## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE NEW YORK CENTRAL RAILROAD NEAR ANGOLA, IND., ON AUGUST 21, 1933.

December 16, 1933.

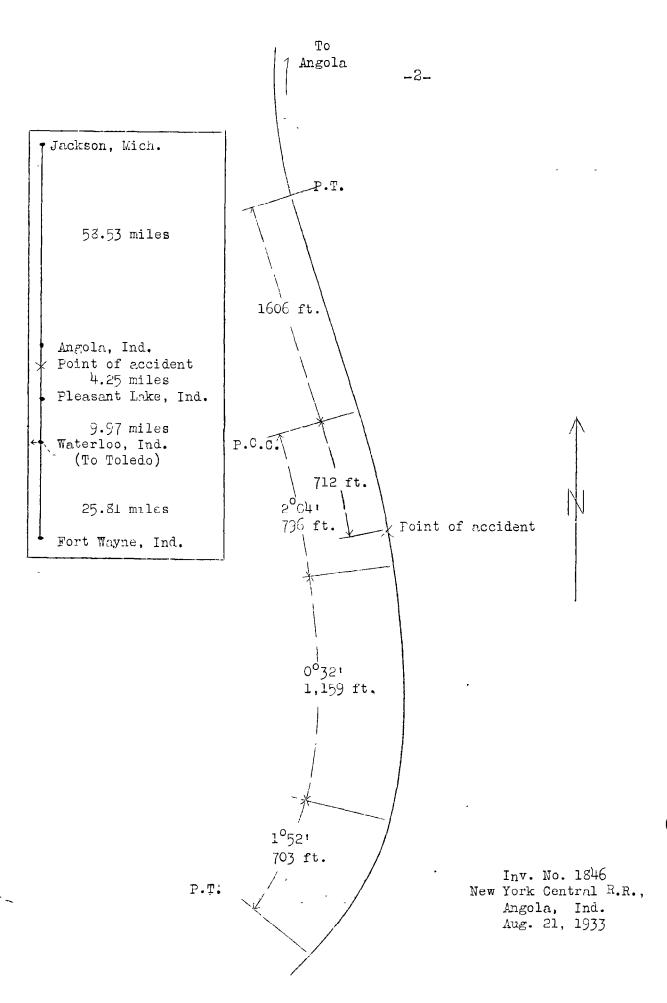
To the Commission:

On August 21, 1933, there was a head-end collision between two freight trains on the New York Central Railroad near Angola, Ind., which resulted in the injury of two employees.

Location and method of operation

This accident occurred on that part of the Toledo Division extending between Jackson, Mich., and Fort Wayne, Ind., a distance of 98.56 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time table, train orders, and a manual block-signal system. accident occurred about 1 miles south of Angola; approaching this point from the north, the track is tangent for a distance of 1,506 feet, followed by a compound curve to the right 2,658 feet in length, with a maximum curvature of 20 041, the accident occurring on this curve at a point 712 feet from its northern end, where the curvature is at its maximum. Approaching from the south the track is tangent for a considerable distance, followed by the curve on which the accident occurred. The grade in this vicinity, is generally descending for south-bound trains being 0.11 percent at the point of accident. On single track, south-bound trains are superior to north-bound trains of the same class, unless otherwise specified.

The passenger station on the west side of the track at Angola was recently destroyed by fire, and the telegraph office has been located in the freight office on the east side of the track; on the day of the accident carpenters were engaged in remodeling the office to make a passenger waiting room. The train-order and block signal is of the 2-arm, 2-position, semaphore type, governing both north-bound and south-bound movements; it is located on the west side of the track directly opposite the office and is electrically operated, the control switch being located on the wall within easy reach of the agent-operator. A lapse of 3 hours occurs between the time the agent-operator goes on duty, at 6:15 a.m., and the time he is required to place a block signal in operation, 9:15 a.m. Rule 906 reads in part as follows:



"To open a signal station the signalman must give "8" to the next signal station in each direction and record the trains that are in "the extended block. He must then display Stop-signal and notify the next signal station in each direction that the signal station is open."

A view of the point of accident from the engineman's side of the cab of a south-bound engine across the inside of the curve could be had for a distance of about ½ mile, while approximately the same view could be had from the fireman's side of the cab of a north-bound engine.

The weather was clear at the time of the accident, which occurred about 12:33 n.m.

## Description

South-bound second-class freight train no. 72 consisted of 7 freight cars, 2 empty passenger cars, and a caboose, hauled by engine 3752, and was in charge of Engineman Fogg and Conductor Taylor. This train arrived at Angola at 10:50 a.m., according to the train sheet, passed by the train-order and block signal, which was displaying a proceed indication for train movements in both directions, the agent-operator having neglected to place the signal at stop after having opened the office, and then stopped in order to perform the usual station work; while at that point some members of the crew had lunch. It is of almost daily occurrence for train no. 72 to receive orders at Angola to meet train no. 73 at that point, or somewhere south thereof, and in this instance about 11:40 a.m. the agent-operator received train order no. 15, form 31, reading as follows:

"No 72 Eng 3752 Meet No 73 Eng 3742 at Angola & Get this order at Angola."

The agert-operator failed to deliver the order to the crew of train no. 72 and that train departed from Angola at 12:25 p.m., according to the conductor, I hour and 55 minutes late, with both the conductor and the engineman having observed that the signal was displaying a proceed indication. On reaching a point about 12 miles beyond Angola the opposing train was observed approaching around the curve and train no. 72 was brought to a stop, being struck immediately afterwards by train no. 73.

North-bound second-class freight train no. 73 consisted of 7 cars and a caboose, hauled by engine 3742, and was in charge of Conductor Pavey and Engineman Westfall. At Waterloo, 14.22 miles south of Angola, the crew received copy of train order no. 15, form 19, previously quoted. Train no. 73 departed from that point at 11:53 a.m., according to the train sheet, left Pleasant Lake, 4.25 miles south of Angola, at 12:22 p.m., according to the train sheet, 21 minutes late,

and was approaching Angola when it collided with train no. 72 while traveling at a speed estimated to have been about 12 miles per hour.

Both engines were slightly damaged but continued to destinations with their trains; none of the equipment in either train was derailed. The employees injured were the engineman and head brakeman of train no. 73.

## Summary of evidence

Engineman Fogg, of train no. 72, stated that after leaving the restaurant at Argola the conductor said the train-order board was clear and to depart when he reached the engine, which was done; Engineman Fogg also saw the train-order board. No copy of train order no. 15 was delivered to the crew by the agent-operator and after the train had departed the engineman did not realize that there was anything wrong until he looked across the inside of the curve and saw the opposing train about 20 cars lengths away, at which time the speed of his own train was 25 or 30 miles per hour. He immediately made an emergency air-brake application, stopped the train, and then tried to back out of the way but was unable to do so.

Conductor Taylor, of train no. 72, stated that the block signal at Angola was clear and after the train departed the first he knew of anything wrong was when the brakes were applied in emergency, bringing the train to a stop before the accident occurred. Conductor Taylor said that while at Angola he was in the freight house and saw the agent-operator but did not say anything to him about train orders or give any particular thought as to the whereabouts of train no. 73.

Engineman Westfall, of train no. 73, stated that copy of train order no. 15 relative to the meet with train no. 72 at Angola was received at Waterloo. While rounding the curve approaching Angola the fireman finished putting in a fire, got up to put on the injector, and then shouted a warning of danger. The speed of the train was about 25 miles per hour and Engineman Westfall immediately applied the air brakes in emergency; at first he thought his train would stop in time to evert the accident and he said it was moving at a low rate of speed when the collision occurred. Brakeman Metcalf was riding on the tool box of the tender, behind the engineman, and was unaware of anything wrong until the fireman shouted a warning of danger; he estimated the speed to have been about 12 miles per hour at the time of the accident.

Agent-Operator Ellis, at Angola, stated that he went on duty at 6:15 a.m., and that when he opened the signal station at 9:15 a.m. he failed to display the train-order signals, saying he had been pretty busy, and that the carpenters were making a lot of noise and that he had been called out to the warehouse to see what he wanted done, the result being that he

forgot the signals. Train no. 72 arrived at 10:50 a.m., and when he copied train order no. 15, form 31, relative to the meet between trains nos. 72 and 73 at Angola, this order being repeated at 11:45 a.m., he was laboring under the impression that the train-order signal was properly displayed and after .copying the order he was busy helping the trainmen. to unload and seal the cars. As a rule, when the crew of the train return from lunch they come in the office and report ready, but for some reason on this day they departed without reporting and the agent-operator did not discover that the train had left until it was too late to do anything about it. Agent-Operator Ellis then recalled that he had forgotten to deliver train order no. 15 and on looking at the train-order signals he saw that they were both in clear position, having been left in that position since the day before. Agent-Operator Ellis further stated that when the operator at Pleasant Lake, located 4.25 miles south of Angola, asked for the block for train no. 73 he gave it to ham without checking against his train-order signal, assuming that it was properly displayed. He also added that it was customary and almost of daily occurrence for train no. 72 to get an order at Angola to meet train no. 73.

## Conclusions

This accident was caused by the failure of Agent-Operator Ellis, at Angola, to deliver a meet order to the crew of train no. 72.

Agent-Operator Ellis went on duty at Angola at 6:15 a.m.; and when he opened the office at 9:15 a.m. he failed to display the train-order and block signal. Train no. 72 arrived at Angola at 10:50 a.m. and Agent-Operator Ellis copied the meet order and repeated it at 11:45 a.m., assuming that the train-order signal was properly displayed. After copying the order he was unusually busy, and then some of the crew went to lunch. Ordinarily they would come into the office and report when ready to depart, but on this occasion they departed without reporting, and with the signals still in proceed position, and it was not until the train had gone that the agent-operator remembered that he had failed to deliver the meet order and discovered that the train-order signal was in clear position.

Rule 219 of the book of rules of this railroad reads as follows:

"An operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train-order signal until he has obtained the signatures of the conductor and engineman to the order."

Had this rule been observed by Agent-Operator Ellis, or had he checked the position of the signals when he pledged the block for train no. 73, the accident probably would have been averted.

Under the rules, a signal imperfectly displayed must be regarded as the most restrictive indication that can be given by that signal, and the fact reported to the superintendent. Proper observance on the part of the members of the crew of train no. 72 should have disclosed to them that something obviously was wrong as both arms of the train-order signal were displaying proceed indications, for both north-bound and south-bound movements.

Respectfully submitted,

W. P. BORLAND,

Director.