

STS-105 POST LAUNCH PAD DEBRIS INSPECTION REPORT
KSC Debris Team
10 August 2001

The post launch inspection of the MLP-3, Pad A FSS and RSS was conducted on 10 August 2001 from Launch + 2 to 3.5 hours(1900 to 2030 EST).

No flight hardware was found.

Orbiter liftoff lateral acceleration data to predict stud hang-ups received from Boeing-Huntington Beach indicated that no SRB holddown stud hang-up had occurred, the reported value was 0.138. 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 the north posts with some evidence of missing RTV at the HDP haunch interface. North holddown post blast covers and T-0 umbilical exhibited minimal exhaust plume damage. Both SRB aft skirt GN2 purge lines were intact, protective tape layering was partially eroded, the metal braid was visible only on the LH purge line.

The LO2 and LH2 Tail Service Masts (TSM) appeared undamaged and the LO2 bonnet was observed to have closed properly. The MLP deck was in generally good shape. A section of handrail on west side of the MLP deck was bent and had loose bolts. OTV-054 camera located on the east side of the MLP received extensive launch damage but no hardware missing was noticed. All MLP deck communication connector caps were found intact and secured.

The GH2 vent line latched in the eighth of eight teeth of the latching mechanism. The GUCP 7-inch QD sealing surface exhibited no damage. The deceleration cable was in nominal configuration, with the vent line blanket was sooted and in generally good condition.

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, hood, ducts and structure appeared to be in good shape with no indications of plume damage.

Debris findings included:

- A piece of twisted sheet metal 10 feet long by 18 inches wide was found near the box car area.
- An A/C duct clamp was found on deck grating at FSS 175 foot levels.

Overall, damage to the pad appeared to be minimal. Minimal debris was noted on pad apron and FSS.

Jorge Rivera NASA-KSC