

DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION

OMB No. 04-R-4028

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)

August 2002

DATE

September 4, 2002

REPORTING CARRIER (railroad & region or division)

Montana Rail Link  
P O Box 16390  
Missoula, MT 59808

REPORTING OFFICER (signature/initial)

Director  
Signals & Communications

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

Copies of this form will be furnished upon request to the Department of Transportation, Federal Railroad Administration, Office of Safety, Washington, D.C. 20590

MAIL 713

Federal Railroad Administration  
Regional Administrator  
703 Broadway, Suite 650  
Vancouver, WA 98660

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.

- A—Automatic
- AB—Automatic block
- ACS—Automatic cab signal
- APB—Automatic permissive block
- ATC—Automatic train control
- ATS—Automatic train stop
- CL—Color light
- CPL—Color position light
- E—Electric
- EM—Electromechanical
- EP—Electropneumatic
- FP—False Proceed
- MB—Manual block
- M—Mechanical
- P—Pneumatic
- PL—Position light
- SA—Semiautomatic
- TC—Traffic control

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 checked="" type="checkbox"/> X TC	8/22/02	BNSF 5447	switch machine	Reed Point, MT
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

See attached.

(If more space is required, continue on reverse)

*De Busk*

On August 22, 2002, at approximately 10:29 hours, Eastward Train, UP 4978, Train Symbol ESPBDKM029, derailed 3 locomotives and 16 cars at West Reed Point. Engineer on Train ESPBDKM029 reported that he observed the Eastward Absolute Signal at West Reed Point as displaying a green over red aspect with the switch points for the West Siding Switch open. Train ESPBDKM029 split the switch and derailed 3 locomotives and 16 cars.

Preliminary investigation by Signal Department personnel revealed the Absolute Signal at West Reed Point was displaying a green over red aspect with the switch points open as reported by the Engineer on Train ESPBDKM029. At The time the derailment occurred, the point detector rod was broken and the switch was indicating in the normal position with the switch points gapped open along with bent switch rods.

Signal Department personnel revealed that the cause of the failure to be a combination of a broken point detector rod, a missing wear plate under the lock rod on the field side of the GRS Model 5D switch machine and wear under the lock rod on the field side of the switch machine frame. The wear plate was found in the bottom of the switch machine with a broken pin that secures the wear plate in place under the lock rod on the switch machine frame.

The missing wear plate which was .093" thick and .028" wear on the frame of the switch machine permitted the lock rod to sit .121" lower in the switch machine than normal. This resulted in permitting the point detector yoke to move an additional 1/16" before resting on top of the lock rod clips. This was enough movement to permit the point detector to indicate in the normal position with the switch points in the reverse position.

Furthermore, it was determined that the west siding switch had been ran through by two Westbound Trains prior to the derailment. Westward Train BNSF 5447, Train Symbol VKCMTAC820 ran through the switch at approximately 7:42 hours. At this time the switch points were lined for the reverse position and indicating in the normal position. Westbound Train BNSF 4398, Train Symbol HKCKPAS119 also ran through the switch at approximately 7:56 hours. Both Trains were on the Main Track and the Westward Signal for the Main Track at West Reed Point displayed a green signal aspect for both trains. Neither train crew reported a signal failure at West Reed Point prior to the derailment. The train crew on Train VKCMTAC820 did notify the Dispatcher after hearing about the derailment and reporting that they thought the switch was lined against them at West Reed Point but they were not positive so they didn't file a report.

Signal Department personnel replaced the switch machine at West Reed Point and have checked the wear plates and performed a switch point integrity test on all power operated switch machines on Montana Rail Link.