INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3297

THE BALTIMORE AND OHIO RAILROAD COMPANY

IN RE ACCIDENT

NEAR CENTURY JCT., W. VA., ON

DECEMBER 1, 1949

SUMMARY

Date:	December 1, 1949	
Railroad:	Baltimore and Ohio	
Location:	Century Jct., W. Va.	
Kind of accident:	Head-end collision	
Trains involved:	Freight	: Freight
Train numbers:	86	: 95
Engine numbers:	4875	: 4832
Consists:	50 cars, caboose	: 29 cars, caboose
Estimated speeds:	6 m. p. h.	: 15 m. p. h.
Operation:	Timetable and train orders, and manual-block system for trains following passenger trains	
Track:	Single; 12°20' curve; 0.02 percent descending grade eastward	
Weather:	Clear	
Time:	6:28 p. m.	
Casualties:	1 killed; 2 injured	
Cause:	Failure to obey meet order	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3297

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

THE BALTIMORE AND OHIO RAILROAD COMPANY

January 13, 1950

Accident near Century Jct., W. Va., on December 1, 1949, caused by failure to obey a meet order.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On December 1, 1949, there was a head-end collision between two freight trains on the Baltimore and Ohio Railroad near Century Jct., W. Va., which resulted in the death of one employee and the injury of two employees.

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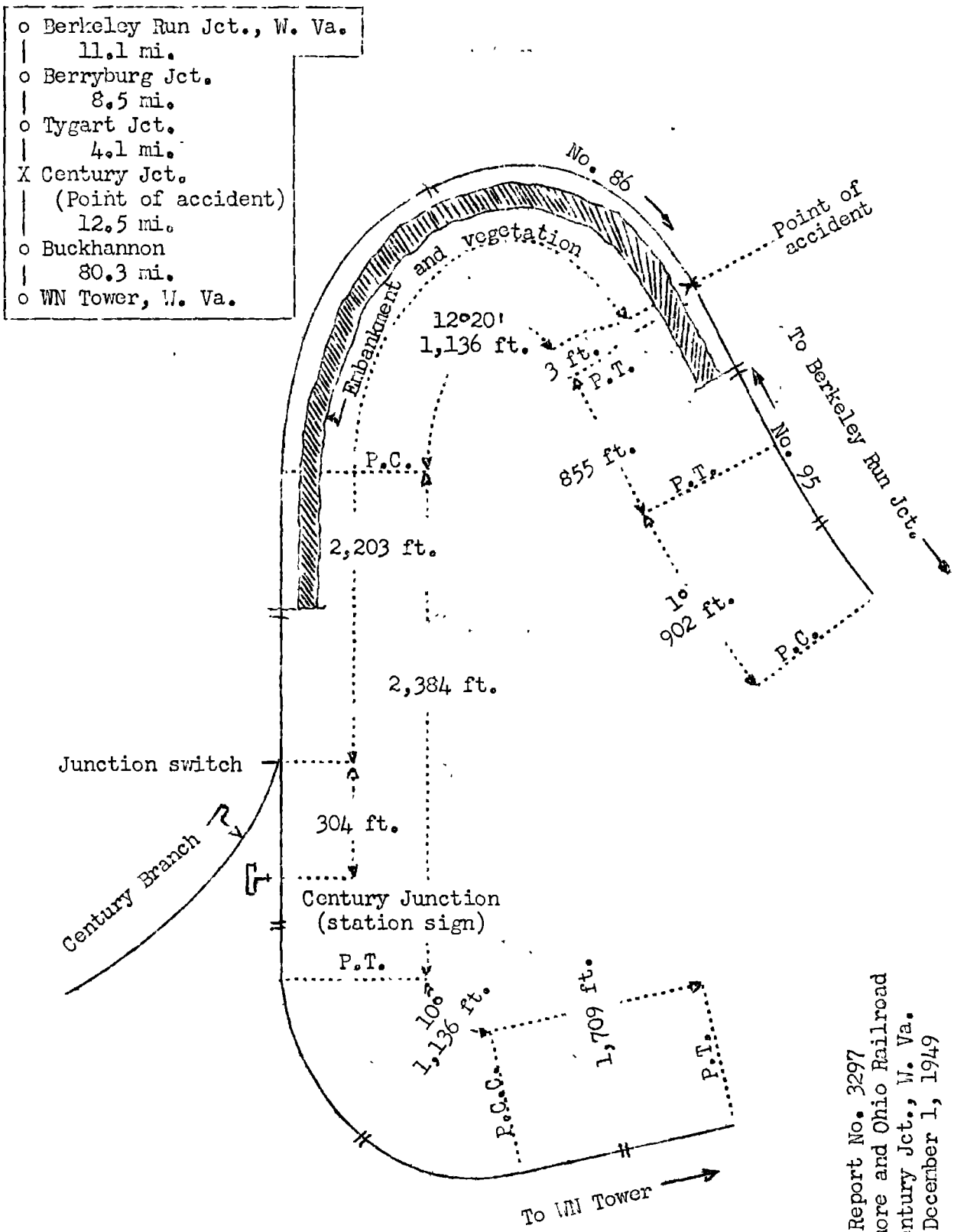
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Report No. 3297
Baltimore and Ohio Railroad
Century Jct., W. Va.
December 1, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the Monongah Division designated as the Cowen Sub-Division and extending between WN Tower and Berkeley Run Jct., W. Va., 116.5 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable and train orders, and by a manual-block system for trains following passenger trains. At Century Jct., 92.8 miles east of WN Tower, a line designated as the Century Branch diverges northward from the Cowen Sub-Division. The junction switch, which is trailing-point for east-bound movements, is located 304 feet east of the station sign. The station sign is 7 feet long, is supported by one post, and bears the words "CENTURY JUNCTION" in black letters 5 inches high on a white background. It is parallel to the Cowen Sub-Division main track and is located 13 feet north of the center-line of the track and 8 feet above the level of the top of the rail. The accident occurred on the main track 2,203 feet east of the junction switch. From the west there are, in succession, a tangent 1,709 feet in length, a compound curve to the right, having a maximum curvature of 10°, 1,136 feet, a tangent 2,384 feet, and a 12°20' curve to the right 1,136 feet to the point of accident and 3 feet eastward. From the east there are, in succession, a 1° curve to the right 902 feet in length, a tangent 855 feet, and the curve on which the accident occurred. The grade varies between 0.02 percent and 0.17 percent descending eastward throughout a distance of 2 miles immediately west of the point of accident, and is 0.02 percent descending at that point.

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

14. Engine Whistle Signals.

Note.--The signals prescribed are illustrated by "o" for short sounds; "__" for longer sounds. * * *

SOUND	INDICATION
* * *	
(n) __ __ o	Approaching meeting or waiting points. See Rule 90 (A).
* * *	

71. On Single Track:

* * *

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

* * *

88. At meeting points between trains of the same class, the inferior train must clear the main track * * *

* * *

90. (A). When a train equipped with communicating signal is two miles distant from * * * a point where by train order * * * the train is to meet or wait for an opposing train, * * * the conductor must signal the engineer as per Rule 16 (l) and be answered by him in accordance with Rule 14 (n).

After giving the signal and receiving the answer by whistle from the engine (or failing to hear the answer distinctly) the conductor will give his undivided attention to the speed of the train as it nears such point, and, if the speed is in the least degree excessive, will apply the air brake.

Engineer of other trains must give the signal as per Rule 14 (n) under the same conditions.

Should the engineer fail to give the signal, conductors and trainmen must take immediate action to stop the train.

* * *

208. * * *

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* * * When * * * train order is issued making a meeting or waiting point at an open train order station * * * a copy of the order must be addressed to the operator at that point * * *.

When the meeting point is at a non-train order station a copy of the train order must also be sent to the train order station on each side where the operator must display the Stop-signal and deliver Clearance Card Form A, part (B), to the conductor and engineer.

* * *

211. (B). * * * conductors of freight trains must show train orders and Clearance Card Form A to flagmen, and engineers to firemen, and when practicable to the front trainmen; firemen and trainmen will ask to see them if not presented by the conductor or engineer and should occasion require must call attention of conductors and engineers to them.

FORM OF TRAIN ORDERS.

A.

Fixing Meeting Points for Opposing Trains.

(1.) No 1 One Eng 873 meet No 2 Two Eng 888 at B.

* * *

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the Rules.

Part (B) of Clearance Card Form A reads as follows:

(B) Signal is at stop for train.....to meet
.....at.....order.....
.....at.....order.....
.....at.....order.....

Timetable special instructions provide that east-bound trains are superior to trains of the same class in the opposite direction.

The maximum authorized speed for the trains involved was 25 miles per hour.

Description of Accident

No. 86, an east-bound third-class freight train, consisted of engine 4875, 50 cars and a caboose. At Buckhannon, the last open office, 12.5 miles west of Century Jct., the crew received copies of train order No. 298 reading as follows:

No 86 Eighty Six
Eng 4875 meet
No 95 Ninety five
Eng 4832 at Century Jct

The crew also received copies of Clearance Card Form A reading in part as follows:

* * *

(B) Signal is at stop for train No 86 to meet No 95 at Century Jct order 298
* * *

This train departed from Buckhannon at 5:49 p. m., 1 hour 54 minutes late, passed the junction switch at Century Jct., where it was required to wait unless No. 95 was into clear on the Century Branch, and while moving at an estimated speed of 6 miles per hour it collided with No. 95 at a point 2,203 feet east of the junction switch.

No. 95, a west-bound third-class freight train, consisted of engine 4832, 29 cars and a caboose. At Berryburg Jct., 12.6 miles east of Century Jct., the crew received copies of train order No. 298. This train departed from Berryburg Jct. at 5:58 p. m., 43 minutes late. At Tygart Jct., the last open office, 4.1 miles east of Century Jct., the crew received copies of Clearance Card Form A reading in part as follows:

* * *

(B) Signal is at stop for train No 95 to meet No 86 at Century Jct order 298
* * *

The train departed from Tygart Jct. at 6:21 p. m., 45 minutes late, and while moving at an estimated speed of 15 miles per hour it collided with No. 86.

The engine, the tender, and the front truck of the first car of No. 86 were derailed. These units remained upright and in line with the track. They were badly damaged. The engine of No. 95 was moved eastward approximately 125 feet by the force of the impact. The engine-truck wheels and the No. 1 pair of driving wheels were derailed, and the engine was badly damaged. The tender, which was not detached from the engine, stopped on the north side of the track, upright and at right angles to the engine. It was badly damaged. The first five cars of the train were overturned to the north. The second and third cars were destroyed, the fourth car was badly damaged, and the first and fifth cars were somewhat damaged.

The front brakeman of No. 95 was killed. The fireman of No. 86 and the fireman of No. 95 were injured.

The weather was clear and it was dark at the time of the accident, which occurred at 6:28 p. m.

During the 30-day period preceding the day of the accident the average daily movement in this territory was 12.85 trains.

Discussion

The crews of both trains held copies of train order No. 298, which established Century Jct. as the meeting point between No. 86 and No. 95. There is no siding at Century Jct. Under the rules, No. 95 was required to enter the Century Branch at the junction switch, and No. 86 was required to remain clear of the junction switch until No. 95 was into clear on the Century Branch. When trains meet at Century Jct., if the engine of the west-bound train moves westward to a point where it cannot be identified from a train on the Cowen Sub-Division, it is customary for a member of the crew of the west-bound train to remain in the vicinity of the junction switch to identify his train to the crew of the east-bound train.

The crew of No. 86 exchanged engines at Buckhannon. Some time later copies of train order No. 298 and Clearance Card Form A were delivered by the conductor to the engineer. The engineer said that while he was reading the order he was interrupted by the hostler, who informed him that the tender of engine 4875 was not fully supplied with water. The engineer

replied that he would supply the tender with water at Tygart Jct. A short time later he informed the conductor that it would be necessary to stop at Tygart Jct. He said that as a result of these conversations he became confused and fixed Tygart Jct. as the point at which his train was to meet No. 95. The engineer did not again read the order or Clearance Card Form A before the collision occurred. All other members of the crew read the train order and Clearance Card Form A and understood that the meeting point with No. 95 was Century Jct. As No. 86 was approaching Century Jct. the headlight was lighted brightly, the enginemen were in their respective positions in the cab of the engine, the front brakeman was seated on the left side of the cab of the engine, and the conductor and the flagman were in the caboose. The brakes of this train had been tested and had functioned properly when used en route. The engineer sounded the rail-highway grade-crossing engine-whistle signal for each of three crossings located west of Century Jct. The speed of the train was reduced to about 10 miles per hour in compliance with a speed restriction between points 3,163 feet and 746 feet west of the junction switch at Century Jct. After the engine passed the latter point, the speed of the train was increased. When the engine entered the curve east of Century Jct., the engineer observed the reflection of the headlight of the opposing train on the rails. At this point the view of the track ahead was restricted to a distance of about 400 feet by a wooded hillside on the south side of the track. The engineer then placed the brake valve in the emergency position, but immediately before this action was taken the conductor's valve in the caboose was opened. The speed of the train was reduced to about 6 miles per hour when the collision occurred. The front brakeman said he did not notice that the meeting-point whistle signal was not sounded as the train was approaching Century Jct. Until the engine was closely approaching the junction switch, he thought that the speed was properly controlled and that the train would be stopped short of the switch. When he observed that the engine was about to pass the switch and that No. 95 had not arrived, he called to the engineer to remind him of the meeting point. When it became apparent that the engineer had not heard the warning, the front brakeman crossed to the right side of the cab. At the same time, the engineer observed the reflection of the headlight of No. 95. The fireman was making his first east-bound trip over this portion of the railroad and was not familiar with the locations of the stations. Until after the collision occurred he was not aware that the train had passed Century Jct. The conductor

and the flagman heard what they assumed to be a meeting-point engine-whistle signal when the train was about 2 miles west of Century Jct. They said afterward that the sound was not distinct and they could have mistaken a rail-highway grade-crossing engine-whistle signal for a meeting-point signal. When the speed of the train was reduced west of Century Jct. and then increased when the engine was in the vicinity of the junction switch, they assumed that No. 95 had arrived and had been identified by the engineer. When the caboose was closely approaching the switch, they observed that No. 95 had not arrived. The conductor opened the conductor's valve just before the engineer placed the brake valve in emergency position.

As No. 95 was approaching the point where the accident occurred the speed was about 15 miles per hour. The enginemen and the front brakeman were in their respective positions on the engine, and the conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. As the train was closely approaching the curve on which the accident occurred, the fireman observed the headlight of No. 86 at a distance of about 400 feet. He called a warning to the engineer, who immediately initiated an emergency brake application. The collision occurred before the speed of the train had been materially reduced.

Cause

It is found that this accident was caused by failure to obey a meet order.

Dated at Washington, D. C., this thirteenth day of January, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.