# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3395

DETROIT, TOLEDO AND IRONTON RAILROAD COMPANY AND THE PENNSYLVANIA RAILROAD COMPANY

IN RE ACCIDENT

AT PENFORD, MICH., ON MARCH 14, 1951

## SUMMARY

Date: March 14, 1951

Railroads: Detroit, Toledo : Pennsylvania

and Ironton

Location: Penford, Mich.

Kind of accident: Side collision

Trains involved: Freight : Freight

Train numbers: Extra 922 South : Extra 6272 North

Engine numbers: Diesel-electric : 6272

unit 922

Consists: 80 cars, caboose: Caboose

Estimated speeds: 5 m. p. h. : 20 m. p. h.

Operation: Interlocking

Tracks: Double; tangent; : Single; tangent;

level level

Weather: Raining

Time: 7:40 a. m.

Casualties: 3 injured

Cause: Failure to operate Pennsylvania

train in accordance with signal

indications

#### INTERSTATE COMMERCE COMMISSION

#### REPORT NO. 3395

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

DETROIT, TOLEDO AND IRONTON RAILROAD COMPANY
AND
THE PENNSYLVANIA RAILROAD COMPANY

May 22, 1951

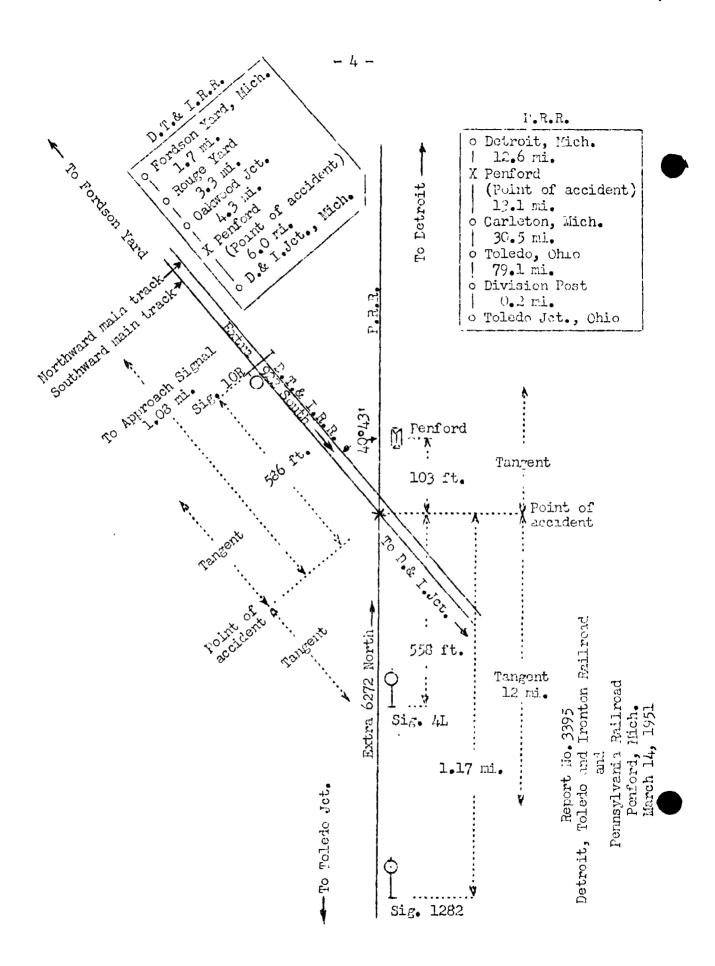
Accident at Penford, Mich., on March 14, 1951, caused by failure to operate the Pennsylvania train in accordance with signal indications.

# REPORT OF THE COMMISSION

### PATTERSON, Commissioner:

On March 14, 1951, there was a side collision between a freight train on the Detroit, Toledo and Ironton Railroad and a freight train on the Pennsylvania Railroad at Penford, Mich., which resulted in the injury of three train-service employees.

Under authority of acction 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



#### Location of Accident and Method of Operation

This accident occurred at the intersection of the Detroit, Toledo and Ironton Railroad, hereinafter referred to as the D.T.& I., and the Pennsylvania Railroad, hereinafter referred to as the P.R.R., at Penford, Mich. The crossing is located on that part of the D.T.& I. extending between Fordson Yard and D.& I. Jct., Mich., 15.3 miles, and on that part of the Eastern Division of the P.R.R. extending between Division Post, near Toledo Jet., Ohio, and Detroit, Mich., 135.3 miles. Penford is 9.3 miles south of Fordson Yard and 122.7 miles north of Division Post. The P.R.R. line extends northeast and southwest. The D.T.& I. line extends north and south and intersects the P.R.R. line at an angle of 40°43'. Timetable directions on both lines are northward and southward, and are used in this report. In the vicinity of the point of accident the D.T.& I. is a double-track line, over which trains are operated by timetable and train orders. no block system in use. From west to east the main tracks are designated as southward and northword. The tracks are tangent immediately south and north of the point of accident. In the vicinity of the point of accident the P.R.R. is a single-track line, over which trains are operated by timetable, train orders and an automatic block-signal system. is tangent throughout a distance of more than 12 miles immediately south of the point of accident, and a considerable distance northward. The grade on each line is practically level.

Movements over the crossing are governed by signals of an electro-mechanical interlocking. Southward approach signal and interlocking signal 10R, governing south-bound movements on the southward main track of the D.T.& I. are located, respectively, 1.08 miles and 586 feet north of the crossing. These signals are of the color-position-light type. The approach signal is approach-lighted and displays three aspects. Signal 10R is continuously lighted and displays two aspects. Automatic signal 1282 and semi-automatic signal 4L, governing north-bound movements on the P.R.R., are located, respectively, 1.17 miles and 558 feet south of the crossing. These signals are or the position-light type, and are continuously lighted. Signal 1282 displays three aspects and signal 4L displays four aspects. Aspects applicable to this investigation and the corresponding indications and names are as follows:

Signal	Aspect	<u>Indication</u>	Name
Approach signal, and loR	Two green lights in vertical position	PROCEED	······································
1282	Three amber lights in diagonal position to the right	Proceed prepared to stop at next signal. Train exceeding Medium speed must at once reduce to that speed.	Approach.
4L	Three amber lights in horizontal position	Stop.	Stop-signal.

The circuits and the mechanical locking are so arranged that, when the route is lined for south-bound movements on the southward main track of the D.T.& I., signal 1282 indicates Approach and signal 4L indicates Stop. Route and indication locking are provided on each line, approach locking is provided on the P.R.R., and time locking is provided on the D.T.& I. Indicators are provided in the interlocking station to indicate when a south-bound train enters the D.T.& I. approach circuit at a point 1.82 miles north of the crossing and when a north-bound train enters the P.R.R. approach circuit at a point 1.59 miles south of the crossing.

Operating rules of the P.R.R. read in part as follows:

#### **DEFINITIONS**

#### SPEEDS

MEDIUM SPEED—Not exceeding one-half the speed authorized for passenger trains but not exceeding 30 miles per hour.

- 98. Trains must approach \* \* \* railroad crossings at grade \* \* \* prepared to stop unless \* \* \* signals indicate proceed, and track is clear. \* \* \*
- 663. A train or engine must stop clear of an interlocking signal indicating Stop. \* \* \*

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The maximum authorized speeds were 30 miles per hour for the D.T.& I. train and 50 miles per hour for the P.R.R. train.

#### Description of Accident

Extra 922 South, a south-bound D.T.& I. freight train, consisted of Diesel-electric unit 922, 80 cars and a caboose. This train departed from Rouge Yard, 1.7 miles south of Fordson Yard, at 6:55 a.m., passed Oakwood Jct., the last open office, 4.3 miles north of the point of accident, at 7:28 a.m., passed the Penford interlocking approach signal, which indicated Proceed, passed signal 10R, which indicated Proceed, and while moving at an estimated speed of 5 miles per hour the eighth and ninth cars were struck by P.R.R. Extra 6272 North.

Extra 6272 North, a north-bound P.R.R. freight train, consisted of engine 6272 and a caboose. This train departed from Toledo, 79.1 miles north of Division Post, at 6:43 a. m., passed Carleton, the last open office, 13.1 miles south of the point of accident, at 7:27 a. m., passed signal 1282, which indicated Approach, passed signal 4L, which indicated Stop, and while moving at an estimated speed of 20 miles per hour it struck the eighth and ninth cars of D.T.& I. Extra 922 South.

Engine 6272 was derailed to the east and stopped on its right side, with the front end 66 feet north of the point of accident. The front truck and the front pair of wheels of the rear truck of the tender were derailed to the east. The engine was badly damaged. The eighth to the twelfth cars, inclusive, of Extra 922 South were derailed and stopped in various positions on or near the tracks. Separations occurred between all adjacent units from the eighth to the eleventh cars. The eighth, ninth and eleventh cars were demolished. The tenth car was badly damaged. The twelfth and the seventy-second cars were somewhat damaged.

The engineer, the fireman and the conductor of Extra 6272 North were injured.

It was raining at the time of the accident, which occurred at 7:40 a.m.

#### Discussion

The operator at Penford lined the route for Extra 922 South to proceed through the interlocking immediately after that train entered upon the approach circuit. As Extra 922 South was approaching the point where the accident occurred the speed was about 20 miles per hour. The engineer said that when the Diesel-electric unit of Extra 922 South was about 500 feet north of the crossing he observed Extra 6272 North approaching at excessive speed. He also said that between signal 4L and the crossing the driving wheels of engine 6272 were sliding. Immediately after the Diesel-electric unit passed the crossing the engineer made an emergency application of the brakes. The speed of the train was reduced to about 5 miles per hour when the collision occurred.

Extra 6272 North was approaching the point where the accident occurred at an estimated speed of about 40 miles per The engineer and the fireman were in the cab of the engine, and the conductor, the front brakeman and the flagman were in the caboose. The brakes of this train had functioned properly when used en route. The fireman said that he called the Approach indication of signal 1282. He said that the engineer did not reply, but partially closed the throttle after the engine passed the signal. However, he did not make a brake application. The engineer said that he did not see signal 1282 and did not hear the fireman call the indication. fireman said that he called the indication of signal 4L as Stop but the engineer did not make a brake application until after the engine had passed the signal. The engineer said that when he observed the aspect displayed by signal 4L he immediately made an emergency application of the brakes. The conductor said there was a slight reduction in speed as the train approached signal 4L. He proceeded to the rear platform of the caboose in the vicinity of signal 4L and alighted from the caboose when he saw the D.T.& I. train moving over the crossing. He said he was not aware of a brake application having been made before the train passed signal 4L. There were slid-flat spots on all of the driving wheel tires.

None of the members of the train crew of Extra 6272 North saw the aspects displayed by signals 1282 and 4L. After the accident occurred, the signal system in the vicinity of the point of accident was tested and was found to be functioning properly.

The rules of the P.R.R. require that when a train passes a signal which indicates Approach the speed of the train must be reduced at once to not exceeding 30 miles per hour and be so controlled that the train can be stopped short of the next signal. The enginemen of Extra 6272 North understood these requirements, but action was not taken in time to reduce the speed of the train so that it could be stopped short of the next signal.

#### Cause

It is found that this accident was caused by failure to operate the Pennsylvania train in accordance with signal indications.

Dated at Washington, D. C., this twenty-second day of May, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.