

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2849

POTOMAC YARD
AND
THE RICHMOND, FREDERICKSBURG AND POTOMAC
RAILROAD COMPANY

REPORT IN RE ACCIDENT
AT POTOMAC YARD, VA., ON
DECEMBER 12, 1944

SUMMARY

Railroads: Potomac Yard : Richmond,
Fredericksburg
and Potomac

Date: December 12, 1944

Location: Potomac Yard, Va.

Kinds of accidents: Rear-end collision and wreckage struck
by train moving on adjacent main track

Trains involved: P. R. R. : B. & O. : Southern .
freight freight passenger

Train numbers: Extra 4818 : Extra 4493 : 232
South South

Engine numbers: 4818 : 4493 : 1406

Consist: 40 cars, : 36 cars, : 10 cars
caboose caboose

Estimated speed: Standing : 15 m. p. h. : 45 m. p. h.

Operation: Freight running track : Automatic block
and train-control
systems

Tracks: Tangent; level : Double; tangent;
level

Weather: Snowing

Time: About 7:06 a. m. : About 7:16 a. m.

Casualties: 1 killed; 12 injured

Cause: Failure to provide adequate operating rules
for the movement of trains and engines on
tracks of Potomac Yard

Recommendation: That the operating officials of Potomac Yard
prescribe adequate rules for operation of
trains and engines in this yard

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2849

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

POTOMAC YARD
AND
THE RICHMOND, FREDERICKSBURG AND POTOMAC RAILROAD COMPANY

January 30, 1945.

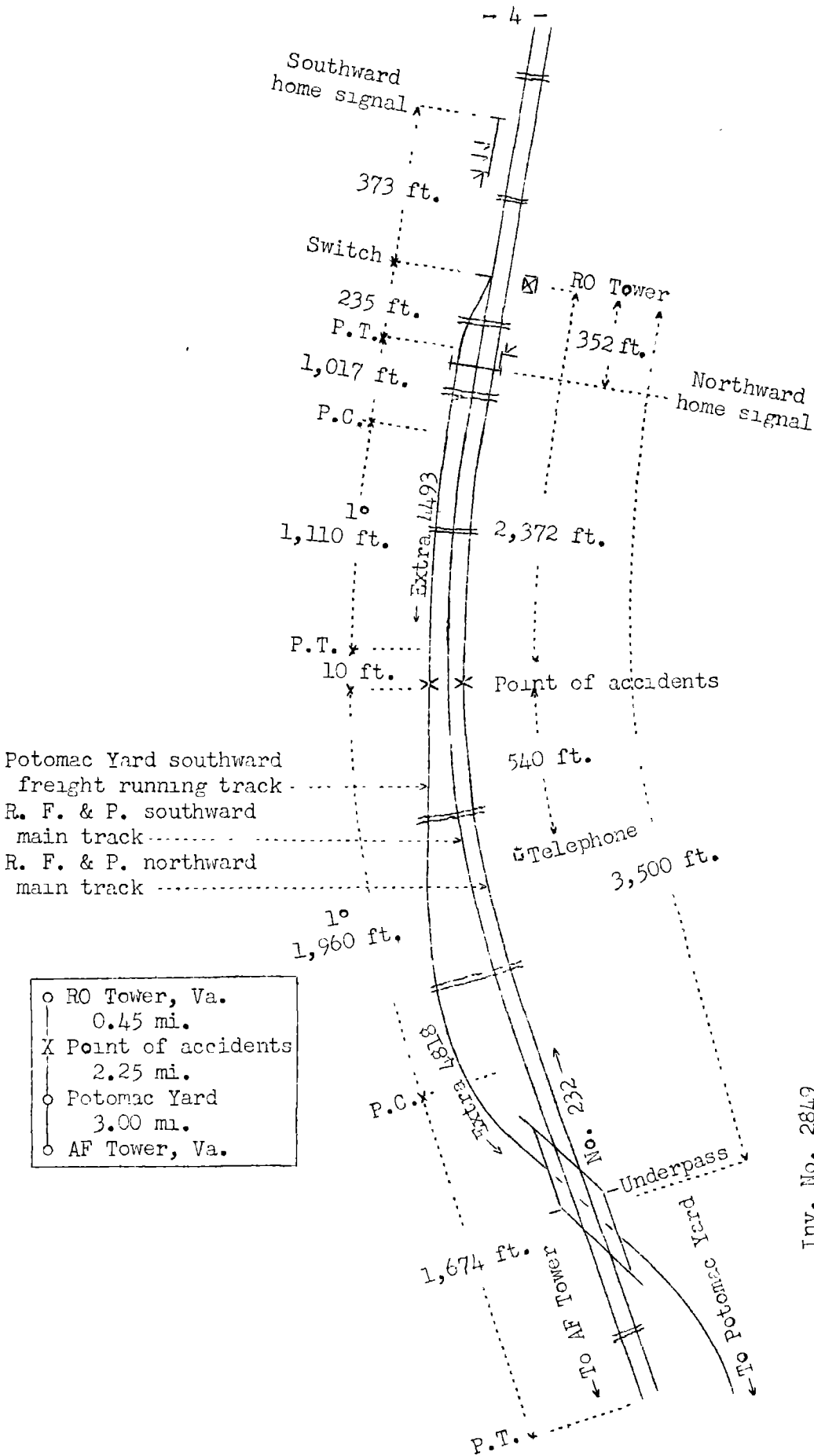
Accidents at Potomac Yard, Va., on December 12, 1944, caused
by failure to provide adequate operating rules for the
movement of trains and engines on tracks of Potomac Yard.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On December 12, 1944, there was a rear-end collision between a Pennsylvania Railroad freight train and a Baltimore & Ohio Railroad freight train on a freight running track at Potomac Yard, Va., and the wreckage was struck by a Southern Railway passenger train on the line of the Richmond, Fredericksburg and Potomac Railroad. These accidents resulted in the death of one train-service employee, and the injury of six passengers, three railway-mail clerks and three train-service employees.

¹Under 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 | RO Tower, Va. |
| | 0.45 mi. |
| X | Point of accidents |
| | 2.25 mi. |
| o | Potomac Yard |
| | 3.00 mi. |
| o | AF Tower, Va. |

Inv. No. 2849
 Potomac Yard
 and
 Richmond, Fredericksburg and Potomac Railroad
 Potomac Yard, Va.
 December 12, 1944

Location of Accident and Method of Operation

The first accident occurred on that part of Potomac Yard designated as the southward freight running track and extending southward from RO Tower to the north end of a freight classification yard, 1.57 miles, and the second accident occurred on that part of the Richmond, Fredericksburg and Potomac Railroad, hereinafter referred to as the R. F. & P., extending northward from AF Tower to RO Tower, Va., 5.7 miles. AF Tower and RO Tower were, respectively, 3 miles south and 2.7 miles north of the station at Potomac Yard. In this vicinity the R. F. & P. was a double-track line over which trains moving with the current of traffic were operated by automatic block and train-control systems. Trains of the Southern Railway, hereinafter referred to as the Southern, were regularly operated over this portion of the R. F. & P. Engines of this railroad were not equipped with the automatic train-control apparatus. Trains of the Pennsylvania Railroad, hereinafter referred to as the P. R. R., and trains of the Baltimore & Ohio Railroad, hereinafter referred to as the B. & O., were regularly operated over the Potomac Yard southward freight running track, which practically paralleled the main tracks of the R. F. & P. on the west in the vicinity of the point of accident. Potomac Yard was jointly operated by the R. F. & P., the Southern, the P. R. R., the B. & O. and the C. & O. The accidents occurred 0.45 mile south of RO Tower. The north switch of the southward freight running track was within the interlocking limits of RO Tower. Movements from the southward main track to the freight running track were made through a No. 15 turnout. About 3,500 feet south of RO Tower the freight running track curved southeastward and crossed under the main tracks. The freight running track was provided with an overhead catenary system for the electric propulsion of trains. From the north on this track there were, in succession, a turnout to the right 235 feet, a tangent 1,017 feet, a 1° curve to the left 1,110 feet, and a tangent 10 feet to the point where the accidents occurred. From the south on the R. F. & P. there was a tangent 1,674 feet in length, which was followed by a 1° curve to the right 1,960 feet to the point where the accidents occurred. At this point the grade was practically level.

The home signal at RO Tower, which governed south-bound movements entering the turnout of the freight running track, was 373 feet north of the tower. The involved aspect and indication of this signal were as follows:

| <u>Aspect</u> | <u>Indication</u> |
|--------------------------|-----------------------------|
| Red-over-yellow-over-red | Proceed at authorized speed |

There was no prescribed maximum speed for the freight trains. The maximum authorized speed for the passenger train involved was 70 miles per hour.

Description of Accident

Extra 4818 South, a south-bound P. R. R. freight train, consisting of electric engine 4818, 40 cars and a caboose, entered the southward freight running track at RO Tower and stopped about 6:57 a. m., with the rear end standing 2,372 feet south of the tower. About 9 minutes later the rear end was struck by Extra 4493 South. The caboose and the rear car of Extra 4818 were demolished.

Extra 4493 South, a south-bound B. & O. freight train, consisting of steam engine 4493, 36 cars and a caboose, entered the southward freight running track about 7:05 a. m., and while moving at an estimated speed of 15 miles per hour it struck the rear end of Extra 4818 South. The engine and the first car of Extra 4493 were derailed. The engine stopped practically upright, obstructed the R. F. & P. southward main track and fouled the R. F. & P. northward main track. About 10 minutes later the engine was struck by No. 232.

No. 232, a north-bound first-class Southern passenger train, consisted of engine 1406, one mail car, one passenger-baggage car, four coaches, one dining car and three Pullman sleeping cars, in the order named. All cars were of steel construction. This train entered the northward main track of the R. F. & P. at AF Tower, the last open office, at 7 a. m., 42 minutes late, and while moving at an estimated speed of 45 miles per hour it struck engine 4493. The engine and the first four cars of No. 232 were derailed and damaged.

It was snowing and dark at the time of the accidents, which occurred about 7:06 and 7:16 a. m.

The engineer of No. 232 was killed. The engineer, the fireman and the front brakeman of Extra 4493 South were injured.

Discussion

About 6:57 a. m. Extra 4818 South stopped on the southward freight running track with the caboose standing 2,372 feet south of RO Tower. About 9 minutes later the rear end of this train was struck by Extra 4493 South. No. 232 departed from AF Tower at 7 a. m. and about 16 minutes later, while moving on the R. F. & P. northward main track, it struck the engine of Extra 4493, which fouled the northward main track. The crew of Extra 4818 were employees of the P. R. R., the crew of Extra 4493 were employees of the B. & O. and the crew of No. 232 were employees of the Southern. All the surviving employees concerned understood that, under the rules of their respective railroads, protection was required for all tracks that were liable to become obstructed as a result of a collision or other causes.

The flagman of Extra 4818 said that, when his train stopped, the left marker lamp on the caboose displayed yellow, and the right marker lamp displayed red to the rear. When he saw the reflection of the headlight of the following train he was about 180 feet north of his caboose, and he was giving stop signals with a lighted red fusee when the engine of Extra 4493 passed him. As Extra 4493 was approaching the point where the accident occurred the speed was about 15 miles per hour. The headlight was lighted brightly. It was snowing and visibility was materially restricted. The brakes had functioned properly at all points where used en route. When the engine reached a point about 200 feet north of the point where the accident occurred the engineer saw, simultaneously, a lighted red fusee and the caboose of Extra 4818. He immediately moved the brake valve to emergency position, but the accident occurred before the train could be stopped. No other member of the crew on the engine saw the preceding train prior to the occurrence of the accident.

As No. 232 was approaching the point where the accident occurred, the speed was about 45 miles per hour. No member of the train crew was aware of anything being wrong until the accident occurred. Since the engineer was killed as a result of the accident, and the fireman was so seriously injured that he could not be questioned during this investigation, it could not be determined when these employees first became aware that the northward main track was obstructed.

When the engineer of Extra 4493 recovered from shock sustained in the rear-end collision he proceeded to a telephone, located about 540 feet south of the point of accident, and instructed the operator at RO Tower to hold all trains. The engineer understood the operator to say that he had stopped all trains. However, No. 232 had passed AF Tower, the last open office south of RO Tower, and the most southerly signal which the operator could have displayed at stop was located 2,048 feet north of the point where the accident occurred. All the flagging facilities on the caboose of Extra 4818 and on engine 4493 were lost as a result of the rear-end collision. In escaping from the point of accident the flagman of Extra 4818 fell and lost his lantern. The fireman and the front brakeman of Extra 4493 were severely injured, and they were unable to furnish protection. The conductor and the front brakeman of Extra 4818 were proceeding toward the rear of their train when they became aware that the R. F. & P. northward main track was obstructed. These employees made unsuccessful attempts to stop No. 232 by giving signals with lighted white lanterns, but apparently these signals were not seen by the enginemen of No. 232.

The investigation disclosed that the employees involved had not been examined or instructed in regard to the method of operation on this track. Movements on similar tracks of the P. R. R. were required to be operated prepared to stop short of

a train or an obstruction, and flag protection for following movements was not required. Movements on similar tracks of the B. & O. were required to be operated at a speed not in excess of 15 miles per hour, and flag protection was required for following movements. In the instant case the crews of the P. R. R. and the B. & O. trains were operating as though their respective trains were on similar tracks of their own railroads. The engineer of the B. & O. train was expecting flag protection that would enable his train to be stopped short of a preceding train, and the flagman of the P. R. R. train did not furnish flag protection until he realized that the crew of the following train had not seen the P. R. R. train. The P. R. R. officials had the same understanding of the operation as that of the P. R. R. employees involved, and likewise the B. & O. officials had the same understanding as that of the B. & O. employees involved. Two bulletins containing instructions relative to operation in Potomac Yard had been issued, one in 1932 and one in 1944, but definite rules had not been prescribed. If a proper method of operation governing movements on the tracks of Potomac Yard had been prescribed, and if the employees concerned had been properly instructed concerning the method of operation, this accident could have been averted.

Cause

It is found that these accidents were caused by failure to provide adequate operating rules for the movement of trains and engines on tracks of Potomac Yard.

Recommendation

It is recommended that the operating officials of Potomac Yard prescribe adequate rules for operation of trains and engines in this yard.

Dated at Washington, D. C., this thirtieth day of January, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.