

CIL09SV01-003
Rev. B
01-10-92

Critical Item: Halon Control Panel

Kind Number: HCF

Criticality Category: 15

<u>SAA No:</u>	09SV01-005	<u>System/Area:</u>	Halon 1301/PTCR Pad B
<u>NASA Part No:</u>	PT-PE1-002 LRF61002	<u>PMN/ Name:</u>	K61-0711-02
<u>Mfg/ Part No:</u>	System Service with Pyrotronic Components	<u>Drawing/ Sheet No:</u>	68-DE-FAC-271/59V, 59W

Function: Receives electrical signal from detectors and energizes dedicated relays to provide early warning, personnel warnings, Halon release, and damper closure.

Critical Failure Mode: Fails to operate, FH09SV01-005.007

Cause: Electrical: Switches fail open; relays fail open; detector panel (CSR-2) fails open; fuses fail open.

Failure Effect: Halon would not be released and/or dampers would not close which could allow a fire to spread in the PTCR Room 209/210. Possible loss of life and vehicle during a hazardous condition.
Time to Effect: Immediately

Acceptance Rationale

Design:

- o The panel conforms to the requirements of NFPA72D for Class B initiating device circuits and the applicable requirements of NFPA 70.
- o This panel is located in a sheltered, air conditioned room.

Test:

- o File VI OMRSD 81K01973 requires an annual test.

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Inspection:

- o The PHI/OMI requires a quarterly inspection of the panel and contents for physical damage, corrosion or other deterioration.

Operational Use:

- o None, response to Pad B PTCR by Fire Services Personnel:
 1. During normal Pad operation (routine operation/maintenance personnel present), Fire Services Personnel will respond within 2-9 minutes after notification from the Protective System Control Center (PSCC).
 2. During hazardous operations at the Pad (access limited to essential personnel only), response time after notification of a fire in the PTCR area would be 2-9 minutes. Fire Services Personnel will be on-site or in near proximity during all hazardous operations.
 3. During terminal launch operations pad lock out (no operation/maintenance personnel present), response time after notification of a fire in the PTCR area is expected to typically be within 20 minutes by the red crew.

Failure History:

- o No KSC FRACA history of failure in the critical failure mode.
- o No GIDEP ALERTs were reported against this part number.