

Bob MURRAY

S&E

9/5/95

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)

August 1995

DATE

August 31, 1995

REPORTING CARRIER (railroad & region or division)

Norfolk Southern Corporation

Division - Piedmont

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 Admin.
Suite 440, North Tower
1720 Peachtree Rd., NW
Atlanta, GA. 30309

REPORTING OFFICER (signature/title)

General Manager - S&E
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	8/22/95	8883	resistor	Brandy Station, VA
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

Train No. 342, Engineer _____, Conductor _____, northbound, passed signal 60.8 which was displaying clear. Conductor and Engineer Trainee _____ looked back and observed that southward signal 60.9 displayed approach while their train was still occupying the 60.9 track circuit.

Investigation revealed that the Trakode bleeder resistor, design value of 12.5 ohms, had a resistance of 96 ohms. This was a change in the value of the resistor itself rather than a connection. This high resistance value prevented the resistor from properly acting as a bleeder. With this resistor in place, the 60.9 signal would occasionally display approach when a shunt was placed about 1000 feet south of the signal. Once duplicated, it was evident that the 60.9 track relay would pick up on the negative side with each pulse of the CP relay on the south track. The track currents were found to be normal. The false proceed was not easy to produce; several northbound trains were observed without recurrence. Several variable factors were obviously involved in reproducing this incident, presumably train speed, train shunt and track conditions.

A proper value resistor was installed to alleviate this situation.