

**In re: Investigation of accident which
occurred on the Southern Railway,
near Alexandria, Va., on
November 24, 1914.**

On November 24th, 1914, there was a rear end collision between two freight trains on the Southern Railway, near Alexandria, Va., which resulted in the death of one employee.

After an investigation into the nature and causes of this accident, the Chief of the Division of Safety reports as follows:

The trains involved in this accident were northbound Southern Ry. freight train 3rd 74, which had stopped to set off cars at a siding known as "seminary", within the Yard Limits of Alexandria, and northbound Chesapeake & Ohio freight train No. 98. Chesapeake & Ohio trains use the track of the Southern Railway between Orange, Va., and Alexandria, Va.

Southern Railway train 3rd 74, drawn by engine 4603, in charge of Engineman Angel and Conductor Purvis, consisting of 48 loaded cars and caboose, left Manassas, Va., at 1.35 a.m. They stalled at Fairfax, Va., and had to double to Fairfax Cross-over. When coupling on to the rear portion of their train a drawbar was broken on the rear end of a car of live stock. This car was then taken to "sideburn", a spur track about 14 miles south of Alexandria, and set off in order to place it on the rear end of the train. When the engine returned, C. & O. train No. 98 had arrived, and was standing behind the remaining portion of 3rd 74's train. Conductor Purvis asked Engineman Carter of train 98 to cut off and assist them in starting their train. Conductor Purvis also notified him to look out for them at "sideburn", where they were to pick up a car of live stock. Train 3rd 74 then proceeded to "sideburn", picked up the car of stock,

placing it behind their caboose, and Flagman Henry lighted a red lantern and fastened it at the end of the running board on the top of the stock car. Third 74 then proceeded, passing Cameron Run, the last telegraph office, at 4.40 a.m. and stopped at Seminary, a siding about one-half mile beyond, to set out cars for Alexandria. The train stopped with the rear end of the last car 215 feet north of, and within yard limits. The engine and 18 cars were cut off, leaving the remainder of train standing on the main line, and while the crew of 3rd 74 were setting out the Alexandria cars their rear end was struck by C. & O. train 98.

Chesapeake & Ohio train 98, drawn by C. & O. engine 596, in charge of Engineman Carter and Conductor Blake, consisting of 20 loads and 4 empties, left Manassas at 3.40 a.m. At Fairfax they were stopped by the flagman of 3rd 74, assisted that train in starting and after waiting for the automatic signal to clear followed them out. They were stopped at Tideburn about 5 minutes by 3rd 74, and at this point they saw the red lantern that had been placed on the top of the car of stock. At Cameron Run train No. 98 received a clear signal from the middle arm of a three-arm interlocking signal, indicating that the switches were set for the freight track, and passed that station at 4.48 a.m. and after proceeding about half a mile, collided with the rear end of third 74 at about 4.50 a.m.

At the time of the accident it was dark and the weather was clear.

The force of the collision drove the pony trucks back under the engine; split the car of stock lengthwise, half going on each side of the engine. The caboose was crushed between the car of stock and the car ahead and turned on its side. It immediately caught fire

and was totally destroyed. In the caboose were riding three members of a train crew, which had brought this train to Manassas, but were relieved on account of the 16-hour law and were dead-heading to Alexandria, one of whom was caught in the wreckage and killed. None of the cars were derailed.

This division is double track and equipped with an automatic block signal system. Trains are operated by time table, train order, and block signal indication. At Cameron Run, is located a mechanical interlocking plant, where a double track freight line branches off from the main line to the right and extends northward through Alexandria Yard to the Classification Yard at Potomac. There is no block signal installation on this freight line and trains from the south desiring to take this route, receive a signal from the middle blade of a three-arm interlocking signal located just south of the tower, which indicates that the switch is set for the freight line, but does not indicate that the track is unoccupied. On this freight line about half a mile north of Cameron Run is located the Yard Limit board of Alexandria Yard, and it was just north of this board the accident occurred. At this point there is a grade of .47% descending northward; the track is tangent and view unobstructed for half a mile in each direction.

Conductor Purvis of train 3rd 74, states that after leaving Sideburn no stop was made until the train arrived at Seminary. When the train stopped at that point, he did not notice any unusual shock; the caboose was eight car lengths inside of the Yard Limits. He got off the rear end of the caboose on the right side and did not notice whether the markers and the light on top of the stock car were burning. The flagman got off the forward end of the caboose and went to the

head end of the train to assist in the work. The engine and 18 cars were cut off and they were engaged in setting out the cars when the accident occurred.

Flagman Henry of train 3rd 74, states that when his train stalled near Fairfax he flagged and stopped train No. 98. At Sideburn, after switching the car of stock to the rear of the caboose, he securely fastened a red lantern to the running board at the end of the car with a piece of wire. After leaving Fairfax he did not again see train 98 until after the accident. Passing Cameron Run, about two minutes before the train stopped at Seminary, he saw that the red light on the top of the car as well as the markers on the caboose were burning. The train came to a stop at Seminary without any unusual shock, and he immediately got off the head end of the caboose, without looking at the markers or lantern, and went to the head end of the train to assist the conductor in setting off cars. The train had been standing at Seminary about ten minutes when the accident occurred.

The engineman, fireman and head brakeman of train 3rd 74 practically agree that the train had been standing about ten minutes at the time of the accident.

Engineman Carter of C. & O. train No. 98, states that he stopped south of Fairfax and picked up the flagman of 3rd 74 and proceeded to Fairfax station stopping behind their caboose. After waiting about 35 minutes he cut off his engine and gave them a push over the hill. He returned to his train, coupled up, and at Sideburn stopped and waited about 5 minutes while train 3rd 74 picked up the car of stock. He saw the red lantern after it had been placed upon the top of the stock car but states that it was burning dimly.

After leaving Sideburn all automatic block signals were either in a clear or caution position until he reached Cameron Run where he received the middle semaphore arm. Indicating that the switches were set for the freight tracks. Passing Cameron Run he slowed down to a speed of about ten miles per hour, and shortly after, knowing that 3rd 74 was close ahead, further reduced speed and entered the yard limits at a speed of 5 or 6 miles per hour. He stated that he had his side window open and his head out looking for anything that might be ahead. That he was not using steam and no steam was escaping. He saw a low switch stand some little distance beyond the point of accident and still further in the distance the signal lights of "AF" tower, but saw no lights or indication that 3rd 74 was ahead until he was about 2 car lengths from them. He immediately made an emergency application of the brakes, but was unable to bring his train to a stop in time to avoid the accident. He seldom found a train stopped at Seminary setting out cars. He did not see the markers on the caboose of third 74 after the car of stock was placed behind it at Sideburn. He further states that in his opinion a train going 6 miles per hour could not stop in time to prevent an accident if a car without a light was found on the track ahead of them at night, and that cars standing on the main track at night should be protected with a light even in Yard Limits. He knew that the light was burning dimly and took extra precaution in looking out for 3rd 74. He stated that his engine was equipped with an oil headlight and that it was in a fair condition and by it objects could be seen about two car lengths ahead.

Fireman Burruss of train 98 states that when leaving Fairfax he noticed only one marker was burning on the rear of 3rd 74,

and that that was on the left side. He also saw the red light on the rear of the stock car leaving Sideburn. He saw nothing further of 3rd 74, nor a light of any kind, until about one and one-half car lengths away from their rear end. The locomotive head light was in good condition, but did not throw a very good light; with it objects might be seen about one and one-half car lengths away. He estimates the speed of his train to have been about 5 miles per hour at the time of the accident.

Head Brakeman Smith of Train 98, states that at Fairfax he noticed that only one marker on the rear of 3rd 74 was burning and he saw the red light on top of the car of stock leaving Sideburn.

When the car of stock was placed behind the caboose it obscured the markers. He was riding in the engine, ahead of the fireman, at the time of the accident and was looking ahead, but saw no light of any kind. He first saw the rear of 3rd 74 when it was about one and one-half car lengths away. There was not much of a shock when the collision occurred.

Towerman Bloxton at Cameron Run states that train 3rd 74 passed his tower at 4.40 a.m. and train 98 about eight minutes later. He estimates the speed of train No. 98 to have been about ten or twelve miles per hour. When 3rd 74 passed, he saw the marker on the left side burning, also the red lantern on top of the car of stock. He further states that it is a common occurrence for trains to stop at Teminary to set off cars.

The caboose in which brakeman Runaldue lost his life, was a standard double truck, eight sill, wooden underframe caboose, 36 ft. in length. The car was built in 1907 and received general repairs at Alexandria shops in April 1914.

Chesapeake & Ohio Engine 596 of train 98 was equipped with an oil headlight. The evidence indicates that the headlight did not give a very good light, and with it objects ahead could not be seen more than two car lengths away.

The evidence further indicates that at least one marker and the lantern on top of the car of live stock, on the rear of train 3rd 74, was burning at the time the train passed Cameron, about two minutes before it stopped at Teminary.

After the accident, measurements were taken of a caboose and a stock car similar to the ones destroyed, and it was found that the stock car was wide enough to conceal about half of the rear lens of each marker displayed on the rear of the caboose. The marker which is known to have been burning was on the opposite of the engineman of train 98 and probably was hidden from his view.

Rule 1 of the General Regulations of the Southern Railway reads:

"Yard limits are indicated by sign boards reading 'Yard Limits' located on either side of certain named stations, as mentioned in the current time table of each division. Switching and other engines and trains may work within these limits without regard to second class and inferior trains but must give way immediately upon their approach. Second class and inferior trains must approach and run through yard limits under full control, expecting to find the main track occupied. In case of accident responsibility rests with approaching train."

Under this rule trains are not required to protect their rear end in yard limits, and trains must enter yard limits at such a speed as would enable the engineman to stop in time to prevent an accident, should they find the track occupied. The rule further states that in case of accident responsibility rests with the approaching train.

In this instance the approaching train was No. 98, and in charge of Engineman Carter. He was required to operate his train under full control. While it is possible that the red lantern on top of the car may have jarred off, or gone out when the train stopped, the evidence shows that it was properly burning a few minutes before, when the train passed Cameron Run.

This accident was caused by the failure of Engineman Carter to properly control the speed of his train while running through Yard Limits. He knew the train ahead of him had a car behind its caboose that might obscure the markers from his view. He knew that the red light on the stock car was burning dimly and that his headlight was not very efficient. Under these circumstances he should have used extreme caution in running through Yard Limits, and had he done so this accident probably would have been averted.

Engineman Carter entered the service of the Chesapeake & Ohio Railway as fireman August, 1900, and was promoted to engineman February, 1905, and has an absolutely clear record. He has been running over the joint track between Orange and Alexandria continuously since promoted to engineer. At the time of the accident he had been on duty 7 hours 55 minutes.

General Rule No. 1 requires that second class and extra trains proceed through Yard Limits under full control, expecting to find the main track occupied. Under this rule trains and engines use these tracks without protection. It is noted that with the oil headlight on the locomotive of No. 98, the engineman was only able to distinguish objects a distance of about two car lengths and it is believed that greater safety would have been provided, if this engine

had been equipped with a modern high power headlight, so that the range of vision of the engineman would have been such that he could have seen the rear end of this train a sufficient distance to have averted this accident, but the use of high power headlights cannot be regarded as a remedy for such dereliction of duty, on the part of employees, as was exhibited in this case.