

STS-109 POST LAUNCH PAD DEBRIS INSPECTION REPORT
KSC Debris Team
01 March 2002

The post launch inspection of the MLP-2, Pad A FSS, north flame trench, and Pad A apron was conducted on 01 March 2002 from Launch + 1.5 to 3.5 hours(0800 to 1000 EST).

No flight hardware was found.

Orbiter liftoff lateral acceleration data to predict stud hang-ups received from Boeing-Huntington Beach reported a value of 0.08G which indicated that no SRB holddown stud hang-up had occurred. Evaluation of the MLP 0-level was performed and the south holddown studs were visually assessed as having no indication of hang-up. Erosion was typical for both the north and south posts. North holddown post blast covers and T-0 umbilical exhibited nominal exhaust plume damage. Both SRB aft skirt GN2 purge lines were intact, protective tape layering was partially eroded on both the RH and LH sides.

The LO2 and LH2 Tail Service Masts (TSM) appeared undamaged with both bonnets observed to have closed properly. The MLP deck was generally in good shape. All MLP deck communication connector caps were found intact and secured.

The GH2 vent line latched on the eighth of eight teeth on the latching mechanism. The restraint 'catch' cable that had paint applied for indication of first contact point was in contact with the retracted line and witness mark could not be identified. The GUCP 7-inch quick disconnect probe was accessible for inspection and appeared to be undamaged with sealing surface in good shape. The deceleration cable was in nominal configuration, and the vent line blanket was sooted and torn. Film review should provide additional data for the assessment of vent line retract position.

The OAA appeared to be intact with no evidence of plume impingement. All slidewire baskets were secured with no evidence of damage.

The GOX vent arm, ducts and structure appeared to be in nominal shape with a broken ground strap at the GOX vent arm console. The GOX vent seals were inspected and found to be in good shape.

Debris findings included:

- FSS 115' level had one or two broken water lines (RSS side).
- FSS 175' level Regulator knob fell off panel 'GN2/GHE crossover panel #5'.

Overall damage to the pad appeared to be normal.

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