

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)

December 1997

DATE

January 9, 1998

REPORTING CARRIER (railroad & region or division)

Norfolk Southern Corporation

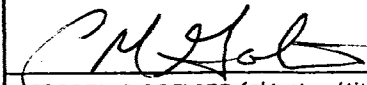
Division - Tennessee

All railroads subject to Regulations of the Federal Railroad Administration shall submit a false proceed signal report, original only, to the Federal Railroad Administration within five days after a false proceed occurs. If no false proceed occurs during any calendar month, a report showing "No Failures" must be filed within ten days after the end of the month.

Copies of this form will be furnished upon request to the Department of Transportation, Federal Railroad Administration, Office of Safety, Washington, D.C. 20590

MAIL TO

Federal Railroad Administration
16th Floor - Suite 16T20
100 Alabama Street, SW
Atlanta, GA 30303-3104



REPORTING OFFICER (signature/title)

Chief Engineer - Western Region
Communications & Signal Dept.

A failure should not be counted more than one time in items 1, 2, 3, and 4; the failure should be classified under the basic system or appliance of which it forms an essential part. E.g.; assume grounds cause a block signal to indicate a false proceed causing corresponding indications of a cab signal system on each train approaching this point, such failures should be included in item 1, Block Systems.

A false proceed failure is a failure of a system, device or appliance to indicate or function as intended which results in less restriction than intended.

The following abbreviations may be used in the report.

- A—Automatic
- AB—Automatic block
- ACS—Automatic cab signal
- APB—Absolute permissive block
- ATC—Automatic train control
- ATS—Automatic train stop
- CL—Color light
- CPL—Color position light
- E—Electric
- EM—Electromechanical
- EP—Electropneumatic
- FP—False proceed
- MB—Manual block
- M—Mechanical
- P—Pneumatic
- PL—Position light
- SA—Semiautomatic
- TC—Traffic control

TYPE OF SYSTEM	DATE	LOCOMOTIVE NUMBER	DEVICE THAT FAILED	LOCATION (city and state)
1 BLOCK SYSTEMS <input type="checkbox"/> AB <input type="checkbox"/> APB <input checked="" type="checkbox"/> TC	12/31/97	9004	signal lens	Cleveland, TN
2 INTERLOCKING <input type="checkbox"/> REMOTE <input type="checkbox"/> MANUAL				
3 AUTOMATIC SYSTEMS <input type="checkbox"/> ATS <input type="checkbox"/> ATC <input type="checkbox"/> ACS				
4 OTHER (specify)				

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

At approximately 7:00 AM, Train No. Q26 with Engineer _____ and Conductor _____ while running eastbound on the siding between Control Points Bradley and Lyle, went by the eastward signal at Lyle while it was displaying stop. The Engineer was able to come to a stop one car length past the signal into the OS at Lyle. No other trains were in the area, and the signal had not been lined for No. Q26 to leave the siding onto single track. Both crew members reported they observed the signal to be displaying diverging approach when they were about 50 cars west of it. Once they were within 5 car lengths of the signal, they said they saw it drop to stop so came to a safe stop. Signal personnel were called to investigate.

The signal system for Lyle is TC with the control station at Knoxville, TN. Lyle is the last control point when traveling east and eastbound moves must have both a permissive signal and a track warrant to proceed east. The signal system east of Lyle is APB with EC II electronic track circuits. The signal system from Lyle west is TC with underground HD circuits. Q26 was in the siding which is a controlled siding so his approach to Lyle would have been restricting. Q26 did have track warrant to proceed, but no signal had been lined at Lyle for their movement. The signal is a ground mounted 3 aspect type "D" dwarf signal capable of displaying red over green (diverging clear), red over yellow (diverging approach) and red (stop). The three aspect signal had a red in top, green in the middle and yellow on the bottom.

All appropriate FRA and operational tests were performed with no exceptions. However, it was observed that the red inner lens was cracked and the lamp voltages were a little low. Believing that this could have contributed to a phantom signal, the dwarf signal was left out of service until sight tests could be performed the next day at 7:00 AM. Those tests were performed and it was found that the red dwarf signal did appear as a single yellow aspect instead of red at various distances. The cracked inner red lens was replaced and the lamp voltages were raised from 6 - 7.5 to 8.0 - 9.5 volts. Then the signal was rechecked and found to be displaying proper aspects at all distances where it could be seen.