From: Guidry, Richard W. (JSC-NE)
Sent: Wednesday, May 28, 2008 12:13 AM
To: Martin, Trent D. (JSC-EA321)
Cc: Leland Hill (leland.hill@escg.jacobs.com); Tutt, John C. (JSC-EA2)[ESCG]; Fohey, Michael F. (JSC-EA3)[ESCG]; Chavez, Kimberly R. (JSC-NE)[GHG]; Mensingh, Paul A. (JSC-NE)[GHG]; Rehm, Raymond B. (JSC-NE)[GHG]; Santiago, Darren M. (JSC-NE)[GHG]; Moreland, Dean (JSC-NE); Mitchell, Patrick L. (JSC-NE); Wolf, Scott L. (JSC-OE); Surber, Michael R. (JSC-OE); Henning, Gary (JSC-EA45)[ESCG]; Kunkel, Steven R. (JSC-MO2)
Subject: RE: AMS Question concerning MLI attachment

Hi Trent,

Re: the subject topic on the suspected prohibition of hook and look fasteners for MLI/thermal blanket retention as noted in your correspondence "EA3-08-047", dated April 21, 2008, and specifically the statement below (excerpted from your memo):

"This control was included because it was understood by the project to be a standard safety control imposed by the PSRP, as confirmed by the panel during the review",

And:

"The project seeks to clarify whether there is in fact a requirement for providing a positive structural retention of thermal blankets and MLI",

Although positive structural retention methods are recommended (and hook and loop fasteners alone discouraged due to the large wide range of variability in the capability (due to different people applying velcro differently)), **I've found no specific payload safety requirement from the safety community and/or STS/ISS programs that disallows the use of hook and loop fasteners for payload MLI/thermal blanket retention within the shuttle payload bay.** (This was also confirmed today after consultation with fellow senior safety panel executive officers, Mr. Dean Moreland and Mr. Patrick Mitchell).

With the lack of a firm safety requirement to force a configuration change to your certified, ISS program-provided GFE, it would therefore appear that a change to the Phase III safety data package and associated HRs relevant to this subject (including "AMS-02-F04", hazard control 6.1) may be warranted for Phase III.

Thus, for the Phase III FSR (or at a dedicated WG/TIM prior to the FSR if you prefer) the request from the PSRP will be to include this subject and the associated deltas proposed to the Phase III HRs. Of specific interest will be further insight on the "flight qualification" of the GFE equipment (verification that the baselined GFE safety certification is still valid with no anomalies/hardware failures noted, details on the specific application of the hardware for AMS-02 and verification that the equipment is indeed being used within the scope of the original flight certification), and additional insight into the referenced "standard integration procedure", including details on any required inspections of the hardware after installation to verify structural integrity, installation, and proper application of MLI/thermal blankets, post-integration with the full complement of AMS-02 hardware.

Please let me know if you encounter any more questions/concerns, and have a great day,

- richard

Richard W. Guidry
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From: Martin, Trent D. (JSC-EA321)
Sent: Monday, April 21, 2008 2:00 PM
To: Guidry, Richard W. (JSC-NE)
Cc: Leland Hill (leland.hill@escg.jacobs.com); Tutt, John C. (JSC-EA2)[ESCG]; Fohey, Michael F. (JSC-EA3)[ESCG]; Chavez, Kimberly R. (JSC-NE)[GHG]; Mensingh, Paul A. (JSC-NE)[GHG]; Rehm, Raymond B. (JSC-NE)[GHG]; Santiago, Darren M. (JSC-NE)[GHG]
Subject: AMS Question concerning MLI attachment

Richard,
Attached you will find a letter detailing a concern that has arisen concerning MLI attachment on the AMS-02 payload. Please let me know if you have any questions.

Thanks,
Trent Martin
AMS Project Manager
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