

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)
October 2002

DATE
October 5, 2002

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

REPORTING CARRIER (railroad & region or division)

LONG ISLAND RAIL ROAD

MAIL TO

Federal Railroad Administration
RRS-13 Mail Stop 25
1120 Vermont Ave., NW
Washington, D.C. 20590

REPORTING OFFICER (signature/title)

Chief Engineer
Long Island Rail Road

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	EM - Electromechanical
AB - Automatic block	EP - Electropneumatic
ACS - Automatic cab signal	FP - False proceed
APB - Absolute permissise 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	SA - Semiautomatic
E - Electric	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 type="checkbox"/> TC				
2 INTERLOCKING <input type="checkbox"/> AUTOMATIC <input type="checkbox"/> REMOTE <input checked="" type="checkbox"/> MANUAL	10/5/02	NA	Track Stick Relay (13TS)	Queens Interlocking Queens, New York
3 AUTOMATIC SYSTEMS <input type="checkbox"/> ATS <input type="checkbox"/> ATC <input type="checkbox"/> ASC				
4 OTHER (specify)				

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN:

Sequence of events

On Saturday October 5, 2002 at 8:25am the Block Operator at Queens Tower reported that the indication for 12R signal at Queens Interlocking remained lit after the passage of eastbound train # 6710 on track 4. Block Operator was able to restore 12R lever to the center position and cancel signal. A restriction was immediately placed on the affected track and route. Signal personnel were immediately dispatched to the interlocking.

Failure Cause

Upon arrival at the location, Signal Personnel simulated the train move. The route was 12R to 12L with 13, 21, & 23 switches normal. The simulated move included, displaying 12R signal, then shunting the track circuit in advance of the signal (4TR), then the tripping track circuit (13TR) and finally the leaving track circuit 12TR. While shunting the 13TR track circuit, Signal Personnel observed that aspect on 12R signal remained displayed at clear. Further investigation determined that the 13TS (Track Stick) relay was falsely energized while the 13TM (Track Repeater) was de-energized. This caused the signal to remain at clear.

The cause of the 13TS relay failure was found to be a grounded wire (13TS1) on the positive control. The wire ground measured 10ma and 12VDC. The 13TS relay is energized through a single broken circuit with common always on the relay.

Repair & Testing

The wire was immediately replaced and the ground was removed. The train move/route was re-simulated and found to be working properly. In addition, all wires in similar single break circuits were replaced.

Recommendations

Due to this failure we are inspecting other Interlockings that have similar single broken circuits for the same possible wire problems.