siding * * *

105 Trains using a siding must proceed at Reduced Speed

530 Controlled sidings are not protected by signals between clearance points. Trains must move at Restricted Speed not exceeding speed authorized by timetable through turnouts and on sidings

544 The normal position of all field signal apparatus, under the control of train dispatcher or operator, is normal position for switches and the most restrictive indication for signals

546 Switches must not be left reversed or signals displaying other than Stop indication when not cleared for the immediate movement of a train or engine

553 When more than one train in the same direction is put on a controlled siding, the following train or trains must be stopped at Stop signal nearest the siding and notified by train dispatcher or operator of the situation, where two opposing trains are put on a controlled siding, both trains must be stopped at Stop signals nearest the siding and notified of the situation

The maximum authorized speed for all trains moving through the turnouts of the siding at Nodaway is 30 miles per hour, and all trains moving on the siding are required to be operated at Reduced Speed

Description of Accident

No 70, a southbound second-class freight train, consisted of diesel-electric units 125A and 125B, coupled in multiple-unit control, 31 cars and a caboose. This train departed from Pacific Junction at 11 40 p m, 1 hour 55 minutes late, passed Napier, Mo, the last open office, 20 4 miles north of Nodaway, at 1 30 a m, 1 hour 28 minutes late, passed signal S78 8 which displayed an Approach aspect, passed signal 52R which displayed a Restricting aspect, entered the siding at Nodaway at the north switch, and about 1 59 a m, as indicated on the graph of the traffic control machine, while moving southward on the siding at an undetermined speed, it collided with the front end of No 23 at a point 4,645 feet south of the station at Nodaway and 2,948 feet south of the north siding-switch

No 23, a northbound first-class passenger train, consisted of diesel-electric unit 9914B, 2 baggage cars, 1 mail car, 1 baggage car, 1 coach, 7 sleeping cars, 1 flat car, and a caboose, in the order named. The 1st to the 13th cars, inclusive, were of all-steel construction, and the 14th car was of steel underframe construction. The 1st car was equipped with tightlock couplers. This train departed from St Joseph, the last open office, at 1 22 a m, 7 minutes late, passed signal N72 1 which displayed an Approach aspect, passed signal 54L which displayed a Restricting aspect, entered the siding at Nodaway at the south switch, and stopped on the siding at a point 2,948 feet south of the north siding-switch. Immediately thereafter, it was struck by No 70.

Both diesel-electric units of No 70 and the 1st to the 9th cars, inclusive, were derailed. The 1st unit stopped upside down on the east side of the main track and at right angles to the track structure (PLATE 1). The control compartment at the front end of the locomotive was torn loose from the underframe and stopped on top of the control compartment at the front of the locomotive of No 23. The 2nd unit stopped upright across the main track and the siding, and adjacent to the 1st unit. The derailed cars stopped in various positions on or near the structures of the main track and the siding. The 1st diesel-electric unit was destroyed and the 2nd unit was heavily damaged. Of the derailed cars, 4 were destroyed, 2 were somewhat damaged, 2 were slightly damaged, and 1 was undamaged.

No 23 was moved southward approximately 50 feet by the force of the impact. None of the equipment was derailed. The superstructure at the front end of the locomotive was crushed by the front end of No 70 throughout a distance of about 12 feet (PLATE 2). The front end of the 1st car

was telescoped throughout a distance of about 15 feet by the rear end of the locomotive. The locomotive and the 1st car were heavily damaged, the 2nd car was somewhat damaged, and the 3rd and the 5th cars were slightly damaged.

The engineer, fireman, and front brakeman of No. 70, and the engineer, fireman, front brakeman, and flagman of No. 23 were injured.

The weather was clear at the time of the accident, which occurred about 1:59 a. m.

The locomotive and the caboose of No. 70, and the office of the operator of the traffic-control machine, were provided with radio-telephone equipment.

The locomotive of No. 70 was provided with a speed recorder, however, this recorder was not equipped with tape.

Discussion

At 1:30 a. m. on the day of the accident the train dispatcher communicated by telephone with the operator of the traffic-control machine and instructed him to line the route for No. 70 to enter the siding at Nodaway and clear the main track there for a meet with No. 23. At 1:40 a. m. the train dispatcher again communicated with the operator and after being informed that No. 23 would probably reach Nodaway before No. 70, he asked the operator if the route had been established for No. 70 to enter the siding. The operator replied that he had not yet established this route. The train dispatcher then decided that No. 23, instead of No. 70, should enter the siding for the meet and he instructed the operator accordingly. The operator said that he fully understood the train dispatcher's change of instructions, and that he lined the route for No. 23 to enter the siding at the south switch and for No. 70 to proceed southward on the main track beyond the north siding-switch to signal 54RA. However, the route was established for No. 70 to enter the siding at the north switch, instead of continuing on the main track for the meet as intended.

As No. 70 was approaching the siding at Nodaway the enginemen and the front brakeman were in the control compartment at the front of the locomotive. The fireman, a qualified engineer, was at the controls. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of the train had been tested and had functioned properly when used en route. Both enginemen said that the speed of the train was approximately 50 miles per hour in approach to signal S788 which was displaying an Approach aspect, and that it was reduced in approach to signal 52R which was displaying a Restricting aspect. The engineer said that when he observed the Restricting aspect being displayed by signal 52R he anticipated that the route was lined for No. 70 to enter the siding at Nodaway, and that his train would clear the main track there for No. 23. He said that the train passed signal 52R and entered the north switch of the siding at a speed of about 25 miles per hour, and that after the locomotive had proceeded a distance of about 1,500 feet southward on the siding the flagman informed him by means of the radio-telephone that the train was clear of the main track. He said that the headlight was then dimmed, and that the speed was further reduced to about 18 - 20 miles per hour as the train proceeded southward on the tangent where the accident occurred. Both enginemen said they thought that the speed of the train at this time complied with the definition of "Reduced Speed" as defined in the operating rules, and that they thought the siding was unoccupied by any other movement since signal 52R had not displayed a Stop aspect and they had not been notified by the train dispatcher or the operator of the traffic control machine that another train was occupying the siding. As the train was approaching the curve located south of the point of accident both enginemen observed the headlight of No. 23 approaching from the south,

but because of the curvature of the tracks they could not immediately determine whether the approaching train was on the main track or the siding. When the front end of their train reached a point which they said was about 1,300 feet north of the point of accident, the engineers simultaneously realized that the opposing train was also occupying the siding and the fireman immediately initiated an emergency application of the brakes. Although both engineers said that the speed of their train was materially reduced by the emergency brake application before the accident occurred, it is apparent from the considerable damage caused by the accident that No. 70 was moving at a somewhat higher rate of speed than 20 miles per hour at the time of the collision. The conductor and the flagman were unaware of anything being wrong before the collision occurred.

As No. 23 was approaching the point where the accident occurred the engineers were in the control compartment at the front of the locomotive, the conductor and the front brakeman were in the coach, and the flagman was in the caboose. The headlight was lighted brightly. The brakes had been tested and had functioned properly when used en route. This train passed signal N72 L which was displaying an Approach aspect, passed signal 54L which was displaying a Restricting aspect, and entered the south turnout of the siding at Nodaway at a speed of approximately 25 miles per hour. Immediately after the train cleared the main track the engineer dimmed the headlight and reduced the speed to about 15 miles per hour. About this time both engineers observed the reflection of the headlight of a southbound train approaching the north end of the siding, and they thought the route would be lined for the opposing train to proceed southward on the main track beyond the north siding-switch. The engineer of No. 23 further reduced the speed of his train to about 5 miles per hour as it proceeded on the siding, in hope that the opposing train would proceed southward on the main track beyond the north siding-switch in sufficient time for the operator of the traffic control machine to line the route for No. 23 to proceed over the switch and reenter the main track without stopping. As No. 23 was closely approaching the point of accident, the engineers observed that the front end of the opposing train had passed the north switch of the siding but were unaware, because of the curvature of the tracks, that it had also entered the siding. The fireman said that when the opposing train was at a distance of about 150 feet, he realized then that it was occupying the siding instead of the main track and he called a warning to the engineer, who immediately initiated an emergency application of the brakes. Both engineers alighted from the locomotive before the collision occurred, and they said that their train had stopped immediately before being struck. The other members of the crew were unaware of anything being wrong until they felt the brakes of the train being applied in emergency.

About 1:30 a. m., after receiving the train dispatcher's first instructions concerning the meet for Nos. 70 and 23, the operator of the traffic control machine lined the route for No. 70 to proceed southward on the main track to signal 52R. He did not immediately establish the route for No. 70 to enter the siding at Nodaway, because he wished to avoid a delay in re-lining routes if the train dispatcher later decided to change the instructions concerning Nos. 70 and 23. He said that he did not operate the levers controlling signal 52R and the north siding-switch, and that these levers remained in normal position and the respective indicator lights indicated that signal 52R was displaying a Stop aspect and that the north siding-switch was lined and locked in normal position for movements on the main track. He said that if the train dispatcher had not changed the instructions he intended to establish the route for No. 70 to enter the siding when indicator lights on the machine indicated that this train was closely approaching Nodaway. About 1:40 a. m. the train dispatcher again communicated by telephone with the operator and after being informed that No. 23 would probably arrive at Nodaway before No. 70, he asked the operator if the route had been established for No. 70 to enter the siding. The operator said that before he replied to the train dispatcher he looked at the indicator lights associated with the levers controlling signal 52R and the north siding-switch, and that after observing these lights were indicating that signal 52R was displaying a Stop aspect and the north siding-switch was lined and locked in normal position for movement on

the main track, he informed the train dispatcher that the route had not yet been established for No 70 to enter the siding. He said that the train dispatcher then instructed him to line the route for No 23 to enter the siding and for No 70 to remain on the main track and proceed southward beyond the north siding-switch to signal 54RA. He said that after receiving this change of instructions he established the route for No 23 to enter the siding, and that he then moved the lever controlling signal 52R to "right" position and the indicator lights associated with this signal and the switch lever controlling the north siding-switch indicated that the route was established for No 70 to proceed on the main track beyond the switch. Although it is evident that the north siding-switch was lined in reverse position, which permitted No 70 to enter the siding, the operator said that he did not at any time move the lever controlling this switch to reverse position for movement of No 70 onto the siding. Shortly before the accident occurred the operator observed the amber light associated with the track section in the immediate vicinity of signal 54L and the south siding-switch become illuminated and then become extinguished, and this indicated to him that No 23 had moved over that track section, entered the siding, and cleared the south siding-switch. He said that he then returned the lever controlling the south siding-switch to normal position and caused signal 54RA to display a proceed aspect for a continuous movement of No 70 southward on the main track beyond both switches of the siding. About this time the operator observed the amber indicator light associated with the track section in the immediate vicinity of signal 52R and the north siding-switch become illuminated and then become extinguished, apparently as a result of No 70 occupying the track section in the immediate vicinity of signal 52R and the north siding-switch, entering the siding, and then clearing the track circuits of the traffic-control system. He said, however, this operation of the amber indicator light indicated to him that No 70 had moved over the track section in the immediate vicinity of signal 52R and was proceeding southward on the main track to signal 54RA. About the time the operator observed the amber indicator light become extinguished he overheard the flagman of No 70 reporting by radio-telephone to the engineer that the train was clear of the main track. He apparently did not realize the significance of this message, because he said that he made no attempt to use the radio telephone and warn the enginemn of No 70 of the opposing movements being made on the siding. He said that shortly after he heard this radio-telephone message, he observed that although the lever controlling the north siding-switch was in normal position for movements on the main track, the indicator light associated with this lever indicated that the switch was lined in reverse position. He said that he thought this occurred because No 70 had derailed at the switch or had damaged the switch in some manner, and that he made an unsuccessful attempt to communicate by radio-telephone with members of the crew of No 70 to ascertain what had occurred to cause the indicator light to indicate that the switch was in reverse position. The operator said that he then moved the lever controlling the north siding-switch to reverse position so that its position would coincide with the position of the switch as indicated by the indicator lights, and that he then depressed the pushbutton associated with this lever to actuate the code which would cause signal 52R again to display an aspect less restrictive than Stop. He said that he did not move these levers again prior to an examination of the traffic-control machine by a signal supervisor, however, the signal supervisor found that the switch lever had been moved to normal position after the accident occurred. The operator said that he was unaware that No 70 had entered the siding and collided with No 23 until some time after the accident occurred.

About one hour after the accident occurred a signal supervisor of the carrier arrived at the operator's office to examine the traffic-control machine, and he said the operator informed him that none of the signal or switch levers had been operated since the time of the accident. He said the examination disclosed that the lever controlling the north siding-switch was in normal position for movements on the main track, and that the set of indicator lights associated with this lever indicated that the switch was lined and locked in normal position. He said the examination also disclosed that the lever controlling signal 52R was in "right" position, and that the red indicator light associated with this lever was illuminated, evidently as a result of derailed equipment occupy-

ing the block of the signal. He said that the code wires were not broken in the accident, and that control of the north siding-switch was not impaired by the accident, indicating that the position of this switch could have been changed by operation of the corresponding switch lever after the accident occurred.

According to officials of the carrier, the traffic-control system was placed in operation in December, 1959, and has been operating properly since that time. After the accident occurred comprehensive tests disclosed that the portion of the traffic-control system involved, including the traffic-control machine, was operating properly.

Analysis of the graph of the traffic-control machine disclosed that at 1 45 a m a route was established for No. 23 to enter the south siding-switch at Nodaway, and that at 1 51 a m this train entered the siding and cleared the circuits of the traffic-control system. It also disclosed that at 1 45 a m signal 52R was caused to display an aspect less restrictive than Stop, indicating that a route was established at this time for No. 70 to proceed southward beyond the north siding-switch. Since the position of a switch is not recorded, it could not be determined from the graph whether the north siding-switch was in normal or reverse position when this route was established. The graph indicated that No. 70 passed signal 52R about 1 57 a m, and that it occupied the track circuit in the immediate vicinity of the signal and the north siding-switch until about 1 58 a m, when it evidently cleared the circuits of the traffic-control system as a result of entering the north siding-switch and proceeding beyond the clearance point. It also indicated that signal 52R displayed a Stop aspect as No. 70 passed the signal, entered the siding and passed the clearance point, and that the signal then displayed a proceed aspect. This indicates that after the train passed the clearance point of the siding, the operator apparently moved the lever controlling the north siding-switch to normal position, and then depressed the pushbutton associated with the levers controlling that switch and signal 52R, initiating a code which caused the switch to be restored to normal position and signal 52R to display a proceed aspect. Beginning at 1 59 a m signal 52R again displayed a Stop aspect, apparently as a result of the accident.

The rules of this carrier provide that when more than one train in the same direction is put on a controlled siding, the following train or trains must be stopped at Stop signal nearest the siding and notified by train dispatcher or operator of the situation, when two opposing trains are put on a controlled siding, both trains must be stopped at Stop signals nearest the siding and notified of the situation. When a train passes a signal displaying a Restricting aspect or moves on the siding it is required to proceed at Reduced Speed prepared to stop short of another train or obstruction. When the operator received the train dispatcher's change of instructions concerning the meet established for Nos. 70 and 23, he was required to line the route for No. 23 to enter the siding at the south switch and for No. 70 to proceed southward on the main track beyond signal 52R and the north siding-switch. The route for No. 23 to enter the siding was established as required, but the route for No. 70 evidently was improperly lined for that train to enter the siding at the north switch. Although the operator said that the lever controlling the north siding-switch was in normal position during the approach of No. 70 to the siding, and that the indicator lights associated with this lever indicated the switch was lined and locked in normal position for movements on the main track it is apparent that he moved this switch lever to reverse position sometime before No. 70 approached signal 52R and established the route for that train to enter the siding at the north switch. It is also apparent that during the approach of No. 70 to the siding the indicator lights associated with this switch lever indicated the north siding-switch was lined in reverse position for movement from the main track to the siding, and that the operator was mistaken concerning their indication at this time. Since he apparently was unaware that the route had been improperly lined for No. 70 to enter the siding, the operator failed to take action to stop either No. 23 or No. 70 at the signals nearest the siding and inform the respective crews of the opposing movement on the siding as required by rule.

The investigation disclosed that, although no signal protection is provided, it is apparent that it has been the practice to permit a train moving on the siding at Nodaway to be operated at any speed which, in the judgment of the engineman, will enable it to be stopped short of another train or obstruction. In this case the freight train was erroneously routed to the siding which was occupied by the opposing passenger train. As a result of the error the operator did not comply with the requirements of Rule 553. The engineer of the freight train apparently assumed that as the signal did not display a Stop aspect and he had not been informed otherwise, that the siding was clear. However, if the freight train had been operated at reduced speed as required by the rules it is probable that the accident would have been averted.

Cause

This accident was caused by failure to line a proper route for opposing trains at a meeting point, and failure to control properly the speed of the freight train.

Recommendation

- It is recommended that the carrier take the necessary action to enforce its rules and instructions requiring trains on sidings to proceed at Reduced Speed prepared to stop short of another train or obstruction, or anything that may require the speed of a train to be reduced.

Dated at Washington, D. C., this twenty-fifth day of January, 1951

By the Commission, Commissioner Winchell

(SEAL)

HAROLD D. McCOY,

Secretary