

T. MASKE
S+TC

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

REPORT FOR (month/year)

July 1996

FALSE PROCEED SIGNAL REPORT

DATE

July 26, 1996

GH 8/15/96

REPORTING CARRIER (railroad & region or division)

Norfolk Southern Corporation
Division - Lake

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 five days after a false proceed occurs. If no false proceed occurs during any calendar month, a report showing "No Failures" must be filed within ten days after the end of the month.
Copies of this form will be furnished upon request to the Department of Transportation, Federal Railroad Administration, Office of Safety, Washington, D.C. 20590

REPORTING OFFICER (signature/title)

Chief Engineer - Western Region
Communications & Signal Dept.

MAIL TO

Federal Railroad Admin.
Suite 440, North Tower
1720 Peachtree Rd., NW
Atlanta, GA. 30309

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 causing 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 type="checkbox"/> APB <input checked="" type="checkbox"/> TC	7/22/96	2822	n/a	Peru, IN
² INTERLOCKING <input type="checkbox"/> REMOTE <input type="checkbox"/> MANUAL <input type="checkbox"/> AUTO-MATIC				DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION RECEIVED JUL 30 1996
³ AUTOMATIC SYSTEMS <input type="checkbox"/> ATS <input type="checkbox"/> ATC <input type="checkbox"/> ACS				
⁴ OTHER (specify)				ATLANTA, GEORGIA

NATURE AND CAUSE OF FAILURE/CORRECTIVE ACTION TAKEN

At approximately 1:57 PM, Train No. 068, Road Foreman Engines, Engineer, Conductor, was traveling eastbound when each member of the crew called the eastward signal ahead at milepost D-197.3 clear. About one minute later they saw that this signal was red over red and were able to stop short of the signal. They reported to the dispatcher that the signal fell in front of them. The dispatcher then lined the signal up for their move, and No. 068 proceeded on signal indication after inspecting their train.

The dispatcher had not lined the signal for No. 068 at the time they reported they had first seen it (verified later with recordings) so he called signal personnel to report a possible false clear. Signal personnel arrived and could not duplicate the incident. All appropriate signal tests were performed with no exceptions taken and the signal itself appeared to have no physical defects. A phantom signal was suspected but could not be checked until the sun conditions were right. The signal was placed back in service with instructions that it not be cleared east until eastbound trains had reported they were stopped at the signal.

The next day at the same time and with the same engine and road foreman engines, an attempt was made to recreate the incident. The engine approached the signal (at stop) from the west with instructions to the crew to call out the signal indication as soon as they could interpret the aspect. Two crew members called a clear two miles from the signal. The third crew member called a clear 1 1/2 miles from the signal. The engine was stopped at the 1 1/2 mile point where the all three were in agreement that it was a clear indication. The signal maintainer right at the signal location confirmed that the signal was displaying red over red and throughout the test. Signal personnel on the engine agreed that they saw glimmering green light. As the engine was moved toward the signal a red over red aspect was seen by all personnel at about one mile from the signal. The bright green had faded to become a dark green spot above the signal. As the engine neared the signal it was noticed that the green spot was the sun shining on the leafy limbs of a sumac tree located 40 yards behind the signal and about 15 yards off the south rail. Based on this test it was determined that the crew had seen a phantom signal produced by sun reflection off the tree leaves. The tree was cut down and the signal returned to normal service after confirming that the phantom no longer was seen.