

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000



C³RS Alert Message Memo

The Confidential Close Call Reporting System (C³RS) is a partnership between the National Aeronautics and Space Administration (NASA) and the Federal Railroad Administration (FRA), in conjunction with participating railroad carriers and labor organizations. The program is designed to improve railroad safety by collecting and analyzing reports which describe unsafe conditions and events in the railroad industry. Employees are encouraged to report safety issues or "close calls" voluntarily and confidentially.

When C³RS receives a report(s) describing a hazardous situation - for example, a railroad system problem, a confusing procedure, or any other circumstance that might compromise safe operations - it will issue an Alert Message. Alert Messages have a single purpose: to relay safety information to individuals in a position of authority so that they can evaluate the safety information and take corrective action as needed. C³RS has no direct operational authority of its own. It acts through, and with, the cooperation of others. Alert Messages are classified as Alert Bulletins or For Your Information Notices and may be included in ad hoc C³RS Safety Teleconferences.

Alert Bulletins – Alert Bulletins (ABs) are utilized for significant or time-critical safety Issues.

For Your Information Notices – For less critical topics, For Your Information (FYI) Notices are issued.

Safety Teleconferences – C³RS will conduct Safety Teleconferences on an ad hoc basis between C³RS and others within the railroad community. These teleconferences alert appropriate personnel to safety issues identified in some selected C³RS Alert Messages by engaging in dialogue about the event(s) presented.

All Alert Messages are issued using de-identified information provided in the reports.

Sincerely,

A handwritten signature in cursive script that reads "Becky L. Hooy".

Becky L. Hooy, Director
NASA Confidential Close Call Reporting System
NASA Aviation Safety Reporting System
Email: Becky.L.Hooy@nasa.gov
Phone: 408.541.2854

About C³RS Reports & Alert Messages

C³RS Report Records

The C³RS Expert Analysts provide the analysis for each report record in the C³RS Database. Information in a C³RS report record includes two types of information – fixed and text.

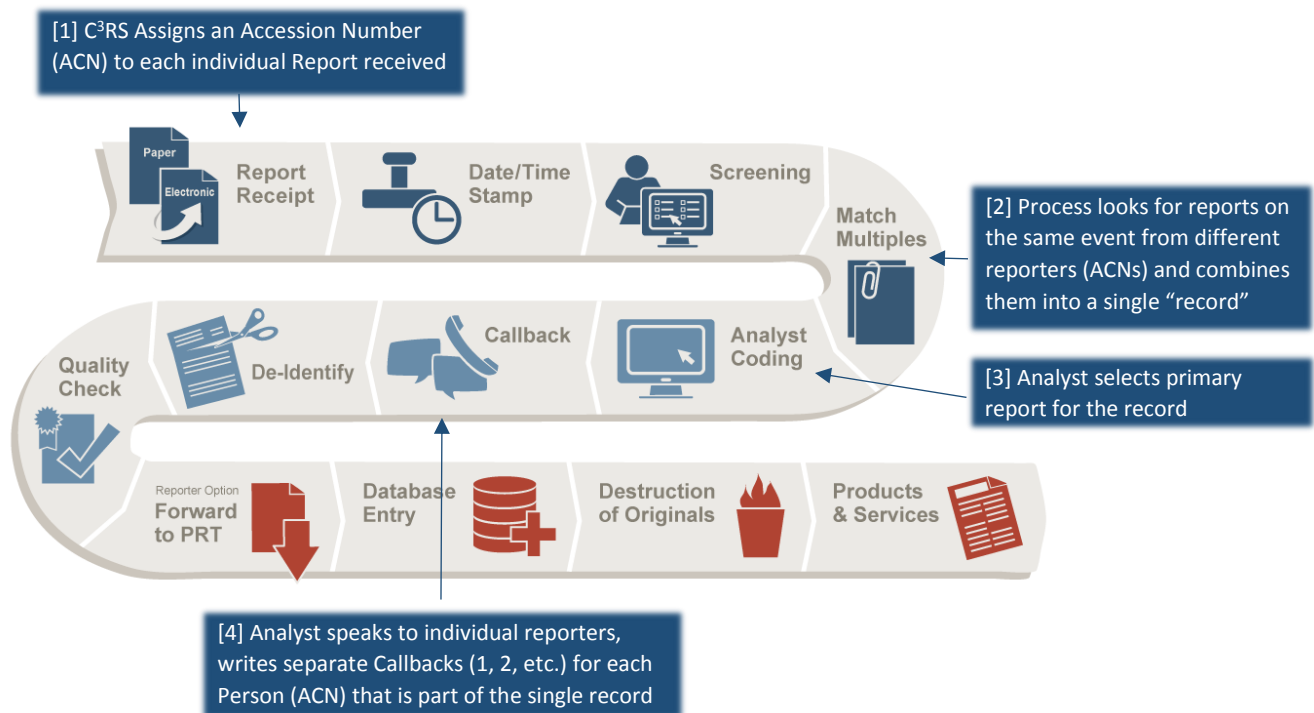
- **Fixed** fields contain information such as Types of Track Authority, Method of Operations, Speed Restrictions, etc.
- **Text** fields include the reporter's Narrative, Callback and Expert Analyst Synopsis.

Multiple Reports

One of the great strengths of C³RS is the ability to combine information from multiple reports on the same event that provides each person's unique perspective, experience, background and knowledge. In a hypothetical example, a train arrives at a station with one or more of the cars off the platform and one of the crew opens the door. Reports may be received from the Engineer, the Conductor, and the Assistant Conductor; all who have been involved in or observed the event. In this example, C³RS could have three reports that describe the same incident. All reports are combined into a single database record. Each person who reported is coded in the report record by reference number (PERSON 1, 2, etc.). Every report to C³RS receives a unique Accession Number (ACN). Each person's narrative is entered as NARRATIVE 1, 2, etc. The C³RS Expert Analysts may perform a telephone Callback to clarify or confirm information. A summary of the Callback is written by the analysts and included in the CALLBACK 1, 2, etc. section of the report record.

Alert Messages (Alert Bulletin & FYI Notices)

The ACN number presented on the Alert Message is the primary ACN in the single or multiple report record. Each Alert Message includes a front-page introduction and relevant report records. See the graphic below for a summary of the matching and C³RS report record processing steps.



4/16/2021

FOR YOUR INFORMATION

2021-1/2-1

21797, 21827

To: FRA-RRS

Info: FRA-RCC, PRT, AAR, APTA, ARASA, ASLRRA, ATDA, BLET, BMWED, BRS, IAMAW, IBEW, NRC, NTSB, NYA, SLSI, SMART, TCU, VOLPE

From: Becky L. Hooey, Director
NASA Confidential Close Call Reporting System

Re: Ground Power Cables Remain Plugged in After Equipment is Released

We recently received an C³RS report describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

C³RS has received multiple reports related to trains released by the Mechanical Department while still connected to ground power. The following reports illustrates the concern.

(ACN 21797) An Engineer reported getting on equipment in a mechanical facility that was still plugged into ground power after it was released to the crew and blue flag protection dropped.

(ACN 21827) An Engineer reported equipment remained plugged into ground power after it was released by the Mechanical Department. A Mechanical Employee re-established Blue Flag Protection to remove the cable.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Becky Hooey at (408) 541-2854 or email at Becky.L.Hooey@nasa.gov



Confidential Close Call Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189



ACN 21797

DATE / TIME

Date of Occurrence 2021-02
Local Time Of Day 0601 - 1200

ENVIRONMENT

Weather Clear

TRAIN / EQUIPMENT A

Operation Type Yard Assignment
Train / Equipment Location Yard
Methods Of Operation Other Than Main Track Rules
Train Activity at Time of Event Switching In Yard

PERSON 1

Accession Number 21797
Function Engineer

EVENTS

Anomaly Encounter - Cables / Chains
Anomaly Procedural Deviation - Operations Policy
Anomaly Procedural Deviation - Mechanical Regulations
Anomaly Procedural Deviation - Company / Organizational Policy
Anomaly Safety Concern
Detected by Person Train Crew
General Result Requested Assistance / Clarification

NARRATIVE 1

My Conductor and I went to take our scheduled move of Equipment. This train was on [a] Track at [the] Yard. Lately, the Mechanical Department has been plugging trains in on this track to ground power. We do not get notified of this and are expected to check ourselves. I went to [the] control car and my Conductor went back to locomotive to do brake test. After a few minutes, I called him on the radio and he said, "Don't move, the train is still plugged in." I then had a [discussion with] the Mechanical Foreman for once again giving us a train that was still plugged in and ready, so to speak. We have made several requests to the Carrier to simply have another tagging system that says "On Ground Power". They have refused and said it's our job to check the equipment. Also, the position of the Mechanical Department is that a train cannot be blue flagged unless work is being performed, but they can have it plugged in and say the train is good to go. Simply leaving the blue flag on when a train is plugged in would also work, but that is too easy. This is a potential disaster if we were to drag a cable or rip down ground power unit. [A] dragging cable could hit someone, cause a derailment, or tear up an interlocking switch. Depending on damage amounts, [it] could bring a decertification to the train crew. This is such a simple, minimal cost at best for the company to resolve.

CALLBACK 1

The reporter, an Engineer, advised this is a regular problem that happens approximately three to four times a week. Mechanical Forces shut down locomotives and plug the trains into ground power to keep the cars warm. In warmer months, they are plugged in to keep the cars cooled. Shutting down the locomotives is a fuel saving initiative. The time from when Blue Flag Protection is dropped to when the crews are given permission to pull the equipment, can range from three to four hours or as much as six to seven hours. The reporter suggested that the blue flags remain on the equipment if it is still plugged into ground power, but has been

advised that the blue flags will only be applied when the equipment is being worked. The reporter explained that it is the train crew's responsibility to check for cables and, if found, they are to call an Electrician to remove the heavy cables from the train. The Electrician has to establish Blue Flag Protection for removal of the cables. As a suggested corrective action, the reporter said a system where tags are left on the head end's power panel when trains are left on ground power might be helpful. The reporter noted that implementing a tagging system could prevent similar events.

SYNOPSIS

An Engineer reported getting on equipment in a mechanical facility that was still plugged into ground power after it was released to the crew and blue flag protection dropped.

ACN 21827

DATE / TIME

Date of Occurrence	2021-03
Local Time Of Day	0601 - 1200

ENVIRONMENT

Weather	Rain
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TRAIN / EQUIPMENT A

Operation Type	Passenger / Commuter
Operation Type	Push / Pull - Passenger
Train / Equipment Location	Yard
Methods Of Operation	Other Than Main Track Rules
Train Activity at Time of Event	Held

PERSON 1

Accession Number	21827
Function	Engineer

EVENTS

Anomaly	Encounter - Cables / Chains
Anomaly	Encounter - Protection
Anomaly	On Track Protection Deviation - Manual Protection
Anomaly	Procedural Deviation - Operations Policy
Anomaly	Procedural Deviation - Mechanical Regulations
Anomaly	Procedural Deviation - Company / Organizational Policy
Anomaly	Safety Concern
Detected by Person	Train Crew
General Result	Requested Assistance / Clarification
Transportation Result	Returned To Compliance

NARRATIVE 1

Arrived at [the] Track to take equipment to [the] Station and realized the equipment was still plugged in. There were no blue flags or anything indicating that the equipment was still plugged in. We called the Mechanical Foreman and advised [the] equipment [was] still plugged in. A Mechanical Employee then came out and put the derail and blue flag up, [then] went on the equipment and blue flagged it. This has been happening a lot lately; it's an accident waiting to happen.

CALLBACK 1

Unable to contact the reporter, an Engineer.

SYNOPSIS

An Engineer reported equipment remained plugged into ground power after it was released by the Mechanical Department. A Mechanical Employee re-established Blue Flag Protection to remove the cable.