DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)
March 1996

DATE
April 2, 1996

All railroads subject to Regulations of the Federal Railroad Administration shall submit a false 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.

REPORTING CARRIER (railroad & region or division)

National Railroad Passenger Corp.
30th Street Station
Third Floor - South Tower Box 41
Philadelphia, PA 19104

MAIL TO

Mr. J. F. Megary
Director of Railroad Safety
Federal Railroad Administration
Scott Plaza Two - Suite 550
Philadelphia, PA 19113

REPORTING OFFICER (signature/title)

Assistant Chief Engineer
Communications and Signals

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.

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	SA -	Semiautomatic
E -	Electric	TC -	Traffic Control

TYPE OF SYSTEM	DATE	LOCOMOTIVE NUMBER	DEVICE THAT FAILED	LOCATION (city and state)
1. BLOCK SYSTEMS ☐ AB ☐ APB ☐ TC				
2. INTERLOCKING ☐ AUTOMATIC ☒ REMOTE ☐ MANUAL	3/19/96	268	cab signals	Cranston, RI
3. AUTOMATIC SYSTEMS ☐ ATS ☐ ATC ☐ ACS				
4. OTHER (specify)				

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

Train 177 with Eng 268 traveling west track two was lined to cross from track two to track one at Cranston Int. The 2W Home signal was reported to display a "medium clear", and as the train (177) proceeded into the interlocking, the cab signal displayed "approach medium". As Train 177 proceeded over the crossover to track one, the enginemen on Train 177 reported his cab signal upgraded to "cab speed". As a result of this report, Amtrak removed "cab speed" cab signal from service on all engines operating between New Haven and Boston, and replaced the 100 Hz inverter used to produce 100 Hz for cab signals for west bound moves at Cranston. The inverter was suspected of drifting off frequency. On March 27, 1996 Amtrak re-enacted the two to one move at Cranston Int using a test Eng 227 with "cab speed" cab signal aspect cut in. We also re-installed the suspected defective 100 Hz inverter for this test. It was our determination from the test that the 100 Hz inverter had drifted to 89 Hz, and as this inverter is a square wave generator, there was also a significant level of the third harmonic, 267 Hz present in the same wave form. This equipment was tuned to receive 120 code at the 91-100 Hz frequency as well as at the 250 Hz frequency and there were sufficient levels of both carriers to support the cab speed aspect at the 120 code rate. The "Fifth Aspect" on-board equipment supporting the "cab speed" cab aspect remains out of service as of this date and is being re-evaluated. This interim "Five-Aspect" on-board equipment does not perform a final "alternating carrier" check as the full Nine-Aspect cab signal equipment does. We will advise you of our corrective action and our intent to re-establish the interim "cab speed" cab signal aspect to service.

(If more space is required, continue on reverse)