INTERSTATE COMMERCE COMMISSION

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE SALT LAKE & UTAH RAILROAD NEAR TAYLORSVILLE, UTAH, ON NOVEMBER 18, 1921.

December 18, 1921

To the Commission:

On November 18, 1921, there was a head-end collision between two passenger trains on the Salt Lake & Utah Railroad near Taylorsville, Utah, which resulted in the death of 3 employees, and the injury of 28 passengers and 7 employees. Representatives of the Public Utilities Commission of Utah participated in the investigation of this accident

Location and method of operation

The Salt Lake & Utah Railroad is an electric interurban line, its main line extending between Salt Lake City and Payson, Utah, a distance of 66.6 miles. In the immediate vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use Southbound trains are required to take siding at meeting points. The accident occurred on a gravel pit spur track located 0.57 mile south of Taylorsville The switch is a facing-point switch for northbound trains, with the switch stand on the west side of the track. Approaching the spur track switch from the south the track is tangent for a distance of 3,444 feet; the grade is 1 per cent de-

scending for northbound trains. The weather was cloudy at the time of the accident, which occurred at about 8.28 a. m.

Description

Southbound passenger train No. 3 consisted of motor car 603, and was in charge of Conductor Stanbridge and Motorman Cramer. It left Salt Lake City at 8. a. m., on time, passed Granger, a registering point 5.8 miles south of Salt Lake City, at 8.20 a. m., on time, proceeded to the spur track switch south of Taylorsville, a distance of 2.8 miles, and backed into clear for the purpose of meeting train No. 2. It was while standing on this spur track, 152 feet from the switch points, that the collision occurred.

Northbound passenger train No 2 consisted of motor car 607, and was in charge of Conductor Sloey and motorman McEwan. It left Riverton, 9.3 miles south of the spur track switch and the last open office, at 8.11 a. m., 3 minutes late, left Bennion, 1 5 miles from the switch, at 8.26 a m., 3 minutes late, and headed in on the spur track, the switch being open, and collided with train No. 3 while traveling at a speed estimated to have been about 25 miles an hour.

Car 603, of train No. 3, was driven backward a distance of about 100 feet and the baggage compartment in the forward end telescoped by car 607, of train No. 2,

The forward ends of both cars were badly damaged, and car 607 was derailed. The employees killed were the motorman of train No. 3, an assistant trainmaster and an electrician, all of whom were in the forward end of car 603

Summary of evidence.

A bulletin dated October 12, 1921, provided that until further notice trains Nos. 2 and 3 would meet at the gravel pit spur When train No. 2 reached the tangent track approaching the switch, motorman McEwan saw train No. 3 standing on the main track at the switch and reduced speed, bringing his train under control after passing a road crossing located about 1,000 feet south of the switch, the speed at this time according to his estimate being from 8 to 12 miles an hour. When within about 600 feet of the switch he received a proceed hand signal from Conductor Stanbridge, of train No. 3, who was then sweeping snow on the opposite side of the track from the switch stand, and in accordance with what he said was the custom, he considered this signal to mean that the train to be met was into clear and the switch lined for the main track. He then released the air brakes and turned on the power, but when about 120 feet from the switch discovered that the switch target was in the stop position, and then saw that the switch points were lined for a movement to the spur track. He said he shut off power and applied the air brakes in emergency, but at this time the car was passing over the switch points, traveling at such a high rate of speed that it could not be stopped before it collided with train No 3. Motorman

McEwan said he had not noticed the indication of the switch target any sooner because his attention had been centered on Conductor Starbridge. Conductor Sloey, also of train No. 2, went into the forward end of the car as it approached the gravel pit spur, noticed Conductor Starbridge giving a proceed signal, and then sat down, paying no further attention to the operation of his train. Just as he had sat down he heard one of the employees in the forward end of the car say that the switch was wrong; he thought it was at about this time that the car entered the open switch.

According to Conductor Starbridge, of train No 3, when his train left the switch he got off with a broom to sweep the snow out of the switch points and also to clear a place on the ground on which to stand while handling the switch After his train had backed in on the spur track he swept around the switch, and on looking up saw train No. 2 approaching. Being of the opinion that it would be traveling at a high rate of speed, he thought he would have to hurry in order to sweep a clear place on the ground on the other side of the track on which to stand while train No. 2 was passing. On again looking at it he saw it was quite close and said he then gave a proceed signal, feeling sure everything was all right. He then began to sweep more snow out of the way, and did not realize that he had left the switch open until train No. 2 entered the switch.

Trainmaster Keibard, who was in the forward end of train No. 3, said he had the best view of the switch of

any of the employees on that train as this car stood on the spur track, and that he could not see either the switch points or switch target and could only see the head and shoulders of Conductor Stanbridge on the opposite side of the track from the switch stand, the view being cut off on account of an embankment and weeds on the inside of the curve of 5° 45' in the spur track as it leads away from the main track.

Both of the cars involved in this accident were of all-steel construction, lined and trimmed with wood. They were of the combination passenger and baggage type, built in 1914, equipped with 4-wheel trucks, and were 61 feet 8 inches in length over the buffer platforms, with a weight of 88,000 pounds. Neither of these cars was equipped with end reinforcements, or any kind of antitelescoping device. Examination of the wheels under these cars showed that all of them had flat spots, those under car 603 being about three-fourths of an inch in length, due to the car having been pushed backward at the time of the collision with the wheels locked, the car having been standing with the air brakes applied. The flat spots on the wheels under car 607 were 1 inch or more in length, while for a distance of 50 feet south of the point of accident there was evidence on the running surfaces of the rails that the wheels had been sliding, while within 10 feet of the point of accident there were several spots on the rails which had been burned blue by sliding wheels.

Conclusions

This accident was caused by the failure of Conductor Stanbridge, of train No 3, to close the switch leading to the gravel pit spur after his train had backed in on the spur, for the purpose of meeting train No. 2, and before giving a proceed signal to the motorman of train No. 2.

No reason was advanced by Conductor Stanbridge for his failure to close this switch. Apparently he became engrossed in sweeping snow from the vicinity of the switch and forgot that he had not closed it after his train had backed into clear.

Time-table Rule 26 reads as follows:

> "All trains will approach switches under perfect control, and where a train is to be met will not attempt to pass until switches and signals are seen to be right and the train taking the siding is known to be in the clear."

While the burden of responsibility rests upon Conductor Stanbridge for giving a proceed signal when he had left the switch open, nevertheless this hand signal did not relieve Motorman McEwan from observing time-table rule 26, and notwithstanding the proceed signal given by the conductor in charge of the switch, motorman McEwan should personally have observed the indication of the switch target, which was in plain view, before materially increasing the speed of his train; had he done so he could then no doubt have stopped his train in time to avoid the collision.

Conductor Stanbridge was employed as an agent and brakeman from May, 1915, to November, 1917; he was then in

the naval service until October, 1919; he was reemployed as a clerk and a brakeman from November, 1919, to March, 1920, at which time he was promoted to conductor. Motorman McEwan had been employed as a motorman since October, 1918. He had had 8 years previous experience on the Oregon Short Line Railroad as a fireman and engineman. The records of both these employees during the period of their employment on the Salt Lake & Utah Railroad were good.

The crew of train No. 3 had been on duty about half an hour, and the crew of train No. 8 about 2½ hours, previous to which all of these employees had been off duty about 14 hours.

Respectfully submitted,

W. P. Borland

Chief, Bureau of Safety.