

G. Martenson

FP-97-03-01

OMB No. 04-R-4028

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 - Tennessee

REPORTING OFFICER (signature/title)

Chief Engineer - Western Region
Communications & Signal Dept.

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

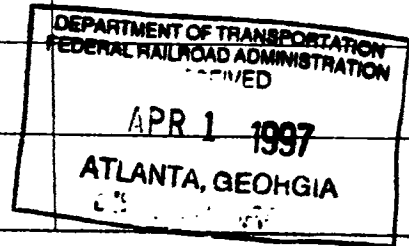
A failure should not be counted more than one time in items 1, 2, 3, and 4; the failure should be classified under the basic system or appliance of which it forms an essential part. E.g.: assume grounds cause a block signal to indicate a false proceed causing corresponding indications of a cab signal 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	8610 7026	wiring error	Harriman, 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 3:00 PM, Train No. 235, Engineer _____, Conductor _____ was running northbound approaching Harriman. The signal at milepost 47.1D, the approach to Harriman, was displaying a clear aspect. Knowing the location Train No. 196 ahead, _____ and _____ correctly assumed that their next signal (Signal 24-2N at Harriman, milepost 49.6D) would be displaying stop and that they should have seen an approach at 47.1D. Train No. 235 had no trouble complying with subsequent signal indications and reported the incident to the dispatcher. A following train, No. 302, Engineer _____, Conductor _____, reported a similar occurrence at about 3:30 PM.

Signal personnel were called to investigate and were able to duplicate the reported incident. The problem was traced to a wiring error in the code out selection circuit for the ElectroCode box connected to the south track at Harriman. The error allowed a "D" code (code 4) to be sent to 47.1D when a "H" code (code 2) should have gone out. The problem was corrected, the system was checked and the signals were returned to service.

The wiring error was apparently made during a cut-in of a new code system the day before the incident. The modified prints called for the #5 contact group in the 24-2NAG relay to be used for an indication circuit. During cut-in, it was discovered that the ElectroCode code selection circuit already used this group, and somehow as the conflict was corrected, the front contact selection wire got doubled in with the heel wire.