

## **General Disclaimer**

### **One or more of the Following Statements may affect this Document**

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.



# Unbonded Thermal Blankets in Orbiter Aft Compartment

KSC Independent Assessment

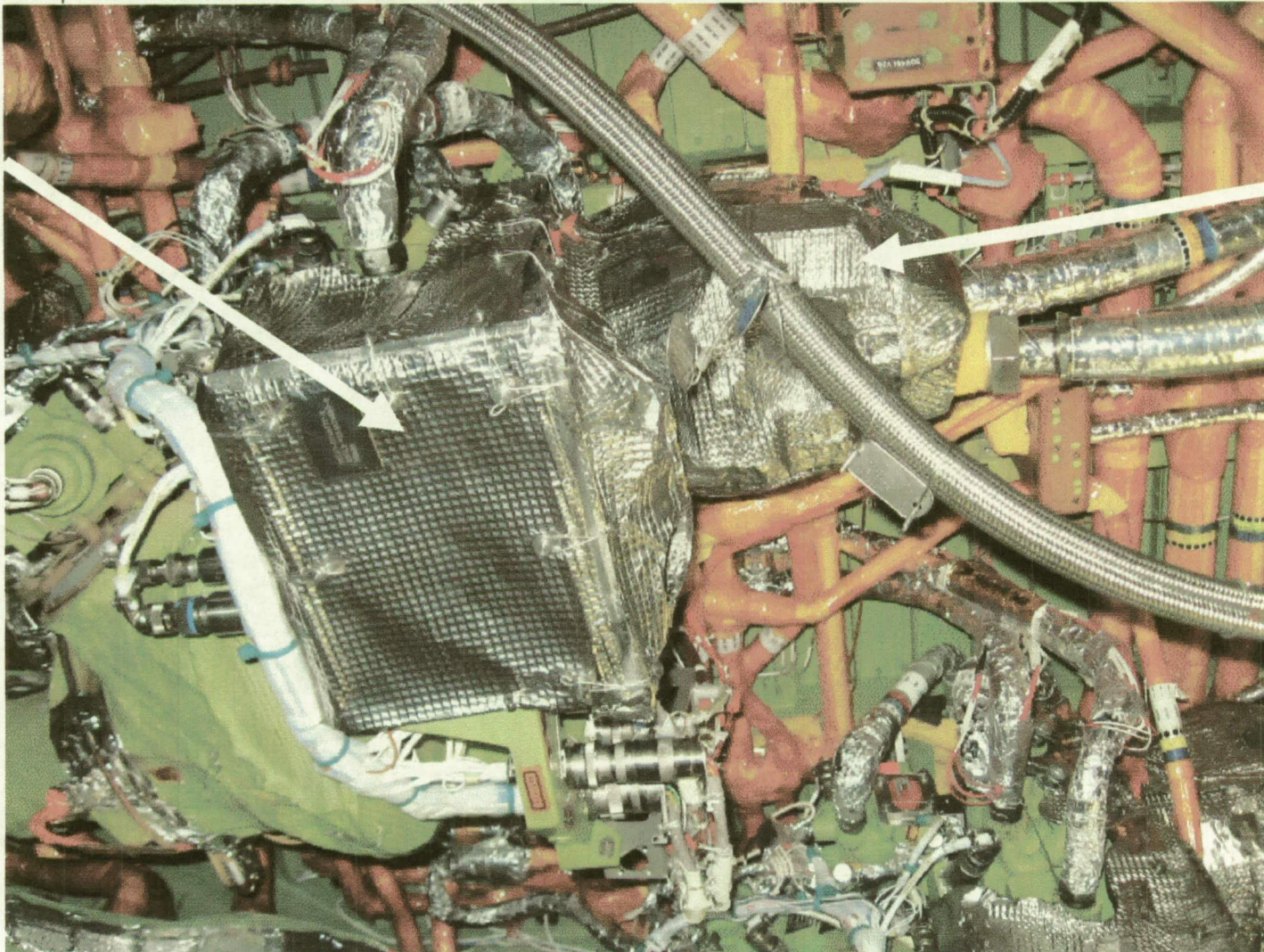
- The Independent Assessment team performed an assessment (KSC 7007) to investigate Electro-Static Discharge (ESD) concerns on thermal blankets on hydraulic and auxiliary power unit components
  - Focus on blankets for Auxiliary Power Units, Hydraulic components in Orbiter aft compartment, and Thrust Vector Control actuators
  - Concern is for ignition source in a potentially hazardous environment rather than damage to electronic components
- Boeing Specification MA0113-306 requires all components (including metallic blankets) to be bonded (grounded)
- Component Status
  - Hydraulic component blankets in aft compartment are bonded
  - Thrust Vector Control blankets are bonded now (Ref. SR3880 PRCB - 29 May 07)
  - Auxiliary Power Unit (APU) component blankets are not bonded
- Risk is very low (Improbable-Catastrophic)
  - Multiple (6-7) unlikely events required to produce catastrophic result
- Orbiter Project is reviewing need to bond APU blankets



# Component Blankets

KSC Independent Assessment

APU



Hydraulic  
Pump

STS-123 SMSR