

CILO9SV01-002
REV. A
July 24, 1990

Critical Item: Halon Control Panel

Find Number: 2

Criticality Category: 19

SAI No: 093V01-006

System/Area: Halon 1301/PTCR Pad A

NASA Part No: PT-F61-002
LSP61002.

PMI/Name: K61-0712-01

Mfg/Part No: SYSTEM SERVICE WITH
PYROTRONICS COMPONENTS

Drawing/Sheet No: 68 DE PAC 271
52, 58

Function: Receives electrical signal from detectors and energizes dedicated relays to perform early warning, personnel warnings, and halon release. Can operate in automatic or manual mode.

Critical Failure Mode: Fails to operate, FMO9SV01-006.006

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

Failure Effect: Loss of fire detection, alarms, remote reporting, and halon release which could allow a fire to spread in 209/210. Possible loss of life or damage/loss of a Space Shuttle Vehicle.

Acceptance Rationale

Design:

This panel conforms to the requirements of NFPA 72 D for Class B initiating device circuits and the applicable requirements of NFPA 70.

Test:

- o File VI OMSD requires an annual test.

Inspection:

- o PMI/OMI shall require a complete inspection of the MCP and components for corrosion or other deterioration quarterly.

Operational Use:

- o Name, response to Pad A PTCR by Fire Services Personnel:
 1. During normal Pad operation (routine operation/maintenance personnel present), Fire Services Personnel will respond within 2-5 minutes after notification from LOC Room 1P10.

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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 post-launch operations (no operation/maintenance personnel present), response time after notification of a fire in the PTCR area is expected to typically be within 20 minutes.

Failure History:

- o No KSC PRACA history of failure in the critical failure.
- o No QIDEP ALERTs were reported.
- o No Trouble Tickets were reported.