## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE NICHOLAS, FAYETTE AND GREENBRIER RAIL-ROAD NEAR SAW MILL, J. VA., ON NOVEMBER 15, 1934.

December 29, 1934.

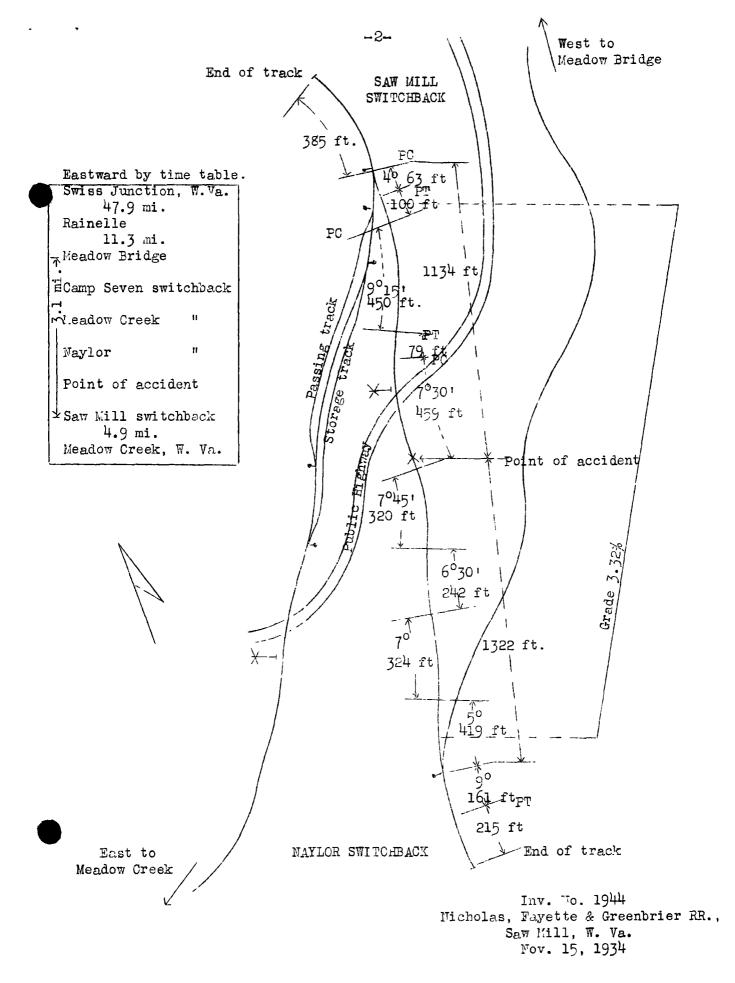
To the Commission:

On November 15, 1934, there was a collision between a passenger train and a portion of a freight train on the Nicholas, Fayette and Greenbrier Railroad near Saw Mill, N. Va., which resulted in the injury of 2 passengers and 1 express messenger.

Location and method of operation

This railroad is owned jointly by the Chesapeake and Ohio Railway and the New York Central Railroad: in 1932 an agreement was made whereby each road would assume the supervision of operation and maintenance of the joint property during alternate years, the Chesapeake and Ohio Railway having supervision during 1934. This accident occurred on the Sewell Valley Sub-division which extends westward, according to time table direction, from Meadow Creek to Swiss Junction, W. Va., a distance of 67.2 miles. This is a single-track line over which trains are operated by time table, train orders and a manual block-signal system. are communicated by telephone to and copied by trainmen at any of the 20 booths, there being only one continuously operated office and three day train order offices on this sub-division. The block in which this accident occurred extends between Meadow Creek and Meadow Bridge, a distance of 8 miles, there being an open office at Meadow Bridge from 8 a.m. to 5 p.m., while orders and clearance cards are received at Meadow Creek by telephone.

In the vicinity of the point of accident the track is laid on the side of a mountain, the track rising 308 feet between Saw Mill and Camp Seven, a distance of 2.4 miles, through a series of four switchbacks, known respectively as Saw Mill, Naylor, Meadow Creek, and Camp Seven. In the immediate vicinity of the point of accident the lower, middle and upper legs of the switchback tracks are practically parallel, the difference in elevation of each leg at point of accident being approximately 70 feet; the accident oc-



curred on the middle leg at a point about half way between Saw Mill and Naylor switchbacks, the distance between these switchbacks being 2,456 feet. This track consists of a series of short curves with only two short tangents near Saw Mill, the curves ranging from 4° to 9°15', and the accident occurred at the eastern end of a 7°30' curve. The grade from Saw Mill to Naylor is 3.32 percent ascending. On the lower leg of the track just east of Saw Mill switchback, the track is paralleled on the south by a passing track and on the north by a storage track 1,015 feet and 1,031 feet in length, respectively.

The sides of the mountain are rough, rocky and wooded, the range of vision of the trainmen being limited to about 700 feet in the vicinity of the point of accident.

The weather was clear at the time of the accident, which occurred about 3:05 p.m.

## Description

Train No. 207, a westbound passenger train, consisted of gasoline motor car 122, which is an enclosed vestibule passenger car of steel construction, and was in charge of Conductor McQuain and Engineman Perkins. At Meadow Creek train order 27 was received by telephone and copied by Conductor McQuain and made complete at 2:36 p.m.; this order read as follows:

"Extra 1102-1127 east take siding and meet No. 207 motor 122 at Saw Mill."

Clearance cards were also recieved; form A called attention to the order and form B (a) stated that Extra 1102-1127 had entered the block at 2:45 p.m. Train No. 207 departed from Meadow Creek, 4.9 miles from Saw Mill at 2:45 p.m., according to the train sheet, 20 minutes late, passed the passing track at Saw Mill, proceeded through the switchback and was backing toward Naylor but had nearly stopped when it collided with the rear end of the front portion of Extra 1102-1127.

Extra 1102-1127, an eastbound freight train, was in charge of Conductor Wilt and Enginemen Simms and Worley. At Meadow Bridge, an open office, 3.1 miles west of Saw Mill, the crew received a copy of train order 27, previously quoted, on form 19, together with clearance cards, form A calling attention to the order, and form B (a) stating that Train No. 207 entered the block at 2:40 p.m. Extra 1102-1127 departed from Meadow Bridge at 2:48 p.m., according to the train sheet, engine 1102 with 12 cars proceeding first, followed by engine 1127 and the caboose. At Camp Seven engine 1127 was coupled to the train which was then divided in

two parts to pass through the switchbacks, the leading portion consisting of engine 1102 and 7 cars, in charge of Engineman Simms, and the rear portion consisting of 5 cars, engine 1127 and the caboose, in charge of Conductor Wilt and Engineman Worley. These two portions then proceeded through the switchbacks and the rear portion was at the Naylor switchback while the lead portion was backing toward Saw Mill when it collided with Train No. 207 while traveling at a speed estimated to have been 3 or 4 miles per hour.

Part of the rear vestibule of the motor car was crushed and the rear truck was derailed. The rear car in the freight train was slightly damaged, but none of the cars in that train was derailed.

## Summary of evidence

Conductor McQuain, of Train No. 207, stated that after receiving train order 27 he gave a copy to Motorman Perkins who read it back to him. He then received the clearance cards, delivered copies to the motorman and called his attention to the meet order, the motorman replying "meet 1102-1127 at saw Mill." On approaching Saw Mill the motorman sounded the meeting point whistle signal and then continued through the switchback. Conductor McQuain stated that he forgot the order; he got off the rear end of the car, opened the switch and signaled the motorman to back up, and then stood on the rear platform of the car, or the head end in the direction the car was moving, and kept a lookout The car was traveling at a speed of about 15 miles per hour when he saw the approaching train about four car lengths distant; he immediately applied the air brakes in emergency by means of the conductor's valve and the car traveled only about 1/2 car length when it stopped and the collision occurred. He was unable to account for his failure to remember the meet order. He had collected all tickets before passing Saw Mill, there were no other duties that would cause him to overlook the meeting point, and he had no troubles of any kind. Conductor McQuain stated that he is the regular conductor on this car and has been working on this run for more than one year and while it is customary to meet trains at Saw Mill daily, these are usually time table meets and he seldom receives train orders, stating that on the average he does not receive more than one or two orders during a month.

Motorman Perkins, of Train No. 207, stated that he thought of the meet order several times before he sounded the meeting point whistle signal about 3/4 mile east of Saw Mill.

but on reaching Saw Mill he did not think of the meet order again. His attention was then diverted to a whine in the motor and he could not determine if it was caused by a defective gasket or a heating generator. After leaving Saw Mill he sounded a road crossing whistle signal, a highway crossing being located about 250 feet west of the point of accident and the car traveled a distance of about three car lengths when the air brakes were applied. Motorman Perkins could give no reason for his failure to remember the meet order, unless it was the noise in the motor that distracted his attention. He also stated that he seldom meets trains at Saw Mill by train orders, the meets usually being according to schedule.

Express Messenger Hart, of Train No. 207, stated that he was aware of the meet with the extra freight train, having heard the motorman read the order to the conductor when he delivered it. He was sitting in the motor compartment recording his waybills at the time of the accident and did not know when they passed Saw Mill.

Head Brakeman Hayes, of Extra 1102-1127, stated that he understood the meet order and on leaving Meadow Creek switchback he rode on the rear car of the lead section. entering the switchback at Naylor his engine sounded the meeting point whistle signal and he also heard the meeting point whistle signal sounded by the motorman of the motor car but at no time did he see the car on the lower tracks. On making the back-up movement from Naylor toward Saw Mill he was standing on the lead car in the direction they were moving and Brakeman McGlothlin was sitting on the edge of He heard a warning from him and he then saw the the car. approaching motor car: he gave a stop signal to the engineman who applied the air brakes in emergency and the speed was reduced from 6 or 8 miles per hour to 3 or 4 miles per hour at the time of the accident. He estimated the speed of the motor car to have been about 2 or 3 miles per hour at the time of accident. Head Brakeman Hayes further stated that the air brakes had been tested and the retaining valves were turned up.

Middle Brakeman McGlothlin, of Extra 1102-1127, stated that when he saw the motor car it was four or five car lengths distant and he thought it was moving at a speed of about three miles per hour at the time of the accident.

Engineman Simms of Engine 1102 stated that his train was traveling at a speed of 10 miles per hour when he received a stop signal; he applied the air brakes, opened the sanders and reversed the engine. He saw the motor car about the same time he received the stop signal. The brakes

in his train had been tested properly and no difficulty was experienced in controlling the train. He thought his train traveled not more than 90 feet after he applied the air brakes in emergency.

Dispatcher Conley who transmitted train order 27 to the operator at Meadow Bridge and the conductor of Train No. 207 at Meadow Creek, stated that it is not an uncommon occurrence to issue meet orders to motor car trains at points between Meadow Creek and Rainelle. Assistant Superintendent Raine stated that a check of the train dispatcher's book covering the period October 17 to November 17, inclusive, showed that exclusive of five orders copied by passenger conductors as a result of this accident, the average daily orders were 43.1, of which 29.7 were copied by freight conductors and 1.6 by passenger conductors.

## Conclusions

This accident was caused by farlure to obey a meet order.

Under the provisions of train order 27, Train No. 207 was required to stop clear of the west switch of the passing track at Saw Mill and await the arrival of Extra 1102-1127. The evidence is clear that the crew of Train No. 207 received and understood this order; on approaching Saw Mill the motorman sounded the meeting point whistle signal, but for some unexplainable reason both the motorman and the conductor then forgot the order and proceeded beyond the passing track.

In previous accident investigation reports attention has been called several times to the unsafe practice of permitting a train to pass a block station and proceed to some outlying switch to await the arrival of an opposing train. This question was discussed in our report upon the collision within block limits of two opposing freight trains on the Chesapeake and Ohio Railway near Elk Hill, Va., on November 24, 1932. This practice to a considerable extent nullifies the safety features of a block system and officials having charge of the operation of this railway should promptly take such steps as may be required to safeguard train operation by proper observance of the block-signal system.

Respectfully submitted,

W. J. PATTERSON,