IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE WASHINGTON & OLD DOMINION RAILWAY NEAR CLARK, VA., ON SEPTEMBER 11, 1920.

December 10, 1920.

On September 11, 1920, there was a rear-end collision between two passenger trains on the Washington & Old Dominion Railway near Clark, Va., which resulted in the injury of five passengers and two employees. A hearing was held at the office of the Commission in Washington, D. C., on September 20-21, 1920, and as a result of this investigation the Chief of the Bureau of Safety reports as follows:

This accident occurred on the Great Falls Division, a double-track line extending between Washington, D. C., and Great Falls, Va., a distance of 14.2 milcs, over which trains are operated by time-table and operating rules. No block signal system is in use and no train orders are issued, except under unusual circumstances.

The double-track line of the Bluemont Division from the south, connects with the track of the Great Falls Division at a point 233 feet west of the station at Thrifton. The movement of all trains to and from the Bluemont Division at this point and all castbound trains on the Great Falls Division, is controlled by a switchtender whose shanty is located in the angle formed by the intersection of the tracks of the two divisions. The movement of eastbound trains from Great Falls is also restricted by a stop signal in the form of a red flag attached to a telegriph pole nearly opposite the switchtender's shanty, while 60 feet farther west there is a stop board. Trains pass these stop signals only upon hand signals from the switchtender. Between Thrifton and Washington, Within which territory this accident occurred, all trains are required to be operated under full control in ageordance with that part of time-table rule S-15-F of the Great Falls Division which reads as follows:

"All trains between Thrifton and Washington must be kept under such control as will enable them to be stopped by ordinary service application of brakes within the distance clearly in view of the motorman."

A similar provision is contained in the time-table of the Bluemont Division, being shown as a part of time-table rule S-6.

The accident occurred about 350 feet west of the station at Clark, which is 1,120 feet east of Thrifton.

Approaching the point of accident from the west there is a 9-degree curve to the left 470 feet in length, followed by 620 feet of tangent, a 4-degree curve to the right 270 feet in length, and about 320 feet of tangent to the point of accident. The grade is 2.9 per cent descending for eastbound trains. On account of an embankment on the inside of the curve approaching the point of accident, the view is limited to about 500 feet. At the time of the accident the weather was clear.

Eastbound passenger motor No. 4, in charge of Conductor Saunders and Motorman James, was en route from Great Falls to Washington. It left Great Falls at 4 40 p.m. and at about 5:20 p.m. stopped at the stop board at the intersection of the tracks of the two divisions near Thrifton. A proceed signal was given by the switchtender, the car passed the station without stopping, and the speed had been reduced preparatory to making a stop at the station at Clark when its rear end was struck by car No. 5. The speed of car No. 4 at the time of the accident was estimated by the crew to have been about 7 or 8 miles an hour.

Eastbound passenger motor No. 5, in charge of Conductor Seism and Motorman Michael, was also enroute from Great Falls to Washington. It left Great Falls at 4:48 p.m. and stopped at the stop board at Thrifton just after car No. 4 had departed. A proceed signal was given by the switch-tender and the car proceeded, passed the station without stopping, and collided with car No. 4 while traveling at a speed estimated to have been about 15 or 20 miles an hour.

Car No. 4 was driven ahead a distance of about 200 feet. The underframe of car No. 5 mounted the underframe of car No. 4 and penetrated that car a distance of 3 or 4 feet. The vestibules were practically demolished, many of the seats term loose, and the windows broken. Neither car was detailed.

An examination of the several employees involved and others having knowledge bearing on the accident disclosed the following additional facts.

The first intimation that the crew of car No. 4 received of the approach of car No. 5 was a shout from Motorman Michael to go ahead. Full power was applied but there was not time for the speed to be materially increased. At Thrifton car No. 5 was about 90 feet behind car No. 4 and as it passed the switchtender, he shouted to Motorman Michael to look out for the car ahead. The switchtender &onsidered that car No. 5 was running too fast when it passed over the switches.

The switchtender at Thrifton does not space cars. When cars are less than 5 minutes apart he usually signals

the motorman as to how many minutes have clapsed since the departure of the preceding train.

Motorman Michael of car No. 5 failed to appear as a witness at the hearing.

A test of the air compressor made by the Commission's inspectors after the accident and before any repairs had been made on the wrecked car showed it to be in proper working order.

This accident was caused by the failure of Motorman Michael of car No. 5 to have under such control as to enable him to bring it to a stop within his range of vision, as required by that part of time-table rule S-15-F previously quoted.

There is no evidence that the brokes on car No. 5 were not in proper working order, and although it seems probable that the speed of car No. 4 had been materially reduced at an unusual point, the fact remains that a proper compliance with time-table rule S-15-F on the part of Motorman Michael would have prevented this accident.

The conduct of Motorman Michael as disclosed by the evidence warrants the statement that his failure was due to carelessness, reckleseness and a general disregard for rules.

It appeared that on one occasion he had been cautioned by the trainmaster for reckless running, that a short time before the accident he had operated his car on a descending grade at a dangerous speed and when cautioned by another motorman riding with him treated the matter lightly and that he was in the habit of reducing speed only at points where he was required to bring his car to a stop. It also appeared that the conductor who was in charge of the car with Motorman Michael at the time of the accident, as did other conductors, considered Michael reckless, and on this particular trip, being apprehensive he cautioned Michael about running at excessive speed, but without result.

Motorman Michael had been in the employ of this company about four weeks. His application states that he had had about 2 years' experience on another railroad. At the time of the accident he had been on duty 2 hours, previous to which he had been off duty 9 hours.

The proper enforcement of rules and the administration of necessary discipline are essential duties of operating officials, and only when a high standard has been attained can the operation of trains be carried on safely. The attitude of the management and of supervising officials of a railway company toward the observance of all its rules is reflected

directly in the conduct of its employees.

The investigation of this accident disclosed conditions which must be regarded as highly detrimental to the maintenance of proper discipline. It is contended by the management of this reilroad that its line between Washington and Great Falls is not different in its method of operation from an ordinary strect-cor line and it is not subject to rules applicable to standard railway operation. Notwithstanding this, its book of rules, which is applicable to standard railway operation, put in effect October 1, 1912, states that it shall govern the realroads operated by the Washington and Old Dominion Railway. The special rules in the time-table also make frequent reference to the general rules contained in the rule book. However, there are many important rules contained in the rule book which no attempt is made to enforce on the Great Falls Division, and no bulletin order or other means has been taken to suspend their operation. appears to be left to the individual amployees to determine which rules are to be observed on that line and which are not. The testimony indicates that some of the employees go into actual service without being provided with o book of rules.

At the time of the accident there were two timetables in effect on the line between Washington and Thrifton, time-table No. 106, frequently spoken of as the yellow card, in effect August 4, 1918, in which is shown the time of all trains between Washington and Great Falls, including the Bluemont Division trains, which use the section of main track between Washington and Thrifton; and time-table No. 17, commonly known as the white time-table, in effect January 11, 1920, showing the time of all trains between Bluemont and Washington, except that no Great Falls Division trains are shown between Washington and Thrifton. An examination of those time-tables disclosed several glaring inconsistencies with respect to time: for example, the Bluement Division time-table shows train No. 13 as due to leave Washington at 8:00 p.m., while on the Great Falls time-table the same train is shown as due to leave Washington at 7.50 p.m. General Manager Davis explained this by saying that the time of some of the trains had been changed when the Bluemont Division Time-table was reissued in January, 1920, and that the Great Falls Division time-table had not been corrected accordingly. From the above it appears that the company is disregarding certain of its own rules and depending entirely upon special time-table rule S-15-F for its safety of operation between Washington and Thrifton.

Special rule S-14-F requires eastbound trains to obtain information from the switchtender at Thrifton as to the time of the last train in the same direction leaving that point, and provides that a printed form numbered 184 will be used for that purpose. It is admitted that no attempt is

being made to comply with this rule. General Manager Davis states that the rule is retained in the time-table because it can do no harm there and sometime they may want to use it. Such an explanation made by the general manager of a railroad company needs no explanation as to his attitude toward the proper enforcement of rules and regulations.

General rule 159 reads:

A train must not loave its initial station on any division, or a junction, or pass from double to single track, until it is ascertained whether all trains due, which are superior or of the same class, have arrived and departed.

Where a train register is maintained, it shall be the duty of the conductor or eiginement to register and to note carefully whether all trains due have arrived and departed.

Time-table special rule S-22-F states that train registers are located at Washington and Great Falls, yet none of the train crews over register at Washington and while they register at Great Falls they never examine the register for information as to the arrival or departure of other trains.

In the application for employment filled out by Motorman Michael when he entered the service of the company, the reference he gave as to provious employment by a railroad was spurious; in fact, the railroad mentioned by him does not exist, yet he was retained in the employment of the Washington & Old Dominion Pailway Company and his references remained unchallenged.

The method of examining and qualifying a man for service is nore or less perfunctory. A prospective employee is given an application blank to fill out and then is sent out with an experienced employee, usually for about 4 days, to learn the road. He is then brought before the trainmaster and instructed and examined is to r tos, rules and regulations. The evidence shows that this examination consumes from 30 minutes to an hour. There is no evidence to indicate the nature of this examination, nor how much of it is devoted to the collection of fares and traffic regulations. and how much to operating rules, but it is evident that 1 hour is not a sufficient time in which to examine thoroughly an employee who has not had provious railroad experience, with respect to rules, time-tables and physical characteristics of the railroad. There is also a distinction to be drawn between instructions and examination. The fact that an emplayee has been instructed is not to be taken as an indication that he understands and remembers what has been imparted to him. This can be determined only by a most thorough

questioning. Conductor Saunders, of car No. 4, seems to illustrate well the product of the examination. He spent 4 days breaking in, he had had no previous railroad experience, he did not know what time his car left Great Falls, and he did not know what time his car was due at Thrifton. According to his own testimony the only examination he had was given him at the office and he was "told a whole lot of stuff." He knew nothing about rule 159 of the book of rules and did not have a copy of the Great Falls Division time-table until the day before the hearing.

A motorman who had been employed in that capacity for some time is another example. When placed on the witness stand and during his examination asked to read a certain rule affecting his duties, he was unable to read it owing to his lack of education; the management had no knowledge of his inability to read.

Laxity also exists in the manner of handling repairs to equipment. When a motor is left at the shop for repairs no record is kept as to just what repairs were made, other than the time ticket of the employee who makes the repairs. Several work reports called for during the investigation could not be found.

It is evident that such laxity in practice by the management and officials in a supervisory capacity as is exhibited in this case can not fail to have its effect upon the employees falling within its influence. As has been said by this Commission in previous instances, rules that are not intended to be enforced have no proper place in a railroad company's code of regulations. The continual violation of them creates a disrespect for all rules and regulations.

The investigation of this accident has disclosed conditions and practices in connection with the operation of trains on the Washington & Old Dominion Railway which are sufficient to warrant grave criticism. Corrective measures should at once be taken by that company to eliminate the lax methods and dangerous conditions and practices pointed out in this report.