# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2954

GRAND TRUNK WESTERN RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT SMITH'S CREEK, MICH., ON

DECEMBER 7, 1945

#### SUMMARY

Railroad:

Grand Trunk Western

Date:

December 7, 1945

Location:

Smith's Creek, Mich.

Kind of accident:

Rear-end collision

Trains involved:

Freight

: Freight

Train numbers:

Extra 3740 East : Extra 25 East

Engine numbers:

3740-3735

: 25

Consist:

91 cars, caboose: 48 cars, caboose

Estimated speed:

Standing

: 8 m. p. h.

Operation:

Timetable and train orders

Track:

Single; tangent; 0.10 percent

ascending grade eastward

Weather:

Foggy

Time:

7:45 a. m.

Casualties:

3 injured

Cause:

Failure properly to control speed of following train in compliance

with flagman's signals

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 2954

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

GRAND TRUNK WESTERN RAILROAD COMPANY

January 30, 1946.

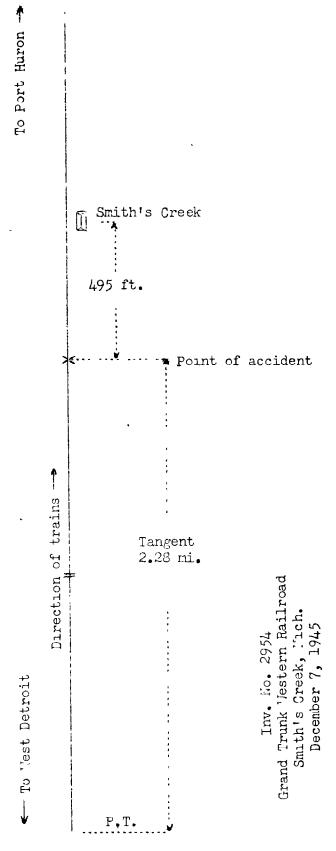
Accident at Smith's Creek, Mich., on December 7, 1945, caused by failure properly to control the speed of the following train in compliance with flagman's signals.

# REPORT OF THE COMMISSION

# PATTERSON, Commissioner:

On December 7, 1945, there was a rear-end collision between two freight trains on the Grand Trunk Western Railroad at Smith's Creek, Mich., which resulted in the injury of three train-service employees.

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



o Port Huron, Mich.
8.80 mi.
X Smith's Creek
(Point of accident)
41.97 mi.
East Yard
6.64 mi.
o West Detroit, Mich.

### Location of Accident and Method of Operation

This accident occurred on that part of the Detroit Division extending between West Detroit and Port Huron, Mich., 57.41 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred 48.61 miles east of West Detroit, at a point 495 feet west of the station at Smith's Creek. The main track is tangent throughout a distance of 2.28 miles west of this point and a considerable distance eastward. The grade for eastbound trains varies between 0.22 percent and 0.41 percent descending throughout a distance of about 1.25 miles, then it is 0.15 percent ascending 400 feet, and 0.10 percent ascending 524 feet to the point of accident and 276 feet eastward.

Operating rules read in part as follows:

#### 11. \* \* \*

On track not protected by automatic block signals a train approaching a fusee burning red on or near its track must stop before any part of the train has passed it, and not proceed until the fusee is burned out.

\* \* \*

15. The explosion of one torpedo is a signal to stop and, in the absence of flagman or instruction of track forces, proceed prepared to stop for the distance which torpedoes would be placed from a preceding train.

The explosion of two torpedoes is a signal to reduce speed and look out for a stop signal.

\* \* \*

99. When a train stops or the main track under circumstances in which it may be overtaken by another train a flagman must immediately go back with flagman's signals to protect the train. Under the conditions specified the distance should be at least:

In day time, if there is no down grade towards train within one mile of its rear, and there is a clear view of its rear of 6,000 feet from an approaching train, 1,500 feet (about 12 telegraph poles).

At other times and places, if there is no down grade towards train within one mile of its rear, 3,600 feet (about 28 telegraph poles).

If there is a down grade towards train within one mile of its rear, 5,400 feet (about 42 telegraph poles).

The flagman must, after going back the specified distance, take a position where there will be an unobstructed view of him from an approaching train of, if possible, 1,500 feet, first placing two terpedoes, not less than 100 nor more than 200 feet apart, on the rail on the same side as the engineman of an approaching train 300 feet beyond such position. The flagman must remain in such position until recalled or relieved.

\* \* \*

Flagmen must each be equipped for day time with a red flag \* \* \* at least six torpedoes and five red fusees, and for night time and when weather or other conditions obscure day signals with a red light, a white light, a supply of matches, at least six torpedoes and five red fusees.

\* \* \*

The maximum authorized speed for freight trains is 40 miles per nour.

#### Description of Accident

Extra 3740 East, an east-bound freight train, consisting of engines 3740 and 3735, 91 cars and a caboose, departed from East Yard, the last open office, 41.97 miles west of Smith's Creek, at 3:30 a.m. and stopped about 7:20 a.m. on the main track at Smith's Creek, with the rear end standing 495 feet west of the station. About 25 minutes later the rear end was struck by Extra 25 East.

Extra 25 East, an east-bound freight train, consisting of engine 25, 48 cars and a caboose, departed from East Yard at 6:30 a.m., and while moving at an estimated speed of 8 miles per hour it struck Extra 3740 East.

The caboose of Extra 3740 was demolished and the rear two cars were more or less damaged. The front end of the engine of Extra 25 was considerably damaged.

The weather was foggy and day was breaking at the time of the accident, which occurred about 7:45 a.m.

- 7 **-** 2954

The engineer, the fireman and the front brakeman of Extra 25 were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 6.93 trains.

#### Discussion

Extra 3740 East stopped about 7 a.m., with the rear end standing about 4,000 feet west of the station at Smith's Creek, as a result of a separation between the eighty-sixth and the eighty-seventh cars. About 25 minutes later, after this train had been recoupled and had moved eastward, it stopped at Smith's Creek with the rear end standing 495 feet west of the station. About 20 minutes later the rear end was struck by Extra 25 East.

When Extra 3740 East stopped because of the separation of cars in the train, the flagman proceeded westward and placed two torpedoes on the west rail of the main track at a point about 4,000 feet west of the point where the collision occurred. When this train proceeded eastward no following train was seen or heard, and the flagman boarded the caboose. When the train stopped in the vicinity of the station at Smith's Creek, the flagman again proceeded westward to provide protection against following trains. He had reached a point about 2,000 feet west of the rear of his train and was displaying a lighted fusee when he saw the reflection of the headlight of a train approaching from the west about 1 mile distant. Then he placed one torpedo on the south rail, and continued to display a lighted fusee until the engine of Extra 25 East passed him.

As Extra 25 East was approaching Smith's Creek the speed was about 35 miles per hour. The headlight was lighted brightly and the enginemen were maintaining a lookout ahead. The enginemen said that because of pockets of fog in this vicinity visibility was somewnat restricted. When the engine was about 4,000 feet west of the point where the accident occurred two torpedoes were exploded, and the engineer said he made a service brake-pipe reduction. When the engine was about 3,600 feet west of the point where the accident occurred the enginemen saw a lighted fusee and the lighted marker lamps of the preceding train, and the engineer moved the brake valve to emergency position. The speed of Extra 25 was about 8 miles per hour when the collision occurred. The brakes of this train had been tested and had functioned properly en route. If proper action had been taken to control the speed of Extra 25 at the point where the engine exploded the torpedoes placed by the flagman of Extra 3740, this accident could have been averted.

## Cause

It is found that this accident was caused by failure properly to control the speed of the following train in compliance with flagman's signals.

Dated at Washington, D. C., this thirtieth day of January, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL, Secretary.