

STEREO CONFIGURATION CHANGE REQUEST

For Office Use Only	TITLE:	CLASS:	NUMBER:	
		I II	DATE:	
CONFIGURED ITEM:		ORIGINATOR:		PRIORITY:
STS Number:	Payload: STEREO	Name:	Dave Curtis	<input checked="" type="checkbox"/> Routine
Component :	Experiment: IMPACT	Organization:	U.C. Berkeley	<input type="checkbox"/> Urgent
Component Part #:	Serial #:	Phone:	510-642-5998	<input type="checkbox"/> Emergency
		Email:	dwc@ssl.berkeley.edu	
TYPE OF REQUEST:		RESPONSIBLE ORGANIZATION/INDIVIDUAL:		IMPACTS: (If yes attach additional pages)
<input type="checkbox"/>	Configuration			COST: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/>	Deviation #			SCHEDULE: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/>	Waiver #			
<input type="checkbox"/>	Other:			
REASONS FOR CHANGE:			RETEST REQUIRED:	
<input type="checkbox"/>	Improvement	<input type="checkbox"/> Test/Payload Failure	<input type="checkbox"/> New Document:	<input type="checkbox"/> No
<input type="checkbox"/>	Reliability	<input type="checkbox"/> Specification Requirements	<input checked="" type="checkbox"/> Other:	<input type="checkbox"/> Yes
PROPOSED CHANGE (Attach additional pages as required):				
<p>The STEREO Resource Allocations Document (460-RQMT-0034A Rev A, Section 5.1 and 5.2) The IMPACT power allocation is 15.2W operational, 6W non-operational. On top of this, according to section 2.3 of the same document, we need at least a 10% margin at the time of CDR. Due to recent increases in operational and non-operational heater requirements, IMPACT no longer fits within these power allocations. The latest Current Best Estimates (CBE) are 15.34W operational, 12.9W survival. With a 10% margin we would need an allocation of 17.1W operational, 14.4W survival.</p>				
RATIONALE (Attach additional pages as required):				
<p>These power increases are driven by the SEP operational and non-op heaters, based on the latest thermal models. The non-op heater in particular is driven by the off-pointing case when all of SEP is in the shade. Ruling out that case the non-op heater requirement drops to 8.9W CBE. Another option to consider would be to thermally couple some or all of SEP to the spacecraft. A coupled analysis (SEP plus the spacecraft) would be required to ensure that no thermal limits are exceeded (we are concerned about the hot case), but it should decrease the heater power requirement.</p>				
DOCUMENTS/DRAWINGS AFFECTED (Document No./Title/Section) :				
460-RQMT-0034A Rev A, Section 5.1 and 5.2				
AFFECTED (Check all that apply):				
FLIGHT SYSTEMS:		GROUND SYSTEMS:		
<input type="checkbox"/>	Avionics	<input type="checkbox"/>	Electrical and Cables	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Experiment	<input type="checkbox"/>	Software/Firmware	<input type="checkbox"/>
<input type="checkbox"/>	Structures and Mechanical	<input type="checkbox"/>	Other:	<input type="checkbox"/> Other:
REQUIRED APPROVAL DATE: _____				
REQUIRED JUSTIFICATION:				
				(Page 1 of 2)

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				I	
				II	DATE:
CONTRACT/AGREEMENT NUMBER EFFECTIVITY:					
STEREO NAS5-97271		√	IMPACT S-13635Y	PLASTIC NAS5-00132	SECCHI S-13631Y
DOCUMENTS/DRAWINGS TO BE REVISED:					
Document/Drawing Number:		Document/Drawing Title:		Section(s) No.	EO No.:
PROCESSING APPROVAL:					
CCB					
Out of Board					
Emergency		Systems Engineer			Date
CCB APPROVAL:					
CCB ACTION DATE:		CCB ACTION ITEMS/CONDITIONS:			
Approved					
Denied					
Withdrawn					
Hold					
CLOSEOUT COMMENTS:				DATE OF CLOSEOUT:	
				CMO	