

DEPARTMENT OF TRANSPORTATION
 FEDERAL RAILROAD ADMINISTRATION
FALSE PROCEED SIGNAL REPORT

DATE JUNE 20, 1997

MAIL TO

 Mr. Tom McFarlin
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 Federal Railroad Administration
 1100 Main Street, Suite 1130
 Kansas City, MO 64105

REPORTING CARRIER (railroad & region or division)
 Burlington Northern Santa Fe Railway

 REPORTING OFFICER (signature/title)
 AVP SIGNAL

FEDERAL RAILROAD ADMINISTRATION
 JUN 24 1997
 KANSAS CITY

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 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 the signal. Such failure should be included in Item 1. Block System

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

AB	-Automatic block	EM	Electromechanical
AC	-Automatic cab signal	EP	-Electropneumatic
APB	-Absolute permissive block	FP	-False proceed
ATC	-Automatic train control	MP	-Manual block
ATS	-Automatic train stop	M	-Mechanical
CL	-Color light	P	-Pneumatic
CPL	-Color position light	PL	-Position light
E	-Electric	SA	-Semiautomatic
		TC	-Traffic Control

TYPE OF SYSTEM	DATE	LOCOMOTIVE OR TRAIN NUMBER	DEVICE THAT FAILED	LOCATION (City and State)
1 BLOCK SYSTEMS <input type="checkbox"/> AB <input type="checkbox"/> APB <input checked="" type="checkbox"/> TC	6-14-97	TRAIN S-CHRI1-14 ENGINE 4006	NONE	ARGENTINE, KANSAS
2 INTERLOCKING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> AUTO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> MATIC				
3 AUTOMATIC SYSTEMS <input type="checkbox"/> ATS <input type="checkbox"/> ATC <input type="checkbox"/> ACS				
4 OTHER (specify)				

7

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

TRAIN S-CHRII-14, TRAVELING WESTBOUND ON THE SOUTH MAIN TRACK OF THE EMPORIA SUBDIVISION OF THE KANSAS DIVISION AT MP-3.5, CP-148, 12TH ST., AT APPROXIMATELY 14:43 HOURS ON JUNE 14, 1997, REPORTED SIGNAL 4W DISPLAYING A RED OVER FLASHING YELLOW, SIGNAL 4W AT MP-3.9, CP-147, AY TOWER, WAS DISPLAYING A RED OVER RED WHILE SIGNAL 4W AT MP-4.0, CP-145, 18TH ST., WAS DISPLAYING A RED OVER FLASHING YELLOW WITH A ROUTE OVER NO.1 CROSSOVER REVERSE TO THE MIDDLE MAIN.

THE INCIDENT WAS INVESTIGATED BY MGR SIG _____, SUP SIG ' _____, GEN SUP SIG CONST _____ AND SIG MNTR _____.
THE LINEUP WAS RECREATED AND REVEALED THAT THE 4W SIGNAL AT CP-148 WAS DISPLAYING A FLASHING YELLOW OVER RED WITH 4W AT CP-147 DISPLAYING A RED OVER RED WITH 4W AT CP-145 DISPLAYING A RED OVER FLASHING YELLOW WITH A ROUTE OVER NO.1 CROSSOVER REVERSE TO THE MIDDLE MAIN.

FURTHER INVESTIGATION REVEALED THAT THE SWADGR RELAY AT CP-147 WAS ENERGIZED WITH THE 4W SIGNAL AT STOP. WHEN THE SWADGR RELAY IS ENERGIZED IT IN TURN ENERGIZES THE SMR CIRCUIT BETWEEN CP-147 AND CP-148 AND ALLOWS THE 4W SIGNAL TO DISPLAY A FLASHING YELLOW OVER RED.

THE SWADGR RELAY SHOULD NOT HAVE BEEN ENERGIZED UNLESS THE 4WAHDP WAS ENERGIZED AT CP-147. THE FRONT HEEL COMBINATION IN THE 4WAHDP RELAY OF THE SWADGR CIRCUIT WAS INADVERTENTLY REMOVED DURING A CUTOVER ON 6-12-97 AND THE SUBSEQUENT TESTING DID NOT REVEAL THE DEFECT.

THE SWADGR CIRCUIT WAS REWIRED TO CORRECT THE DEFECT AND THE ROUTE TESTED AND RETURNED TO SERVICE AT APPROXIMATELY 22:00 HOURS ON 6-14-97.

(If more space is required continue on reverse)

FRA F6180-14