ISS Electromagnetic Effects Panel
Tailoring/Interpretation Agreement

SUBMITTAL DATE	AGREEMENT NO.	REV.	FLIGHT #(s)	Page 1 of 3
29 March 2011	TIA # 1200	a	STS-134 / ULF6	

SYSTEM	ORIGINATOR and PHONE NO.	ORGANIZATION / CONTRACTOR
AMS-02	Duong Nguyen (281) 486-6311	EA / Jacobs

END ITEM/CONFIG. ID NO.	PART NUMBER(s)	DESCRIPTION	ASSEMBLY(s)	GFE	Payload
AMS-02	SEG39135720-304	AMS-02 CE07, CS01, RS02	All ISS segments except Russian segment	N	Y

SPECIFICATION NUMBER	SPEC. PARAGRAPH NO.	MANUFACTURER	CRITICALITY	SEVERITY
SSP 30237	3.2.1.3.2 CE07 3.2.2.1.2 CS01 3.2.4.1.2 RS02	NASA/CERN	3	3

ISSUE DESCRIPTION: (use continuation pages if required)

AMS-02 Payload does not meet the requirements of SSP 30237 paragraphs 3.2.1.3.2 (CE07), 3.2.2.1.2 (CS01) and 3.3.2.4.1.2 (RS02). These SSP 30237 requirements are mandated by SSP 57003, paragraph 3.2.2.4.4.

AMS-02 Payload EMI testing was conducted on 2/22 – 2/26/2010 at European Space Research and Technology Centre (ESTEC) Maxwell EMI Test Facility in Noordwijk, The Netherlands.

Results of EMI test show that AMS-02 initial turn ON transient exceeds the CE07 envelope by 2.75 V at 28 milliseconds and some glitches in science data received from AMS-02 data acquisition systems were detected at 80 Hz during CS01 and RS02 240 V injection testing.
(Continued on page 2.)

TAILORING /INTERPRETATION AGREEMENT: (use continuation pages if required)

AMS-02 is allowed to meet the requirements of SSP 30237, paragraphs 3.2.1.3.2 (CE07), with the exceedance such that AMS-02 initial turn ON transient exceeds the CE07 envelope by 2.75 V at 28 milliseconds.

AMS-02 is allowed to meet the requirements of SSP 30237, paragraphs 3.2.2.1.2 (CS01) and 3.3.2.4.1.2 (RS02) with some glitches in science data received from AMS-02 data acquisition systems at 80 Hz during CS01 and RS02 240 V injection testing.

RATIONALE: (use continuation pages if required)

The AMS-02 project team considers effects and exceedances noted during the AMS-02 EMI RS02, CS01, and CE07 testing as minor susceptibility events related to AMS-02 mission success and data collection. The AMS-02 Program accepts the risk of science data loss due to conducted and radiated susceptibility.

Any failures resulting from conducted and radiated susceptibility will not cause a safety hazard or interfere with other equipment. The CE07 exceedance will not create an interference problem with equipment on orbit.

This is criticality 3 hardware. This TIA does not impose any operational constraints. This TIA is for all of the ISS except the Russian segment.

AGREEMENT DISPOSITION

PRIME EME	NASA EME	DATE	APPROVE	WITHDRAW	REJECT
Bob Armstrong	Matt McCollum	4/5/11	**X**		

COMMENTS:

4/5/11 Deferred. Approved pending updates to Severity, Agreement and Rationale sections.
4/5/11 Updated Severity, Agreement and Rationale sections. **TIA approved.**

ISS Electromagnetic Effects Panel
Tailoring/Interpretation Agreement Continuation Page

SUBMITTAL DATE	AGREEMENT NO.	REV.	FLIGHT #(s)	Page 2 of 3
29 March 2011	TIA # 1200	a	STS-134 / ULF6	
SYSTEM	**ORIGINATOR and PHONE NO.**		**ORGANIZATION / CONTRACTOR**	
AMS-02	Duong Nguyen (281) 486-6311		EA / Jacobs	

ISSUE DESCRIPTION Continued:

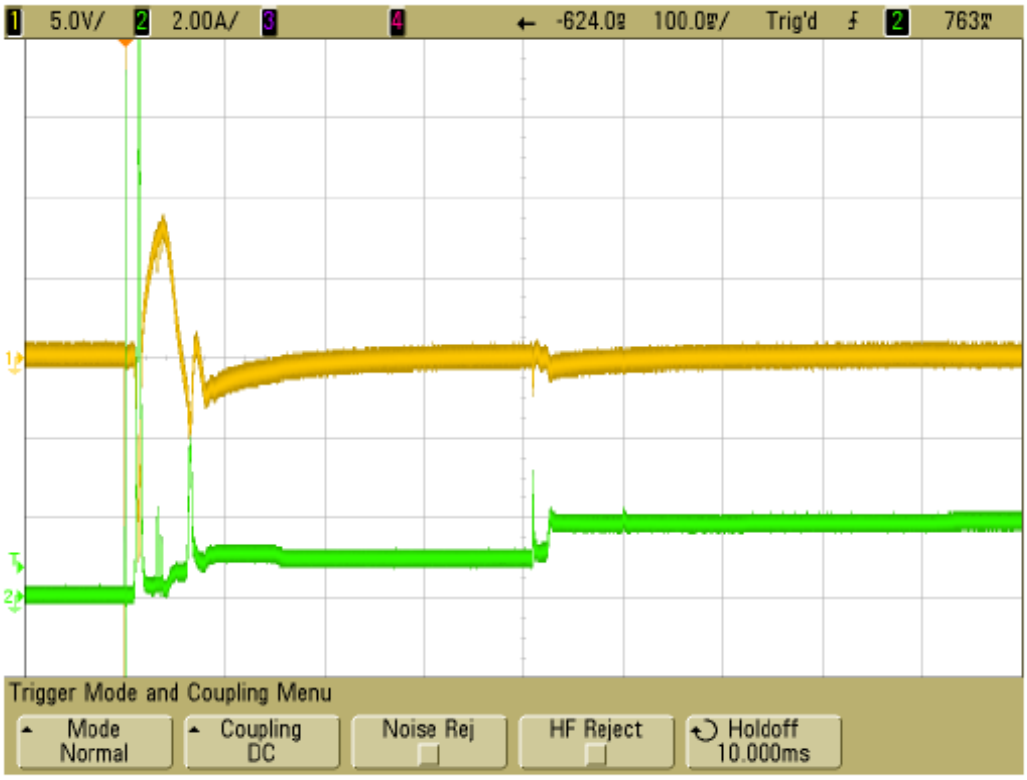

Figure 1 – Conducted Emission Inrush / Mode Change Voltage Transients.

ISS Electromagnetic Effects Panel
Tailoring/Interpretation Agreement
Technical Concurrence

SUBMITTAL DATE	AGREEMENT NO.	REV.	FLIGHT #(s)	Page 3 of 3
29 March 2011	TIA # 1200	a	STS-134 / ULF6	

SYSTEM	ORIGINATOR and PHONE NO.	ORGANIZATION / CONTRACTOR
AMS-02	Duong Nguyen (281) 486-6311	EA / Jacobs

MEMBERS

NAME	DATE	ORGANIZATION
		Space Station Office, KSC
		Payloads Office, ISSP
		Engineering Directorate, JSC
		Safety and Mission Assurance/Program Risk Office, ISSP
		NASA Frequency Management Office
		Boeing Development Site – Huntsville
		Electrical Power Systems

AD HOC MEMBERS

	Space Shuttle Program
	Operations Office, ISSP
	Boeing – Houston
	Subsystem or Tech. Discipline Area Requirement Owner, NASA ISSP
	Subsystem or Tech. Discipline Area Requirement Owner, Boeing ISSP
	Manager, ISSP Element
	Launch Package/Stage Manager
	Mission Operations Directorate, JSC
	International Partner Representative(s)