# INTERSTATE COMMERCE COMMISSION . WASHINGTON

INVESTIGATION NO. 3210

THE COLORADO AND SOUTHERN RAILWAY COMPANY
REPORT IN RE ACCIDENT
NEAR LONGIONT, COLO., ON

CCTOBER 22, 1948

#### SUMMARY

Railroad:

Colorado and Southern

Date:

October 22, 1948

Location:

Longmont, Colo.

Kind of accident:

Collision

Equipment involved:

Passenger train

: Motor-truck

Train number:

31

Engine number:

372

Consist:

4 cars

Estimated speeds:

60 m. p. h. : 20 m. p. h.

Operation:

Timetable and train orders

Track:

Single; tangent; 0.57 percent descending grade northward

Highway:

Tangent; crosses track at angle of 52°30'; 0.26 percent descending

grade eastward

Weather:

Clear

Time:

10:55 a. m.

Casualties:

18 injured

Cause:

Motor-truck occupying rail-highway

crossing at grade immediately in front of approaching train

## INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 3210

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

THE COLORADO AND SOUTHERN RAILWAY COMPANY

December 29, 1948

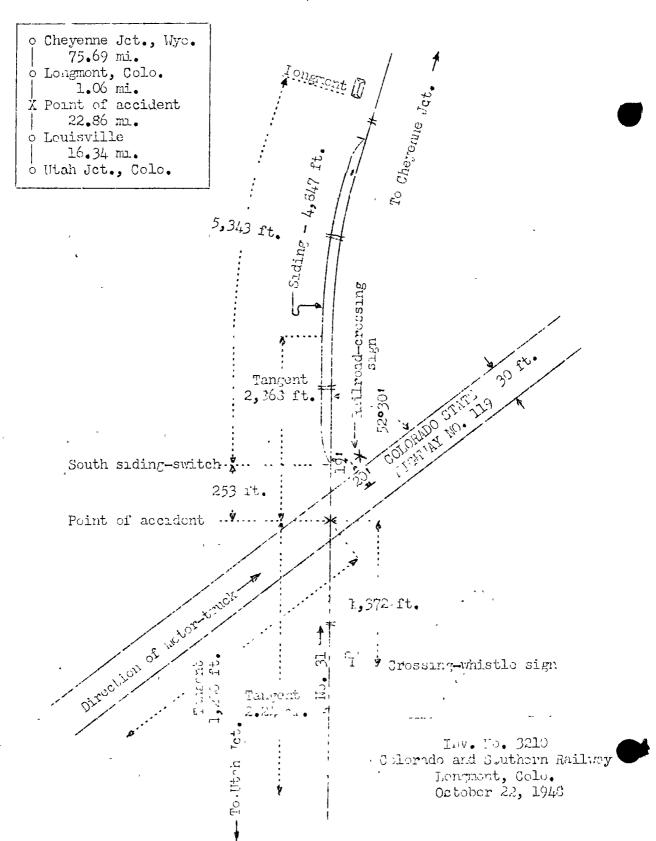
Accident near Longmont, Colo., on October 22, 1948, caused by a motor-truck occupying a rail-highway crossing at grade immediately in front of an approaching train.

## REPORT OF THE COIMISSION

## PATTERSON, Commissioner:

On October 22, 1948, there was a collision between a passenger train on the Colorado and Southern Railway and a motor-truck at a grade crossing near Longmont, Colo., which resulted in the injury of 17 passengers and the driver of the motor-truck.

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



#### Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between Utah Jct., Colo., and Cheyenne Jct., Tyo., 115.95 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Longmont, 40.26 miles north of Utah Jct., a siding 4,847 feet in length parallels the main track on the west. The south switch of this siding is 5,343 feet south of the station. The accident occurred 253 feet south of this switch, where the railroad is crossed at grade by Colorado State Highway No. 119. From the south on the railroad the track is tangent 2.24 miles to the point of accident and 2,868 feet northward. The grade is 0.57 percent descending northward.

Colorado State Highway No. 119 intersects the railroad at an angle of 52°30'. This highway is 30 feet in width and is surfaced with gravel. It is tangent throughout a distance of 1,200 feet immediately west of the crossing and a considerable distance eastward. The grade for cast-bound traffic averages 0.26 percent descending 700 feet to the crossing. The crossing is 38 feet wide, and the surface of the highway is practically level with the tops of the rails.

A standard cross-buck railrond-crossing sign is located in the northeast angle of the crossing, 19 feet east of the center-line of the track and about 20 feet north of the center-line of the highway. This sign is mounted on a mast 12-fect above the tops of the rails, and bears the words "RAILROAD CROSSING" in black letters on a white background. A crossing-whistle sign for north-bound trains is located 1,372 feet south of the crossing.

This carrier's operating rules read in partias follows:

14. ENGINE WHISTLE SIGNALS.

Note.—The signals prescribed are illustrated by "o" for short sounds; "\_\_\_\_" for longer sounds. \* \* \*

SOUND. .

INDICATION.

(1) \_\_ - 0 \_\_

Approaching public crossings at grade, last blast prolonged until crossing is reached.

\* \* \*

\* \* \*

30. The entine bell must be rung \* \* \* while approaching and passing public crossings at grade, \* \* \*

The maximum authorized speed for the train involved was 60 miles per hour.

## Description of Accident

No. 31, a north-bound first-class passenger train, consisted of engine 372, one baggage car, one mail-baggage car and two coaches, in the order named. The first car was of steel-underframe construction, with wooden-superstructure covered with steel sheathing, and the remainder of the cars were of all-steel construction. This train departed from Louisville, the last open office, 23.02 miles south of Longmont, at 10:06 a.m., 50 minutes late, and, while moving at a speed of 60 miles per hour, as indicated by the tape of the speed-recorder with which the engine was equipped, it struck a motor-truck on a grade crossing 1.06 miles south of the station at Longmont.

The motor-truck involved was owned by the Golden Transfer Company, Longmont, Colo. The driver, who was the sole occupant, held Colorado 1948 chauffeur's license No. 7-224. The matortruck was a 1941 GMC 2-1/2 ton truck and bore Colorado license No. 77739. It was equipped with nover-driven tandem axles at the rear, dual wheels at each end of each rear axle, single wheels on the front axle, and was provided with an enclosed steel cab. All theels of the motor-truck were provided with hydraulic brakes. Permanently mounted on the body of the motor-truck was a power-operated concrete mixer, with a rated capacity of 3 cubic yards. At the time of the accident it was loaded with 3 cubic yards of concrete, weighing about 12,000 pounds. The total length of the motor-truck was 19 feet 2 inches. The total weight of the motor-truck and lading was about 27,000 pounds. This motor-truck was moving eastward on Colorado State Highway No. 119 at an estimated speed of 20 miles per hour when it entered upon the crossing, without stopping, and was struck by No. 31.

The motor-truck was demolished. A portion of the wreckage became lodged under the train which resulted in the derailment of the rear truck of the first car and the remaining three cars at a point about 75 feet north of the crossing. A separation occurred between the first and second cars as a result of a broken knuckle. The engine and the first car stopped upright and on the track, with the front end of the engine 1,808 feet

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north of the crossing. The second, third and fourth cars remained coupled and stopped practically upright and parallel to the track, with the front end of the second car 7.1 feet north of the crossing and 18 feet east of the main track. The left side of the engine and all the cars were slightly damaged.

. The reather was clear at the time of the accident, which occurred at 10:55 a.m.

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During the 30-day period preceding the day of the accident, the average daily movement over the crossing was 12.7 trains. During the 24-hour period beginning at 8 %, m., October 25, 1948, 357 automobiles, 113 trucks and 2 buses passed over the crossing.

#### Discussion

No. 31 was approaching the crossing at a speed of 30 miles per hour in territory where the maximum authorized speed for this train was 60 miles ber hour. The enginemen were maintaining a lookout ahead from their respective positions in the cab of the engine, and the members of the train crow were in various locations throughout the ears of the train. The brakes of this train had been tosted and had functioned properly en route. The engineer said that when the engine was in the vicinity of the crossing-whis the sign, he sounded the grade-crossing whistle-signal and completed the last blast at the crossing, and that during that time the engine bell was ringing. The fireman said that throughout a distance of about 1/2 mile immediately south of the crossing he observed the motor-truck moving on the highway and approaching the crossing from the west. He said that the speed of the motor-truck did not appear excessive, and he thought it would stop slort of the crossing. When it became apparent that the motortruck would not stop short of the crossing, the fireman jumped to the deck of the engine, but did not call a warning to the angineer. The engineer moved the brate-valve to the emergency position when the collicion occurred.

The driver of the motor-truck had been employed by the Golden Transfer Company as a commercial driver for several years. Since July, 1948, he frequently had traversed this route, and he was familiar with the crossing involved. He said that as the motor-track approached the crossing on the day of the accident, the right window of the cab was half open, the left window was fully open and there was nothing

in the cab to obscure his view shead. The barrel of the concrete miner was revolving at idling speed, powered by an independent motor. However, this machine did not make as much noise as the motor of the motor-truck. When the motor-truck was about 150 feet west of the crossing, he looked in both directions but did not observe the approaching train, and did not hear the warning whistle or bell. Therefore, he made no effort to stop the motor-truck short of the crossing. Throughout a distance of 1,245 feet immediately west of the crossing on the nightary, the driver of a motor vehicle has an unobstructed view of an approaching train throughout a distance of 2,000 feet immediately south of the crossing.

### Cause

It is found that this accident was caused by a motor-truck occupying a rail-highway crossing at grade immediately in front of an approaching train.

Dated at Washington, D. C., this twenty-ninth day of December, 1948.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.