

Cryogenic Propulsion DELTA - Processing Flow Summary Report

Flow: STS-107
System: MPS

Engineer: Tamara Alexander
Date: 1-7-03

OV: 102
ET: 93 (LWT)
MLP: 1
PAD: A

Significant Out-of-Family Issues

No new items.

PRACA Review

There has been one new PR (out of family) concerning MPS flight hardware since the STS-107 Flow Summary Report dated 12/6/02.

Out-of-Family Review:

All new out-of-family PRACA has been reviewed:

- MPS-2-28-1550 "PD17 LH2 Hi-Point Bleed QD Leak" (PITA #94231)

ITEM

GSE:

No new items.

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New Requirements

None.

Significant Software Changes

No new items.

SCAN (MPS only)

Previously reviewed.

Open Issues

- **BSTRA Ball Crack Found on OV-103**
(will be suspect PR MPS-2-28-1551)

During OV-103 OMDP inspections of the LO2 17-inch feedline, a crack was found on the BSTRA ball closest to the manifold. Subsequently, suspect PRs were taken out on the other vehicles. Inspections of the LO2 and LH2 17-inch feedline BSTRAs are complete on OV-103, OV-104 and OV-105. Inspections of the LO2 and LH2 engine feedlines are complete on OV-104 and in work on OV-103 and OV-105. No additional cracks have been found. With engines installed and the vehicle already mated to the ET, access is restricted for OV-102, therefore no inspections have been performed. The last time such inspections took place on OV-102 was during its last OMDP, prior to flight 27 (STS-109). The M&P and MPS communities are currently analyzing the problem and working towards generating flight rationale for STS-107.

Additional Information

- **PD17 LH2 Hi-Point Bleed QD Leak**
PR MPS-2-28-1550 (PITA #94231); was IPR 107V-0072 (PITA #94038, 94196)

During the PD17 LH2 Hi-Point Bleed QD leak check, a leak of about 100 scim was discovered. The seal was removed and replaced. Subsequent leak checks showed no further problems (0.0907 scim). PR closed.