



IronWood Technologies

Railroad Accident Reconstruction

Federal Railroad Administration

False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - State of Louisiana

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
472	4/3/1995	KCS	AB			????	????	Shreveport, LA	N
<p>Scenario Reenacted, Unable to Duplicate, No Defects Found</p> <p>Mr. David Green (FRA OP) reported that a trainmen had reported that signal no. 5549 at MP-554.95, Shreveport Subdivision, was Yellow with some cars setting beyond the signal. Time, date, engineer, train number or consist are unavailable. All applicable tests were performed at said location and condition could not be reproduced. The following individuals were involved in the testing of the system: Signal Supervisor, Signal Inspector, Signal Maintainer, and FRA Inspector.</p> <p>See attached list of some of the tests performed.</p>									
47	8/12/1995	UP	CTC			UP 3598	Relay, Insulated Joint	Pickens, LA	N
<p>Failed Equipment or Device - Relay</p> <p>On August 12, 1995, at 13:50 (CDT) on the Monroe Subdivision, northbound GSWWEG-11 observed a Green indication from northbound approach signal 435 while northbound signal 433 at the control point indicated a Red over Lunar.</p> <p>An investigation revealed a shorted insulated joint and track relay out of tolerance at Approach Signal 435.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									

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509	8/24/1995	IC	CTC			GNOCH24, WC174	Signal 2LB	Skip, LA	N
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Human Error - Improper Equipment Installed

Signal LB displayed a SLOW CLEAR indication for trailing route through turnout reverse, when switch points were normal. Two engines split switch. This incident was called in per FRA 233.5 at 11:40 CDST, 8-24, FRA Rpt#305107.

Investigation found that the pin attaching the throw bar to the throw rod broke. When the switch was called reverse the points remained normal. The point detector circuit had voltage of normal polarity, and the KP relay was reverse connecting the RWCR to this normal voltage. Since the RWCR was a neutral relay, it energized.

During a previous cutover the original relay (600 ohm biased-neutral) was changed to a 900 ohm neutral relay with more contacts. The tests did not detect the error since the tests did not include mechanical failures, or simulations which disconnect the motor, which prevented the switch points from moving.

524	10/22/1995	SP	AB			SP 1HOCMX-20	Signal 1496	Lafayette, LA	N
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Human Error - Field Wiring Error, Inadequate Service Testing

On October 22, 1995 at approximately 11:45 AM, Engineer operating train no. 1HOCMX-20 traveling east, reported that signal 1502 at the West End of Scott was Yellow, signal 1496 was Green and signal 1482 was Red. Signal 1496 should have been Yellow.

Under the direction of Signal Supervisor, the signal system was put to STOP and thoroughly tested. It was found that the coil wires on the 1496HR relay had been transposed, thus causing the signal to display the incorrect aspect.

After the wires were switched to their proper positions, the signal system was again tested and found to be working as intended with no exceptions.

The signal system was returned to service on October 22, 1995 at 2:00 PM.

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543	1/3/1996	KCS	CTC			KCS 621	?	Converse, LA	N
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Phantom Signal - Due to Foreign Light Source

At 17:00hrs on 1/3/96 an Extra 621 North the MPASH1 with Engineer, Conductor, Brakeman Trainee, and Road Foreman of Engines was traveling north on the main line at Mile Post 611.50 South Converse and received a CLEAR signal indication. Upon arriving at North Converse, Mile Post 609.64, they realized there was a dark north bound signal. When the train was stopped the Brakeman Trainee stepped out of the cab and looked back south and could see the south bound main line signal and reported it to be CLEAR. The other crew members stepped out to look at the signal and didn't see the signal CLEAR, the brakeman said that it must have went out. [The Brakeman Trainee] has approximately 8 weeks service with the KCS RailRoad. The Signal Supervisor and Signal Maintainer performed all applicable tests and the condition could not be reproduced. The following evening the Signal Maintainer went to the site again on 1/4/96 around the same time of the incident and found that there was a green porch light in the background of the signal at a house near the track, (see Picture Attached) that could have possibly been mistaken for a Green signal. The Signal Maintainer talked to the home owner, explained the situation and got him to change the light bulb to a regular white light. Please find attached a picture of the location, the test records and statements from the Signalmen performing the test and a train report including consist.

151	1/2/1997	UP	CTC	Manual		Job #700	Underground Cable	Avondale, LA	N
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Failed Equipment or Device - Aerial or Underground Cable, Shorted or Grounded (not due to vandalism or digging)

On January 2, 1997, at 14:25 CDT on the Alexandria Subdivision the Tower Operator at West Bridge Junction, at Milepole 10.2 reported that as Train Job #700 passed Signal No. 7 leaving the new yard on the SP tracks to Westwego, Signal No. 7 stayed Yellow.

An investigation revealed the 7GZ signal mechanism had a ground on it through an underground cable from switch No. 9 which kept the mechanism energized with a train occupying the OS track ahead of Signal No. 7.

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

111	2/24/1997	BNSF	AB			SP 8027 Eng, ICXCI	Signal 1617	Crowley, LA	N
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Maintenance - Pole Line (storm, excessive vegetation, rotting poles, excessive slack in wires, etc.)

Upon arrival found approach signal 1617 was Green with train on mainline between switches at Crowley and east spring switch reverse for siding. Head in signal 1639 was Red with signal 1617 Green. All signals involved placed to STOP. Inspection revealed trees had fallen through the pole line and had several wires wrapped together causing signal 1617 to be false cleared with foreign battery. Trees were then cleared, pole line repaired, signals put back on line and all tested OK.

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159	6/16/1997	UP		Manual		UP883	None	West Bridge Jct., LA	N
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Cause

Narrative

Phantom Signal - Due to Sun Angle

On June 19, 1997, at 15:22 CDST, on the Alexandria Subdivision at West Bridge Jct., LA, southbound MLINO-16 observed a Yellow dwarf signal for movement from the Yard to UP Long Bridge with a power switch not lined for the movement.

An investigation revealed the sun was shining in the signal and washed out the Red aspect.

The lens was changed and the signal was adjusted so it would display a more plainly lit Red aspect.

160	7/24/1997	UP	CTC			SP 8280	None	Luling, LA	N
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Human Error - Improper Equipment Installed

On July 24, 1997 at 15:30 CDST, on the Alexandria Subdivision at Luling, LA, northbound FINOLB-23 observed northbound signal 23.7 Green with the next northbound signal at CP L027 Red and a train occupying the track north of L027.

An investigation revealed the D biased relay at signal 23.7 had been changed out earlier due to lightning damage with a neutral relay.

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

117	8/6/1997	BNSF	AB			SSW8089 East	Signal 1660	Crowley, LA	N
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Maintenance - Pole Line (storm, excessive vegetation, rotting poles, excessive slack in wires, etc.)

Train 7290 west was in the siding at Crowley with train 7952 west pulling into the siding behind the 7290 west to meet east bound train SSW 8089. The 7952 west was too long and several cars were hanging out on the main line at the east end of the siding. Train SSW 8089 reported that when he approached and passed signal 1660 at the west end of the siding the signal 1660 was Green and when he arrived at east end signal 1639 was Red. Signal Supervisor was called and placed the signals to STOP until all trains had departed. When reenactment was done signal 1660 assumed the correct Yellow aspect. All circuits and relays were tested with no exceptions poleline was walked and line wrap was observed at mile post 164.2 account trees in the line. The wrap was between BL10 and WPC control wire, which is the pole changer from Yellow to Green at signal 1660. Even though circuit wasn't failing at time of inspection when wires were pressed together signal 1660 did change to the Green position. This failure was reproduced for the local trainmaster and we think the line wrap was the cause of the reported false proceed. The line wrap, trees, brush and BL10 were removed and all signals restored and tested OK. We will install Electrocode in this area immediately to preclude this from happening again.

The SSW 8089 had authority in the Midland Block and was not authorized in the Crowley block. The SSW 8089 had to stop at the east end of Crowley due to no authority in the block and therefore there was no chance of a collision.

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
120	9/26/1997	BNSF	AB			SF3680	Signal 1401	Elks DTC Bolck near Lafayette, LA	N
<p>Cause</p> <p>Narrative</p> <p>Vandalism - Pole Line</p> <p>Train P-NWOCLO1-26/engine SF3680 reported signal 1401 Green with next signal 1415 Red with no other trains in vicinity. Upon arrival Signal Supervisor and Signal Maintainer observed the above condition and placed 1401 signal to STOP. Further investigation revealed signal 1415 was Red due to a failed rectifier which shorted down the signal batteries at 1415 signal. Signal 1401 was Green account line wire 01G was wrapped with the 15PCR line wire which falsely held 1401 Green. The line wrap was caused by a dozer working under our poleline near mile post 140.05. The dozer had hit one of our poles and caused a hard wrap. There wasn't any trees or brush in this area and the dozer apparently belongs to a farmer doing work in the field next to the BNSF property. After line wrap was removed and rectifier replaced, signal 1401 was restored to service, all circuits tested and ok for service. Electrocode will be installed in this area to retire the poleline circuits.</p>									
172	9/27/1997	UP	AB			None	None	Shreveport, LA	N
<p>Vandalism - Pole Line</p> <p>On September 27, 1997 on the Reisor Subdivision at Shreveport, Louisiana, the northbound signal 315.7 at milepost 315.6 (Hollywood Junction) was observed to display a Green aspect with the track north of the signals occupied.</p> <p>An investigation revealed scrap wire, laying on the pole line north of signal 315.7, shorting and false feeding signal control circuits.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									
177	12/5/1997	UP	CTC			CSX T8603	None	AMA Jct., LA	N
<p>Human Error - Field Wiring Error, Inadequate Service Testing</p> <p>On December 05, 1997 at 04:23 CST, on the Alexandria Subdivision at CPL021, AMA Jct., LA, southbound MLINOB/04 on track #1 observed a Yellow over Red signal with the track ahead occupied.</p> <p>An investigation revealed the HR relay output and relay common wires swapped between track 1 and track 2 at LO21.</p> <p>The signal system was restored to proper operation, and all applicable tests were performed.</p>									

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180	1/12/1998	BNSF	AB			UP-INOLB1-11	Signal 1745	Midland, LA	N
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Maintenance - Pole Line (storm, excessive vegetation, rotting poles, excessive slack in wires, etc.)

At approximately 10:30 AM a westbound crew on Union Pacific train INOLB1-11 near Midland, Louisiana reported they were at signal 1745 on the main track near the east side track switch with a Green signal which should be Red account an east bound train had left the west switch reversed after they previously cleared the main for a meet.

The train crew verified the switch was still lined for movement to the side track and reported to the dispatcher that signal 1745 was false cleared over the reversed switch. With that operations were suspended in the area and signal personnel notified.

Relief Signal Maintainer and Signal Inspector responded immediately to the call and interviewed the crew for pertinent information, with Signal Supervisor responding to help with the investigation and corrections as needed.

Investigation revealed a large willow tree had been blowing into the pole line during the storms that day causing the 55PC line wire to be hard wrapped with the 45G7 signal control wire spanning out the 1NWPR switch repeater contact thereby false clearing signal 1745.

The line wires were unwrapped, the trees and brush were cut, the pole line inspected for other possible wraps, signals tested and placed back in service with all ok.

212	8/7/1998	UP	CTC	Manual		UP-0508	None	Kinder, LA	N
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Human Error - Field Wiring Error, Inadequate Service Testing

On August 7, 1998 at 22:45 CDST, on the Beaumont Subdivision at Kinder, LA, westbound MLIBT-07, at Mile Pole 545.3, observed a Yellow westbound signal governing the Interlocker at Kinder with the gate lined against movement on the Beaumont Sub.

An investigation revealed a wiring error which caused the gate repeater to be ineffective in the signal circuits.

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

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Cause						
			Narrative						
214	8/27/1998	UP	CTC			SP 8108	None	Georgetown, LA	N
			Human Error - Field Wiring Error, Inadequate Service Testing						
			On August 27, 1998 at 14:40 CDST, on the Monroe Subdivision at Georgetown, LA, northbound MDYNL-26 observed the northbound signal at Control Point A560 upgrade from Red to Green with OS track circuit occupied.						
			An investigation revealed the relay track connections on either side of one insulated joint at the north end of the OS were transposed, which allowed the track battery from the north to be in series with both relays and energize the relays with the OS track occupied.						
			The signal system was restored to proper operation, and all applicable tests were performed.						
627	2/26/2000	CN	AB				Signal 366.7	near Baton Rouge, LA	N
			Failed Equipment or Device - Track Isolation Unit						
			The report of an alleged false proceed signal at Mile 366.7 was left on the Viocemail system of the Signal Supervisor, by a trainmaster, at 02:43 hrs (26.FEB.00). The Acting Signal Supervisor checked the voice mail at 17:20hrs. (26.FEB.00). This voice mail stated that with a train south of signal 366.7, said signal was flashing from Red to Yellow.						
			The appropriate signals were removed from service.						
			On site inspection and testing, formally commencing at 00:30hrs (27.FEB.00), could reproduce the condition as reported. A defective Track Code Isolation Unit allowed a capacitor to supply voltage to, and cause the momentary pickup of the 3667 HR, hence displaying the Yellow aspect with the track occupied.						
			The Isolation Unit was replaced. The signal system was tested and found to be operating properly. The signal system was restored to service at 02:30hrs (27.FEB.00).						
			As part of an on-going upgrade of the signal system on the Baton Rouge District, the Trackcode in this area is scheduled to be replaced with Electrocode, the week of 06.MAR.00.						
629	3/28/2000	CN		Manual			CL	E. Bridge Interlocking	N
			Human Error - Signal Circuit Design Error, Inadequate Service-Testing						
			Polarity of control wires for H2 mechanism (Signal 31) was reversed allowing said signal to display Green aspect in lieu of Yellow. (09:00, 28-Mar-00). Signal wires were restored and full operational tests were made (18:00, 29-Mar-00). Signal was found to have been wired according to circuit plans. Plan was in error and field corrections made. East Bridge Interlocking, New Orleans, LA.						

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319	3/28/2001	UP		Manual		Unknown	None	West Bridge Jct., LA	N
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Human Error - Improper Circuit Jumper in Place

On March 29, 2001 at 17:00 CST, at West Bridge Jct., LA, on the Livonia Subdivision, the westbound signal #7 at MP 10.2 stayed Yellow after a westbound train passed it and occupied the track circuit west of the signal #7.

An investigation revealed that pulling levers for signals #6 and #7 in the mechanical interlocker created a bridge that applied battery which held signal #7 Yellow.

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

663	4/21/2001	CN		Manual		4601	36B Signal	New Orleans, LA	N
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Scenario Reenacted, Unable to Duplicate, No Defects Found

On April 21, 2001 at approximately 11:10 a Union Pacific train crew AV07 went by 36B signal with an alleged CLEAR signal (Green over Red) and proceeded into the plant when he noticed 19 switch lined against them. The train crew notified the East Bridge Operator, and the operator said he hadn't pulled the lever to give them the signal.

There was a BN train on the Public Belt track going up the Huey P. Long Bridge. He had the 31 signal lined and the lever still out. 20, 21, and 22 switches were already lined reverse for the UP crew AV07 but 18 and 19 switches were still lined normal.

The Inspector arrived at about 13:10 and found 36B signal vandalized. All the hoods were knocked off and the lenses had been hit with rocks and were cracked. At this time the Red aspect could be seen, and not mistaken for anything other than a Red, from the Shrewsbury crossing just south of the signal. Inspector checked for grounds at the signal house, no grounds found. He went over the steps the operator had taken that morning and attempted to reenact the incident. The 36B signal remained Red. When 18 and 19 switches were normal and the operator cleared 36B signal, the inspector reported the signal was Yellow over Red. Then the operator lined the route up to the bridge, 18 and 19 switches lined reverse and called for the 36B signal. 36B was Yellow over Red. All circuits were clear going up to the Huey P. Long Bridge and no grounds were found at East Bridge. The reported incident could not be reproduced. Due to excessive vandalism at this location, on April 25, 36A and 36B signals and the cable were replaced for precautionary reasons.

Report #	Date	Reporting Carrier	Block System	Interlocking System	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
690	5/14/2002	CN	CTC			IC 1116	SB Signal, Trk 1, Skip	St. Charles, LA	N
<p>Cause</p> <p>Failed Equipment or Device - Electrical Ground (not in underground or aerial cable)</p> <p>Signal Supervisor was notified at 20:15. M320 train reported a false proceed at Skip. The approach signal to Skip was APPROACH DIVERGING and went to APPROACH then back to APPROACH DIVERGING. The signal aspect at Skip was Red over Flashing Red, then to a DIVERGING CLEAR, and back to Red over Flashing Red. Crew M320 knew that TL James crossover was Red lined against his movement, due to an empty grain train going through to track 2.</p> <p>The Supervisor and Inspectors arrived at Martin Jct. and the signal was Red over Red over Red. They checked for grounds on the battery busses and found a 12mA negative ground on the B12 buss with AC power on, with the AC power off it read 500 mA. They lined the switch on track one for the TL James crossover Red. The Code 2 was lost going to Skip on the EC 4H unit, sending only a Code 1 and 5, but every few seconds the Code 4 would light up and stay on about 6 seconds then drop back out.</p> <p>The ground was on 5RC and 5RA signal head. Any time the 5RALOR relay was down it would not produce a Code 4. If the 5RALOR was up with the 5RCEN or 5RCRE off it would not produce a Code 4. With a switch lined you dropped out the ANWPR which dropped the 1NBPR that took the path away from your reference to Code 4 with the relay down. The negative 12mA ground was making the unit think it needed to send a Code 4 out, which was why the DIVERGING CLEAR was falsely produced at Skip. It should have been a RESTRICTING signal, Red over Flashing Red because TL James crossover was lined Red. The cable to the 5R signal was megged. They found the 5RAEN and 5RCEN grounded. The signal heads were removed and the wires were repaired. They megged and tested the signal system, and it was placed back in service at 14:30, 5/15/02.</p>									
694	6/21/2002	CN	AB			IC 6124	Signal 415.4	Gramercy, LA	N
<p>Maintenance - Switch Fouling Wires Missing, Broken, or Ineffective</p> <p>IC train 316 on June 21, 2002 reported a false aspect at signal 415.4, Gramercy LA, Baton Rouge Subdivision. The switcher was shoving cars in the north end of Mt. Airy siding. When the switcher cleared the switch and was in the fouling section, the switch was then lined back for the main and signal 415.4 went to Green. Upon arrival the Inspector found both 15' fouling wires broken. The fouling wires were repaired. The signals, fouling and switch circuit were tested.</p>									
410	1/14/2003	UP	AB			UP 9252	None	Shreveport, LA	N
<p>Maintenance - Pole Line (storm, excessive vegetation, rotting poles, excessive slack in wires, etc.)</p> <p>On January 14, 2003 at 1342 CST, in Shreveport, LA on the Reisor Subdivision, northbound MSHFW 14, on the main track at mile post 315.80, reported the northbound signal at Hollywood, mile post 315.8 cleared when they had passed the signal, and were still in the block north of the signal.</p> <p>An investigation revealed that at milepost 316.0 a pole fell and caused a short in the signal control wires, which false cleared northbound signal at Hollywood Jct., MP 315.8.</p> <p>The pole line was repaired and all applicable tests were performed.</p>									

Report #	Date	Reporting Carrier	Block System	Interlocking System	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
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436	1/8/2004	UP	CTC			UP 2016	None	Grosse Tete, LA	N
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Human Error - Improper Circuit Jumper in Place

On January 08, 2004 at 13:05 CST, in Grosse Tete, LA on the Livonia Subdivision, northbound LLL08 08, at MP 101.40 on the main line, was lined for the siding, and reported a Red over Yellow northbound absolute signal at L101 with the siding occupied.

An investigation revealed the H circuit was bridged not letting the G relay drop out.

The bridge was removed, and all applicable tests were performed.

No. of Reports Shown in this Listing: **24**