



IronWood Technologies

Railroad Accident Reconstruction

Federal Railroad Administration

False Proceed Signal Database

January 1, 1995 through May 3, 2004

All Reports - Cause: Failed Equipment or Device - PSO Coupler

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
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361	11/29/2002	NS	CTC			NS 9361	PSO Coupler	Bellevue, OH	N
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On November 29, 2002 at 9:15 p.m., train LB 28, lead unit NS 9361, while approaching the eastbound signal at Bragg Rd., MP B-246, observed signal to be RESTRICTING. When train LB 28 was seven (7) car lengths from the signal, it upgraded to an APPROACH for less than a second, then dropped to STOP. Train was stopped four (4) car lengths from the signal. Train 403 was proceeding east in the block ahead of LB 28.

C&S investigation determined that a Phase Shift Overlay (PSO) rail to line coupler was discharging enough voltage on the signal control line circuit to energize the R222 HD relay causing the signal to display an APPROACH signal for a second and cancelling the stick circuit causing signal to drop to STOP. The phase shift overlay is superimposed on the signal control line wire and the coupler discharged into the relay after the track circuit was energized. This overlay circuit was not in service at this time.

Manufacturer is testing coupler and their use in this application. The PSO will be moved to spare wires and vendor is reviewing its application.

No. of Reports Shown in this Listing: 1