

DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION  <b>FALSE PROCEED SIGNAL REPORT</b>	REPORT FOR (month/year)  Jun-03
	DATE  26-Jun-03
MAIL TO  <b>Mr. Michael Woods</b> Federal Railroad Administration 16th Floor - Suite 16T20 100 Alabama Street, SW Atlanta, GA 30303-3104	REPORTING CARRIER  <b>Norfolk Southern Corporation</b>  Division: <b>Piedmont Division</b>
	REPORTING OFFICER  _____  <b>Chief Engineer - Eastern Region</b> <b>Communications &amp; Signal Department</b>

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	6/21/2003		Track Circuit	Greensboro, NC
2 INTERLOCKING <input type="checkbox"/> REMOTE <input type="checkbox"/> AUTO-MATIC <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 7:20 p.m. on 6/21/03, train Amtrak 74, Engineer \_\_\_\_\_, Conductor \_\_\_\_\_ and Assistant Conductor \_\_\_\_\_, was running northbound on Track #1 when it received a Green over Red (G/R) clear aspect at the intermediate signal at MP 285.6. Amtrak 74 should have received a Yellow over Green (Y/G) approach diverging aspect. The Control Point at Elm MP 284.5 was lined for a turn out move onto the H-Line and displayed a Red over Green (R/G) diverging clear aspect. This is trackcode territory with color light signals and GRS 5H power switch machines. The condition was reproduced during testing. An invalid trackcode pulse was being transmitted from CP Elm to the Intermediate signal at MP 285.6. A (- + -) was being transmitted and deciphered as a (- +) and displayed the clear aspect. When the pulse was adjusted with the NPL adjustment pot to slow down the rate, a (+ -) was sent and deciphered at MP 285.6, displaying the proper aspect, Yellow over Green approach diverging. Current levels on the track circuit were within specifications, all cables were meggered and relays tested with no exceptions found.

Track circuit was adjusted to proper rate and engineering change made in the AD & BD relays to prevent this type of signal aspect display in the future.

