INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

CHICAGO, BURLINGTON & QUINCY RAILROAD

OMAR, COLO.

OCTOBER 27, 1936

INVESTIGATION NO. 2107

SUMMARY

Railroad: Chicago, Burlington & Quincy

Date: October 27, 1936

Location: Omar, Colo.

Kind of accident: Head-end collision

Trains involved: Freight : Passenger

Train numbers: Extra 6325 : No. 301

Engine numbers: 6325 : 2826

Consist: 30 cars and : 10 cars

caboose

Speed: Standing : 20 miles per hour

Track: 1º curve to the right, 0.6 percent

descending grade for eastward trains

Weather: Foggy

Time: 5:40 a.m.

Casualties: 18 injured

Cause: Failure to obey a meet order

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December 11, 1936

To the Commission:

On October 27, 1936, there was a head-end collision between a passenger train and a freight train on the Chicago, Burlington & Quincy Railroad at Omar, Colo., which resulted in the injury of 12 passengers, 1 mail clerk, 1 Pullman porter and 4 employees.

Location and method of operation

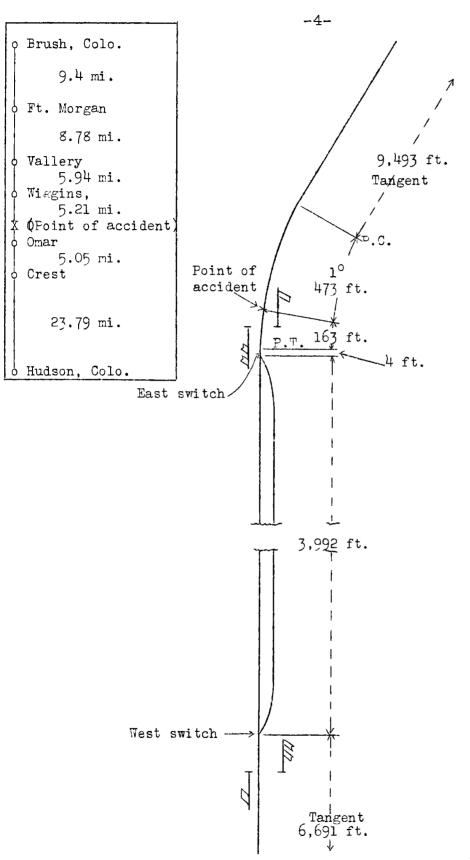
This accident occurred on the Akron and Denver Subdivision of the McCook Division which extends between Akron and Denver, Colo., a distance of 111.42 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders, and an automatic blocksignal system. The passing track at Omar is 3,992 feet in length, paralleling the main track on the south, and the accident occurred at a point 167 feet east of the east switch of this passing track. Approaching the point of the accident from the east, the track is tangent for a distance of 9,493 feet, followed by a 1° curve to the left 636 feet in length, the accident occurring on this curve about 163 feet from its western end. Approaching from the west the track is tangent for 10,687 feet, followed by the curve on which the accident occurred. The grade for east-bound trains is descending, and is 0.6 percent at the point of accident.

At a point about 117 feet east of the east passing-track switch are located two automatic block signals; the single arm signal on the south side of the track is known as the starting signal for east-bound trains and the 2-arm signal directly opposite on the north side of the track is the home signal for west-bound trains; there are similar signals just west of the west switch.

The weather was very foggy at the time of the accident, which occurred about 5:40 a.m.

Description

Extra 6325, an east-bound freight train, consisted of 30 cars and a caboose, hauled by engine 6325, and was in charge of Conductor Challstrom and Engineman Lowman. This train arrived at Hudson, 28.84 miles west of Omar, at 4:10 p.m., where the crew received a copy of train order 51, form 19, directing Train No. 3 to wait at Wiggins until 4:57 a.m. and at Omar until 5:02 a.m. for Extra 6325; they also received train order 33,



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form 19, directing Train No. 301 to wait at Vallery until 5:15 a.m. and at Wiggins until 5:25 a.m. for Extra 6325, both of these stations being east of Omar. Extra 6325 departed from Hudson, the last open office, at 4:18 a.m., according to the train sheet, and a stop was made at Crest, 5.05 miles west of Omar, on account of being unable to reach Omar for Train No. 3 on the time given in the order. Conductor Challstrom called the dispatcher on the telephone and received train order 49, form 19, directing his train to meet Train No. 301 at Omar and Train No. 67 at Wiggins. Extra 6325 departed from Crest, but instead of heading in on passing track at Omar to meet Train No. 301, it continued on the main line, and had just been stopped east of the east switch when it was struck by Train No. 301.

Train No. 301, a west-bound passenger train, consisted of 1 baggage car, 1 combination baggage and mail car, 1 coach, 1 Pullman sleeping car, 1 chair car, 1 coach, 1 Pullman tourist sleeping car, 1 dining car, end 2 Pullman sleeping cars, in the order named, hauled by engine 2826, and was in charge of Conductor Lawler and Engineman Uhl. All of the cars were of steel construction with the exception of the baggage car, which was of steel-underframe construction. At Brush, 29.33 miles east of Omar, the crew received train order 33, form 19, referred to above, and on arriving at Wiggins, 5.21 miles east of Omar, at 5:29 a.m., they received train order 49, also on form 19. Train No. 301 departed from Wiggins at 5:30 a.m., 28 minutes late, and collided with Extra 6325 just east of Omar while traveling at a speed estimated to have been between 20 and 25 miles per hour.

The front end of engine 6325 was badly damaged, and the fourth and fifth cars were turned over on the south side of the track. The rear end of engine 2826, of Train No. 301, was raised enough to permit its tender to slide under it, the entire engine stopping in an upright position on top of the tender; the engine was badly damaged at each end and the tender cistern also was badly damaged; one pair of wheels of the baggage car was derailed. The engineman, fireman and head brakeman of Train No. 301, and the fireman of Extra 6325, were the employees injured.

Summary of evidence

Engineman Lowman, of Extra 6325, stated that when leaving Denver the weather was very foggy and that he could see possibly one-quarter of a mile, but at no time could he see the rear of the train; the fog was much heavier at Hudson than at Denver. After stopping at Crest, the head brakeman came to the engine with train order 49, which provided for meets at Omar and at Wiggins, and he hung the order on the clip where it could be reached, but did not hand it to the fireman as required by the rules. The brakeman when giving him the order said they were meeting Trains Nos. 301 and 67 at Wiggins, and Engineman Lowman

had a similar understanding, although he said he read the order three times, including reading it aloud to the fireman and the brakeman. The fog by this time was so dense that he could not see signals more than 100 feet distant; on approaching Omar a caution signal was encountered at the signal near the west switch, at which time the speed was nearly 50 miles per hour, and he made a service application of the brakes, bringing the train to a stop about 35 feet east of the signal near the east switch, which was in stop position; he thought he had been stopped about 10 or 15 seconds when the accident occurred. Engineman Lowman said he thought it was safe to operate his train in a dense fog at a speed of 50 miles per hour as long as he could see the signal indications.

Fireman Jackson, of Extra 6325, corroborated the engineman's statement to the effect that when the head brakeman got on the engine at Crest and handed Engineman Lowman the order he told the engineman they were to meet both of the trains at Wiggins. The engineman did not show him the order, but hung it on the clip, and being busy he did not look at it until about 10 minutes after the accident occurred; when he read it the order was clear, although the words were run a little close together. Fireman Jackson stated he was busy with the fire at Omar when the engineman applied the air brakes and called to the brakeman that someone was coming, and to get a fusee; Brakeman Traut got the fusee, jumped off and ran out in front of their engine.

Head Brakeman Traut, of Extra 6325, stated that he personally read train order 49, received at Crost and handed to him by Flagman Raub near the caboose; he did not have any conversation with the conductor about the contents of the order or receive any instructions to head in at Omar. After reading the order he was under the impression they were to meet Trains Nos. 301 and 67 at Wiggins, the reason for this being the fact that Wiggins was the most distinct word in the order, and that the two words "Omar and" were improperly spaced, and he also said he thought the conductor might have started to write "and", but blurred it and then wrote it a second time. He delivered the order to Engineman Lowman with the remark that "we have a meet with 301 and 67," and was positive that he did not specify any On leaving Crest he rode on the left side of the cab, was unable to determine the speed of the train approaching Omar, and did not see the signals at the west end, and when the engineman applied the brakes he crossed over to the engineman's side, in the gangway, and he said the train was nearly stopped when he saw the signal in stop position at the east end of the passing track, and immediately afterward he saw the headlight of the engine on Train No. 301. As his train came to a stop he secured a fusee, lighted it and ran forward, and was about two car lengths in front of the engine then the collision occurred;

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he was not positive that the fusee signal was answered, although he thought that was the case. Head Brakeman Traut stated that he did not know he had misread the meet order until after the accident.

Conductor Challstrom, of Extra 6325, stated that before leaving Denver, he had an understanding with Engineman Lowman that they would stop at Hudson to inspect the train, on account of there being a very heavy fog, but nothing was said about the speed at which the train should be run. The stop was made at Hudson and the train inspected, and the next stop was at Crest, where they headed in to meet Train No. 3. While at Crest he called the dispatcher and received train order 49, but made only one copy of this order, the original, which he handed to the flagman, who read it and gave it to the head brakeman to deliver to the engineman; he saw the flagman and head brakeman reading the order and there was no doubt in his mind that they both understood the order. He did not make a wire report to the dispatcher about the weather conditions, as required by special instructions in the timetable, but did have a conversation over the telephone from Crest about it, saying the fog was so dense that they could see only 2 or 3 car lengths. Between Crest and Omar he and the flagman were in the cupola of the caboose, looking for a land mark, and were from 3 to 8 car lengths from the signal at the west end of Omar when he became aware of the fact they were going to run past their meeting point, and he applied the brakes just as the flagman called to him about the signal; he could not tell whether he or the engineman was the first to apply the brakes.

Flagman Raub, of Extra 6325, stated that Conductor Challstrom handed him train order 49 at Crest and said "we have a meet with 301 at Omar and 67 at Wiggins." He then read the order, which was clear to him, after which he gave it to the head brakeman. When the train pulled off the siding at Crest he opened and closed the switch, and between Crest and Omar he was in the cupola of the caboose; he estimated the speed of the train between these two points at 40 miles per hour and said he could not see over one car length. When coming into Omar he saw the home signal and called their location to the conductor, who at the same moment applied the brakes.

Engineman Uhl, of Train No. 301, stated that he could see about 70 car lengths at Wiggins, but from Wiggins westward the fog increased and seemed to come in sheets, with the result that he was making no effort to make running time. The signal about 2 miles east of Omar was clear and could be seen about 3,000 feet, and he estimated his speed at 25 miles per hour on passing this signal. As they approached the curve east of Omar the fireman said he saw a headlight burning, but Engineman Uhl thought Extra 6325 had not yet pulled entirely into clear. He

closed the throttle as they reached the curve and the fireman said the headlight was still burning; the engineman then made a service application of the brakes, at which time they were well around the curve, where he could see the headlight, and the fireman again called, saying that the opposing train was on the main track, and he then placed the brake valve in emergency position, both he and the fireman jumping off just as the collision occurred. Engineman Uhl stated he could have stopped if he had applied the brakes when the fireman first told him there was a headlight ahead. The fireman did not mention anything about the signal being in stop position, nor did he ask the fireman about the position of the signal, and he was expecting to stop at the west switch. He estimated the speed at the time of the collision at 20 miles per hour.

Fireman Hodgkin, of Train No. 301, stated that shortly after Engineman Uhl whistled for the meeting point at Omar he looked out for a signal but was unable to see anything, the fog being very dense. After getting on the curve just east of Omar he thought he saw a change in the fog, the glare of a headlight suddenly appeared and he called to the engineman, who applied the brakes at once, and told him that there was a red light, that the opposing train was on the main line, and to get off. The red light he had seen was the fusee held by the brakeman of Extra 6325; he did not see the indication of the automatic signal near the east switch.

Dispatcher Gasch, who issued the train orders involved, said he had been advised by Conductor Challstrom that there was a heavy fog and that it was getting bad, also by the operator at Hudson, who said they had thought it best to stop and inspect the train as the engineman could not see signals. At that time he did not know the weather conditions eastward and supposed the fog was just around Hudson, but later, when he put out the meet order between Extra 6325 and Trains Nos. 301 and 67, he asked the operator at Ft. Morgan, east of Omar, if there was any fog and was told it was not bad, but Conductor Challstrom, at Crest, said the fog was very bad; he did not, however, issue a fog order as required by the rules when fogs or storms are reported to him; an order of this character reads as follows: "Fog or storms reported between------and-------"

Discussion

Under the provisions of train order 49, Extra 6325 was required to take siding and meet Train No. 301 at Omar; the engineman and head brakeman misread the meet order, however, both making the same mistake, while the fireman did not read the order until after the accident. The order was poorly written by the conductor, but it was not in such condition as to justify any one in misreading it if proper care in reading orders was

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exercised. The evidence is conflicting as to the exact location of Extra 6325 at the time the brakes were applied; in fact, it is impossible to say definitely from the record whether they were first applied by the engineman from the engine or the conductor from the caboose. From the engineman's statement, however, it would appear that the brakes were applied about the time the engine passed the restrictive signal indication at the west end of Omar, but that the engineman was unable to stop his train before passing the stop signal at the east end of Omar. Engineman Lowman was an experienced employee, knew the locations of these signals, and was fully cognizent of the fact that his view was very materially restricted by the dense fog which existed at the time, and he should have so controlled the speed of his train that, upon receiving a restrictive gignal indication, he could have stopped before passing the succeeding signal in the stop position, although, under the circumstances in this particular case, there is no positive assurance that the accident would have been prevented even had he brought his train to a stop at that signal.

The rules provide that the engineman show train orders to his fireman and sound the meeting-point whistle signal at least I mile before reaching the meeting point, and if such signal is not given, the conductor is required to take immediate action to stop the train; the rules also provide that when fogs, storms or other conditions obscure the view of track or signals, speed of trains must be reduced to permit strict observance of signals and insure absolute safety, regardless of time, and that extraordinary precaution must be taken, both at switches and at all places where the right to proceed depends upon signals; also that when fog or storms are reported, dispatchers will give trainmen and enginemen notification of same by train order. None of these rules was obeyed; the engineman did not show the order to the fireman, but put it on a clip, while the conductor did not take action to stop the train until the caboose had practically reached the switch where the train should have taken the siding; in addition, the speed had been nearly 50 miles per hour, according to the engineman, when passing that switch, although signals could not be seen more than 100 feet. It also is noted that the conductor made but one copy of train order 49, not having a copy in his possession at the time of the accident.

Conclusion

This accident was caused by failure to obey a meet order.

Respectfully submitted,

W. J. PATTERSON,

Director.