

AMS CHANGE REQUEST/DIRECTIVE

1. CR/DIR Number: AMS-02 / D-051

2. Date: 03/12/2007

3. Change Title: Phase II Flight Safety Hazard Report Baseline - AMS-02-F05 (03/19/2007)

4. Cost Impact: _____

5. Document(s) Affected: JSC 49978, "Phase II Flight Safety Data Package for the Alpha Magnetic Spectrometer – 02 (AMS-02)"

6. Weight Impact:

7. Schedule Impact:

8. Other Impacts:

9. Description Of Change:

Baseline Hazard Report (HR) AMS-02-F05 has been modified to accommodate design detail updates for the TRD, including the deletion of control of 7.2 (cross flow pressure relief capability) as it has been found to no longer be applicable. Controls 7.3 and 7.4 were renumbered to reflect this change. A control has been added to address Cryosystem (Warm Helium Gas Supply) inability to meet the 1.5 proof requirement for all components. Additionally the possibility of excessive external pressure on the pilot valves of the Warm Helium Gas Supply was completed. A number of verifications were documented as closed. Revised schematics and pressure tables were provided for TRD, Warm helium, & TTCS. TTCS controls were updated to reflect current design of TTCS Accumulator and heats design. End of life evacuation is addressed as a control for the COPV. Minor editorial changes.

10. Justification:

HR AMS-02-F05, "Rupture of AMS-02 Pressurized Systems: TRD Gas System (Xe & CO2), Cryomagnet Warm Helium Gas System, Tracker Thermal Control System, Thermal Control Systems, Cryocooler" provides a complete description of the AMS-02 Payload hazard associated with pressure systems. This HR is a part of a detailed safety analysis of the AMS-02 payload and all its detectors and subsystems that is presented in the complete JSC 49978. The HR documents that the payload meets the requirements of the current version of NSTS 1700.7 and NSTS 1700.7 ISS Addendum, para. 301; and is required to be submitted as part of the SDP (JSC 49978) to the PSRP 45 days prior to the Phase II Flight Safety Review. This HR must be signed and approved by the AMS-02 Project Manager prior to submittal for PSRP Review.

11. Action Required (To Implement This Change):

AMS-02 CCB Approval and AMS-02 Project Manager must sign hazard report prior to submittal to PSRP prior to April 05, 2007

12. Initiator/Organization: Leland Hill/ESCG

13. Organization Approval: EA

14. Disposition:

- Deferred
- Approved
- Approved With Changes Indicated
- Disapproved

15. Approval: _____

CCB Chairman/Date

[Signature]
3/19/07

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EVALUATOR LIST

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