Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Cause						
			Narrative						
472	4/3/1995	KCS	AB			????	????	Shreveport, LA	N
			Scenario Reenacted, Unable to Duplicate, No Defects Found						
			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 carssetting 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.						
			See attached list of some of the tests performed.						
477	4/13/1995	KCS	CTC			Ext. Military	?	Vidor, TX	N
			Scenario Reenacted, Unable to Duplicate, No Defects Found						
			On 4/13/95 an Extra Military Train was following a Union Pacific Spray Train on Yellows south out of Mauriceville. The crew reported that they had to put the train in emergency just north of Vidor when they realized they were approaching the rear of the UP Spray Train. On 4/17/95 the Signal Supervisor received a report of a false proceed signal #7851 at Mile Post 758.26 as per attached letter. All applicable tests were performed and the condition could not be reproduced. We were unable to get written statements from the train crew concerning the incident. Please find attached the following items, Drawing of the layout of the signals in the block, Statement from the Signal Supervisor concerning the report and follow up, Statement from the Signal Maintainer and Signal Inspector concerning report and test results, Relay test form, and Megger test forms for North Vidor and signal 7581 & 7582.						

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			Cause						
			Narrative						
531	11/8/1995	KCS	CTC			746	?	Noel, MO	N

Phantom Signal - Due to Foreign Light Source

At 23:03 hrs on 11/8/95 northbound Extra Train 0006 of the 7th reported going by signal #2046 (approach signal to South Noel) with a CLEAR indication and arrived at South Noel with a Red absolute signal. The train got by the absolute signal but was able to stop before any further incident. Please review attached statement from the Signal Supervisor for more information from testing and from crew interviews. Also find attached a consist report and a train report from dispatchers office.

[From the Signal Supervisor's report] The report was investigated by the Signal Maintainer and myself. We were unable to reproduce the reported conditions. Also nothing was found that would contribute to the reported occurrence, such as grounds or relays out of spect [sic]. We did find that at a place about a mile north of signal #2046 where a street light could possibly be mistaken for a Green signal off in the far distance. This light might very well be mistaken for a signal in the distance if someone was not alert and was not sure of his location.

While later talking to the engineer, I asked him about this possibility, but he did not think so. The brakeman told me that he did not see the aspect of the approach signal which leads me to believe that the crew was not calling signals that night.

543	1/3/1996	KCS	CTC			KCS 621	?	Converse, LA	N

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.

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			Cause						
			Narrative						
563	6/18/1996	KCS		Automatic		KCS 704	?	Texarkana, AR	N
			Human Error - Signal Circuit Design Error, Inadequate Service-Testing						
			On 6/18/96 an KCS 704 was traveling north at the KCS/Cotton Belt interlocker at approximately 10:45 hours in Texarkana, AR. The Engineer reported to the Signal Maintainer that the signal at the interlocker was Green and he found a handthrow switch north of the interlocker lined reverse. After investigation by the Signal Supervisor and Signal Maintainer, it was determined that the NWP circuit for the switches north of the interlocker were checking only the yellow aspect and not the green aspect. Immediately the changes were made for the NWP to check the Green aspect. {The signal Supervisor and Maintainer] made all required tests and returned the interlocker to service.						
581	2/20/1997	KCS	CTC			UP3589	N/A	Mauriceville, TX	N
			Human Error - Field Wiring Error, Inadequate Service Testing						
			At 11:30hrs on 2/20/97 Extra UP3589 North the AGLI with Engineer and Conductor was traveling north on the main line at Mile Post 752.88 and received a CLEAR signal at signal #7522 the north bound approach to South Mauriceville. Upon arriving at South Mauriceville Mile Post 750.1 they received a Red over Lunar signal which is a normal head in move into the siding. Signal Maintainer [redacted] and Signalman [redacted] performed all applicable tests and found and corrected the problem. Signal Supervisor [redacted] was en route and verified testing and results with [redacted]. On 2/19/97 [redacted] and [redacted] combined a split battery system (LB10 & RB10) at control point South Mauriceville, TX. During a previous wiring change an old circuit had been left in, which referenced B10 to the Code 4 output (Green output) on the south Electrocode IIC unit. This caused the approach signal (7522) to display a Green aspect. Proper testing was not performed after disarrangement of LB10 and RB10. A formal investigation is scheduled concerning this matter. Attached are the statements of findings from [redacted] and [redacted].						
593	1/11/1998	KCS	CTC			NS 314 A7	A04XTR	Meridian, MS	N
			Failed Equipment or Device - Relay						
			At 02:30 hrs on 1/11/98 Norfolk Southern's NS 314 A7 was traveling north on the NS northbound main at Meridian, MS and reported they received a Yellow aspect at signal 04, when they reached the crossover they realized that #6 Switch was lined against their move. Please see attached memo from Signal Supervisor for details of investigation, the problem found and the preventative action taken. Also attached is a track diagram of this location.						

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Cause						
			Narrative						
614	4/15/1999	KCS	CTC			BN 6307	Wiring	Mulberry, MO	N

Maintenance - Wiring Chewed by Rodents

At 17:20 hrs on 04/15/98 train #076214 North with engine BN6307 with Engineer, Conductor, and a consist of 0 loads, 79 empties, 2471 tons and 4854 feet, was traveling northbound at Mile Post 116, North Mulberry where he received a Green signal. This is the approach to the KCS/BN Interlocker, Mile Post 114.6 at Arcadia, KS. Upon arrival at the interlocker they had a Red signal and shortly after a BN train pulled through the interlocker. Signal Supervisor, Signal Maintainer, and Signal Inspector investigated the report and were able to reproduce the reported failure. Please find attached statement of findings by Signal Supervisor and a train report for the reporting train.

[Statement by Signal Supervisor]

At about 17:30 hrs. on 04/15/99 I was notified by the Signal Desk that a northbound train had reported receiving a CLEAR northbound signal at North Mulberry; which is the northbound approach signal to the KCS/BN interlocking at Arcadia, KS. When the train got to where it could see the color of the interlocking home signal, it was Red. The KCS train also reported that it was only a very short time before a BN train went across in front of them.

The Signal Desk contacted the BN to have their personnel to check the interlocking tapes as the interlocking is their maintenance.

I contacted our Signal Maintainer to go check on our approach signal to verify that it would be no better than Yellow when the home signal was Red. While I was still in route to North Mulberry, [redacted] contacted me by cell phone and informed me that the approach signal would come up CLEAR (Green) with the interlocking home signal at Red. I confirmed that we would not have any other KCS train moves that would be affected by this condition and instructed [redacted] to remain there and wait until I arrived.

When I arrived, I confirmed [redacted] observations and we began to investigate the system. In our test we were able to determine that the 44YGPR relay in the KCS case at the interlocking was being held up by stray battery. The relay repeats the Yellow and Green aspects of the northbound home signal at the interlocking. It also determined the codes to be transmitted to the northbound approach signal. It was determined that there were no grounds on the circuit, but there was stray positive battery. Through further investigation, it was determined that a rodent had chewed into one of two four-conductor unshielded cables used between the junction box at the bottom of the home signal pole and the SA signal head at the top. There were no signs of the rodents in the junction box or the signal head, but they had gotten into the pole itself from the opening at the bottom of the spider-type foundation and chewed through the insulation of the cable that contained the B10 and the 44YGPR wires. They also chewed some of the actual wire strands and frayed them enough that there were strands of one conductor touching the other and introducing the B10 battery onto the YGPR wire all of the time.

We replaced the cables in the pole and made follow up tests. We sealed the foundation bottom and base openings.

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Cause						
			Narrative						
641	7/24/2000	KCS	CTC			KCS 6602	Pt. Det. Rod	Beaumont, TX	N
			Human Error - Signal Equipment Improperly Installed						
			At 11:50 hrs on 07/24/00 train #016423 North with engines KCS 6202 and KCS 729 with Engineer and Conductor and a consist of 48 loads, 29 empties, 6633 tons and 4370 feet, was traveling north bound at Mile Post 766, Neches River Bridge, where he reported receiving a Yellow aspect with the derail in the derailing position. The signals were immediately removed from service with the Control Operator until investigation could be made. Upon arrival at the location myself, Signal Engineer [redacted], Signal Supervisor [redacted], and Signal Maintainer [redacted] investigated the report and was able to reproduce the reported failure. The first finding was that the point detector rod was broken where the threads (for connection to the external rod) and the shoulder of the external rod come together. The second finding was that the Lock Rod Arm (clips) were installed reverse therefore not insuring that the lock rod and point detector rods were moving concurrently as described in the General Railway Signal Pamphlet #1293 Rev. February 1987, page 45. The corrective action was to install the lock rod arm (clips) properly and replace the broken point detector rod. We have checked every affected switch machine on the KCS property to insure that this condition doesn't exist anywhere else.						
673	6/25/2001	KCS	CTC			KCS 685	B1 Relay	Page, OK	N
			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.						
683	12/2/2001	KCS	CTC			KCS 685	Vandalism	Jaudon, MO	N
			Vandalism - Signal Damaged, Caused Unintended Signal Aspect						
			At 14:21hrs on 12/2/01, train #RUN8, (IFG Local), with Engineer and Conductor, with a consist of 0 loads, 20 empties, 800 tons and 2169 feet was in the siding at the south siding switch at Joudon waiting on a meet with train #000230, (KCSH North), with Engineer and Conductor, and a consist of 21 loads, 15 empties, 2813 tons and 2281 feet. RUN8 was aware of the meet and was told that the north bound train #000230 was lined north up the main line by the siding switch. The crew on RUN8 notified the signal desk that the trailing signal out of the siding was displaying a Lunar (RESTRICTED signal). This location is not capable of displaying a Lunar. Upon investigation of the report by Signal Maintainer [redacted], it was discovered that the SA mechanism had been vandalized, shot by a rifle which knocked out the red lens but didn't break the bulb.						

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Cause						
			Narrative						
691	5/27/2002	KCS	CTC			KCS 685	Vandalism	Watts, OK	N
			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.						
693	6/20/2002	KCS	CTC			KCS 685		Monticello, TX	N
			Human Error - Signal Equipment Improperly Installed						
			At approximately 11:45hrs on 06/20/02, train #060819 (INSATLA), with Engineer and Conductor and a consist of 24 loads, 0 empties, 6233 tons and 5685 feet, with engines ATSF 0693 and BNSF 4885 was traveling westward on the main track at East Monticello, Mile Post 101.0 on the Greenville Subdivision, Transcontinental Division, where he received a CLEAR (Green) aspect to proceed westward. As the train approached West Monticello, Mile Post 102.4, the crew reported that the westbound main line signal was Dark. Upon investigation of the report by the Signal Inspector, who also witnessed the Dark signal, it was discovered that there was a back nut behind the EN battery strap that was loose. [redacted] had been wiring in a recorder at this location when he was notified to give up his track authority and clear for a train.						
			Please see attached Call Desk trouble ticket, and a Train report for the train affected.						

No. of Reports Shown in this Listing: **13**