

**DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION**

FALSE PROCEED SIGNAL REPORT

Report For (Month/Year)

Date: July 16, 2003

All railroads subject to Regulations of the Federal Railroad Administration shall submit a False signal Report, original only, to the Federal Railroad Administration within fifteen days after a false proceed occurs. If no false proceed occurs during any calendar month, a report showing ANo Failures must be filed within ten (10) days after the end of the month.

Reporting Carrier (railroad & region or division):

Southeastern Pennsylvania Transportation Authority

Assistant Chief Engineer, C&S

Mail To:

Mr. David Myers
Regional Administrator
Federal Railroad Administration
International Plaza Two - Suite 550
Philadelphia, PA 19103

A failure should not be counted more than one time in items 1, 2, 3, & 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.

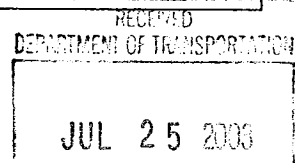
RA - Automatic	EM - Electromechanical
AB - Automatic Block	EP - Electropneumatic
ACS - Automatic Cab Signal	FP - False Proceed
APB - Absolute Permissive Block	MB - Manual Block
ATC - Automatic Train Control	M - Mechanical
ATS - Automatic Train Stop	P - Pneumatic
CL - Color Light	PL - Position Light
CPL - Color Position Light	PL - Position Light
E - Electric	TC - Traffic Control

Type of System	Date	Locomotive Number	Device That Failed	Location (City & State)
1. BLOCK SYSTEMS <input type="checkbox"/> AB <input type="checkbox"/> APB <input type="checkbox"/> TC				
2. INTERLOCKING X AUTOMATIC <input type="checkbox"/> REMOTE <input type="checkbox"/> MANUAL	July 13, 2003		Cab decoder circuit (See below)	Juniper Interlocking, Philadelphia, Pa
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:

See attached

(If more space is required, continue on reverse side)



On June 29th at 08:50hrs, the C&S Trouble Desk received a report of cabs dropping to Restricting after accepting Interlocking Signal 4N at Juniper. Signal Maintainers were dispatched to investigate the alleged report of the cabs dropping out, but they could not duplicate the reported failure.

Then on July 4th at 07:43hrs, the C&S Desk took a report of Juniper Interlocking Signal 4N displaying Clear, then having the cabs drop to Restricting with the next Interlocking Signal at Market East displaying Restricting. Once again, Signal Maintainers were dispatched to the scene to investigate an alleged report that the signal were dropping in the trains face, and once again could not duplicate the failure.

Finally, on July 13, 2003 at approximately 18:00hrs, the C&S Desk received a report that a train operating north on No. 2 track from Suburban Station, reported Juniper Interlocking Signal 4N displaying Clear with 180 cab in the 4T interlocking track circuit and a train ahead sitting in Market East station. The train also reported that when the train exited Juniper Interlocking and entered track circuit 2ET the cabs dropped to Restricting.

Upon learning of the incident, the C&S Desk immediately removed signal 4N from service via form C&S 39, "Signal Facility Out of Service", 4N signal was set to Stop Signal and Signal Maintainers were dispatched to investigate. Concurrently, Signal Foreman J. Caro was dispatched to the scene.

During the investigation, signal 4N was set to display Restricting and the cab was removed from track circuits 4T and 2ET.

Using operational simulations, it was not possible to recreate the alleged false proceed. Nonetheless, from the Juniper circuit drawings it appeared possible for a failure fitting the reported description to occur if the 2EDR relay were to fail to drop away. Consequently, the 2EDR relay, Decoding Unit and Decoding Transformer were replaced. In addition, the 2EDR, 2EHR, 4AHR as well as other suspected circuits were point checked and broken down. Grounds were also checked. Finally during testing, the 2EDR was falsely energized and signal 4N displayed Clear with 180 code in the interlocking and no code in track circuit 2ET.

On July 15, 2003 at 17:25hrs Juniper Interlocking Signal 4N was returned to service.