# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2898

NORFOLK AND WESTERN RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT BEDFORD, VA., ON

JUNE 11, 1945

## SUMMARY

Railroad:

Norfolk and Western

Date:

June 11, 1945

Location:

Bedford, Va.

Kind of accident:

Collision

Train involved:

Freight

: Cut of freight

cars

Train number:

Extra 1253 East :

Engine number:

1233

:

Consist:

59 cars, caboose: 8 cars

Estimated speed:

25 m. p. h.

: Standing

Operation:

Timetable, train orders and automatic block-signal system;

yard limits

Track:

Double; tangent; vertical curve

Weather:

Clear

Time:

12:48 p. m.

Casualties:

1 killed; 2 injured

Cause:

Failure properly to control speed of train moving within

yard limits

## INTERSTATE COMMERCE COMMISSION

### INVESTIGATION NO. 2898

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

NORFOLK AND WESTERN RAILWAY COMPANY

July 27, 1945.

Accident at Bedford, Va., on June 11, 1945, caused by failure properly to control the speed of a train moving within yard limits.

# REPORT OF THE COMMISSION

# PATTERSON, Commissioner:

On June 11, 1945, there was a collision between a freight train and a cut of freight cars on the Norfolk and Western Railway at Bedford, Va., which resulted in the death of one employee, and the injury of two employees.

<sup>&</sup>lt;sup>1</sup>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.

- 5 -

# Location of Accident and Method of Operation

This accident occurred on that part of the Norfolk Division extending eastward from West Roanoke to Crewe, Va., 124.92 miles, a double-track line in the vicinity of the point of accident, over which trains moving with the current of traffic are operated by timetable, train orders and an automatic block-signal system. At the time of the accident, because signal forces were relocating certain automatic block signals, the signals between Thaxton and Goode, respectively, 24.4 miles and 37.81 miles east of West Roanoke, were out of service and trains were being operated in this territory by timetable, train orders and a manual-block system. The accident occurred within yard limits on the eastward main track at Bedford, 29.48 miles east of West Roanoke, at a point 3,894 feet east of the west yard-limit sign and 2,307 feet east of the station. From the west there are, in succession, a tangent 2,470 feet in length, a 2°24' curve to the left 626 feet and a tangent 1,776 feet to the point of accident and 1,692 feet eastward. The grade for east-bound trains varies between 0.364 and 0.72 percent ascending throughout a distance of 4,200 feet, then there is a vertical curve 1,441 feet to the point of accident and 359 feet eastward.

At Bedford a siding 9,158 feet in length lies between the main tracks. The west siding-switch, which connects the siding and the eastward main track, is 443 feet east of the station.

The train-order signal at Bedford, which was in use also as a manual-block signal at the time of the accident, is of the two-indication, lower-quadrant, semaphore type, and is electrically lighted. It is mounted on a mast located on the south side of the eastward main track and in front of the station. The involved day aspect and corresponding indication of this signal are as follows:

# Aspect

# Indication

60 degrees

Proceed

Operating rules read in part as follows:

99(b). All trains, except first class \* \* \* must approach all stations, \* \* \* under control and so proceed until the track or automatic signal is plainly seen to be clear. The responsibility for a collisior. \* \* \* will rest with the following train. \* \* \*

This gives all trains except first class, \* \* \* the right to stand within yard limits, \* \* \* without protecting against following trains, \* \* \*

- 6 -

Second class trains will not protect against trains of the same or inferior class, and freight extras, third and fourth class trains will not protect against freight extras, third and fourth class trains, except in foggy or stormy weather \* \* \*

\* \* \*

109. Within yard limits, trains and engines, except first class trains and those running on train order schedule, must run with caution and under control until the track or automatic signal is plainly seen to be clear.

#### FORMS OF TRAIN ORDERS

\* \* \*

S

Providing for Movement of Trains when Automatic Signals are Out of Service Over a Section of Line for Any Reason

A train order reading as follows, will be issued to trains and operators affected.

Automatic signals between .....and .......... are out of service. Trains be governed by manual block and train rules. \* \* \*

\* \* \*

While manual block is being used the train order signal at stations affected will also be used as a block signal, and shall indicate Stop, except when changed to proceed for approaching train when no orders are on hand and block is clear. \* \* \*

\* \* \*

#### MANUAL BLOCK SYSTEM RULES

709. \* \* \*

\* \* \*

Rule 99(b) must be observed at all stations, yards, passing sidings and coal and water stations regardless of block signal indications.

723. \* \* \*

Trains standing or switching on main track must not be considered or reported as clear unless they have actually cleared the block. **- 7 -** 2898

# Description of Accident

No. 75, a west-bound fourth-class freight train, consisting of engine 1129, 36 cars and a caboose, stopped into clear on the siding in the vicinity of the west switch at Bedford at 10:33 a. m. About 12:48 p. m., during switching operations, a cut of 8 cars was left standing on the eastward main track, and engine 1129, headed westward, was preparing to enter a spur track located a short distance east of the east end of the sut of cars when the west car was struck by Extra 1233 East.

Extra 1233 East, an east-bound freight train, consisting of engine 1233, 59 cars and a caboose, passed the west yard-limit sign, passed the manual-block signal at Bedford, which displayed proceed, and while moving at an estimated speed of 25 miles per hour it struck the cut of cars.

The crew of each train held copies of train order No. 105 reading in part as follows:

Effective 830 am today automatic signals between east switch at Thaxton and west switch Lowry are out of service.

Trains be governed by manual block and train rules. \* \* \*

Six of the eight cars on the eastward main track, two cars on the spur track and the engine and the first six cars of Extra 1233 East were derailed and badly damaged. The front end of engine 1129 was slightly damaged.

The weather was clear at the time of the accident, which occurred about 12:48 p. m.

The conductor of No. 75 was killed. The fireman and the swing brakeman of No. 75 were injured.

### Discussion

During switching operations at Bedford, engine 1129 left 8 cars standing on the eastward main track, and the cut of cars was struck by Extra 1233 East at a point 3,894 feet east of the west yard-limit sign.

When the accident occurred the members of the crew of No. 75 were in the vicinity of their engine, which was standing a snort distance east of the east end of the cut of cars. The surviving members said they were not aware that Extra 1233 East was approaching until immediately prior to the collision.

As Extra 1233 East was approaching Bedford the speed was about 40 miles per hour. The enginemen were maintaining a look-out anead. When the engine was in the vicinity of the west

yard-limit sign the engineer made a 10-pound brake-pipe reduc-When the engine was a short distance west of the manualblock signal the enginemen observed that the signal was displaying a proceed indication, and the engineer released the brakes. From this point eastward, because of the curve, an overhead bridge and buildings adjacent to the track, the view had by the enginemen of the track ahead was materially restricted. When the engine was moving on the curve the fireman informed the engineer that he could see some cars a few hundred feet distant, but was not able to determine whether the cars were on the main track. Soon afterward the engineer saw the cut of cars on the eastward main track, and immediately moved the brake valve to emergency position. The speed of Extra 1233 was about 25 miles per hour when the collision occurred. members of the train crew were not aware of anything being wrong until the brakes were applied in emergency immediately prior to the collision.

The operator at Bedford said that engine 1129 was permitted to enter the eastward main track in the block involved under a proceed indication, and he was aware that the engine was engaged in switching service but, although no member of the crew had reported that the block was clear, he thought the eastward main track was clear when he displayed the manualblock signal in proceed position for Extra 1233 East. engineer of Extra 1233 East said that he had become accustomed to accepting a proceed automatic signal as information that the track ahead within yard limits was clear. Although the proceed indication which he received was displayed by a menual-block signal, he operated his train in the same manner as he would have done if the proceed indication had been displayed by an automatic-block signal. However, other members of the crew understood that, within yard limits when the manual-block signal was displaying proceed, the speed of their train was required to be so controlled that it could be stopped short of a train or an obstruction. The fireman thought the train was being operated under proper control.

## Cause

It is found that this accident was caused by failure properly to control the speed of a train moving within yard limits.

Dated at Washington, D. C., this twenty-seventh day of July, 1945.

By the Commission, Commissioner Patterson.

W. P. BARTEL, Secretary.

(SEAL)