



IronWood Technologies

Railroad Accident Reconstruction

Federal Railroad Administration

False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - State of Oklahoma

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
45	8/10/1995	UP	AB			UP2400	Track Relay	Adair, OK	N
Failed Equipment or Device - Relay									
On August 10, 1995, at 11:30 (CDT) on the Cherokee Subdivision while the MOWDWD-10 was switching at the south end of Adair, Oklahoma, the southbound leaving signal at M.P. 454.5 displayed a Green indication with the main line track circuit south of the OS circuit occupied.									
An investigation revealed the signal being held in a Green position by the track relay for the occupied track circuit having contacts fused in the normally-energized position caused by a lightning strike. The track relay was replaced.									
The signal system was restored to proper operation, and all applicable tests were performed.									
4	12/12/1995	BNSF	CTC			Train 01-131-12	Power Switch	Afton, OK	N
Human Error - Improper Circuit Jumper in Place									
Replaced crossover switch machine (67sw) on main track number 2, Afton, OK. When crossover was requested reverse, switch 67A on main track number 1 did not throw reverse and stayed in the normal position. Switch 67 on main track 2 threw reverse and crossover indicated reverse through incorrect jumpers in 67sw allowing signal 68RB to display false proceed signal through crossover. Train ran through switch on main number 1. Removed incorrect jumpers and tested crossover, system functioned as intended.									
6	12/30/1995	CSXT	CTC			None	Sig LA	West Purcell, OK	N
Vandalism - Signal Mechanism Shot - Stuck in Position									
Dispatcher reported signal LA, Main Line westward control signal, West End Purcell, OK cleared on its own and could not be taken down. Maintainer observed signal LA displaying a very dim Yellow aspect. Maintainer found signal had been shot, damaging the H-5 relay. Maintainer replaced H-5 relay and tested signal system. There were no trains that viewed the signal before the signal was placed to STOP by the signal maintainer.									

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70	9/3/1996	BNSF	CTC			Q-CVLI1-02 Eng. 8	EC-4, 213A Module	Avard, OK	N
<p>Failed Equipment or Device - Electrocode Module</p> <p>At approximately 0720 hours on 9-3-96, train Q-CVLI1-02, engine 8534, traveling eastbound on the North track of the Panhandle Subdivision of the Oklahoma Division between Avard and Waynoka, Oklahoma observed intermediate CL signal 3382 pumping from Dark over Dark to Yellow over Yellow with a train in the block ahead. Supervisor of Signals and Signal Maintainer were called to investigate.</p> <p>The investigation revealed that the condition existed as follows, the signal would display a Yellow over Yellow aspect for 2 seconds then display a Dark over Dark for 40 seconds then repeat. Further investigation revealed a Bad Order Electrocode-4, 213A, Lamp Driver Module and a burst signal bulb in the Top Green position. Suspect a lightning strike close to the signal account heavy storms in the area.</p> <p>The 213A module and bulb were replaced and a complete operational test performed. The system was left operating as intended.</p>									
78	12/15/1996	BNSF	CTC			94-650-15	Signal 92R	South Ada, OK	N
<p>Failed Equipment or Device - Relay</p> <p>At approximately 0340 hours on 12/15/96, train 94-650-15 reported absolute signal 92R, northbound home signal, South Ada, OK displayed a Green aspect with train 50-JJ005-13 still occupying the block between South and North Ada.</p> <p>Signal Maintainer found 92RHDR in the energized position with no voltage applied to the coils. Relay was replaced, operating tests performed, and system operated as intended. 92RHDR will be sent to the Springfield Signal shop for further testing.</p>									
323	4/4/2001	UP	AB			UP4267	None	Optima, OK	N
<p>Human Error - Field Wiring Error, Inadequate Service Testing</p> <p>On April 4, 2001 at 11:00 CDT, at Optima, OK on the Pratt Subdivision, eastbound MWCHN 02, on the main track at MP 460.80, reported a CLEAR eastbound signal at MP 460.80, with a switch reversed east of the signal.</p> <p>An investigation revealed that the switch circuit controller was improperly wired.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									

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321	4/11/2001	UP		Manual		BNSF 9788	None	Wagoner, OK	N
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Failed Equipment or Device - Interior Wiring

On April 11, 2001 at 16:30 CDT, at Wagoner, OK on the Cherokee Subdivision, southbound CGDRO 10, on the main track at MP 486.3, reported the southbound approach signal to the Wagoner Interlocker displayed an APPROACH DIVERGING (Yellow over Yellow) into a Red southbound home signal.

An investigation revealed that lightning had melted two wires together, which applied voltage to the bottom aspect of the southbound approach signal.

The signal system was restored to proper operation, and all applicable tests were performed.

673	6/25/2001	KCS	CTC			KCS 685	B1 Relay	Page, OK	N
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Failed Equipment or Device - Relay

At 13:27hrs on 06/25/01, train #109824 North left the switch at North Page on signal indication traveling north. The dispatcher requested a follow up signal behind train #109824 for train 108224 to follow him north. At 13:37hrs on 06/25/01, train #108224 North with engines KCS685, KCS717, IMRL213, KCS2040, and KCS2034 with Engineer [redacted], and Conductor [redacted], and a consist of 34 loads, 47 empties, 5548 tons and 5192 feet, arrived at the north siding switch at Page, MP 353.9 with a Green over Red displayed for a north bound move. Train #108224 confirmed the location of train #109824 and realized he was only by the first signal north of Page at MP 351.8. Upon inspection by Signal Engineer [redacted], Signal Supervisor [redacted], and Signal Supervisor [redacted], we were able to reproduce the failure. We discovered that the north bound Yellow Green Repeater (12YGPR) relay at the first intermediate north of Page at Mile Post 351.8 was failing to drop out causing a Code 4 (Electrocode) to be transmitted south to the north switch at Page. There was no visible evidence for why the relay was hanging up. It would remain up even when gently removed from the plugboard. The information on the defective relsy is as follows: GRS B1, 300 ohm, D.C. Neutral, Drawing #56001-750 GR1, Serial #142277, manufacturer's inspection date is 5/14/53.

691	5/27/2002	KCS	CTC			KCS 685	Vandalism	Watts, OK	N
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Vandalism - Signal Mechanism Shot - Stuck in Position

At approximately 23:25hrs on 05/27/02, train 108227 (#82), with Engineer and Conductor, with a consist of 51 loads, 17 empties, 6532 tons and 4251 feet, with engines KCS 4509, KCS 669 and BNSF 9873 was traveling northbound on the main track at North Watts, Mile Post 234.30 on the Heavener Subdivision, Mid Continent Division. As the train approached North Watts the crew reported that the northbound main line signal and the trailing signal out of the siding were both displaying a CLEAR (Green). Upon investigation of the report by the Signal Supervisor, it was discovered that the SA mechanism in the trailing siding signal had been vandalized, shot by a rifle, which caused debris to hang the mechanism in a position to cause it to display a Green.

Please see attached Call Desk trouble ticket, a statement of facts from [redacted], a train report and a Station report for North Watts.

No. of Reports Shown in this Listing: **9**