INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3688

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

IN RE ACCIDENT

AT MOGADORE, OHIO, ON

MAY 21, 1956

SUMMARY

Date:	May 21, 1956	
Railroad:	New York, Chicago and St. Louis	
Location:	Mogadore, Ohio	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Freight
Train numbers:	161	: 191
Locomotive numbers:	Diesel-electric unit 81	: Diesel-electric units 447 and 442
Consists:	13 cars, caboose	: 54 cars, caboose
Speeds:	Standing	: About 10 m. p. h.
Operation:	Timetable and train orders	
Track:	Single, 3° curve; 0.73 percent descending grade westward	
Weather:	Clear	
Time:	2:10 p. m.	
Casualties:	3 injured	
Cause:	Failure to provide adequate protection for preceding train.	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3688

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

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

July 25, 1956

Accident at Mogadore, Ohio, on May 21, 1956, caused by failure to provide adequate protection for the preceding train.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner:

On May 21, 1956, there was a rear-end collision between two freight trains on the New York, Chicago and St. Louis Railroad at Mogadore, Ohio, which resulted in the injury of three train-service employees.

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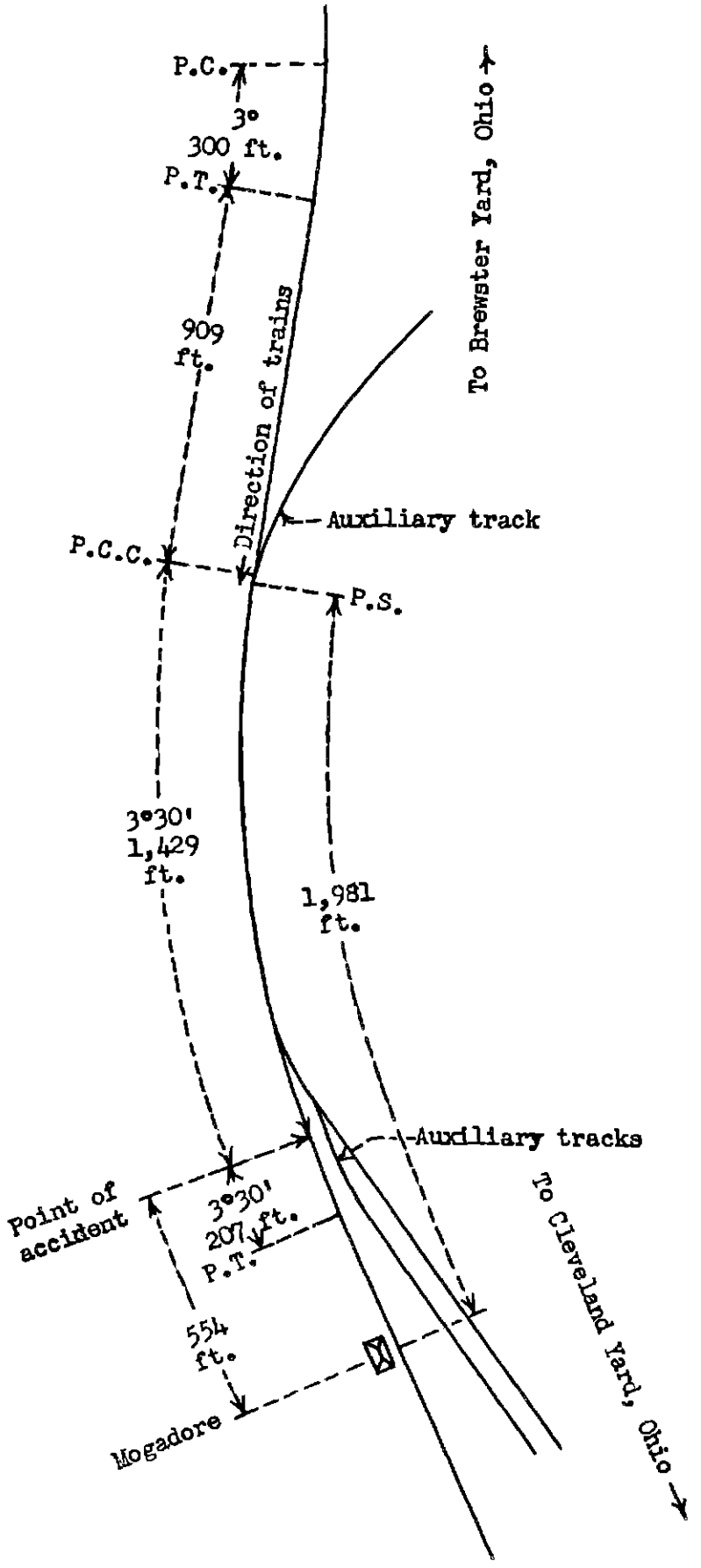
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Brewster Yard, Ohio
28.2 mi.
Hartsville
7.5 mi.
Mogadore
(Point of accident)
39.0 mi.
Cleveland Yard, Ohio

Report No. 3688
New York, Chicago and St. Louis Railroad
Mogadore, Ohio
May 21, 1956

Location of Accident and Method of Operation

This accident occurred on that part of the Wheeling and Lake Erie District extending between Brewster Yard and Cleveland Yard, Ohio, 74.7 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track at a point 35.6 miles west of Brewster Yard and 554 feet east of the station at Mogadore. From the east there are, in succession, a 3° curve to the right 300 feet in length, a tangent 909 feet, and a compound curve to the left, having a maximum curvature of 3°30', 1,429 feet to the point of accident and 207 feet westward. At the point of accident the curvature is 3°. The grade for west-bound trains is, successively, 0.66 percent descending 3,700 feet, 0.44 percent descending 500 feet, and 0.73 percent descending 13 feet to the point of accident.

This carrier's operating rules read in part as follows:

DEFINITIONS

Reduced Speed.--Proceed prepared to stop short of train, obstruction, or switch not properly lined. * * *

15. The explosion of two torpedoes is a signal to proceed at reduced speed. The explosion of one torpedo will indicate the same as two, but the use of two is required.

* * *

35. The following signals will be used by flagmen:

Day signals--A red flag, Torpedoes and Fusees.

* * *

91. Unless some form of block system is used, trains in the same direction must keep not less than five minutes apart, except in closing up at stations. * * *

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. * * *

* * *

Bulletin special instructions read in part as follows:

Effective at once, Rule 15 carried on Page 25 of RULES FOR THE GOVERNMENT OF THE OPERATING DEPARTMENT is modified as follows

"The explosion of two torpedoes is a signal to reduce speed and proceed at reduced speed for a distance of 6000 feet from the point the torpedoes were exploded. If the track is then seen to be clear normal speed may be resumed.

* * *

The maximum authorized speed for freight trains in the vicinity of the point of accident is 49 miles per hour. Because of the type of equipment in the train of No. 191 on the day of the accident, this train was restricted to a speed of 40 miles per hour.

Description of Accident

No. 161, a west-bound third-class freight train, consisted, at the time of the accident, of Diesel-electric unit 81, 13 cars, and a caboose. This train departed from Hartville, 7.5 miles east of Mogadore and the last open office east of Mogadore, at 1:19 p. m., 4 hours 24 minutes late, and stopped on the main track at Mogadore at 1:48 p. m. About 22 minutes later the rear end was struck by No. 191. The accident occurred 554 feet east of the station.

No. 191, a west-bound second-class freight train, consisted of Diesel-electric units 447 and 442, coupled in multiple-unit control, 54 cars, and a caboose. This train passed Hartville at 1:57 p. m., 1 hour 24 minutes late, and while moving at a speed of about 10 miles per hour it struck the rear end of No. 161.

The caboose and the rear two cars of No. 161, and the Diesel-electric units, the first three cars, and the front wheels of the front truck of the fourth car of No. 191 were derailed. The Diesel-electric units stopped upright and approximately in line with the track. The front end of the first unit was 125 feet west of the point of accident. The derailed cars stopped in various positions on or near the track. The derailed equipment was considerably damaged.

The engineer, the fireman, and the front brakeman of No. 191 were injured.

The weather was clear at the time of the accident, which occurred about 2:10 p. m.

The Diesel-electric units of No. 191 were of the road-switcher type.

Discussion

As No. 161 was approaching Mogadore the enginemen, the front brakeman, and the swing brakeman were on the locomotive. The conductor and the flagman were in the caboose. Switching service was to be performed at Mogadore, and the engineer reduced the speed sufficiently to permit the flagman to place torpedoes at a point about 2 miles east of the station and again at a point about 1 mile east of the station. The flagman alighted, placed two torpedoes on the rail, and then boarded the caboose at each of these points. The flagman alighted from the train and placed two additional torpedoes on the rail near an auxiliary-track switch located 1,981 feet east of the station. The other members of the crew performed switching service a short distance east of the station, and the train was then moved to the station. After a small amount of freight was unloaded the train was moved eastward a distance of about 50 feet in order to clear a street crossing immediately west of the station. The collision occurred about 10 minutes later. The flagman had not been recalled, but after he placed the torpedoes near the auxiliary-track switch he had walked westward to a point about 300 feet east of the rear end of his train and remained in this vicinity until he saw No. 191 approaching. He said that the locomotive of No. 191 came into his view at approximately the time that the torpedoes near the switch were exploded. When he saw the train he gave stop signals with a red flag. He said that his signals were acknowledged immediately, but he did not think there was a material reduction in the speed of the train before the collision occurred. He was unable to estimate the speed at which the train was moving.

As No. 191 was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The conductor and the flagman were in the caboose. The brakes of the train had been tested and had functioned properly when used enroute. The engineer said that after the locomotive struck the torpedoes about 2 miles east of Mogadore he reduced the speed of the train from about 38 miles per hour to between 20 and 25 miles per hour. He said that when the locomotive struck the torpedoes about 1 mile farther westward he was proceeding at reduced

speed, and he continued to proceed at that speed. The employees on the locomotive saw the stop signals given by the flagman of No. 161 at approximately the time that their locomotive exploded the torpedoes in the vicinity of the auxiliary-track switch. From the manner in which the signals were given, the engineer expected that No. 161 would be close ahead. He immediately made an emergency application of the brakes. The employees on the locomotive estimated that the speed had been reduced to between 5 and 10 miles per hour when the collision occurred. According to the tape of the speed-recording device, between points approximately 1-1/2 miles and 1/4 mile east of the point of accident the speed varied between 26 and 30 miles per hour, and it was then reduced from 30 miles per hour to less than 10 miles per hour within a distance of approximately 1/4 mile. The speed was less than 10 miles per hour when the accident occurred.

After the accident occurred the conductor and the flagman of No. 161 both said they thought that under the circumstances the protection provided for their train was adequate. The rules and bulletin instructions of this carrier provided that after the torpedoes were placed a train exploding the torpedoes was required to approach Mogadore at reduced speed, defined as prepared to stop short of an obstruction or switch not properly lined, and these employees thought that the flagman provided adequate protection against a train moving at that speed. They said they would expect a train exploding the torpedoes to approach Mogadore at a speed of not more than 10 or 15 miles per hour. The enginemen of No. 191 said it was their understanding that after the torpedoes were exploded their train was being operated at reduced speed. The rules provided that the flagman of No. 161 go back a sufficient distance to insure full protection, and the engineer said he was prepared to stop short of any train for which such protection was provided.

Under the rules of this carrier, when a train stops under circumstances in which it may be overtaken by another train the flagman must go back immediately a sufficient distance to insure full protection. As interpreted by the carrier, this rule requires the flagman to go back a sufficient distance to insure full protection against a train moving at maximum authorized speed. This requirement is not modified by the placing of torpedoes, and the flagman is required to go back the same distance after torpedoes have been placed as he is when no torpedoes have been placed.

Cause

This accident was caused by failure to provide adequate protection for the preceding train.

Dated at Washington, D. C. this twenty-fifth day of July, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.