

R. Murray
SRTC
Reg: 2
G V H
4/01/97

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)
March 1997

DATE
March 31, 1997

REPORTING CARRIER (railroad & region or division)
Norfolk Southern Corporation
Division - Virginia

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)

Chief Engineer - Eastern 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	3/22/97	8516-8558	wiring error	Poe, 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

At approximately 12:10 AM, Train No. 184 eastbound, Engineer _____, Conductor _____, received a clear indication on #2 signal at Poe off the Beltline for movement onto Main No. 1. At the time, Train No. 676 was working the Car Lot track, having entered through the west end crossover off of Main No. 1. Though No. 676 was clear of the fouling circuit, both the mainline and inside hand throw switches were still in the reverse position, and since this was in the block immediately east of Poe, the #2 signal should not have cleared. The dispatcher had requested the route for Train No. 184 when the block light went off on Main No. 1 east of Poe, thinking that No. 676 had cleared up in the Car Lot track and restored his switches. The #2 signal went in time once No. 676's crew started to restore the switches. Train No. 184 did not move on the #2 clear signal indication since they were aware of the reversed switches. The alertness of the involved train crews prevented an accident in this case.

Signal personnel were called to investigate and were able to duplicate the incident. They found that neither the mainline nor the inside switch were wired according to the print. The way they were wired caused the normal switch repeater relay for this crossover to be energized not only when both switches were normal, but also when both were lined reverse (for movement main to Car Lot track). When either switch was out of correspondence with the other, the relay dropped. This is why the condition was not detected during 236.103 tests.

The wiring errors were corrected, the signal system tested appropriately, and signals were returned to service. It is not known when or how this wiring error came about. Due to the "normal" nature of train operations involving this switch, it could have gone undetected for a long time.