## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE INDIAMAPOLIS UNION RAILWAY AT INDIAMAPOLIS, IND., ON OCTOBER 31, 1934.

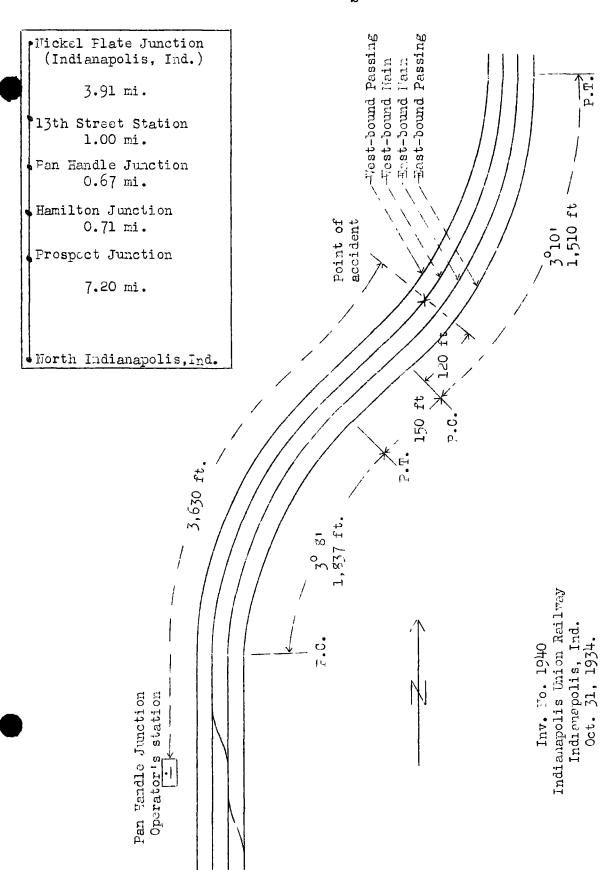
December 12, 1934.

To the Commission:

On October 31, 1934, there was a head-end collision between a Cleveland, Cincinnati, Chicago & St. Louis freight train and a Baltimore and Ohio transfer train on the tracks of the Belt Railroad, leased and operated by the Indianapolis Union Railroad, at Indianapolis, Inc., which resulted in the death of 1 employee and the injury of 1 employee. The investigation of this accident was held in conjunction with a representative of the Public Service Commission of Indiana.

# Location and method of operation

The Bolt Railroad extends between North Indianapolis.and Nickel Plate Junction, a distance of 13.49 miles, and connects with several railroads at various points. This line is entirely within yard limits and trains are operated by book of rules and general orders, no time table or train orders being in use, all trains being considered as extras and required to run under control at all times. Between Pan Handle Junction and 13th Street station, a distance of 1 mile, within which territory this accident occurred, there are four tracks designated, from north to south, as the west-bound passing track, west-bound main track, east-bound main track and east-bound passing track; the accident occurred on the west-bound main track at a point approximately 3,630 feet east of Pan Handle There is an interlocking plant at Pan Handle Junction which controls the movement of trains through crossovers at that point. Trains approaching these cross-overs in either direction are governed by 3-indication color-light dwarf signals which display red, yellow and green, for stop, proceed with caution, and proceed, respectively; a train receiving either a yellow or a green indication is authorized to proceed on the route lined for it, regardless of track or Operators may allow reverse movements only after direction. communicating with the station in advance. Approaching the point of accident from the west, there is a 308' curve to the right 1,837 feet in length and then the track is tangent for a distance of about 150 feet, followed by a 3°10' curve to the



left 1,510 feet in length, the accident occurring on this latter curve at a point about 120 feet from its western end. Approaching from the east, the track is tangent for a distance of 970 feet to the curve on which the accident occurred. The grade at the point of accident is 0.27 percent ascending for east-bound trains.

In the immediate vicinity of the point of accident the view is somewhat obstructed by a water tank and buildings on the north side of the track, and in addition, the curvature of the track prevents crews of opposing trains at night from determining which track another train is using until they are within a short distance of each other.

The weather was clear at the time of the accident, which occurred about 8:48 P.M.

### Description

Extra 6248, an east-bound freight train of the Cleveland, Cincinnati, Chicago & St. Louis Railway, hereinafter called the Big Four, consisted of 41 cars and a caboose, hauled by engine 6248, and was in charge of Conductor Hubbard and Engineman Webster. This train entered the tracks of the Belt Railroad at Vandalia Junction at 8:02 p.m., and after setting off 17 cars at two points en route it approached Pan Handle Junction on the east-bound passing track at 8:46 p.m. A yellow indication was received and the train moved through the cross-overs to the west-bound main track, and was proceeding against the current of traffic when it collided with the transfer train while traveling at a speed estimated to have been between 2 and 5 miles per hour.

The transfer train, west-bound, was a train of the Baltimore & Ohio Railroad, hereinafter referred to as the B&O, and consisted of five cars and a caboose, hauled by engine 342; it was in charge of Conductor Burton and Engineman Gritton. This train left Nickel Plate Junction at 8:32 p.m., passed 13th Street station at 8:47 p.m., under a clear signal indication, and shortly afterwards collided with the Big Four train while traveling at an estimated speed of 10 or 12 miles per hour.

The Big Four engine was not derailed and only slightly damaged; the first car in its train was derailed and demolished and the next two cars were slightly damaged. The B&O engine was derailed and considerably damaged, and the first car was slightly damaged. The employee killed was the engineman and the employee injured was the fireman of the B&O transfer train.

## Summary of evidence

Engineman Webster, of Extra 6248, stated that as the train approached Pan Handle Junction on the east-bound passing track the signal changed from red to green and then to yellow and was displaying this latter indication when his train passed it. train moved through the cross-overs and entered the west-bound main track at a speed of about 10 miles per hour and did not attain a speed of more than 15 miles per hour after passing that point. While rounding the curve east of Pan Handle Junction he saw the reflection of a headlight and assumed that it was a train on the west-bound passing track. On account of his view being restricted, however, he asked the fireman and head brakeman to watch the headlight and when the two trains were about 8 or 10 rail lengths apart the fireman told him that it was on the same track and he immediately applied the brakes in emergency and sounded the whistle; he did not think the speed was more than 5 miles per hour at the time of the accident.

Fireman Meeker, of Extra 6248, stated that after entering the curve east of Pan Handle Junction the engineman remarked that he saw the headlight of an approaching train, but due to the fireman's position on the outside of the curve he could not see it at that time. As soon as his train entered the tangent track he saw that the approaching train was on the west-bound track and immediately notified the engineman; he estimated the speed of his train at 6 or 8 miles per hour when the brakes were applied and about 4 miles per hour at the time of the accident. The statements of Head Brakeman Rodgers corroborated those of Fireman Meeker.

Conductor Hubbard, of Extra 6248, stated that the train was traveling at a speed of about 8 miles per hour when it passed through the cross-overs at Pan Handle Junction and did not increase speed to any extent after passing that point; he was working at the desk in the caboose and did not see or hear anyone trying to attract his attention. Afterwards he went up in the cupola but did not see a train approaching, his first intimation of anything wrong being when the brakes were applied in emergency. He looked at his watch immediately after the accident and noted that it occurred about 8:47 p.m.

Fireman Sprankle, of engine 342, stated that his transfer train approached 13th Street station at a speed of between 12 and 18 miles per hour and the engineman called a green signal indication which he acknowledged; he did not see the indication on account of the curvature of the track. He was on his seatbox looking ahead but did not see the opposing train approaching around the curve and the engineman did not say anything until just before the collision occurred; the engineman then shut off

steam and shouted to him to jump, which they both did about the time the trains collided; the finemen thought the engineman applied the independent brak, just prior to the accident but could not state whether he applied the automatic brakes.

Conductor Burton, of Extra 343, stated that the train passed 13th Street station, where a clear signal indication was displayed, at a speed of about 15 miles per hour and was still traveling at about the same rate of speed when the collision occurred, no brake application being made prior to that time. As he was not in the cupola of the caboose he had not seen the approaching train.

Operator Landrigan, on duty at Pan Handle Junction, stated that a Belt Railroad engine arrived at his station on the westbound passing track and while svitching cars to some yard tracks the dispatcher instructed him to send this engine to Prospect Junction, 1.38 miles west of his station. He called Hamilton Junction, which is between Pan Handle Junction and Prospect Junction, and arranged to send the Belt engine on the eastward main against the current of traffic. In the meantime the operator at 13th Street station reported a Big Four relief engine approaching on the west-bound main track and Operator Landrigan then called the operator at Hamilton Junction and arranged to route this engine ahead of the Belt engine over the east-bound main track; the operator at Hamilton Junction at the same time informed him that Extra 6248 was approaching on the east-bound passing track. He lined the coss-over switches for the Big Four relief engine to move from the west-bound main to the east-bound main, but Extra 6248 arrived before the Belt en ine left and he lined the switches leading from the eastbound passing track to the east-bound main track and displayed a yellow signal indication, intending to route this train eastward over the latter track, but forgot to close the crossover switch leading from the east-bound main to the west-bound main track. He discovered his error while Extra 6248 was passing and immediately ran inside, called the operator at 13th Street station, and asked him if there was any train on the west-bound main track, that operator telling him that a B&O transfer train was then going by on that track. Operator Landrigan made no effort to stop the Big Four train while it was passing his station as he said it was traveling too fast, 24 or 25 miles per hour, for him to get on the caboosc, nor could he have shouted a warning to the crew in the caboosc for the reason that the train was making too much noise for him to be heard, neither did he give any stop signals as the Belt engine was then on the west-bound passing track and obscured the view; at the time he had thought the best way to prevent an accident was to instruct the operator at 13th Street to stop any opposing movement. Operator Landrigan further stated that he had worked

at Pan Handle Junction about 15 days during the past year and was familiar with the rule requiring switches to be restored to normal position immediately after being used, but said he failed to do so in this instance although the west-bound Bis Four relief engine had passed about 2 minutes before the Big Four freight train arrived from the opposite direction.

Operator Shea, on duty at 13th Street station, stated that after Nickel Plate Junction reported the B&O transfer train to him he called the operator at Pan Handle Junction four times but was unable to communicate with him. train arrived he displayed a clear signal indication and the train proceeded on the west-bound main track. About 2 minutes later Operator Landrigan at Pan Handle Junction called to inquire if there was anything coming west and he told him that the B&O transfer was on the west-bound main: Operator Landrigan then said that a Big Four train was just heading into the same track and asked him to stop the B&O tra n, but he redied that it was then too late. Operator Shea said that it was not unusual to run trains against the current of traffic, but before allowing a movement of this kind an operator authorizing the movement first calls the next station in advance and gets authority for it, a red signal indication then being displayed to protect against opposing movements.

Engineman Watz, of Belt engine 1, stated that at the time the Big Four freight train was passing Pan Handle Junction his own engine was coupled to two cars and was moving west on the west-bound passing track, between the office and the Big Four train. He had seen the operator, with a white lantern, pass in front of his engine and then return behind the cut of cars, and thought he was trying to check the number of the caboose of the freight train. He did not pay particular attention to the speed of that train, but believed that had it been excessive he would have noticed it. The operator did not tell him until later that the freight train had been given a wrong line up and had he known it in time he would have sounded the whistle of his engine in order to attract the attention of the crew of that train.

Fireman Gray, of Belt engine 1, estimated the speed of the Big Four freight train at 25 miles per hour while it was passing Pan Handle Junction. He saw the operator run across the track in front of his engine with a white lantern and hold it up but said the operator did not give any signals. Conductor Weigle, of engine 1, said that he was in the office talking with the dispatcher by telephone and engaged in other duties while the freight train was passing and did not learn that it was using the wrong route until he went outside and was told by the operator; at that time the entire train had passed the office.

#### Conclusions

This accident was caused by the farlure of Operator Landrigan, at Pan Handle Junction, to restore a cross-over switch to normal position, resulting in Extra 6248 being operated against the current of traffic without protection.

Operator Landrigan arranged for the movement of two westbound light engines against the current of traffic on the eastbound main track and accordingly lined the cross-over switches connecting the two main tracks; after the first of the two light engines had departed, however, he failed to restore the switches. Extra 6248 then arrived on the east-bound passing track and the operator lined the switches so as to have that extra cross-over to the east-bound main track and proceed eastward on that track, but forgot that the switches of the crossover between the two main tracks were still open, with the result that Extra 6248 crossed over first to the east-bound main track and thence to the west-bound main track and proceeded eastward on the latter track. When Operator Landrigan discovered his error he did not try to stop Extra 6248 but ran inside and communicated with the operator at the block station in advance for the purpose of ascertaining whether there was anything coming with the current of traffic on the west-bound track, but the BaO transfer already was passing that point. The rules require switches to be left in proper position after having been used, and in addition a bulletin had been issued as late as June 30 of this year calling attention to the fact that operators were to keep their switches in normal position except when being used for cross-over movements; Operator Landrigan should have restored the switches of the cross-over between the two main tracks before giving attention to his other duties.

No record is kept of the number of movements against the current of traffic although it is understood that they are of more or less frequent occurrence. The number of movements both with and against the current of traffic during the first 30 days of October totaled 2190, an average of 73 per day. Greater safety would surround these movements, particularly where many are made against the current of traffic, if a blocksignal system were in effect.

Respectfully submitted,

J. W. PATTERSON,

Director.