



# IronWood Technologies

Railroad Accident Reconstruction

## Federal Railroad Administration

### False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - Iowa, Chicago & Eastern Railroad Corporation (I&M Rail Link)

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
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**Cause**

**Narrative**

587	10/5/1997	IMRL	CTC			IMRL 218	None	Deer Creek, Iowa	N
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**Scenario Reenacted, Unable to Duplicate, No Defects Found**

On October 5, 1997, Engineer on train 98K 04 reported that he observed the eastward absolute signal at East Deer Creek as displaying a Yellow aspect. The proped aspect for the eastward absolute signal at East Deer Creek at this time was Red. This signal had not been lined by the dispatcher.

Signal Department personnel were immediately called to investigate this incident. Personnel performing operating tests and were unable to duplicate this incident. Personnel viewed the log report and replayed the events as they occurred from the CTC Computer System which indicated the eastward absolute signal at East Deer Creek was never lined for train 98K 04.

The only exception found by Signal Department personnel was the hood was not secured on the lower light unit. This condition is still under investigation to determine if the reflection from the sun could have [ends in mid-sentence]

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617	7/8/1999	IMRL	CTC			IMRL 8925	RHDR Circuit	Deer Creek, IA	N
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**Human Error - Signal Circuit Design Error, Inadequate Service-Testing**

On July 8, 1999 at approximately 13:53 hours, crew on eastward train M 232D 08 reported passing the eastward absolute signal at West Deer Creek displaying a CLEAR aspect when the next signal in advance at East Deer Creek was displaying a STOP aspect. At this time the power operated switch was lined reverse with a signal lined eastward out of the siding at East Deer Creek. The proper aspect for the eastward absolute signal at West Deer Creek at this time was APPROACH.

Signal Department personnel were immediately notified and arrived on the scene to promptly investigate this incident. Personnel duplicated the conditions that were reported at the time this incident occurred and determined this condition did occur as reported. With an eastward absolute signal lined out of the siding at East Deer Creek and an eastward signal lined down the main track at West Deer Creek, the eastward absolute signal at West Deer Creek would improperly display a CLEAR aspect.

This condition was caused by a circuit design error involving the RHDPR circuit at East Deer Creek which pole changes normal energy on the RHD line circuits. The RHDPR relay was designed to be energized when the RA or RB signal was lined at East Deer Creek. Corrections were made in the RHDPR circuit by checking the front contacts of the RAHR and NWPR relays before the RHDPR relay would be energized. Circuit changes were made and tests were completed at 0200 hours on July 9, 1999.

Signal Department personnel have determined that this condition has existed since 1979 when the CTC control points at Deer Creek were installed. Signal Department personnel have also checked all CTC control points on IMRL and have determined this design error does not exist at any other signal locations.

630	4/14/2000	IMRL	APB			IMRL 355	Stick Circuit	Kittredge, IL	N
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**Human Error - Signal Circuit Design Error, Inadequate Service-Testing**

On April 14, 2000, Engineer on train M264D14 reported the eastbound signal at East Kittredge as displaying an APPROACH aspect with westbound train ICHLB14 occupying the same block east of Kittredge. The proper aspect for the eastbound signal at East Kittredge at this time was Red.

Signal Department personnel were notified and immediately investigated this incident. Signal Department duplicated this incident and found stick relays energized at MP 114.8. This condition prevented the opposing east bound signals to tumble back to Kittredge when train ICHLB14 passed Adeline.

Signal personnel released the stick circuits and performed the appropriate tests. Subsequent to tests, signal system was returned to operation at 22:52 hours on April 14, 2000.

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			<b>Cause</b>							
			<b>Narrative</b>							
631	5/2/2000	IMRL	APB			UP 9730	None	Byron, Illinois	N	
			<b>Scenario Reenacted, Unable to Duplicate, No Defects Found</b>							
			On May 2, 2000, Engineer on westbound train ICHLB 02 reported that while operating on Red signals and after passing eastbound signal 891 he looked toward the rear of his train and observed signal 891 displaying a CLEAR aspect. The Engineer reported that his train was occupying the block for signal 891 when the CLEAR aspect was observed. The proper aspect for signal 891, at this time, was Red.							
			Signal Department personnel were notified at 10:00 PM and immediately began a complete investigation of this incident. Personnel tested relays, meggered cables, and inspected signal light wires and the pole line. Attempts were also made to recreate this incident by shunting tracks and with actual train movements. Signal would not clear until shunts or train was completely by signal 891. Subsequent to tests, signal system was functioning as intended and returned to service at 04:40 AM on May 3, 2000. Signal Department personnel were unable to duplicate this alleged false proceed report.							
637	6/26/2000	IMRL	CTC			IMRL 105	None	Ipsco, Iowa	N	
			<b>Scenario Reenacted, Unable to Duplicate, No Defects Found</b>							
			On June 26, 2000 at approximately 23:06 hours, crew on train L82726 reported observing eastward absolute signal 1E at Ipsco displaying a CLEAR aspect when lined into the pocket track with cars setout in the pocket track. The proper aspect for signal 1E at Ipsco at this time was Lunar.							
			Signal Department personnel were immediately notified and arrived on the scene to promptly investigate this incident. Personnel duplicated the conditions as reported by lining signals and shunting tracks which resulted in signal 1E displaying a Lunar aspect as intended. Personnel then reviewed the VHLC data log which verified that signal 1E displayed a Lunar aspect for train L82726 which was the proper aspect. Signal Department personnel were unable to duplicate a CLEAR aspect as reported. Subsequent to tests, signal system was returned to service.							
664	5/9/2001	IMRL	APB			IMRL 358	None	Savanna, IL	N	
			<b>Scenario Reenacted, Unable to Duplicate, No Defects Found</b>							
			On May 9, 2001, Engineer on train I 111B 07 reported that while proceeding eastward on No. 2 Track to run around train occupying the Main Track, both eastward signals at Plum (No. 2 Track and Main Track signals) displayed CLEAR aspects simultaneously. At this time the proper aspect for the eastward signal governing movement on the Main Track was CLEAR and the eastward signal governing movement on No. 2 Track should have displayed a Red.							
			Signal Department personnel immediately investigated this incident and determined the signal system functioned as intended. Personnel meggered all underground cables, tested relays, performed ground tests, performed switch tests, performed fouling tests and tested searchlight signals. Personnel also performed operating tests multiple times to recreate this incident. Subsequent to tests, signal system functioned as intended.							

Report #	Date	Reporting Carrier	Block System	Interlocking System	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?	
			Cause							
			Narrative							
686	12/27/2001	IMRL	APB			MRL 265	None	Savanna, IL	N	
			Insufficient Information in Report to Assign Cause							
			See attached [nothing attached].							

No. of Reports Shown in this Listing: 7