SWALES AEROSPACE
Beltsville, Maryland 20705

THEMIS System Change Notice

SCN#: *022*
Date: 14 March 2006

Proposed Change Level (Circle): 3 **Proposed Change:** **MRD G.3 to G.4 Updates**	**Lead Engineer:** Taylor **Subsystem:** Systems

Reason for Change:

An update to the MRD was required to correct some errors and changes that have been made since the last update.

Reference Documentation Summary

thm_sys_001H_MRD_ResourceChangeLog.xls

Subsystem Impacted: (**Bold** indicates an impact)

ACS	C&DH	**Mechanical**	Propulsion	Booms	IDPU S/W
Battery	EGSE	MGSE	RF Comm	EFI	SST
Bus	Harness	Mission Ops	Solar Array	ESA	SCM
Avionics Unit	I&T	Power	**Thermal**	FGM	
BUS S/W	Launch Vehicle			IDPU	

Minutes Summary (Systems Engineering Meeting):

The following changes were needed to correct errors in the wording or numbering:
1) PB-16, PB-17, PB.Thm-1, and PB.Thm-2, changed "Probe Thermal Subsystem Specification" to "Probe and PC Thermal ICD and Spec, SAI-ICD-0080", since that is the official CM'd name of the document.
2) Renumbered PB.ACS-20 to PB.ACS-21 since a requirement ID 20 already existed, but was deleted a while ago,
3) PB.FSW-9, deleted "PB.FSW-9" from the content of the requirement Statement, because the ID shouldn't be in the statement.
4) PB.FSW-10, removed TBC on recovery from Cold Restart
5) PB.FSW-14, removed TBC on recovery from Watchdog Timer servicing.
The following changes were needed to bring the MRD up to date with the design and mission changes:
1) PB-41 added "negative" in two places, and changed "5" to "3", since the probe will now be flipped 180 degrees relative to the initial attitude. Also, the attitude uncertainty has been tightened from 5 degrees to 3 degrees, in accordance with the mission and design.
2) PB.FSW-7, deleted "Specific Data Image shall contain the probe's", and then delete ", which" since the ID is in Hardware, not FSW.
3) Added PB.Thm-16, "Thermally safe in any attitude" since this has been a driving thermal design req. that was never captured.
4) PC.Mec-2, changed "5" to "2" based on latest LV spin rate control capability, since is benefits the design.
5) PC.Mec-4, changed "0.5 sec" to "0.03 sec between probes B-E and less than 1 sec from Probe A to any other Probe." Based on SSS

Approval

PROPRIETARY YES ☐ NO ☐

Project Manager _____ Date

Systems _____

Impacted Subsystem Lead _____ Date

Distribution

•Subsystem trades (level 4) can be made within the resources of the subsystem. Systems Engineer insight and involvement.
•Trades that impact subsystem/system interfaces or resource allocations (level 3/level 2) require concurrence by the Configuration Control Board (CCB): Principal Investigator, Project Manager, Mission Systems Engineer (MSE), Probe Systems Engineer, Mission Operations Manager and affected Team Leads. GSFC Mission Manager insight.
•Trades that impact Level 1 *baseline* science/programmatic requirements must include approval by Principal Investigator and GSFC Mission Manager.
•Trades that impact Level 1 *minimum* science/programmatic requirements must include approval by NASA HQ.