



# IronWood Technologies

Railroad Accident Reconstruction

## Federal Railroad Administration

### False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - Cause: Maintenance - Improper Adjustment, Track Circuit

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
458	2/17/1995	CP	CTC			8654	RTR	Signal 139.2	N
<p>On February 17, 1995 at approximately 1630 CNW south bound train no. 8654 was located at south end of siding Farmington and reported signal 28R at the Farmington holding signals had cleared from Red to Yellow to Green for about 15 seconds and returned to Red while CNW southbound train 8018 was in 2nd block ahead.</p> <p>Upon investigation, it was determined when CNW train 8018 had passed signal 139-2, the directional stick relay had picked to allow a clearing code to generate to the rear causing signal 28R to display an APPROACH aspect and immediately after passing signal 139-2, the train lost shunt allowing a clearing code to be generated back to signal 28R causing signal 28R to display a CLEAR aspect for about 15 seconds. Possible cause found to be RT track circuit was not adjusted properly causing track circuit to pick up momentarily under the train.</p> <p>Corrective Action: All track circuits between Rosemount and Comus will be inspected for adjustment and assure shunting with .06 ohm shunt.</p>									
50	11/9/1995	UP	CTC			UP2324	None	Marysville, KS	N
<p>On November 8, 1995, at 11:15 (CST) on the Marysville Subdivision, westbound LNE75-08 flagged by Red signal at Z150. The westbound train ahead of LNE75-08 was stopped by the Signal No. 153.7 with 2 1/2 cars of the train east of the insulated joints. As LNE75-08 approached Signal No. 153.7, his cab signal upgraded from Red to Yellow.</p> <p>An investigation revealed the current of the ACS east of the insulated joint at signal No. 153.7 was 3 amps which allowed the current to pass under the stopped 2 1/2 cars upgrading the ACS in LNE75-08.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									
61	4/3/1996	BNSF	CTC			None	Track Circuits	Bristol, IL	N
<p>Amtrak 1347-3 on the North Track west of Bristol, IL., lost shunt and allowed the westbound signal on the North Track at Bristol to momentarily clear. The dispatcher had entered a stack for this signal behind Amtrak. Shunt test were performed with no exceptions. No train was present near Bristol to observe the westbound signal at Bristol to momentarily clear. Adjustments to track circuits between Bristol and MP 48.7 were made to reduce the voltage on the track relays for better sensitivity.</p>									

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85	7/28/1996	CSXT	CTC			Train #	Track Circuit	Vulcan Intermediate, PeeDee, SC	N
<p>On 08/02/96 Traincrew reported that on 7-28-96 they received a Yellow over Green indication at M.P. 262.10 and a STOP at the Northend of PeeDee and was routed through the siding. The signal was removed from service. Signal personnel performed operational test and could not duplicate incident. Event log at the Operations Center did not indicate any problem and indicated the train down the main line. Signal personnel along with the local FRA inspector were able to determine that a track circuit failure was occurring in the siding, that problem was corrected. No exceptions were taken to the signal system it has been restored to service.</p>									
105	8/6/1996	UP	CTC		ACS	UP6322	None	Cheyenne, Wyoming	N
<p>On August 6, 1996, at approximately 01:10 CDT on the Laramie Subdivision, Eastbound LAAP7D-04 on Track No. 1, while in the block at approximately M.P. 512.50, received an upgrade of his cab signal from Red to Yellow. Eastbound XOACST-03 was ahead of him on Track No. 1 at M.P. 512.25 still occupying the same block with three axles of the last car.</p> <p>An investigation revealed the high level output from the cab transmitter at M.P. 512.25 enabled the cab signal to push by the three axles and upgrade the cab signal on LAAP7D-04.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									
267	10/21/2000	NS	CTC			NS 6776, NS 8613,	Human Error	Cleveland, OH	N
<p>At 1:30 p.m. on 10/21/00, train #24Z on track one observed signal 2E at CP Twin go from RESTRICTING aspect to a CLEAR aspect and back to APPROACH with a train ahead passing the next intermediate signal at MP RD-100.4, 7.7 miles ahead. The CLEAR aspect was only displayed 14 seconds before dropping to APPROACH, the proper aspect.</p> <p>Upon investigation it was discovered that the working current on the 1004T relay was excessive, which resulted in the circuit failing to shunt for light engine 5096 moving in the block ahead of train 24Z.</p>									
400	6/21/2003	NS					Track Circuit	Greensboro, NC	N
<p>At approximately 7:20 p.m. on 6/21/03, train Amtrak 74 was running northbound on Track #1 when it received a Green over Red (G/R) CLEAR aspect at the intermediate signal at MP 285.6. Amtrak 74 should have received a Yellow over Green (Y/G) APPROACH DIVERGING aspect. The Control Point at Elm MP 284.5 was lined for a turnout move onto the H-Line and displayed a Red over Green (R/G) DIVERGING CLEAR aspect. This is Trackcode territory with color light signals and GRS 5H power switch machines. The condition was reproduced during testing. An invalid Trackcode pulse was being transmitted from CP Elm to the intermediate signal at MP 285.6. A (+ - +) was being transmitted and deciphered as a (- +) and displayed the CLEAR aspect. When the pulse was adjusted with the NPL adjustment pot to slow down the rate, a (+ -) was sent and deciphered at MP 285.6, displaying the proper aspect, Yellow over Green APPROACH DIVERGING. Current levels on the track were within specifications, all cables were meggered and relays tested with no exceptions found.</p> <p>Track circuit was adjusted to proper rate and engineering change made in the AD &amp; BD relays to prevent this type of signal aspect display in the future.</p>									

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No. of Reports Shown in this Listing: 7