

DEPARTMENT OF TRANSPORTATION
 FEDERAL RAILROAD ADMINISTRATION
FALSE PROCEED SIGNAL REPORT

DATE 04/29/2000

MAIL TO
 Mr. Tom McFarlin
 Signal & Train Control Specialist
 Federal Railroad Administration
 901 Locust Street - Suite 464
 Kansas City, MO 64106

REPORTING CARRIER (railroad & region or division)
 Burlington Northern Santa Fe Railway
 Illinois Division
 REPORTING OFFICER (signature/title)
 Assistant Vice President - Signals

A failure should not be counted more than one time in items 1, 2, 3, and 4; the failure should be classified as a failure of the 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 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

A -Automatic	EM -Electromechanical
AB -Automatic block	EP -Electropneumatic
ACS -Automatic cab signal	FP -False proceed
APB -Absolute permissive block	MP -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 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	4/24/20	BNSF 4970 ZWSPNBY9-24B	LINE WIRE AND INVERTER	KERNAN, IL. SIGNAL 811
2 INTERLOCKING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> AUTO MATIC				
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

TRAIN ZWSPNBY9-24B, ENGINE BNSF 4970, OPERATING WESTWARD ON MAIN TRACK NO. 1 APPROACHING CONTROL POINT AT KERNAN WENT BY THE APPROACH SIGNAL AT MP 81.64 (SIG 811) DISPLAYING APPROACH MEDIUM. THE HOME SIGNAL AT KERNAN WAS AT STOP. THE SIGNAL SUPERVISOR AND TWO MAINTAINERS RESPONDED AND PUT ALL SIGNALS TO STOP. INVESTIGATION REVEALED THAT A 480V AC WIRE HAD COME UNTIED FROM ITS INSULATOR WITH THE TIE WIRE STILL ATTACHED TO IT. THE HIGH WINDS BLEW THE 480V AC LINE WIRE OFF THE CROSSARM AND IT DROPPED DOWN TO THE AREA OF THE SECONDARY ARMS BELOW. THE TIE WIRE THAT WAS STILL ATTACHED TO THE 480V AC LINE WIRE ALLOWED IT TO TOUCH THE "NMR" LINE WIRE. WHEN THIS HAPPENED, THE 480V AC FED BACK INTO THE CONTROL POINT, BURNING UP AN INVERTER, CAUSING A GROUND ON THE BATTERY THAT FEEDS THE "NMR" CIRCUIT. THE GROUND ALLOWED CURRENT TO BYPASS THE CIRCUITS AT KERNAN AND ENERGIZE THE "NMR" RELAY AT SIGNAL 811, CAUSING IT TO DISPLAY APPROACH MEDIUM. THE LINEWIRE WAS RESTORED TO ITS INSULATOR, THE INVERTER WAS REPLACED AND SIGNAL SYSTEM TESTED FOR PROPER OPERATIONS AND RETURNED TO SERVICE.