RAILROAD ACCIDENT INVESTIGATION

Report No 3809

CHICAGO AND EASTERN ILLINOIS RAILROAD COMPANY

CYPPESS, ILL

MAY 15, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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May 15, 1958 DATE Chicago and Eastern Illinois RAILROAD Cypress, III LOCATION Rear-end collision KIND OF ACCIDENT Freight Freight TRAINS INVOLVED Extra 221 South TRAIN NUMBERS Extra 226 South Diesel-electric units 221 Diesel-electric units 226, 223 LOCOMOTIVE NUMBERS and 212 and 206 98 cars, caboose 20 cars, caboose CONSISTS 33 m p h Standing **SPEEDS** Timetable and train orders **OPERATION** Single, 4°30' curve, 0 40 percent descending grade southward TRACK Clear **WEATHER** 6 10 a m TIME 1 killed, 2 injured **CASUALTIES** Failure properly to control speed of following train moving CAUSE within yard limits

INTERSTATE COMMERCE COMMISSION

Report No 3809

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

CHICAGO AND EASTERN ILLINOIS RAILROAD COMPANY

October 2, 1958

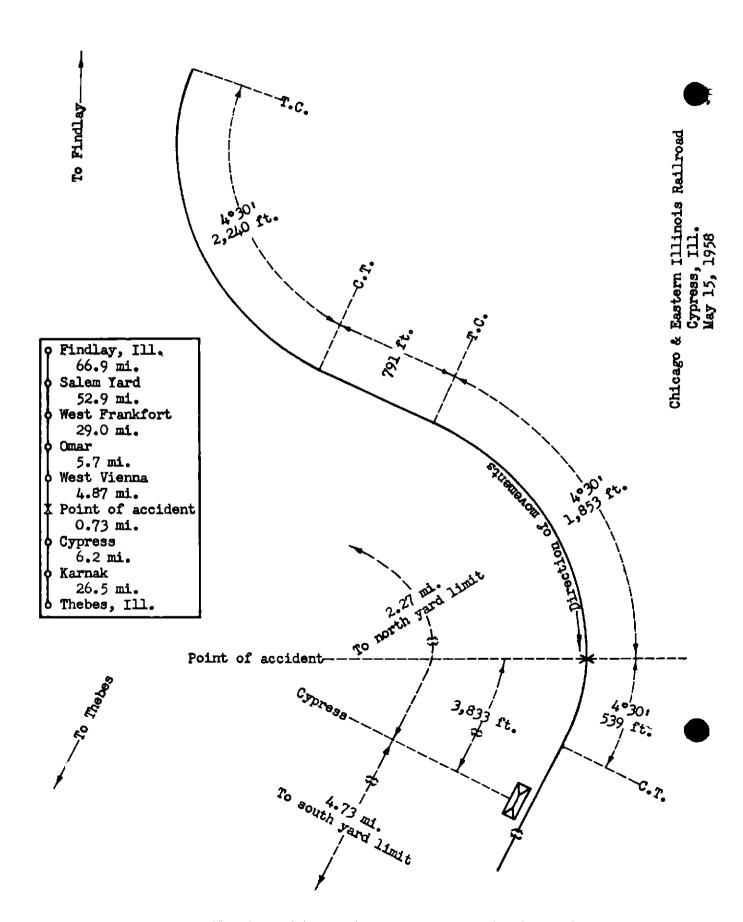
Accident at Cypress, Ill, on May 15, 1958, caused by failure properly to control the speed of the following train moving within yard limits

REPORT OF THE COMMISSION 1

TUGGLE, Commissioner,

On May 15, 1958, there was a rear-end collision between 2 fieralt trains on the Chicago and Fastern Illinois Pailroad, at Cypress, Ill, which resulted in the death of 1 train-service employee and the injury of 2 train-service employees. This accident was investigated in conjunction with representatives of the Illinois Commerce Commission.

lUnder authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition



Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Findlay and Thebes, Ill., 192.8 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. Yard limit signs at Cypress, 160.1 miles south of Findlay, are located 2.27 miles north and 4.73. iles south of the station. The accident occurred on the main track within yard in its at a point 3,833 feet north of the station at Cypress. From the north there are, in succession, a $4^{\circ}30'$ curve to the left 2,240 leet in length, a tangent 791 feet, a $4^{\circ}30'$ curve to the right 1,853 feet to point of accident and 539 feet south vard. The grade is 0.40 percent descending south vard at the point of accident

This carrier's operating rules read in part as follows

93 Yard limits are designated by special instructions in the time-table

Within yard limits, * * * Protection against * * * extra trains * * * is not required

Within yard limits, * * * extra trains * * * must move prepared to stop short of train, obstruction, or switch not properly uned

* * *

The maximum authorized speed for freight trains in the vicinity of the point of accident is $40 \, \mathrm{miles}$ per hour

Description of Accident

Extra 226 South, a southbound freight train, consisted of diesel-electric units 226, 223, and 206, coupled in nultiple-unit control, 98 cars, and a caboose. This train departed from Salem Yard, 93.2 miles north of Cypress, at 12.25 a.m., departed from West Frankfort, 40.3 miles north of Cypress, the last open office, at 3.15 a.m., and stopped within yard limits on the main track at Cypress at 5.45 a.m. with the rear end of the train 3,833 feet north of the station. About 25 minutes later, the rear end of the train was struck by Extra 221 South.

Extra 221 South, a southbound freight train, consisted of road-switcher type diesel-electric units 221 and 212, coupled in multiple-unit control, 20 cars, and a caboose. The control compartment of the first diesel-electric unit was at the south end. This train departed from Salem Yard at 4.09 a.m., departed from West Frankfort at 5.20 a.m., passed the north yard-limit sign at Cypress, and while i by no at a speed of 33 miles per nour, as indicated by the tape of the speed or ording device, it struck the rear end of Entra 226 South

The front end of the locomotive of Extra 221 South stopped approximately 155 feet south of the point of collision. Both diesel-electric units, and the 1st and 2nd cars were derailed and stopped in line with the trick. A separation occurred between the diesel-electric units. Part of the superstructure, including the control compartment, of the 1st diesel-electric unit was torn from the underframe. The caboose, and the 95th to 98th cars, inclusive, of Extra 226 South were derailed, and separations occurred at both ends of the derailed cars. The caboose stopped on its right side about 22 feet west of the name track, and the derailed cars stopped in various positions on and near the track structure. The 4 derailed cars of Extra 226 South were destroyed and the caboose was heavily

damaged. The 1st diesel-electric unit of Extra 221 Scuth was heavily dai aged and the 2nd diesel-electric unit was somewhat damaged.

The fireman of Extra 221 South was killed, and the engineer and the front braker an were injured

The veather was clear at the time of the accident, which occurred about 6.10 a. r.

During a 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 5.1 trains

The locomotives and cabooses of both trains were equipped with radios for intercommunication

Discussion

When Extra 226 South stopped at Cypress, the rear end of the train blocked a highway grade crossing. The conductor, who was in the caboose, instructed the engineer by use of the radio to move the train for aid about 100 feet to clear the crossing. The conductor had soile difficulty in transmitting the instructions because of static. After the train via moved to clear the crossing, the locamotive vias detached and the flagman then assisted the front braker in in performing sufficient operations. In the vicinity of the point of accident the range of vision is restricted by curvature of the track and vegetation. The conductor said that he heard Extra 221 South approaching before it came into vier on the curve on which the accident occurred and that he attenute I to warn the engineer of that train by use of the radio. However, he said that there was insufficient time and that he alighted immediately before the collision occurred.

As Extra 221 South was approaching the point where the accident occurred the enginement and the front brakeman vere in their respective positions in the control compartment of the first dieselelectric unit. The conductor and the flagman here in the capoose. The brakes of this train had been tested and had functioned properly when used en route. The engineer said that en route from Saler Yard to Omar, 11.3 miles north of Cypress, he made three unsuccessful attempts to reach tile crev of Extra 226 South by radio to determine their location. He said that mer Extra 221 South was in tre vicinity of Omar he clearly heard on the radio parts of the conversation of the conductor of Extra 226 South regarding the blocking of the crossing. He said he thought that the conductor vas referring to a railroad crossing at Kamar, 6.2 miles south of Cypress. He understoom from the conversation that Extra 226 South was departing from Karnak at that time and he so inforced the fireman and the front brakeman. When Extra 221 South was in the vicinity of West Vicinia, 5.6 miles north of Cypress, the engineer said that he again made an unsuccessful afterlift to reach the crew of Extra 226 South by radio. He estimated that the speed of the train was about 45 miles per nour when it passed the north yard-limit sign at Cypress. The members of the crew called each other's attention to the yard-limit sign. The engineer said that after passing the yard-limit sign ne initiated a service trake authoration. He said that he then made a further attempt to reach the crev of Extra 226 by radio but was again unsuccessful. He said that when the speed of the train was reduced to approx-1 ately 25 miles per hour he released the brakes, and that shortly after he observed Extra 225. Couth when it came into view on the curve on which the accident occurred. He initediately initrated an exergency brake application but he said that the speed of the train was not raterially reduced before the collision occurred

The tape of the speed-recording device of the first diesel-electric unit of Extra 221 South was destroyed as a result of the collision. However, the tape of the speed-recording device of the second diesel-electric unit indicated that a service brake application was made at a point approximately 1.5 miles north of the point of accident and, as a result, the speed of the train was reduced from 50 miles per hour to approximately 32 miles per nour in a distance of approximately 3,200 feet. The speed then increased gradually to 40 miles per hour to the point where the brakes apparently became applied in emergency. The speed of the train was approximately 33 miles per hour when the collision occurred. The speed-recording device of the second diesel-electric unit was removed and calibrated after the accident occurred and it was found to be accurate.

After the accident occurred it was found that a caboose standing at the point of accident first became visible to the crew in the control compartment of a southbound locomotive at a distance of 617 feet

Examination of the brake equipment of Extra 221 South after the accident occurred disclosed that 7 cars had brake-cylinder piston travel in excess of 10 inches

Under the rules of the carrier the flagman of Extra 226 South was not required to provide protection against extratrains moving within yard limits. Extra 221 South was required to be operated within yard limits in such manner that it could be stooped short of a preceding train.

Cause

This accident was caused by failure properly to control the speed of the following train roving within yard \lim its

Dated at Washington, D. C., this second day of October, 1958

By the Commission, Commissioner Tuggle

(SEAL)

HAROLD D McCOY,

Secretary

Interstate Commerce Commission

Mashington 25, 20 C

OFFICIAL BUSINESS

RETURN AFTER FIVE DAYS

POSTAGE AND FEES PAID INTERSTATE COMMERCE COMMISSION