



## IronWood Technologies

Railroad Accident Reconstruction

## Federal Railroad Administration

### False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - Cause: Maintenance - Switch Circuit Controller

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
<a href="#">38</a>	3/14/1995	UP	APB			UP3148	Switch Circuit Controller	Amelia, Texas	N
<p>On March 14, 1995, at 15:00 (CDT), eastbound UP3148 on the Beaumont Subdivision observed eastbound Signal H450 Green with west end of Amelia Yard lined against them.</p> <p>An investigation revealed the switch circuit controller connecting rod had fallen off due to worn threads in the socket assembly.</p> <p>The socket assembly was replaced on the switch rod, and a switch inspection was done. The signal system was restored to proper operation.</p>									
<a href="#">41</a>	6/16/1995	UP	AB			UP6317	Switch Circuit Controller	Stanton, Texas	N
<p>On June 16, 1995, at 10:55 (CDT) westbound FWEP16 on the Baird Subdivision reported a Green westbound signal at the east end of Stanton with the switch reverse at the west end of Stanton.</p> <p>An investigation revealed the switch circuit controller at the west end of Stanton had bad roller and tension springs that, under vibration, would lose the "shunt circuit" with the switch in a reverse position.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									
<a href="#">155</a>	4/7/1997	UP	AB			LVW50-06	Switch Foot	Adobe Creek, Colorado	N
<p>On April 7, 1997, at 2:22 DST on the Hoisington Subdivision, eastbound LVW50-06 observed the signal at the west end of Adobe Creek was CLEAR with the switch at the east end of Adobe Creek in a reverse position for movement from main to siding.</p> <p>An investigation revealed the switch foot connecting the switch rod to the switch point at the east end of Adobe Creek was broken, so reversing the switch would not operate the switch circuit controller which would have caused a Red signal at the west end of Adobe Creek.</p> <p>The switch was repaired; the signal system was restored to proper operation, and all applicable tests were performed.</p>									

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156	6/3/1997	UP	CTC			UP804	Switch Circuit Controller	Geronimo, TX	N
<p>On June 3, 1997, at 5:45 CDST, on the Austin Subdivision, northbound LAS49/02 backed into the Geronimo Spur, at MP 219.0 and was in the clear. With the Geronimo Spur switch still reverse, a northbound signal was cleared at CPQ219 for a main line movement over the switch.</p> <p>An investigation revealed that excess rail movement from loose rail seats and spikes had caused the Switch Circuit Controller cams to roll past, and off of their rollers, letting their normal contacts make and causing a false indication of the switch.</p> <p>The loose rail seats and spikes were tightened and the Switch Circuit Controller was adjusted. The signal system was restored to proper operation, and all applicable tests were performed.</p>									
170	9/8/1997	UP	CTC			UP 3347	Switch Machine	North Platte, NE	N
<p>On September 8, 1997, at 05:46 CDST, on the Council Bluffs Subdivision at B283 in North Platte, Nebraska, eastbound ZSEME 05, while making a move from Track 1 to Track 3, had a PROCEED signal with the east switch of the east crossover gapped open approximately one inch.</p> <p>An investigation revealed the switch had been run through and the switch machine and rods had been damaged and bent in such a manner to allow the machine to lock up and indicate with the point gapped.</p> <p>The switch machine was replaced, the signal system was restored to proper operation, and all applicable tests were performed.</p>									
173	10/22/1997	UP	AB			UP 3592	Switch Circuit Controller	Boracho, TX	N
<p>On October 22, 1997 at 21:00 CDT, on the Baird Subdivision at Boracho, Texas, westbound IDALB 21, on the main track, reported westbound signal 708.1 Green with the spring switch in the next block at MP 710.0 lined reverse.</p> <p>An investigation revealed a bad order switch circuit controller at the spring switch.</p> <p>The switch circuit controller was replaced. The signal system was restored to proper operation, and all applicable tests were performed.</p>									
209	7/9/1998	UP	APB			UP 2256	Switch Circuit Controller	Conway, AR	N
<p>On July 09, 1998 at 00:30 CDST, on the Coffeyville Subdivision at the south end of Conway, MP B371.9, northbound Local LVR56-08 stopped and lined the switch for the siding and observed the northbound signal stay Green.</p> <p>An investigation revealed that the switch circuit controller rod had fallen off the controller.</p> <p>The switch rod was replaced, the signal system was restored to proper operation, and all applicable tests were performed.</p>									

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639	7/11/2000	DH	CTC				Switch Circuit Controller	MP 29.5, Ballston Spa, NY	N
<p>Train SCR traveled north thru CPC 24 to switch cars at Curtis Lumber, train 63 was to follow them north. The dispatcher cleared CPC 24 North after SCR. Train 263 called SCR to find out their location. SCR reported that they were switching in Curtis out the switch was open on the main. Train 263 had passed CRC 24 with a CLEAR signal and saw signal 28.7 was CLEAR and stopped their train. Maintainer Acker was notified at 18:45 and the switch circuit controller rod had fallen off at Curtis switch because switch points had moved north. Also found the spring loaded cam in circuit controller in closed position unable to move. Replaced controller and point rod. Had Track Dept. move switch timbers.</p>									
306	4/11/2001	CSXT	CTC			U724-10	Workmanship	Sproul, WV	N
<p>On 4-11-01, train U72410, coming off the Coal River Subdivision, reported an APPROACH signal westbound at Sproul Junction immediately after T78308 cleared OS circuit ahead. This should have been RESTRICTING. T78308 was a westbound train on the Big Coal Subdivision. The signals were removed from service pending investigation. The field investigation revealed that the reverse point detector stud had become loose and backed off on a T-21 hand throw switch for the spur track. This allowed both NWP and RWP relays to become energized at the same time. A contributing factor was the absence of a check circuit that would prevent the energizing of both the NWP and RWP relays simultaneously. Changes have been made and signals restored to service.</p>									
355	10/11/2002	CSXT	AB			Q416-09	S8PT Connectors	W.E. Space Center, Lordstown, OH	N
<p>On October 11, 2002 at 6:00 AM the Q416-09 approached intermediate signal W90.41, displaying a CLEAR signal and stopped east of the signal, made a cut on Q416-09 to pick up cars at the West End Space Center, Goodman Yard. The train crew went west of intermediate signal W90.41 and observed that the signal indication changed to RESTRICTED PROCEED. The crew went west of the trailing point switch, threw the switch reverse and entered the West End Space Center. The switch was left open while working and upon clearing the fouling circuit, train crew reported that the W90.41 signal indicated CLEAR. When the train crew came back out onto the fouling circuit, W90.41 signal indicated RESTRICTED PROCEED. The train crew tied back onto their train, restored the switch normal and proceeded west with permission. Signals were removed from service and signal personnel dispatched to the site. Investigation revealed that corroded track connections from the circuit controller to the rail were the cause of the false proceed signal. All track connections from the circuit controller to the rail were renewed and a new switch circuit controller installed. Full operational tests were performed and the signals were restored to service.</p>									
392	1/25/2003	CSXT	CTC				Lock Rod Clip	E.E. Georgia, Georgia, IN	N
<p>At about 1425 hours, Q554-25 heading westbound at the East End of Georgia on the Indiana Sub, while Q565-24 was stationary in the siding reported receiving an APPROACH signal. While occupying the OS section of the East End Georgia the crew on Q554-25 observed the switch aligned reverse toward the standing Q565-24. Q554-25 stopped short of the Q565-24. Signals were removed from service and signal personnel dispatched to the scene. Inspection revealed that the internal point detector rod broke leaving the point detector circuit controller indicating the switch in the normal position with the switch points physically reversed thereby allowing a signal request cleared to the standing train in the siding while the circuitry appeared to be lined for the main track resulting in a false proceed signal. Investigation also revealed that an improper installation (clip installed backwards) of the lock rod clip that ensures that the "H" contacts center in the event that the point detector rod breaks and doesn't follow the movement of the switch points. Signal personnel replaced the broken point detector rod, properly installed the lock and clips, performed all operational tests and upon satisfactory completion restored the signals to service. Subsequently, a system-wide instructional notice has been issued to all signal personnel to inspect all switch machines of similar make to ensure that there are no other improperly installed lock rod clips in service.</p>									

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422	8/24/2003	UP	CTC			UP 2466	Circuit Controller	Stanwix, AZ	N
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On August 24, 2003 at 02:45 MDT, in Stanwix, AZ on the Gile Subdivision, eastbound 1 ALAWFX 20, at CP SP819, had a CLEAR signal for a move from single main track to #1 main track, and the movable point frog was not in full reverse position.

An investigation revealed the securing screws supporting the reverse switch indication contact assembly of the M23 switch machine had come loose, letting the reverse contacts make with the movable point frog not in full reverse position.

The circuit controller assembly was replaced and all applicable tests were performed.

No. of Reports Shown in this Listing: 12