



IronWood Technologies

Railroad Accident Reconstruction

Federal Railroad Administration

False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - Indiana & Ohio Rail Corporation

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
595	1/14/1998	INOX		Automatic		None	1342 Approach Signal	Lima, Ohio	N
Cause Human Error - Field Wiring Error, Inadequate Service Testing									
Approach Signal 1342 on northbound approach to the Conrail Sugar Interlocking, Lima, Ohio displayed a Green aspect into a Red home signal at the interlocking. This condition was caused by the control wires 1342 HD and N1342 ND having been transposed where the line wire and aerial cable junction at MP 133.45. This condition was discovered about 9:00 A.M. on 1/14/98 and corrected and placed back into service at 2:30 P.M. The discovery of the false proceed was made by RailTex and RCL signal personnel while making routine tests of the system. It is unknown how long this condition existed, but it appears to have been wired in when the aerial cable was installed several years ago. RailTex acquired this property less than a year ago from the Grand Trunk Railroad.									
594	1/14/1998	INOX		Automatic		3802	Approach Signal #8	Liberty Center, OH	N
Maintenance - Pole Line (storm, excessive vegetation, rotting poles, excessive slack in wires, etc.)									
It was reported by the train crew on train no. 261-14 that they received a Green approach signal northbound at signal #8, MP 82.22 into a Red-over-Red home signal at the interlocking. This was confirmed by the signal MTR who was near the interlocking at the time of the report. The signals were taken out of service and the incident was investigated by both RailTex and RCL personnel. After the signal, MTR duplicated the false proceed by placing a shunt in advance of the approach and witnessing the Green into a Red. Further attempts to duplicate the incident failed. The pole line was walked out and at MP 82.9, it was found that the 8HR1 and 8DR1 were untied on the pole and nearly touching by means of a tie wire. This would cause both the 8DR and 8HR relays to be energized simultaneously, causing a Green into a Red.									
601	5/17/1998	INOX	CTC			3807	60R	Cincinnati, OH	N
Human Error - Field Wiring Error, Inadequate Service Testing									
On May 17, 1998 at approximately 07:00 AM vandals set fire to a pole and cables at Mile Post 10.9 Ridge Interlocker. The signal Maintainer was called at 9:00 AM and found the power and 7 conductor destroyed. Repairs began about 12:00 PM and were complete about 06:00 PM. During reconnection the H's for the 60R signal were transposed, which gave a Green signal instead of a Yellow into a Red. The signals were put back into service.									
At 10:45 PM the Signal Dept. was informed of the false proceed and took the signals out of service. The problem was found and corrected. The signal system was tested and put back into service.									

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
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722	1/24/2004	INOX		Automatic		40024 Southbound	DN22 B Relay A21HDPR	Quincy, Ohio	N
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Human Error - Improper Equipment Installed

On 01/24/04, Indiana & Ohio Railroad train 40024 Southbound reported a CLEAR aspect displayed on the southbound distant signal to the Quincy Interlocking. After proceeding by the CLEAR signal at Milepost 162.8, train 40024 approached the home signal, Milepost 164.1, and encountered a STOP aspect displayed on the southbound home signal with a conflicting CSX train proceeding through the interlocking. Train 40024 was able to stop in approach of the home signal. Train 40024 advised the INOH dispatcher of the improper aspect displayed on the distant signal. At this point, both distant signals were taken out of service, the southbound being at milepost 162.8 and the northbound being at milepost 166.2 with all train movements being made prepared to stop at the Quincy Interlocking home signals. Notification was made to their independent signal contractor, Railroad Controls Limited (RCL). RCL then dispatched a signal maintainer and two managers to the scene. It was determined that 3 days prior to this incident a biased relay, the A21HDPR, had been replaced at the southbound home signal, milepost 164.1 and replaced with a neutral relay. The coil wires were removed from the A21HDPR to ensure that the signal in question remained at APPROACH. INOH then notified the Rail America Director of Signals & Communications who then directed that all signal cases be secured by a railroad official until the incident could be confirmed. On 01-26-04 RCL and Director of Signals & Communications recreated the incident, and verified the improper relay was the cause of the signal failure. On 01-27-04, RCL completed testing of all relays and cable, completed operational testing, and then returned the signal system back to regular operation at 16:53. At this time, the signal system was operating as intended.

Attached are the circuit plans pertinent to this incident. Note the A21HDPR on sheet 12 of 21. Walter Fithian, Rail America Director Signals can be contacted at 561-245-1506 if additional information is required.

No. of Reports Shown in this Listing: 4