

DEPARTMENT OF TRANSPORTATION  
 FEDERAL RAILROAD ADMINISTRATION  
**FALSE PROCEED SIGNAL REPORT**

DATE 4-12-97

MAIL TO  
 Mr. Tom McFarlin  
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 Federal Railroad Administration  
 1100 Main Street, Suite 1130  
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FEDERAL RAILROAD  
 ADMINISTRATION

REPORTING CARRIER (railroad & region or division)  
 Burlington Northern Santa Fe Railway  
 Kansas Division  
 Emporia Subdivision

REPORTING OFFICER (signature/title)  
 ATR Signal :

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 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	4-4-97	C-TPRR1-04 ENGINE UP 9552	NONE	AUGUSTA, 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)				

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

ON APRIL 4, 1997, AT APPROXIMATELY 1510 HOURS, UP COAL TRAIN, C-TPRR1-04 UP ENGINE 9552, WAS TRAVELING WESTBOUND ON THE NORTH TRACK OF THE EMPORIA SUBDIVISION, KANSAS DIVISION, APPROACHING THE EAST END OF AUGUSTA SIDING MP-183.21 WHEN THEY REPORTED THE 2R SIGNAL PUMPING FROM YELLOW TO FLASHING YELLOW AND BACK TO YELLOW WITH THE NEXT SIGNAL AT CP-1853 RED TO THE SOC IN SCHUAMBURG, ILLINOIS. THE WEATHER WAS WINDY, COLD AND RAINING.

THE TRAIN WAS ADVISED TO STOP SHORT OF THE SIGNAL, SIGNAL 2R WAS TAKEN DOWN AND THE CREW ADVISED TO WAIT FOR THE ARRIVAL OF SUPERVISOR SIGNALS. SUPERVISOR SIGNALS INTERVIEWED THE CREW AND ADVISED THE DISPATCHER THAT THEY COULD FLAG SIGNAL 2R. THIS ROUTE WAS TAKEN OUT OF SERVICE UNTIL TESTING COULD BE PERFORMED.

THE INCIDENT WAS INVESTIGATED BY SUPERVISOR SIGNALS, SIGNAL MAINTAINERS AND SIGNAL 2R AT THE EAST END OF AUGUSTA WAS REQUESTED AND DISPLAYED A FLASHING YELLOW ASPECT WITH THE NEXT SIGNAL AT CP-1853 RED. FURTHER INVESTIGATION REVEALED THAT THE NWMR RELAY AT THE EAST END OF AUGUSTA WAS ENERGIZED WITH THE 2RAHDP RELAY AT CP-1853 DE-ENERGIZED, THIS ALLOWED SIGNAL 2R TO DISPLAY A FLASHING YELLOW.

THE BATTERY END OF THE NWMR CIRCUIT WAS OPENED AT CP-1853 AND THERE WAS STILL APPROXIMATELY 10 VOLTS DC ON THE CIRCUIT FROM AN EXTERNAL SOURCE. THE POLELINE WAS WALKED AND A LINE WRAP WAS DISCOVERED BETWEEN THE NUMBER 5, TOP ARM, TRACK SIDE POSITION AND THE NUMBER 5, BOTTOM ARM, TRACK SIDE POSITION WITH THE NUMBER 4, TOP ARM WIRE LAYING AGAINST THE NUMBER 4, BOTTOM ARM WIRE AT APPROXIMATELY MP-184.64. THE TOP ARM 4 AND 5 TRACK SIDE CIRCUIT IS, NSWXRN AND NSWXR RESPECTIVELY. THE BOTTOM ARM 4 AND 5 IS, NWNRN AND NWMR RESPECTIVELY. THE NSWXR CIRCUIT IS A 10 VOLT DC WRAP FOR THE CUSTER LANE CROSSING AT MP-184.64 THAT IS NORMALLY ENERGIZED. THE WIRES WERE SAGGING ACCOUNT OF AN IMBALANCE ON THE EAST SIDE OF THE DOUBLE ARM WHICH ALLOWED THE TRACK SIDE WEST TO BECOME SLACK.

THE WRAP WAS REMOVED, AN ARM GUY INSTALLED AND THE SLACK TAKEN OUT OF THE WIRES. ALL ENERGY WAS REMOVED FROM THE NWMR CIRCUIT AND THE SIGNAL 2R NOW DISPLAYED A YELLOW ASPECT. THE SIGNAL WAS TESTED INCLUDING CROSS AND GROUNDS AND RETURNED TO SERVICE AT APPROXIMATELY 1930 HOURS. THE NWMR AND NSWXR CIRCUITS WERE STAGGERED TO PREVENT A SIMILAR OCCURRENCE IN THE FUTURE.

(If more space is required continue on reverse)

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