

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3734

CHICAGO, ROCK ISLAND AND PACIFIC  
RAILROAD COMPANY

IN RE ACCIDENT

NEAR AULNE, KANS., ON

DECEMBER 6, 1956

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## SUMMARY

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Date: December 6, 1956

Railroad: Chicago, Rock Island and Pacific

Location: Aulne, Kans.

Kind of accident: Collision

Equipment involved: Locomotive and rear portion of freight train

Train number: Extra 134 North

Locomotive number: Diesel-electric units 134A, 135B, and 41A

Consist: 40 cars, caboose

Speeds: Locomotive - : Rear portion of train -  
undetermined standing

Operation: Signal indications

Track: Single; tangent; 0.15 percent ascending grade northward

Weather: Clear

Time: 6:45 a. m.

Casualties: 1 killed; 4 injured

Cause: Failure properly to control speed of locomotive returning for rear portion of train

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## INTERSTATE COMMERCE COMMISSION

REPORT NO. 3734

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

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY

March 19, 1957

Accident near Aulne, Kans., on December 6, 1956, caused by  
failure properly to control the speed of a locomotive  
returning for the rear portion of a train.

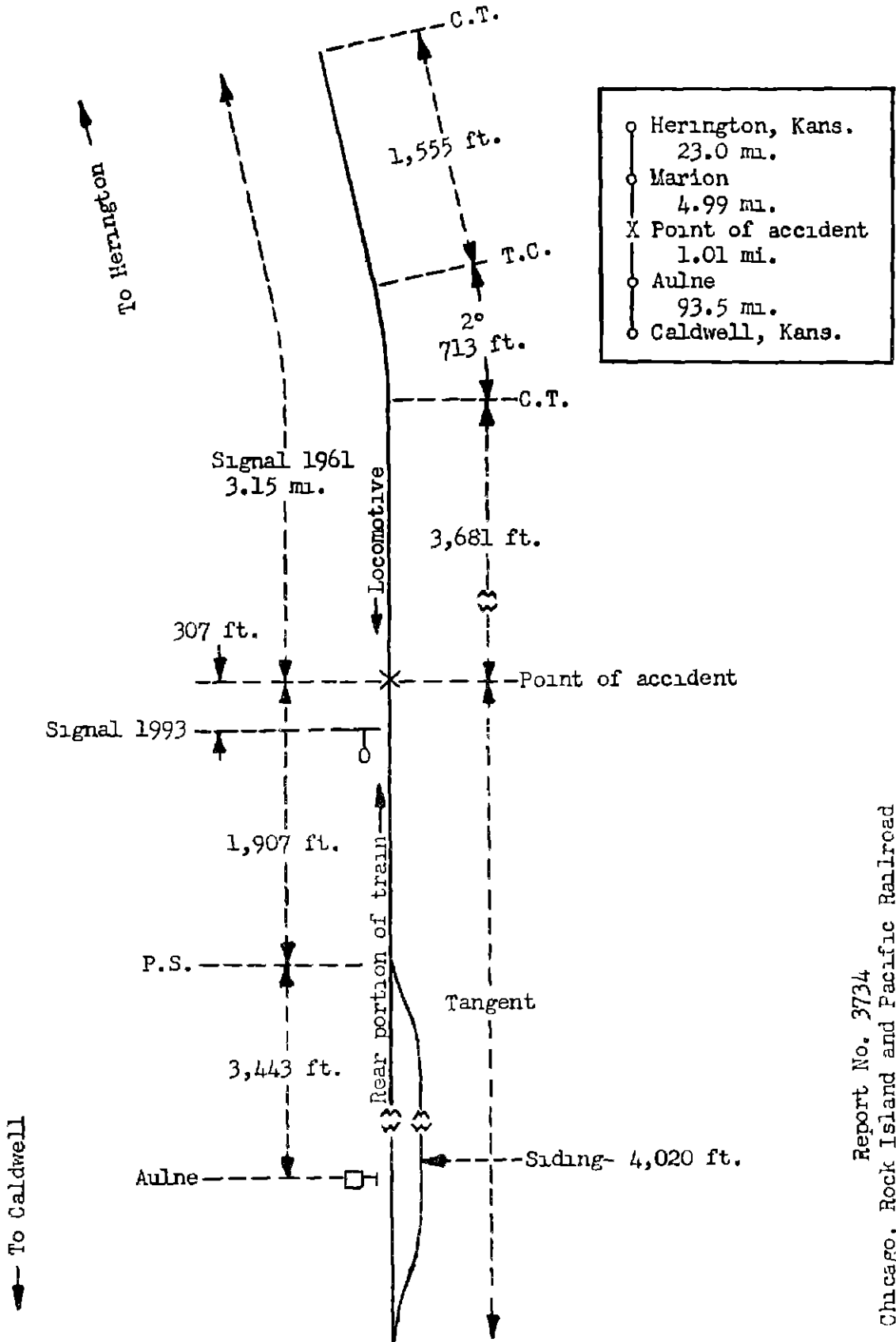
REPORT OF THE COMMISSION<sup>1</sup>MURPHY, Commissioner:

On December 6, 1956, there was a collision between a locomotive and the rear portion of a freight train on the Chicago, Rock Island and Pacific Railroad near Aulne, Kans., which resulted in the death of one train-service employee, and the injury of four train-service employees.

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



Report No. 3734  
 Chicago, Rock Island and Pacific Railroad  
 Aulne, Kans.  
 December 6, 1956

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Location of Accident and Method of Operation

This accident occurred on that part of the Southern Division extending between Caldwell and Herington, Kans 122.5 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. At Aulne, 93.5 miles north of Caldwell, a siding 4,020 feet in length parallels the main track on the east. The north siding-switch is 3,443 feet north of the station sign. The accident occurred on the main track at a point 1,907 feet north of the north siding-switch. The main track is tangent throughout a distance of more than 1 mile immediately south of the point of accident and 3,681 feet northward. From the north there are, in succession, a tangent 1,555 feet in length, a 2° curve to the right 713 feet, and the tangent on which the accident occurred. The grade is 0.15 percent ascending northward at the point of accident.

Automatic signals 1961 and 1993, governing south-bound movements, are located, respectively, 3.15 miles north and 307 feet south of the point of accident. These signals, which form part of a traffic-control system, are of the searchlight type. The aspect applicable to this investigation and the corresponding indication and name areas follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Red-over-number plate	Stop, Then Proceed at Low Speed through the entire block	Stop and Proceed

This carrier's operating rules read in part as follows:

## DEFINITIONS

Low Speed.--A speed that will permit stopping short of train, engine, obstruction or switch not properly lined and looking out for broken rail, but not exceeding 15 miles per hour.

100. Leaving Portion of Trains.--When an engine leaves a portion of its train on a main track under conditions which may make it difficult for the returning engineer to locate the standing portion, two torpedoes must be placed not less than 20 car lengths in advance of the head end of rear portion to serve as a warning. \* \* \*

\* \* \*

The maximum authorized speed for Diesel-electric road freight locomotives when moving backward is 40 miles per hour.

### Description of Accident

Extra 134 North, a north-bound freight train, departed from Caldwell at 11:40 p. m., December 5, and stopped on the main track at Aulne about 3:40 a. m., December 6. At the time the train arrived at Aulne it consisted of Diesel-electric units 134A, 135B, and 41A, coupled in multiple-unit control, 120 cars, and a caboose. During the process of setting the one hundred and twelfth car onto the siding at Aulne, the coupler and yoke were pulled out of the south end of the seventy-ninth car. After this occurred, the first seventy-nine cars were taken to Marion, 6.0 miles north of Aulne, and placed on a siding at that point. The locomotive then returned southward, passed signal 1961, which indicated Stop-then-proceed-at-low-speed, and while moving at an undetermined speed it collided with the rear portion of the train. The accident occurred 1,907 feet north of the north siding-switch at Aulne.

The locomotive stopped with the south end 118 feet south of the point of accident. The south truck of Diesel-electric unit 41A, the unit at the south end, was derailed. This unit stopped upright and in line with the track. The first five cars of the rear portion of the train were derailed and stopped in various positions on or near the track. The first four of these cars were tank cars loaded with fuel oil. The end of the body of the first car overrode the underframe of Diesel-electric unit 41A and telescoped the nose section of the unit a distance of approximately 8 feet. Fire broke out in the wreckage, and equipment which had been damaged in the collision was further damaged by fire. The first five cars were destroyed, Diesel-electric unit 41A was badly damaged, and Diesel-electric unit 135B and the sixth car were somewhat damaged.

The flagman of Extra 134 North was killed. The engineer, the fireman, the front brakeman, and the conductor were injured.

The weather was cloudy and it was dark at the time of the accident, which occurred about 6:45 a. m.

### Discussion

As Extra 134 North was approaching Aulne the enginemen and the front brakeman were on the locomotive. The conductor and the flagman were in the caboose. The conductor said that there was severe slack action in the train when the rear end was a short distance south of Aulne. He then saw sparks flying from underneath a car near the rear end of the train. He stopped the train by use of the conductor's valve, and then found that the ninth car ahead of the caboose was off center. During the process of setting this car onto the siding two separations occurred in the train. After the second separation the conductor found that the coupler and yoke were pulled out of the south end of the seventy-ninth car. He instructed the flagman to go to the front end of the train and inform the enginemen and the front brakeman that it would be necessary to take the first seventy-nine cars to Marion and return with the locomotive for the rear portion of the train. All members of the crew accompanied this movement.

After the forward portion of the train reached Marion, the rear portion of the train on the main track at Aulne and north of Aulne caused all southward signals between Aulne and Marion to continue to display their most restrictive aspects. The conductor obtained permission from the train dispatcher for the locomotive to pass a southward absolute signal at the south end of the siding at Marion to return for the rear portion of the train, and the locomotive then departed southbound. The members of the train crew were in the control compartment at the south end of the locomotive, and the enginemen were in the control compartment at the north end. The headlight at the south end of the locomotive was lighted brightly. The engineer said that the southward movement was made at a speed of from 15 to 20 miles per hour. The members of the crew saw the aspect displayed by signal 1961. They knew that this aspect was displayed because of the rear portion of their train in the block of the signal, and for this reason they did not stop before passing the signal. The conductor said that after the locomotive passed the crest of an ascending grade about 2,500 feet north of the point of accident the speed appeared to increase slightly. The front brakeman said that he then gave reduce-speed signals with his lantern from the door on the east side of the control compartment. These signals were not acted upon, and the conductor said that he then gave reduce-speed signals from the door on the opposite side of the control compartment. There was no response to these signals. The conductor and the brakeman thought the signals were given throughout a distance of about 1,400 feet. They said that the flagman,

who was seated in the engineer's seat, then said he would make an emergency application of the brakes. At approximately the same time these employees saw the north end of the rear portion of their train ahead. The flagman immediately made an emergency application of the brakes, and the conductor and the brakeman alighted from the locomotive. They alighted at a point about 160 feet north of the point of collision. The enginemen said that neither of them saw signals given by the conductor or the brakeman. The engineer said that as the locomotive moved southward he was bothered by fumes from the exhaust of the Diesel engines and suffered several coughing spells. He thought that possibly it was during one of these spells that the signals were given. He first became aware that anything was wrong when the brakes became applied. The fireman said that he was leaning out the window and maintaining what he thought was a constant lookout in the direction of movement. He said that the air was sufficiently cold to cause his eyes to water, and he thought this condition may have interfered with his vision to the extent that he failed to see the signals. He saw the conductor alight from the locomotive at approximately the same time that the brakes became applied. Neither of the enginemen saw the rear portion of their train before the collision occurred. None of the surviving members of the crew could estimate the speed of the locomotive at the time of the collision.

Under the rules of this carrier the aspect displayed by signal 1961 for the movement of the locomotive of Extra 134 North required that the locomotive stop before passing the signal and then proceed at low speed through the entire block. Low speed is defined in part as a speed that will permit stopping short of an obstruction but not exceeding 15 miles per hour. The rules also provide that when an engine leaves a portion of its train on a main track under conditions which may make it difficult for the returning engineer to locate the standing portion, two torpedoes must be placed not less than 20 car lengths in advance of the head end of rear portion to serve as a warning. In the instant case the conductor of Extra 134 North said he knew the location of the north end of the rear portion of his train with respect to the location of signal 1993, and since he did not anticipate any difficulty in locating the rear portion of the train he did not consider the use of torpedoes necessary.

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Cause

This accident was caused by failure properly to control the speed of a locomotive returning for the rear portion of a train.

Dated at Washington, D. C., this nineteenth day of March, 1957.

By the Commission, Commissioner Murphy.

(SEAL)

HAROLD D. McCOY,

Secretary.