

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2641
THE BALTIMORE & OHIO RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR POTOMAC, MD., ON
OCTOBER 25, 1942

SUMMARY

Railroad: Baltimore & Ohio
Date: October 25, 1942
Location: Potomac, Md.
Kind of accident: Head-end collision
Trains involved: Light engine : Freight
Train numbers: : Extra 7103 West
Engine numbers: 6149 : 7103
Consist: : 68 cars, caboose
Estimated speed: 15 m. p. h. : 25 m. p. h.
Operation: Automatic block-signal system for
movements with current of traffic,
and train orders and manual block
system for movements against cur-
rent of traffic
Track: Double; 3° curve; 0.23 percent
descending grade westward
Weather: Clear
Time: 7:01 p. m.
Casualties: 5 injured
Cause: Accident caused by an engine moving
against current of traffic without
authority

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2641

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

THE BALTIMORE & OHIO RAILROAD COMPANY

December 14, 1942.

Accident near Potomac, Md., on October 25, 1942, caused by
an engine moving against the current of traffic with-
out authority.

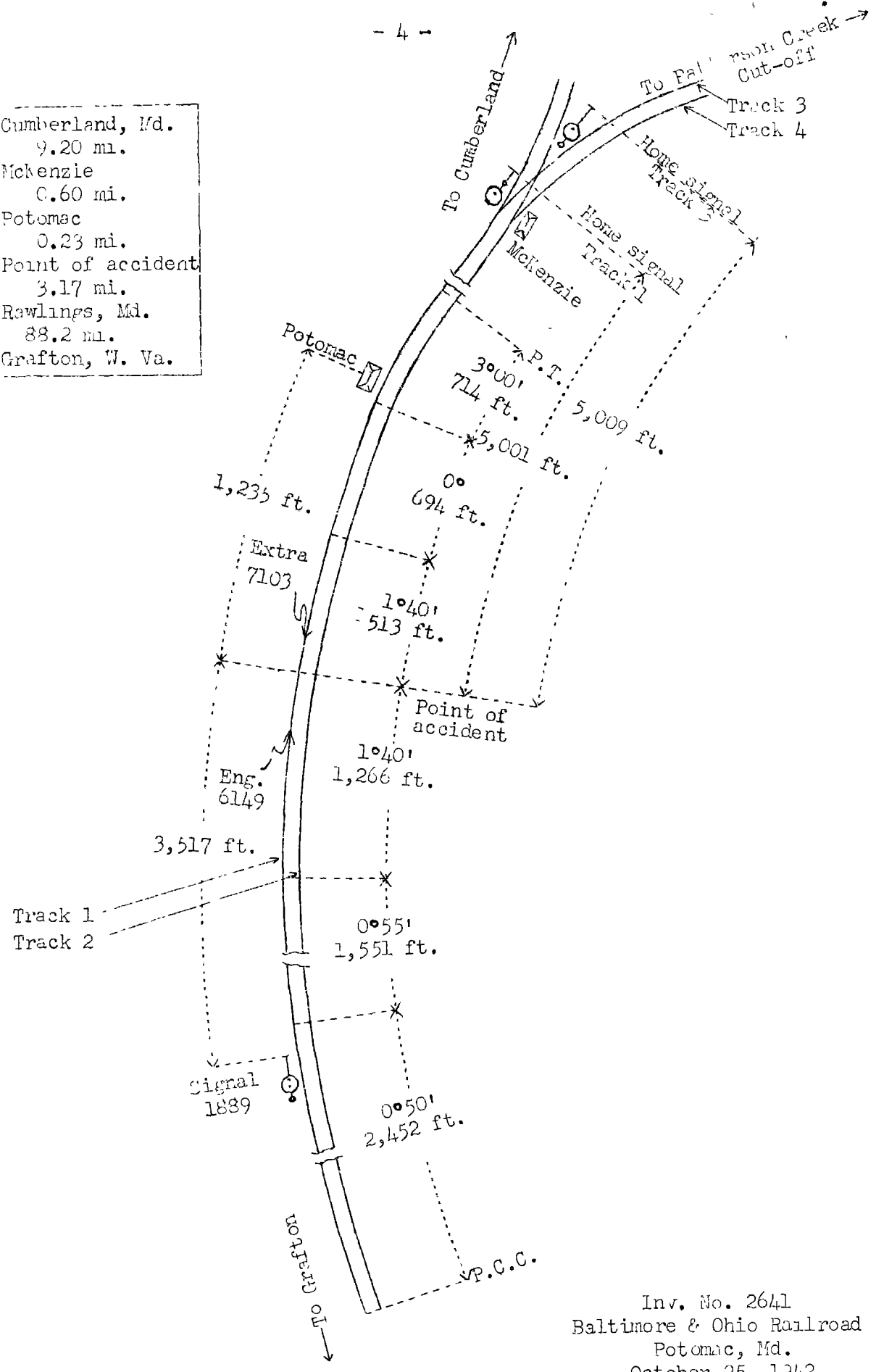
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On October 25, 1942, there was a head-end collision
between a light engine and a freight train on the Baltimore
& Ohio Railroad near Potomac, Md., which resulted in the
injury of five employees.

¹Under authority of section 17 (2) of the Interstate Com-
merce Act the above-entitled proceeding was referred by the
Commission to Commissioner Patterson for consideration and
disposition.

- Cumberland, Md. 9.20 mi.
- McKenzie C. 60 mi.
- Potomac 0.23 mi.
- ✕ Point of accident 3.17 mi.
- Rawlings, Md. 88.2 mi.
- Grafton, W. Va.



Inv. No. 2641
 Baltimore & Ohio Railroad
 Potomac, Md.
 October 25, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Cumberland Division designated as the West End and extending between Cumberland, Md., and Grafton, W. Va., a distance of 101.4 miles. In the vicinity of the point of accident this is a double-track line over which trains moving with the current of traffic are operated by an automatic block-signal system, the indications of which supersede time-table superiority, and trains moving against the current of traffic are operated by train orders and a manual-block system. Between McKenzie and Rawlings, Md., located, respectively, 0.6 mile east and 3.4 miles west of Potomac, the main tracks from north to south are track 1, westward track, and track 2, eastward track. A double-track line designated as the Patterson Creek Cut-Off, hereinafter referred to as the cut-off, extends southeastwardly from McKenzie to Patterson Creek, a distance of 6.3 miles. These tracks from north to south are track 3, westward track, and track 4, eastward track. At Rawlings there is a crossover between tracks 1 and 2. A telephone for communication between train crews and the operator at McKenzie is located in the vicinity of the crossover. The accident occurred on track 1 at a point 1,235 feet west of the station at Potomac. Approaching from the west there is a compound curve to the right 7,190 feet in length, the maximum curvature of which is 3°. The accident occurred on this curve at a point 1,921 feet from its eastern end, at which point the curvature is 1°40'. At the point of accident the grade for west-bound trains is 0.23 percent ascending.

At McKenzie some signals governing westward movements on tracks 1 and 3 are located, respectively, 5,001 feet and 5,009 feet east of the point of accident. Automatic signal 1889 governing westward movements on track 1 is located 3,517 feet west of the point of accident. These signals are of the color-position-light type and are approach-lighted. The involved aspects and corresponding indications and names of these signals are as follows:

Home Signal (Track 1)

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Two yellow lights in diagonal position above white light	Proceed at medium speed preparing to stop at next signal	Medium Approach

Home Signal (Track 3)

<u>Aspect</u>	<u>Indication,</u>	<u>Name</u>
White light above two green lights in vertical position	Proceed	Clear

Signal 1389

White light above two green lights in vertical position	Proceed	Clear
---	---------	-------

Operating rules read in part as follows:

SPEED RESTRICTIONS.

Normal Speed--The maximum speed permitted by timetables for main track movements.

Medium Speed--One-half the normal speed, not to exceed thirty (30) miles per hour.

* * *

251. On portions of the railroad, and on designated tracks so specified on the time-table, trains will run with reference to other trains in the same direction by block signals whose indications will supersede the superiority of trains.

512. A train must not cross over at any point and proceed on another track with the current of traffic without permission from the signalman, nor against the current of traffic without orders from the Train Dispatcher.

Time-table special instruction No. 15 provides that Rule 251 is in effect in the territory involved.

In this vicinity the maximum authorized speed for freight trains is 55 miles per hour, and for the light engine involved moving in backward motion, 25 miles per hour.

Description of Accident

Extra 6149 West, a west-bound freight train, was operated via the cut-off and stopped at McKenzie on track 3 at 6:15 p. m., according to the dispatcher's record of movement of trains. Soon afterward the engine was detached and moved

westward on track 1 to Rawlings where the engine was supplied with water and then was moved eastward in backward motion on track 1. While this engine was moving against the current of traffic on track 1 at an estimated speed of 15 miles per hour it collided with Extra 7103 West at a point 1,235 feet west of the station at Potomac.

Extra 7103 West, a west-bound freight train, consisted of engine 7103, 31 loaded and 37 empty cars and a caboose. At Cumberland, 9.3 miles east of Potomac, a terminal air-brake test was made and the brakes functioned properly. This train departed from Cumberland at 3:42 p. m., according to the dispatcher's record of movement of trains, and passed McKenzie at 6:59 p. m. The westward home signal for track 1 displayed medium approach. While this train was moving at an estimated speed of 25 miles per hour it collided with engine 6149.

From an engine moving in either direction, in the vicinity of the point of accident, the view of an engine approaching on track 1 from the opposite direction is restricted to a distance of approximately 650 feet, because of trees on the south side of the track and track curvature.

The tender of engine 6149 was derailed to the south and stopped, badly damaged, across track 2. The No. 1 pair of driving wheels of engine 6149 was derailed, the cab was demolished and the rear-end engine-frame was bent. Engine 7103 was derailed to the south and stopped, badly damaged, on its left side on track 2 and parallel to it. The first 5 cars and the twenty-second to thirty-third cars, inclusive, were derailed and considerably damaged.

It was clear at the time of the accident, which occurred about 7:01 p. m.

The employees injured were the engineer and the fireman of engine 6149, and the engineer, the fireman and the front brakeman of Extra 7103 West.

Discussion

The rules governing operation on the line involved provide that movements against the current of traffic must be authorized by train order. Crossover movements from one main track to proceed on another main track with the current of traffic must be authorized by the signalman. All the employees involved understood these requirements.

Engine 6149 departed from Rawlings and was moving eastward against the current of traffic on track 1 as it approached the

point where the accident occurred. The engine was headed westward and the speed was about 15 miles per hour. The first the enginemen were aware of anything being wrong was when the collision occurred. There was no condition of engine 6149 that distracted the attention of the enginemen or obscured their vision.

As Extra 7103 West was approaching the point where the accident occurred the speed was about 25 miles per hour. No train orders affecting the movement of this train on track 1 had been issued. The enginemen and the front brakeman were maintaining a lookout ahead, but the first they were aware of anything being wrong was when the collision occurred. The fireman said he observed simultaneously signal 1853 displaying a proceed indication and an engine moving eastward at a point some distance east of that signal, but he thought the engine was on track 2.

Engine 6149 was not authorized by train order to move from Rawlings to McKenzie on track 1 against the current of traffic, and no flag protection was provided to protect the movement. The engineer had charge of the movement. The front brakeman was instructed by the engineer to remain with the train on track 3 at McKenzie, but he was not instructed to provide protection for the return movement. The engineer said he was fully aware of the requirement that the movement to McKenzie be authorized by train order but he neglected to call the operator before starting back. Had the engineer communicated with the operator at McKenzie and obtained authority for engine 6149 to return to McKenzie, in accordance with the requirements of the rules, this accident would have been averted.

Cause

It is found that this accident was caused by an engine moving against the current of traffic without authority.

Dated at Washington, D. C., this fourteenth day of December, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.