

USA Ground Operations CIL Sheet

DEC 15 1999

Critical Item: Valve, Check

Criticality Category: 1S

NASA Part No: None

Total Quantity: 2

Mfg/Part No: Stockham / G-931

System: Deluge Fire Extinguishing System

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
VN-S01-012	1	VAB	K61-277B	387.00	80K50291 / 5
VN-S01-019	1	VAB	K61-277B	387.00	80K50291 / 5

Function:

Prevents water supplied by Utility Annex fire pumps from flowing into the output lines of the fire water storage tanks.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY33R-001.001 Fail closed	Corrosion, contamination, or failure of internal piece part. Loss of 25th floor storage tank capability to provide fire water supply to VAB low zone sprinkler systems and hose racks. Loss of 40th floor storage tank capability to supply fire water to VAB high zone sprinkler systems and hose racks above 16th floor and low bay roof hose reels. Unable to detect need to start fire pump(s) to provide additional fire deluge water supply. Possibility of loss of life and/or vehicle during a hazardous situation.	None Immediate	1S

ACCEPTANCE RATIONALE

Design:

- Cast iron body
- Bolted cap
- Full waterway
- Metal to metal seat
- Brass Hinge Pin
- Bronze Disc Ring

Test:

- OMI M6135 performs weekly, monthly, quarterly, semiannual and annual maintenance to ensure that the fire system is operational and performs as intended.
- OMI M2062 performs an annual validation which verifies the check valves are operational.
- OMRSD File VI requires annual verification of water flow.

Inspection:

- None

Failure History:

- Current data on test failures, unexplained anomalies, and other failures experienced during ground processing activities can be found in the PRACA database. The PRACA database was researched and no data was found on this component in the critical failure mode.

Operational Use:

Correcting Action	Timeframe
There is no action which can be taken to mitigate the failure effect.	Since no correcting action is available, timeframe does not apply.