

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

REPORT FOR (month/year)

September 1995

DATE 10 AM 8:45
September 12, 1995

REPORTING CARRIER
Northern Indiana Commuter
Transportation District

All railroads subject to Regulations of the Federal Railroad Administration shall submit a false proceed signal report, original only, to the Federal Railroad Administration within fifteen days after a false proceed signal occurs. Copies of this form will be furnished upon request to the Department of Transportation, Federal Railroad Administration, Office of Safety, Washington, D.C. 20590

MAIL TO

Director of Railroad Safety
Region 4
Federal Railroad Administration
111 N. Canal Street, Suite 655
Chicago, IL 60606

REPORTING OFFICER (signature and title)

Chief, Electrical Engineer

A failure should not be counted more than one time in items 1, 2, 3, and 4; the failure should be classified under the basic system or appliance of which it forms an essential part. E.g.: assume grounds cause a block signal to indicate a false proceed or issuing corresponding indications of a cab signal system on each train approaching this point, such failures should be included in item 1, Block Systems.

A false proceed failure is a failure of a system, device or appliance to indicate or function as intended which results in less restriction than intended.

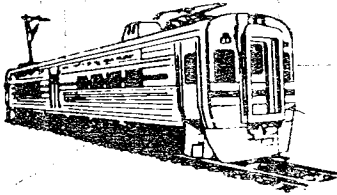
The following abbreviations may be used in the report.

- A-Automatic
- AB-Automatic Block
- ACS-Automatic Cab Signal
- APB-Absolute Permissive Block
- ATC-Automatic Train Control
- ATS-Automatic Train Stop
- CL-Color Light
- CPL-Color Position Light
- E-Electric
- EM-Electromechanical
- EP-Electropneumatic
- FP-False Proceed
- MB-Manual Block
- M-Mechanical
- P-Pneumatic
- PL-Position Light
- SA-Semiautomatic
- TC-Traffic control

TYPE OF SYSTEM	DATE	LOCOMOTIVE NUMBER	DEVICE THAT FAILED	LOCATION (city and state)
1 BLOCK SYSTEMS <input type="checkbox"/> AB <input checked="" type="checkbox"/> APB <input type="checkbox"/> TC	9/5/95	2004	Track Circuit	Porter, IN
2 INTERLOCKING <input type="checkbox"/> REMOTE <input type="checkbox"/> MANUAL <input type="checkbox"/> AUTOMATIC				
3 AUTOMATIC SYSTEMS <input type="checkbox"/> ATS <input type="checkbox"/> ATC <input type="checkbox"/> ACS				
4 OTHER (specify)				

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

See attached report.



Northern Indiana Commuter Transportation District

601 NORTH ROESKE AVENUE (219) 874-4221
MICHIGAN CITY, INDIANA 46360-2669

REPORT ON FALSE PROCEED INDICATION AT EAST END OF WILSON PASSING TRACK AND WEST END OF NORTH BAILLY SIDING

September 12, 1995

NICTD Signal maintainer was called out on the morning of September 5, 1995 to locate and repair the source of **restrictive** signal indications between and including the opposing head block signals located at the east end of Wilson passing track and at the east end of Bailly siding. It was later learned that the restrictive indications were the result of an insulated joint short-circuited by damaged rail at the fouling circuit where the west end of North Bailly siding meets the main track.

The signal maintainer was unaware of the shorted insulated joint when he discovered that track relay A472 was de-energized at the cut section at the west end of North Bailly. In an effort to locate the source of failure, the signal maintainer made the usual checks of the track circuit including the relay, the transformer, fuses, rail, and bonds. However, the cause of failure was not apparent.

With the knowledge that no scheduled trains were forthcoming and that extra freight train #2005 was expected to enter the main track from North Bailly siding, the maintainer decided to temporarily exchange the track connections on track relay A472 to isolate the source of trouble. This change placed track relay A472 in phase with (at the same instantaneous polarity of) 472 track transformer located immediately east of the insulated joints. Track relay A472 energized as a result of this test.

As freight extra #2005 entered the mainline and proceeded west through track circuit A472, the maintainer observed that track relay A472 released but re-energized as the train neared the west end of track circuit A472. Consequently, the maintainer immediately restored the track relay connections to their original configuration.

False Proceed of
September 5, 1995
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The activities described above caused the eastward head block signal at the east end of Wilson passing track to momentarily display a proceed indication. This indication was observed and reported by a high-rail track inspector waiting for a meet with freight extra #2005. Simultaneously, a momentary clear indication was also observed at the dwarf signal at the west end of North Bailly siding and reported by the crew of freight extra #2004. However, the responsibilities of train #2004 did not require movement out of North Bailly at that time. Hence, the signal was not passed.

After the maintainer returned track circuit A472T to it's original configuration, track relay A472 would not re-energize because of the shorted insulated joint. Subsequently, the failed joint was discovered and replaced along with the damaged rail in North Bailly siding. Insulated joint and shunt tests were performed to check the vitality of the adjacent track circuits.

The maintainer was instructed that the troubleshooting procedure employed in this case was an unsafe practice. Maintenance practices, both good and poor, will continue to be the subject of ongoing maintainer training.