



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 - Lightning Arrestors, Shorted

Report #	Date	Reporting Carrier	Block System	Interlocking	Auto. Systems	Loco or Train No.	Device that Failed	Location	Collision or Derailment?
			Narrative						
75	11/16/1996	BNSF	CTC			Suburban 1268	Lightning Arrestors	Westmont, IL	N
<p>Suburban train 1268 reported signal 319.6 went from Red, to Yellow, to Green and then back to Red while train 1294 was east of the signal. Signal Supervisor found shorted lightning arrestors on Track Isolation Units. While the last set of trucks in train 1294 were in the stagger of the insulated joints and with the two shorted lightning arrestors, the insulated joints were in effect bypassed. This allowed the track relay on the east side of the insulated joints to be energized by the track battery on the west side of the joints until the last set of trucks were east of the effective insulated joint, at which time the track relay was again de-energized. This allowed the signal to momentarily go to Yellow, Green and then back to Red. The defective lightning arrestors were removed and the circuits tested for proper operation.</p>									
194	5/5/1998	NS	CTC			6626-8947	Arrestor	Carbo, VA	N
<p>Train No. J62U705, operating the two units as a pusher, had entered the CV main off the west leg of the wye at Carbo on signal indication. After he moved from unit 8947 to unit 6626 to change direction, the Engineer observed he had an APPROACH DIVERGING for his eastbound movement at Carbo. Shortly after he started his eastbound move, the CV dispatcher contacted him giving him permission to pass the next signal into the siding at Mill Creek and couple to train No. 572. When the Engineer told the Dispatcher that his last signal displayed APPROACH DIVERGING instead of APPROACH, the dispatcher had him stop his train and then called signal personnel to investigate.</p> <p>Signal personnel arrived and had train No. J62U705 back west of the signal at Carbo. They then had the dispatcher set up the same scenario and were able to see the false proceed about five minutes later. Investigation revealed that there were three badly burned lightning arrestors in a pole mounted junction box at Carbo. Each of these arrestors was partially grounding the circuit to which it was attached. One was on the BP circuit which had 12 VDC on it at the time. The positive side of the BD relay for the eastward signal was also grounded by one of these arrestors and had 5.2 volts on it which was found to be coming from the BP circuit ground. The arrestors were replaced and the signal system tested for proper operation before being returned to service.</p> <p>A recent lightning storm had likely caused the multiple ground condition by severely burning these three arrestors.</p>									

No. of Reports Shown in this Listing: 2