



Report #	Date	Reporting Carrier	Block System	Interlockin	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
55	1/29/1996	BNSF	CTC			P-CHLA1-29	Engin FR-2	Edelstein, IL	N
<p>Westbound Train P-CHLA1-29 reported passing Signal 1361 displaying a Green aspect and next signal, westbound control signal at Edelstein, was Dark over Red. Maintainer and Inspector found the FR-2, the device that supplies lamp voltage, was partially failing, causing the top lamp on the westbound control signal to be very dim, but enough current to hold the light out relay. The defective FR-2 was replaced, the light out relay tested for proper operation and signal system tested.</p>									
67	6/21/1996	BNSF	CTC			CFWSX 320	Engin FR-2	W.E. Landes, TX	N
<p>The CFWSX entered the east end of the siding at Landes on a DIVERGING CLEAR aspect traveling westbound. The next signal encountered at the west end of Landes was dark. The signal was dark due to a bad order FR-2. The FR-2 wouldn't light the signal but allowed enough current flow to keep the light check relay energized. A new FR-2 was installed, tested and left working OK.</p>									
108	1/16/1997	BNSF	CTC			Q-BHSH1-15	FR-2 Module	E.E.Clearcreek, TX	N
<p>Westbound train Q-BHSH1-15, Eng 7068, reported APPROACH signal 4611 displaying a Flashing Yellow aspect and WB control signal at the east end of Clearcreek, MP-448.9 of the Panhandle Subdivision, Oklahoma Division, displaying a Red over Dark aspect with the signal cleared into the siding over a reverse switch.</p> <p>The incident was investigated by Supervisor of Signals, Signal Inspector. And Signal Maintainer. The reported condition was reproduced by making the same lineup, subsequent investigation revealed that the Electro Pneumatic Corporation (Harmon) FR-2, Revision "B," current regulated solid state flasher, was outputting 500mA at 0.95 VDC to the LB lamp which was enough current to energize the LBCR, a DN-22L, 0.8 ohm light check relay, but not enough to produce a visible light aspect.</p> <p>The FR-2 Rev. "B" module was replaced with a FR-2 Rev. "C" module and the circuit tested for proper operation.</p> <p>BNSF is in the process of upgrading all FR-2 modules to Revision "C."</p>									

No. of Reports Shown in this Listing: 3