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INTERSTATE COMMERCE COMMISSION,

WASHINGTON

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REPORT OF THE DIRECTOR

BUREAU OF SAFETY

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ACCIDENT ON THE

CHICAGO, BURLINGTON & QUINCY RAILROAD

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SPEAR, MONT.

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SEPTEMBER 22, 1936

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INVESTIGATION NO. 2101

SUMMARY

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Railroad: Chicago, Burlington & Quincy  
Date: September 22, 1936  
Location: Spear, Mont.  
Kind of accident: Head-end collision  
Trains involved: Passenger : Extra  
Train numbers: No. 44 : Extra 6168  
Engine numbers: 2922 : 6168  
Consist: 4 cars : light engine  
Speed: 40-50 m.p.h.: 10-15 m.p.h. backing up  
Track: Tangent; 0.7 percent ascending grade  
for eastbound movements  
Weather: Clear and dark  
Time: 10:20 p.m.  
Casualties: 1 killed and 21 injured  
Cause: Failure of Extra 6168 to clear time of  
opposing overdue superior train; con-  
tributing cause was failure of Train No.  
44 to be brought to a stop when the en-  
gineman observed the headlight of the  
opposing light engine.

November 6, 1936.

To the Commission:

On September 22, 1936, there was a head-end collision between a passenger train and a light engine on the Chicago, Burlington & Quincy Railroad at Spear, Mont., which resulted in the death of 1 employee, and the injury of 13 passengers, 1 railway mail clerk, and 7 employees. The investigation of this accident was made in conjunction with a representative of the Board of Railroad Commissioners and Public Service Commission of Montana.

#### Location and method of operation

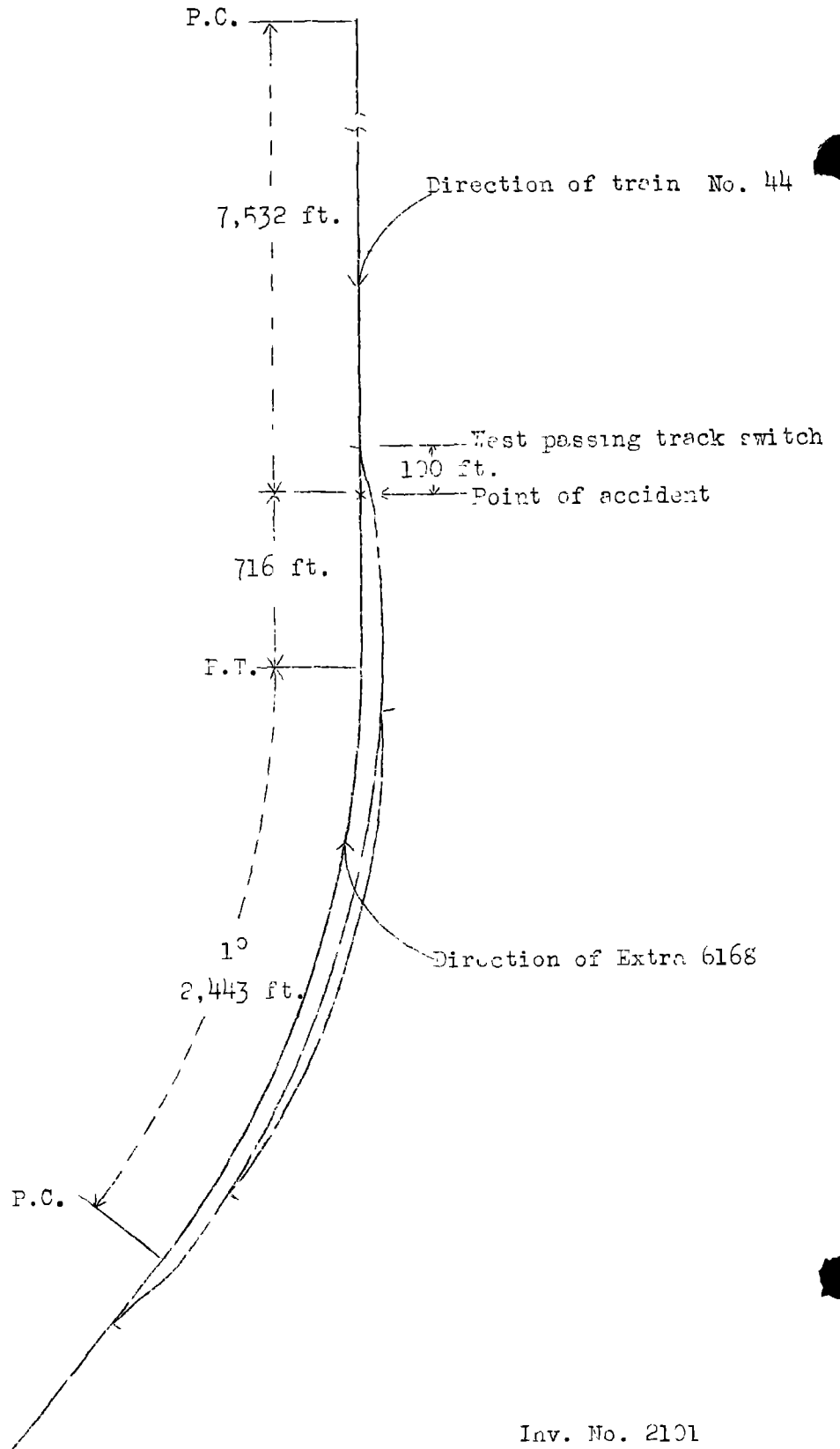
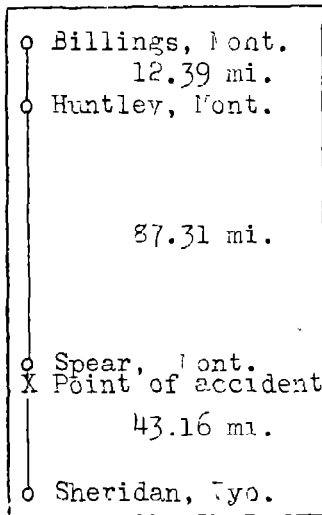
This accident occurred on the Sheridan and Billings Sub-division of the Sheridan Division, extending between Sheridan, Wyo., and Huntley, Mont., a distance of 130.47 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders, and a manual block system for following movements only, no provision being made for blocking opposing trains. The accident occurred at a point approximately 100 feet east of the west switch of the passing track at Spear; approaching this point from the west, the track is tangent for more than 1 mile, the accident occurring on this tangent at a point 716 feet from its eastern end. Approaching from the east, there is a 1° curve to the left for a distance of 2,443 feet, followed by the tangent on which the accident occurred. The grade for eastbound movements is 0.7 percent ascending at the point of accident.

The view had by an engine crew of an eastbound train approaching the point of accident is unrestricted for more than 1 mile, while the view had by the fireman of an approaching westbound train is approximately 1,500 feet, the view of the engineman being restricted until the engine enters the tangent.

The weather was clear at the time of the accident, which occurred about 10:20 p.m.

#### Description

Train No. 44, an eastbound passenger train, consisted of 1 baggage car, 1 mail car, 1 chair car, and 1 Pullman sleeping car, hauled by engine 2922, and was in charge of Conductor Haskins and Engineman Merritt. The first and third cars were of steel-underframe construction, while the others were of all-steel construction. This train departed from Huntley, its initial terminal on this railroad, at 7:55 p.m., according to



Inv. No. 2101  
 Chicago, Burlington & Quincy R.R.  
 Spear, Montana  
 Sept. 22, 1936

the train sheet, on time, left Lodge Grass, 8.51 miles from Spear, about 10:09 p.m., 15 minutes late, according to the statement of the engineman, and collided with Extra 6168 just beyond the west passing-track switch at Spear while traveling at a speed estimated to have been between 45 and 50 miles per hour.

Extra 6168, a westbound light engine, was in charge of Engineman Kyner and Fireman Kirchman. This engine departed from Sheridan, 43.16 miles east of Spear, at 7:45 p.m., according to the train sheet, left Parkman, 17.67 miles from Spear, at 9:37 p.m., without any orders concerning Train No. 44, and on seeing an approaching train the engine was stopped in the vicinity of the west passing-track switch at Spear and was backing up when struck by Train No. 44.

The engines were locked together, the front end of engine 2922 telescoping the front end of engine 6168 and shoving that engine backward a distance of 370 feet. The rear end of the tender of engine 2922 and the front end of the baggage car were badly damaged, while the train parted between the second and third cars, the third car stopping about 50 feet behind the second car; none of the equipment was derailed. The employee killed was the fireman of Train No. 44, and the employees injured were the engineman, conductor, both brakemen and the baggageman of Train No. 44 and the engineman and fireman of Extra 6168.

#### Summary of evidence

Engineman Merritt, of Train No. 44, stated that on approaching Spear he was operating the train at a speed of 45 or 50 miles per hour, and that he saw a headlight when he was about half-way between the whistling post and the west passing-track switch, assuming that it was the helper engine he expected to meet. He thought, however, that it was on the passing track and had stopped at the telephone and that when he had sounded the station whistle the headlight had been turned on and the engine then started toward the west switch so that it would be ready to proceed after his own train had passed. Engineman Merritt stated, however, that he was concerned about the burning headlight, and blinked his own headlight to call attention to the fact that the headlight on the helper engine was burning, and he expected at any second that it would be turned off. He then left his own headlight burning and looked down toward the ground, looking up again just as his engine struck the helper engine. The speed of his train had not been reduced at any time, but he stated that had he applied the air

brakes when he first saw the headlight of the opposing engine he could have stopped his train before striking it.

Conductor Haskins, of Train No. 44, stated that he had been on this run for the past 60 days and during that time he had not received any meet orders with light engines, although he had observed them on passing tracks practically every night. After the accident he talked with Engineman Kyner, of the light engine, and was told that he had thought he would be able to make Ionia, 12.94 miles west of Spear, for Train No. 44, and that Engineman Merritt must have thought he was on the side track. Engineman Kyner also said that he was close to the west switch when he saw the headlight of Train No. 44.

Flagman McGee, of Train No. 44, stated that in a subsequent conversation with Fireman Kirchman, of the helper engine, the fireman told him that Engineman Kyner's watch had stopped at "20", not mentioning the hour. Flagman McGee thought the accident occurred at 10:25 p.m. as he looked at his watch about 2 minutes afterwards and it was then 10:27 p.m.

Engineman Kyner, of Extra 6168, stated that at Sheridan he received among others an order to run extra from Sheridan to Ionia, but did not receive any order relative to Train No. 44. On stopping at Parkman he compared time with the office clock and looked at his timetable. The operator told him that the eastbound train he was to help would be at Ionia at 11:20 p.m. and he said that on looking at his timetable for the time of Train No. 44 at Ionia he became confused, as he had in mind that the scheduled time of that train at Ionia was 11:48 p.m. instead of 9:48 p.m. as actually was the case; he did not think that he misread the timetable, but just had the times confused, and was unable to explain how this happened unless in some way he associated it with the time of the train he was to help at Ionia. Engineman Kyner stated that he was operating the engine at a speed of about 30 miles per hour on approaching Spear, and as the engine entered the tangent track on which the accident occurred he saw a headlight which for an instant he thought might be an automobile on the highway which parallels the track, but he realized immediately that it was an approaching train and then thought it might be the train he was to help. When he saw the headlight turned off, however, he realized that it was Train No. 44 and immediately applied the air brakes, stopping his engine a short distance west of the west passing-track switch, and then started to back up, and he thought his speed in back motion

was about 15 miles per hour at the time of the accident. He was unable to give an estimate as to his distance from the approaching train when he first saw it, and said he saw the headlight go out but that he did not see it turned on again. Engineman Kyner further stated that the headlight and brakes on his own engine were operating properly. His watch was in good condition; it had been last overhauled in May and he had checked it and registered time before leaving the terminal on this trip. Engineman Kyner also said he was in good health and had had sufficient rest before making this trip, and that there were no conditions that would interfere with the proper performance of his duties.

Fireman Kirchman, of Extra 6168, stated that he saw Engineman Kyner look at his timetable at Parkman, but that the engineman did not say anything to him about Train No. 44 and that he did not concern himself with it, stating that he was busy with other duties and it slipped his mind; he also added that possibly it was due to his lack of experience. On approaching Spear he turned on the stoker and set the air to put in a fire, and when he looked out he saw the headlight ahead and heard Engineman Kyner say something about being on the time of Train No. 44. He then ran across the deck to the engineman's side to make sure that it was not an automobile on the highway, and saw the headlight turned off and he believed that it was turned back on again, at which time the two trains were close to each other. After the accident, when talking with Engineman Kyner, the engineman took out his watch to ascertain the time and it indicated 10:20 p.m.; the watch was broken and had stopped. Fireman Kirchman stated that his own watch then showed the time as 10:55 p.m. and he estimated the time of the accident to have been 10:20 p.m. Fireman Kirchman further stated that he had checked and registered his own watch before leaving Sheridan.

The service record of Fireman Kirchman who was 21 years of age, showed he had had very little experience; he was employed by this road as a fireman on February 17, 1936, and since entering the service had worked a total of 38 days in road service and 6 days in yard service.

Operator Haworth, at Parkman, stated that while Extra 6168 was waiting at Parkman for the block, Engineman Kyner spoke of taking coal and water at Wyola, 4.69 miles east of Spear, but made no reference to Train No. 44, although he did take out his timetable and examine it carefully; Engineman Kyner appeared to be in a normal state of mind.

### Discussion

Engineman Kyner, of Extra 6168, stated that after the operator at Parkman informed him that the train he was to assist would be at Ionia at 11:20 p.m., he looked at his timetable for the schedule of Train No. 44 at that point, and while the scheduled time of that train is 9:48 p.m., yet for some unexplainable reason he became confused as to the times and had in mind that Train No. 44 was due at Ionia at 11:48, which is located 12.94 miles west of Spear; the result of this confusion was that his engine was occupying the main track without authority or protection on the time of an opposing overdue superior train. Fireman Kirchman, who was not an experienced man, stated that he had no conversation with the engineman concerning Train No. 44 and did not pay any attention to the matter.

Rule 17 of the operating rules of this railroad requires in part that the headlight must be concealed or extinguished when a train turns out to meet another train. This rule is supplemented, as regards opposing trains, by special instructions given verbally at rules examinations, while on Form 2620, a signal test report, it is provided that correct observance of a headlight uncovered on a train on a siding requires an approaching train to stop, and then to proceed at restricted speed until it can be seen that the train showing the headlight is clear of the main track. Engineman Merritt, of Train No. 44, saw the headlight of Extra 6163 but thought it was on the passing track and that the engineman had forgotten to extinguish the headlight. It was his duty, however, to stop and then to proceed at restricted speed, and he stated that if he had applied the brakes when he first saw the headlight he could have stopped in time to have avoided the accident.

### Conclusion

This accident was caused by the failure of Extra 6168 to clear the time of an opposing overdue superior train, the engineman having become confused as to the schedule time of that train. A contributing cause was the failure of Train No. 44 to be brought to a stop when the engineman observed the headlight of the opposing light engine.

Respectfully submitted,

W. J. PATTERSON,

Director.