INTERSTATE COMMIRCE COMMISSION

PEPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RUINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW YORK CENTRAL RAILROAD AT HOLLEY, N. Y., ON SEPTEMBER 34, 1926.

October 30, 1926.

To the Cormission.

On September 24, 1326, there was a head-end collision between an express train and a yard engine on the New York Central Railroad at Holley, N. Y., resulting in the death of one employee.

Location and method of operation

This accident occurred on that part of the Rochester Division extending between Suspension Bridge and Rochester, N. Y., a distance of 75.71 miles, this is o double-track line over which trains are operated by time-table, train orders and a manual block-signal system, supplemented at certain points by automatic signals. collision occurred on the eastbound main track, just east of the station at Holley, at a point where both manual and automatic signals were in use. Approaching the point of accident from the west the track is tangent for more than 1 mile, followed by a 1° curve to the left 1,616 feet in length, the accident occurring on this curve at a point 819.5 feet from its western end. Approaching from the east the track is also tangent for more than 1 mile, followed by the curve on which the accident occurred. The grade is 0.5032 per cent descending for eastbound trains at the point of collision. Owing to the curvature of the track, and buildings and trees on the north side of the track, the view of the point of collision was restricted to about 500 or 600 feet from the cabs of the opposing engines.

Directly opposite the passenger station at Holley, which is on the north side of the tracks, there is located a manual block signal, on the south side of the tracks, the collision occurred 162 feet east of this signal. East-bound automatic block signal 232, of the color-light type, is located 4,855.2 feet west of the manual block signal; the indications of signal 232 are red, yellow, and green, for stop, caution, and proceed, respectively. The track circuit extends 6,219.5 feet east of signal 232, or 1,364.3 feet east of the manual block signal. The manual block signal works in conjunction with the automatic signal, when the manual signal is placed in the stop

position a caution indication is displayed by signal 232, and when the manual signal is placed in the clear position a clear indication is displayed by signal 232, provided the track circuit is unoccupied to the end of automatic block-signal territory. What is known as the quarry switch is located 1,691.2 feet east of the eastern end of the track circuit controlling signal 232.

The weather was clear at the time of the accident, which occurred at about 5.40 p.m.

Description

Engine 485, known as a traveling switch engine, performs switching at Fancher, then goes west to Albian and then returns eastward to Fancher and thence to Holley. At the time of the accident extra 485, in charge of Conductor Vanderpool and Engineman Lynch, consisted of two cars, hauled by yard engine 485. During the course of switching at Holley a car was set out at the quarry switch, beyond the limits of the automatic signal system, and then engine 485, headed west, with two freight cars behind it, proceeded westward against the current of traffic on the eastbound main track and collided with extra 3373 while traveling at a low rate of speed.

Eastbound express train extra 3373 consisted of 28 express cars and 2 coaches, all deadhead equipment, hauled by engine 3373, and was in charge of Conductor Sleight and Engineman Wickens. It departed from Fancher, 3.59 miles west of Holley, at 3.33 p.m., according to the train sheet, running under a caution manual block-signal indication, passed signal 232, which was displaying a clear indication, and collided with extra 485 while traveling at a speed estimated to have been between 20 and 25 miles an hour.

Both engines were derailed and badly damaged, engine 3373, together with its tender, coming to rest on its left side, across the westbound main track, while eight cars in its train were derailed. Engine 485 came to rest on the westbound main track, at a point 125 feet east of the point of collision, while the tender and two cars broke away from the engine, ran down the grade, and came to a stop at a point about 1,625 feet east of the point of collision. The employee killed was the fireman of extra 3373.

Summary of evidence

Engineman Lynch, of extra 485, stated that the yard engine hid been stated in around Holley for about two nours. He then proceeded to the crossover at Albian Street, located 5,350 feet west of the point of collision, there Brakeman Eddy for olf the engine for the ourbose of affording proper flag protection while the engine want to the quarry switch, 7,235 feet east of Albian Street, set out a car, and returned, against the current of traffic. Engineman Lynch said that he get Fireman Bender operate the engine on the trip to the quarry switch and return, while rounding the curve on the return trip he told the fireman to be careful, and the fireman made an air-brake application. Shortly afterwards the fireman gave warning of danger and Engineman Lynch jumped just before the collision occurred.

Firsman Bender, of extra 485, stated that extra 3373 was about at ht car-lengths away when he first saw it; he immediately shut off steam, applied the air brakes, reversed the angle, then released the air brakes and shouted to Engineman Lynch. Fireman Bender further stated that the speed of his engine was not more than 6 or 7 miles an nour at any time on the resurn trup from the quarry switch, and that it was just barely moving at the time of the collision. He also said that before proceeding from Albion Street to the quarry switch he saw Brakeman Eddy take the flag off the pilot of the engine, close the crossover switches, and start walking westward.

Conductor Vanderpool, of extra 485, stated unat the yard engine arrived at Holley at about 1 p.m., and that he obtained permission from the operator at that point to use both main tracks until he reported that he was into At about 3.25 p.m. the engine crossed over to the castbound main track at Albion Street, to so to the quarry switch and set out a car, and he said the at this time he instructed Brakenian Eddy not to permit anything down the castbound main track until the engine resurred. He stood on the front footboard of the engine on the return trip, and he said the namual block signal at Holley was displaying a clear indication for elatbound trains and a stop indication for westbound trains and that about the time he observed these indications he also saw extra 3373 approaching. Brakerin Foster was also ridia, on the front footboard of the yard engine on the return trip, with the conductor, while Brakeran Walters was riding on the second c r, their statements practically correspond tod those of Conductor Vanderpool and they also stated that the manual block signal was displaying a clear indication for eastbound trains and a stop indication for westbound trains immediately prior to the accident.

Brakeman Eddy, of extra 485, stated that while he was not a qualified flagman he has acted as flagmen on previous occasions, and on this occasion Conductor Vanderpool instructed him to afford flag protection while the yard engine vent to the quarry switch and returned. closing the crossover switches he wilked westward and was standing at a point about six car-lengths west of Albion Street when extra 3373 approached. Brakeman Eddy said that he did not have any torpedoes down but that he concinuously waved his flag from the time the train passed signal 232 until it went by nin, as which time he estimated the speed of the train to have been from 25 to 30 nour. He said that the engineman was looking out of the window but that he received he enswer to his flag signals. When the rear end of the train oassed him he saw Flagman Storms on the rear platform of the coach, shouted to the flagran, waved his red flag and pointed down the track, and then Flagman Storms vent inside the coach. Brakeman Eddy admitted that he was required to use torpedoes when flagging, that he had two torpedoes in his possession, and that there was plenty of time at his disposal in which to have put then down.

Engineman Wickens, of extra 3373, stated that at Fancher, 3.59 miles west of Holley, water was taken and the train departed, at 3.33 p.m., under a caution manual block-signal indication, indicating that his train should proceed under control to Brockport, the next open office, 4.6 miles east of Holley prepared to stop short of any Approaching Holley he sounded the whistle obstruction, for Albion Street crossing and observed that automatic block signal 232 was displaying a clear indication, but he said that he did not see Brakeman Eddy, nor were any torpedoes encountered. At this time the speed of his train was about 35 miles an nour and after crossing Albion Screet he shut off steam. After passing the freight house, located just west of the station on the south side of the tracks, he began to work steam, lightly, while rounding the curve, and then Fireman Maloney, who was on the inside of the curve, shouted a warning of danger. Engineman Tickens leaned out of the cab window, saw the switch engine ahead and immediately applied the air brakes in emergency, but at this time it was too late to avert the accident, at which time he said that the speed of als train was about 20 miles an hour. Engineman Wickens further stated that he saw a man standing south of the tracks, just west of Albion Street crossing, and thought it was an employee in transportation service, who gave him a proceed signal as the engine passed, he did not see any flag in the man's hand or under his arm. Engineman Wickens also stated that the manual block signal at Holley was displaying a clear indication for eastbound trains, and that the fire man called its indication, but that he informed the fireman it did not indicate anything as it was his understanding from the time-table that the office at Holley closes at 3.30 p.m. and that his train therefore was running on a caution block which extended from Fancher to Brockport. Engineman Wickens was of the impression, however, that on receiving a clear indication at automatic signal 232 his train did not have to operate with caution until it reached the end of automatic block-signal territory. He also said that he was aware that a switch engine was liable to be working at Holley at any time, but as he saw no smoke or anything to indicate its presence he thought the switch engine probably would be at the quarry switch.

Conductor Sleight and Brakeman Rogers, of extra 3373, stated that they were unaware of anything wrong prior to the accident. Conductor Sleight said that his train departed from Fancher under a caution manual block signal indication and it was his understanding that they were therefore required to proceed with caution to Błockport, knowing that the office at Holley was supposed to close at 3.30 p.m., although on receiving a clear indication on automatic signal 232 it would indicate that the track was clear for the length of the circuit.

Flagman Storms, of extra 3373, stated that approaching Holley he was riding on the rear platform of the rear coach, he observed Brakeman Eddy, standing near the track, about five or eight car-lengths west of Albion Street, and the brakeman motioned with his hand toward Holley station but did not use the flag. He did not know what Brakeman Eddy intended to convey by pointing ahead and thought it best to apply the air brakes from the rear but before he had an opportunity to do so the air brakes were applied in emergency from the head end. Flagman Storms went back to flag and he said that on his way back the section foreman informed him that the train ran by the flag, and that Brakeman Eddy told him the same thing.

Operator Lake, stationed at Holley, stated that extra 485 was given permission to use both main tracks until they reported clear and that the operators at Fancher and Brockport, understood that all trains were to approach Holley under caution. Between 3.25 and 3.30 p.m. he telephoned the operator at Fancher and inquired as to whether or not extra 3373 had entered the block and was informed that it had not; he then told him to let extra 3373 depart under a caution signal indication as extra 485 was working on the eastbound main track, and was informed that this would be done. Operator Lake further

stated that at 3.30 p.m., the time he is supposed to go off duty, he placed the eastbound Manual-block signal in the clear position but that he left the vestbound in the stop position, why, he did not know, other than probably he was busy making out his reports and cettling up for the day and did not notice that he had not cleared the westbound signal. On looking out of the winder, toward the east he saw extra 485 just a short distance away, returning from the quarry switch, moving against the current of traffic on the eastbound main track, the crew was getting off the engine and on looking toward the west he saw extra 3373 approaching and he sold he immediately placed the east bound manual-block signal in the stop position, when the engine of extra 3373 was about six-car lengths away. Operator Lake further stated that he did not ask permission of the dispatcher to close the office, although it has been customary to do so, nor did he comply with the rule that unless otherwise provided, a signal station must not be closed until the block in each direction is clear of all trains, he said he thought he could close his station so far as the switch engine was concerned as occasionally the crew of that engine would not finish switching until as late as 6 p.m., and that the rule, as he interpreted it, only applied to first-class trains.

Section Foreman Stazzio stated that no was in charge of a section gang working at Albion Street at about $3.30 \, \mathrm{p.m.}$ He had his motor car off the track and as he wanted to proceed eastward on the eastbound main track he went into the flag cabin and telephoned the dispatcher who told him that extra 3373 had left Fencher and that he would have to wait until it passed. Section Foreman Stazzlo said he then left the telephone and told Brakeman Eddy that extra 3373 had left Fancher and the brakeman told him he was going to stop the train. The section foreman then stood on Albion Street crossing and observed extra 3373 approaching when about 1 mile away. He said he had heard the engine whistle sounded for Lynch's crossing, about 1 mile west of Albion Street, and it was sounded again for Albion Street. Brakeman Eddy remained at Albion Street crossing until extra 3573 was about at automatic signal 232 and then began to wave a red flag, but the flag Was not answered. The brakeman waved his flag three or four times, and then the flag appeared to get furled around the stick, so that not much of it showed. flagman then endeavored to unfurl it, and by this time the engine was so close that the brakeman had to step off the track, after which he pointed his finger toward the east while the engineman appeared to look down at the flagman as he passed him. Section Foreman Stazzio also said that there were about 9 or 10 men on the crossing at the

time extra 3373 passed and he thought it possible that Dayineman Wickens did not know that Brakeman Dddy was flagging for the switch engine, but supposed he was one of the workmen.

Crossing Watchman Donnelly, station at Albion Street crossing, stated that Brakeman Eddy informed him that he had instructions to stop all eastbound traffic. As extra 3373 approached he saw Brakeman Eddy five or six car-lengths west of the crossin, waving stop signals.

Conclusions

This accident was caused by the failure of Brakeman Eddy, of extra 485, properly to protect his train.

While there is a clear conflict in the evidence as to what steps were taken by Brakeman Eddy to stop extra 3373, it does not appear that he was particularly energetic in his efforts, and it seems here than probable that he was close to or among the section men working in the vicinity and that the engineman of extra 3373 did not know he had been flagged. Brakeman Eddy knew the rules required the use of torpedoes, had two torpedoes in his possession, and had ample time in which to but them down, even after he saw extra 3373 approaching, had he coaplied with the rules it is probable that extra 3573 would have been brought to a stop in time to avert the accident.

The track circuit controlling automatic signal 232 extends only a short distance east of the station at Holley, and the evidence indicated that extra 485 did not reach this circuit on its return from the quarry switch until after extra 3573 had passed signal 232. Under these circumstances a clear indication was displayed at that signal.

The enginemen of the two trains involved had opposing ideas as to how a train should be operated on receiving a clear indication at automatic signal 232 under the circumstances which existed at the time of the accident, with the manual block office at Holley closed for the day and the eastbound train entering the block at Fancher under a permissive indication. The engineman of extra 3373 considered that the approaching train would be governed by the permissive indication until it rescaled the automatic signal, that the indication of the automatic signal would govern until the train rescaled the end of

the track circuit, and that then the permissive indication would again govern the movement of the train, until it reached the end of the Handal block section of Brook-On the other word, the engineral of extra 485 port. considered that the permissive indication received at Fancher would govern throughout the entire length of the manual block section, extensing from Fancies to Erockyort, regardless of the indicition displayed of suboutic signal 232 at Holley. It is also to be moved in a the operator at Holley had closed his office without perission from the dispatoner and without waiting a toloth in each direction from his office was clear of all trains, he said he understood the rule applied only when first-class trains were involved. There is no room for differences of opinion as to the interpintations to replaced on signals or rules, and the officials of this railroad should take steps to see that any misunderstandings of such character are eliminated as quickly as possible.

The employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the nours of service law.

Respectfully submitted,

W P. BORLAND

Director.