# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 3221

RUTLAND RAILFOAD COMPANY

REPORT IN RE ACCIDENT

NEAR ALBURGH, VT., ON

DECEMBER 22, 1948

#### SUMMARY

Railroad: Rutland

Date: December 22, 1948

Location: Alburgh, Vt.

Rear-end collision Kind of accident:

: Engine Trains involved: Freight

: Extra 31 South Train numbers: Extra 109 South

109 : 31 Engine numbers:

Consist: 13 cars, cabonse :

6 m. p. h. Estimated speeds: : 20 m, p. h.

Timetable, train orders and manual-block system Operation:

Single; 3°30' curve; level Track:

Weather: Light snow

Time: 1:09 a. m.

Casualties: l killed; l injured

Cause: Failure to provide adequate protection

for the movement of each train

# ' INTERSTATE COMMERCE COMMISSION

## INVESTIGATION NO. 3221

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

## RUTLAND RAILROAD COMPANY

· March 7, 1949

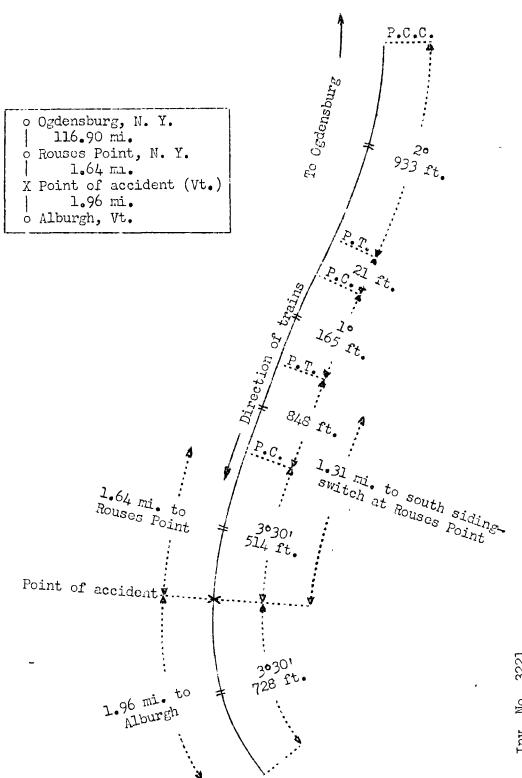
Accident near Alburg!, Vt., on December 22, 1948, caucid by failure to provide alequat protection for the movement of each train.

REPORT OF THE CONCISSION

# PATTERSON, Commissioner:

On December 22, 1948, there was a rear-end collision between a freight train and an engine on the Rutland Railroad near Alburgh, Vt., which resulted in the death of one employee, and the injury of one employee.

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.



Inv. No. 3221 Rutland Railrosd Alburgh, Vt. December 22, 1948

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## Location of Accident and Method of Operation

**-** 5 **-**

This accident occurred on that part of the railroad extending between Ogdensburg, N. N., and Alburgh, Vt., 120.5 ciles, a single-track line, over which trains are operated by timetable, train orders and a manual-block system. The accident occurred on the main track at a point in Vermont, 1.96 miles north of Alburgh and 1.64 miles south of Rouses Point, N. Y. From the north there are, in succession, a compound curve to the right, the maximum curvature of which is 2°, 953 feet in length, a tangent S1 feet, a 1° curve to the left 165 feet, a tangent 648 feet and a 3°30' curve to the left 514 feet to the point of accident and 728 feet southered. The grade is level.

The block in which the accident occurred extends between Rouses Point and Alburgh, 3.6 miles. These are open stations. There is no manual-block signal at Rouses Point to govern the use of this block. The conductor of each train is required to register and to obtain proper clearance forms from the operator before his train enters the block.

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

#### DEFINITIONS.

\* \* \*

Train. -- An engine or motor car or more than one engine or motor car coupled, with or without cars, displaying markers.

Train Register. -- A book or form which may be used at designated stations for registering signals displayed, the time of arrival and departure of trains and such other information as may be prescribed.

#### SIGNAL DEFINITIONS.

Medium Speed. -- A speed not exceeding thirty miles per hour.

#### SIGNALS.

7. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

- 8. Flags \* \* \* nust be used by day, and lights of the prescribed color by night.
- 19. The following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train;

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Fig. 7 \* \* \* by night while running on single track, \* \* \*. Lights showing yellow to front and side and red to the rear.

#### MOVELENT OF TRAINS.

83. \* \* \*

Stations at which train registers are located will be designated by time-table.

83b. Where train registers are provided at intermediate stations trains must be registered by the conductor unless otherwise specified by time-table.

83c. Engineen are relieved from examining train registers, except when they \* \* \* have no conductor, \* \* \*

\* \* \*

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\* \* \*

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, \* \* \* lighted fusees must be thrown off at proper intervals.

\* \* \*

FORMS OF BLANKS

CLEARANCE FORM A

\* \* \*

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Where Clearance Form A is used when the block is not clear, the line giving block indication will be left blank, and Clearance Form B used in addition to Clearance Form A.

# CLEARANCE FORM B

\* \* \*

1. When signal cannot be cleared, use the following: Proceed into block as though .....signal was displayed.

\* \* \*

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## SIGNAL RULES

RULE 289A Block occupied; proceed prepared to stop short of train ahead. Medium speed must not be exceeded.

#### MANUAL BLOCK SYSTEM RULES

317-B. \* \* \*

\* \* \*

To permit a train to follow a train other than a passenger train into a block, except during fog or adverse weather condition, the signalman must give "17 for \_\_\_\_\_," to the next block station in advance. The signalman receiving this signal, if there is no passenger train in the block, must reply "5 of \_\_\_\_\_." The approaching train will then be admitted to the block under Permissive-indication or with Clearance Forms A and B.

Note to Rule 317-B.--Rule 317-B is for absolute block for opposing movements, and permissive block for following movements on the same track.

- 321. Signalmen must, as far as practicable, observe all passing trains and note whether they are complete and in order, and the markers properly displayed.
- 323. Should a train without markers has a block station, the signalman must notify the signalman at the next block station in each direction, and must not report that train clear of the block until he has ascertained that the train is complete.

This carrier's timetable special instructions read in part as follows:

1. MÁNUAL BLOCK SYSTEM.

\* \* \*

Except as otherwise provided, Rules 517-B and \* \* \* for absolute block for opposing movements and permissive block for following movements govern the movement of trains other than passenger trains.

Issuance of Clearance Forms A and B, \* \* \* will be authorized by the train dispatcher except in case of failure of communication.

18. TRAIN REGISTERS.

\* \* \* , Rouses Point, Alburgh, \* \* \*

Special instructions, dated April 20th, 1940, read in part as follows:

To Chief Train Dispatcher, Train Dispatchers.

Current Time-Table Special Instructions, itcm No. 1, page 17, requiring absolute block between various points on descending grades will be eliminated April 28th, 1940.

Effective on that date train dispatchers will permit permissive movements (except passenger trains) spacing ten (10) minutes on descending grades and additional spacing as may be necessary in case of adverse yeather or other conditions.

\* \* \*

In the vicinity of the point of accident the maximum authorized speed was 15 miles per hour for the preceding train and 30 miles per hour for the following train.

# Description of Accident

Extra 109 South, a south-bound freight train, consisted of engine 109, headed northward, 13 cars and a caboose, in the order named. This train departed from Rouses Point as Extra 109 South at 12:50 a.m., December 22, according to the

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train register. About 19 minutes later, while it was moving at an estimated speed of 6 miles per hour, the rear end was struck by Extra 31 South at a point 1.31 miles south of the south siding-switch at Rouses Point.

Extra 31 South, consisting of engine 31, departed from Rouses Point, the last open office, at 1 a.m., and while moving at an estimated speed of 20 miles per hour it struck the rear end of Extra 109 South.

The rear truck of the caboose of Extra 109 South was derailed and the caboose, which was of wooden construction on a steel underframe, was badly damaged. The front end of engine 31 was slightly damaged.

The conductor of Entra 109 South was killed, and the flagman was injured.

A light snow was falling at the time of the accident, which occurred about 1:09 a.m.

## Discussion

The manual block rules of this carrier provide that the dispatcher may authorize an operator to admit a freight train to a block which is occupied by a preceding freight train, either under permissive-block-signal indication or under authority of Clearance Forms A and B, 10 or more minutes after a preceding freight train has entered the block. A following train authorized to enter a block either under permissive indication or Clearance Forms A and B must proceed prepared to stop short of train shead but must not exceed a speed of 30 miles per hour. Clearance Forms A and B are used at Rouses Point because there is no manual-block signal at that station. The rules provide that when a train is moving under circumstances in which it may be overtaken by another train full protection must be provided and, at night, fusees must be thrown off at proper intervals.

About 12:50 a.m. the conductor of Extra 109 South received copies of Clearance Forms A and B from the operator at Rouses Point as authority to enter the block extending from Rouses Point to Alburgh. The conductor registered the departure of Extra 109 South as 12:50 a.m. The operator said that he informed the conductor that Extra 109 South would be following No. 10, a second-class freight train, into the block and that Extra 31 South would follow Extra 109 South into the block. The engineer said that Extra 109 South actually departed from Rouses Point at 12:55 a.m. The operator did not observe the time when Extra 109 South

departed but entered the time of departure on the block record as 12:50 a. m., which he obtained from the train register in accordance with past practice. Extra 109 South did not exceed a speed of 10 miles per hour while it was passing over a trestle about I mile in length located immediately south of Rouses Point, and did not exceed a speed of 15 miles per hour at any point. Timetable Special Instructions restricted the speed of all trains over this trestle to 10 miles per hour, and the speed of engine 109 to 15 miles per hour throughout the block. Although a following train was permitted to be operated at 20 miles per hour, no member of the crew of Extra 109 South threw off lighted fusees or provided any other protection against the following train. Neither marker lamps nor any other light was placed at the rear of the caboose. As this train approached the point where the accident occurred, the engineer, the fireman and the front brokeman were in the cab of the engine, which was headed north, and they were maintaining a lookout to the north. The headlight on the rear of the tender was lighted brightly, but the headlight on the front of the engine was extinguished. The conductor and the flagman were in the cabocse. The engineer heard a whistle signal and then observed the headlight of engine 31 when it was about 300 feet north of the caboose of Extra 109 South. He immediately attempted to increase the speed of his train, but the collision occurred before the speed was materially increased. All surviving members of the crew said that the conductor had not informed them that Extra 31 South would follow their train into the block.

Extra 31 South arrived at Rouses Point about 12:58 a.m. The crew consisted of the engineer, the fireman and a brakeman. The dispatcher authorized Iscuance of Clearance Forms A and B for this train to enter the block southward at Rouses Point at 1 a. m., 10 minutes after the time registered as the departing time of Extra 109 South from that station. operator informed the engineer and the brakeman that Extra 109 South had preceded their train into the block at 12:50 a. m. The engineer registered the departure of Extra 31 South from Rouses Point at 1 a.m. and this train departed southward immediately afterward. The crew said that the speed restriction of 10 miles per hour over the trestle south of Rouses Point was not exceeded by their train. Each member of the crew sold that he was aware that engine 109 of the preceding train was restricted to 15 miles per hour by timetable special instructions. When Extra 31 South was approaching the point where the accident occurred, the enginemen were in their accustomed positions in the cab of

the ourline, and the brakeman was seated on the left side of the engine. The headlight was lighted brightly. The brakes of engine 31 had functioned properly whore used en route. The engineer sounded the whistle signal for a rail-highway grade crossing located about 200 feet north of the point where the accident occurred. 'The last blast was completed as the engine reached the crossing. He said that the engine was moving about 20 miles per hour when he saw the cabbose of the preceding train about 50 feet ahead. He immediately applied the brakes in emergency but the collision occurred before the brakes became effective. The engineer, the fireman and the front brakeman of Extra 31 South said there was no lighted marker displayed on the rear end of Extro 109 South. The engineer of Extra 109 South said he did not see any lighted marker on the rear of his train. The operator at Rouses Point said he was unable to see Extra 109 South when it departed from his station, because of intervening cars. After the accident, a marker lamp, without wick or oil, was found on the ground near the south end of the caboose of the preceding train, and an unlighted lantern with red globe was suspended from a chain connecting the hand railings on the south end of the caboose.

The investigation of this accident disclosed a number of violations of the rules, all of which contributed to the cause of this accident. The rules of this carrier require that any movement operated as a train must display lighted markers at the rear during the night, but, in this case, the preceding train did not display lighted markers. An operator must observe each train as it passes his station to determine if the train is complete and markers are displayed properly. However, the operator at Rouses Point did not observe that the preceding train did not display lighted markers. A freight train following a freight train may be admitted to an occupied block under authority of Clearance Forms A and B, but the following train must be held at an open office not less than ten minutes after the departure of the preceding train. In the instant case, the operator spaced the following train in accordance with the time shown on the train register, instead of observing the time that the preceding train actually departed. The first train was proceeding in such manner that it could be overtaken by a following train, but no lighted fusees were thrown off to protect against a following train.

# Cause

It is found that this accident was caused by failure to provide adequate protection for the movement of each train.

Dated at Washington, D. C., this seventh day of March, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.