National Aeronautics and Space Administration
Headquarters
Washington, DC 20546-0001

August 11, 2009

NM 8715-79
NPR 8715.3C

Reply to Attn of: Safety and Assurance Requirements Division

TO: Distribution

FROM: Chief, Safety and Mission Assurance

SUBJECT: Granting Relief from Agency-level Safety and Mission Assurance Requirements

Many of the Safety and Mission Assurance (SMA) NASA Policy Directives (NPDs), NASA Procedural Requirements (NPRs), and NASA-Standards have differing processes (and terminology) for requesting waivers, deviations, and exceptions, and many of these processes no longer align with the current technical authority implementation as designated in the NASA Governance Model.

Through this memorandum, I am establishing a NASA interim directive for requesting relief from Agency-level SMA requirements. This interim directive establishes terminology, clarifies the level of authority needed to grant relief from Agency-level SMA requirements, and provides a waiver/deviation request form.

This interim directive is effective immediately, and it will remain in effect until permanent requirements are established and Agency SMA requirements documents are updated. This interim directive supersedes the waiver (nee: variance) process that is described in NPR 8715.3, paragraph 1.13.

Please direct any questions you may have to my lead for this new process, Mr. John Lyver, at (202) 358-1155 or by email at JLyver@nasa.gov. In the near future, Mr. Lyver will be providing a demonstration of the automated tool that we are developing to assist in the requirements relief process.

Bryan O'Connor

Bryan O'Connor

Enclosure

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Mr. Johnson

Adjudication of Requests for Relief from Agency-wide Safety and Mission Assurance Requirements

1. Overview

1.1 Applicability

a. This document is applicable to NASA Headquarters and NASA Centers including Component Facilities, programs, projects, and Technical and Service Support Centers. This document applies to the Jet Propulsion Laboratory (JPL), other contractors, and grant recipients only to the extent specified or referenced in applicable contracts, grants, or agreements.

b. This document is applicable during all phases of the life cycle of systems, facilities, or operations.

c. This document supersedes NPR 8715.3, NASA General Safety Program Requirements, paragraph 1.13.

1.2 General Provisions

a. Agency authority to grant relief from NASA Safety and Mission Assurance (SMA) requirements is the responsibility of the Chief, Office of Safety and Mission Assurance (OSMA) per NPR 1400.1, NASA Directives Procedural Requirements, Chapter 4, and NPD 8070.6, Technical Standards, paragraph 5.b.3, for the following requirements (aka: Agency-wide SMA requirements):

(1) NASA Policy Directives (NPD) and NASA Procedural Requirements (NPR), where OSMA is the Responsible Office (per NPR 1400.1) with the exception of NPR 8715.5, Range Safety Program and NPR 8715.7, Expendable Launch Vehicle (ELV) Payload Safety Program. Until further notice, NPR 8715.5 and NPR 8715.7 will use the waiver/deviation process specified in NPR 8715.5.

(2) NASA Standards (NASA-STD) where OSMA is the lead Technical Authority (TA) (per NPD 8070.6).

(3) Non-NASA documents and standards where Headquarters/OSMA is the designated Responsible Office or TA. This includes standards that are invoked as mandatory from a document listed in paragraphs 1.2.a.(1) or 1.2.a.(2) above. (Example: ANSI/NCSL Z540.1-1994 (R2002), General Requirements for Calibration Laboratories and Measuring and Test Equipment, which is invoked by NPD 8730.1, Metrology and Calibration.)

Note: Attachment A contains a list of the documents referred to in the above paragraphs.

b. All NASA activities shall comply with the requirements stated in NASA policy and requirements documents unless relief is granted by the level of NASA management imposing the requirement as specified in this document for the requirements specified in paragraph 1.2.a (Requirement).

c. If local implementation of any requirement (see paragraph 1.4 tailoring definition) results in an increase in risk, then relief shall be requested per this document (Requirement).

Note: NASA does not have approval authority for Federal, State, or local regulations (e.g., OSHA, Cal OSHA), or for consensus standards that are referenced by Federal regulations (e.g., ANSI, American Conference of Governmental Industrial Hygienists) that apply to NASA unless specifically granted by the levying authority.

1.3 Types of Relief that May be Granted for Agency-wide SMA Requirements

Note: The definitions below are taken from the draft update NASA Interim Directive (NID) to NPR 7120.5D, NASA Space Flight Program and Project Management Requirements.

a. Waiver. A documented authorization releasing a program or project from meeting a requirement after the requirement is put under configuration control at the level the requirement will be implemented. (From Draft NID to NPR 7120.5D – July 15, 2009)

b. Deviation. A documented authorization releasing a program or project from meeting a requirement before the requirement is put under configuration control at the level the requirement will be implemented. (From Draft NID to NPR 7120.5D – July 15, 2009)

c. Non-applicable requirement. Not relevant, not capable of being applied. (From Draft NID to NPR 7120.5D – July 15, 2009)

Note: See paragraph 2.3 for documentation of determination of non-applicability of Agency-wide SMA requirements.

Note: In the past, the term "exception" was used to identify non-applicable requirements. That term is no longer used. (See paragraph 2.5.b).

1.4 Other Definitions

a. Tailoring. The process used to rewrite an applicable requirement by the requirement implementer. If the revised requirement meets/exceeds and has no increase in risk from that of the original requirement then it may be accepted/implemented by appropriate local authority. If the revised requirement does not meet/exceed the original requirement or has an increase in risk from that of the original requirement, then a waiver or deviation is required per this document prior to implementation.

Note: This definition is for use within the SMA TA and is different from the definition for tailoring in the July 15, 2009 Draft NID to NPR 7120.5D paragraph 3.6.1.2.

b. Directed requirement: An Agency-wide SMA requirement that has been imposed on NASA SMA as a flowdown of a requirement from a level higher to or outside of OSMA.

Example: Seatbelt requirements in NPR 8715.3 are directed requirements because Executive Order 13043 requires seatbelt usage by all federal employees in a duty status.

c. Derived requirement: A requirement that is not a directed requirement.

d. Emergency waiver (or deviation) request: A request for relief that is needed on a short-term basis outside of normal working locations or hours to meet an immediate operational need that cannot wait until normal business hours.

e. Relief adjudication: The process of review, concurrence, and approval of a request for relief from an Agency-wide SMA requirement. The process includes the granting or disapproval of the request by the Chief, OSMA (or delegated authority) and acceptance or disapproval of the change in risk by the appropriate NASA management official.

f. Requirement relief request: Request for a waiver or deviation.

g. Safety and Mission Assurance Requirement Tracking System – SMARTS: NASA data system that contains meta data about Agency-wide SMA requirements.

h. Subject Matter Expert (SME): Person recognized as an expert in the technical area under review.

i. Tightly coupled program: Programs having multiple projects that execute portions of a mission or missions. No single project is capable of implementing a complete mission. Typically, multiple NASA Centers contribute to the program. Individual projects may be managed at different Centers. The program may also include other Agency or international partner contributions. (This definition is from Draft NID to NPR 7120.5D, paragraph 2.1.4.d as of July 15, 2009)

Note: As of July 2009, NASA has four tightly coupled programs: Constellation, International Space Station, Space Shuttle, and Stratospheric Observatory for Infrared Astronomy (SOFIA).

1.5 Responsibilities

1.5.1 Mission Directorate Associate Administrators, Center Directors, Director, JPL, Director, NASA Management Office for JPL, and program/project managers shall:

a. Establish and implement local processes and requirements as needed to comply with this document (Requirement).

b. Ensure requirements relief requests are approved and risk is accepted in accordance with this document (Requirement).

1.5.2 NASA Center SMA Directors shall:

a. Ensure all requirements relief requests include a risk assessment that determines whether there is an increase in risk because of the change in a requirement (Requirement).

b. Ensure all requests for requirements relief include a plan for mitigating the associated deficiency and identify a date or development milestone for bringing the project into compliance with the associated requirement as specified in the relief request (Requirement).

c. Provide a copy of each approved request processed per this document to the Headquarters/OSMA (Requirement).

d. Assist programs/projects in the preparation of requirements relief requests (Requirement).

e. Ensure that all appropriate organizations and SMEs are provided an opportunity to review a request and that their comments and concerns are thoroughly documented as a part of the request (Requirement).

1.5.3 Officials adjudicating requirement relief requests for the SMA TA shall ensure that prior to adjudication:

Note: The SMA TA signature does not imply any acceptance of the associated risk, nor does it imply implementation of the revised requirement per the relief request.

a. The request is complete, thorough, and is properly filled out (Requirement).

b. The request is appropriate and in NASA's best interests (Requirement).

c. The change in risk is quantified and appropriate mitigation measures have been listed (Requirement).

d. All appropriate organizations and SMEs have reviewed the request (Requirement).

e. All concerns with the request have been documented (Requirement).

1.5.4 Officials accepting the risk and implementing requirements relief requests shall:

a. Be of a level of seniority that is senior to the request initiator, and senior to (or equivalent to) the person signing as the SMA TA (Requirement).

b. Ensure that the request is appropriate and in NASA's best interests (Requirement).

c. Accept the change in risk noted and accepted on behalf of the personnel property and activities listed on the relief request on behalf of the U.S. Government (USG) for USG property and personnel and the general public (Requirement).

d. Ensure all concerns with the request have been documented (Requirement).

e. Ensure that the completed request is filed in their organization and a copy is provided to the Headquarters/OSMA (Requirement).

2. Delegation of Authority to Adjudicate Requests for Relief from SMA Requirements

2.1 The Chief, OSMA remains the final adjudication authority for granting requests for relief from all Agency-level SMA requirements as specified in paragraph 1.1 above, unless higher authority is required.

2.2 The Chief, OSMA reserves the right to overturn any delegated adjudication decision or revoke a delegation.

2.3 Authority for determination and documentation of non-applicability of Agency-wide SMA requirements is delegated as described in paragraphs 2.3.1, 2.3.2, and 2.3.3.

2.3.1 For Agency-wide SMA requirements that pertain to NASA Headquarters Organizations, to include Headquarters run programs and projects:

a. The authority to determine non-applicability of Agency-wide SMA requirements is delegated to Headquarters Organizations, working jointly with Headquarters/OSMA.

b. The delegated authority shall obtain concurrence by the Chief, OSMA and submit the documentation of non-applicability to OSMA for maintenance under Headquarters/OSMA configuration management (Requirement).

2.3.2 For Agency-wide SMA requirements that pertain to a tightly coupled program (aka: level 2) and a loosely coupled program or project:

a. The authority to determine non-applicability of Agency-wide SMA requirements is delegated to the organization implementing the requirement, working jointly with the Center/facility SMA Office, and Headquarters/OSMA.

b. The delegated authority shall obtain concurrence by the Chief, OSMA and submit the documentation of non-applicability to OSMA for maintenance under Headquarters/OSMA configuration management (Requirement).

2.3.3 For Agency-wide SMA requirements that pertain to projects in tightly coupled programs (aka: level 3) and elements of loosely coupled projects:

a. The authority to determine non-applicability of Agency-wide SMA requirements is delegated to the organization implementing the requirement, working jointly with the Center/facility SMA Office, and the Chief SMA Officer for the implementing organization.

b. The delegated authority shall obtain concurrence by the Center SMA Director and submit the documentation of non-applicability to the Chief SMA Officer for the directing organization for maintenance (Requirement).

c. The Chief SMA Officer for the directing organization shall forward the documentation of non-applicability to Headquarters/OSMA within 1 month of approval (Requirement).

2.3.4 Documenting of non-applicability of requirements can be done via formal documented traceability analysis. For example, a valid method of documenting non-applicability is the May 6, 2008 letter from Chief, OSMA to the Constellation Program concurring in the

requirements traceability analysis granted non-applicability to several SMA TA requirements (nee: exceptions).

Note: The letter to Constellation Program from Chief, OSMA can be found at: http://www.hq.nasa.gov/office/codeq/doctree/doctree_f.htm

Note: The Engineering TA has established a different process and requirements for determination of non-applicability of Agency-wide Engineering requirements which is defined in Paragraph 3.6.1.2 of the Draft NID to NPR 7120.5D as of July 15, 2009, as: "Relief from a prescribed requirement that is not relevant and/or not capable of being applied to a specific program, project, system or component is identified as a non-applicable requirement in the associated deviation or waiver. Relief from non-applicable requirements can be approved by the program or project level Technical Authority."

2.4 Tailoring of Agency-wide SMA Requirements.

2.4.1 Agency-wide SMA requirements may be tailored by requirements implementers provided that the revised (aka: tailored) requirement or set of revised requirements:

a. Fully meets the intent and scope of the Agency-wide SMA requirement(s).

b. Does not increase the risk as defined in NPR 8000.4, Agency Risk Management Procedural Requirements.

2.4.2 Tailoring of Agency-wide SMA requirements shall be formally documented with the approval of the SMA TA representative at that level (i.e., Chief SMA Officer) for programmatic requirements or the Center SMA Director for institutional, matrixed, programmatic, or programmatic oversight requirements (Requirement).

2.5 Authority for adjudicating requests is delegated to the following unless reserved for adjudication by the Chief, OSMA as listed in section 2.6 below:

a. For tightly coupled programs: Center SMA Director at the Center hosting the Level II program.

b. For requests originating from JPL, being processed by/through JPL SMA, or where the work will be performed by JPL: NASA Management Office for JPL.

c. All other requests: NASA Center Director for the program/project or institution where the work is being performed.

2.6 The Chief, OSMA shall adjudicate the relief from the following requirements (authority is not delegated) (Requirement):

Note: The below listing is for the initial rollout of this process. Further analyses may increase or decrease the list of non-delegated individual requirements.

a. All requirements in the following documents:

- NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping
- NPR 8705.2, Human-Rating Requirements for Space Systems

- NPR 8715.6, NASA Procedural Requirements for Limiting Orbital Debris
- NASA-STD 8719.14, Process for Limiting Orbital Debris

b. All requirements in the following chapters of NPR 8715.3, NASA General Safety Program Requirements:

- Nuclear Safety for Launching Radioactive Materials (Chapter 6)
- Process/Requirements for the SMA Portions of Requests for Liability Insurance or Indemnification of EAV Developers (Chapter 10)
- NASA Meteoroid Environment Program (Chapter 11)

c. Requirements designated in writing from the Chief, OSMA as a result of audits, mishaps, or those of special interest to senior NASA management.

Note: This designation may be done for specific worksites, projects, programs, Agency-wide, one Center, or others, and may be designated for a specified period of time.

d. All directed requirements.

e. Requests for relief that were adjudicated by the SMA TA as rejected/disapproved and are being appealed to NASA Headquarters (see NPR 7120.5D, paragraph 3.4 for the appeal process).

f. When the person requesting the relief is a NASA Headquarters employee or the relief is being requested for a NASA Headquarters function/responsibility/office.

g. When the relief is being requested from a requirement which is personally assigned to the Center Director.

h. When the approval authority is a Headquarters senior management official (example: any requirement for which a program/project requests relief from the sponsoring Mission Directorate Associate Administrator or other NASA Headquarters official or outside of NASA).

2.7 Authority to grant relief from the following requirements may be delegated provided the requirements in paragraph 2.6 do not preclude delegation:

a. When relief is requested for requirements in the following occupational health and safety documents, the request shall be reviewed by the OSMA Occupational Safety and Health Administration (OSHA) point of contact within the NASA Headquarters OSMA prior to adjudication of the request (Requirement).

- NASA-STD 8719.9, Safety Standard for Lifting Devices and Equipment
- NASA Safety Standard 1740.12, Safety Standard for Explosives, Propellants, and Pyrotechnics or NASA-STD 8719.12, Safety Standard for Explosives, Propellants, and Pyrotechnics (which is pending final approval)
- NASA-STD 8719.17, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PV/S)

b. When relief is requested for a standard that would establish a substitute standard (aka: meet/exceed) to the entire NASA-STD or other NASA SMA mandatory standard, the request shall stipulate that Headquarters/OSMA is a mandatory reviewer (Requirement).

Note: In this case, the Headquarters/OSMA will review the applicability of the proposed substitute standard for either use across NASA or for upgrading of SMA TA Standards. (Example: A national standard (e.g.; ANSI STD) to replace the use of a NASA-STD.)

2.8 Additional Requirements

a. If delegation is desired beyond those personnel listed in paragraph 2.3, a request may be made to the Chief, OSMA via the OSMA requirements point of contact stating the need, scope, and duration of the authority being requested.

b. For tightly coupled programs, the delegated authority may be further delegated to the Level II Chief SMA Officer (or Deputy) consistent with the level of the board that will review the waiver/deviation if the sub-delegated person is not the implementer of the original requirement.

c. Provided that the sub-delegated person is not the implementer of the original requirement, delegated authority may be further delegated without a special request to the Chief, OSMA to:

- Deputy Center Director
- Facility Director
- Deputy Director of the NASA Management Office for JPL

Note: Since the Center Director signature accepts any increased risk for personnel within the scope of the waiver, risk acceptance may not be delegated to the Center SMA Director without written authorization from the Chief, OSMA.

d. Persons delegated with the authority for adjudication of a request for waiver/deviation have the implicit obligation to consult with the appropriate NASA experts on the requirements, at either Headquarters or elsewhere about the Agency, and shall obtain written feedback from those experts (Requirement).

e. A list of SMEs contacted for review of a request shall be included in the completed adjudication documentation (Requirement).

f. A copy of all adjudicated requests for relief from Agency-Level SMA requirements shall be forwarded to the designated Headquarters/OSMA requirements point of contact prior to the initiation of the activity involved in the request, but no later than 10 calendar days after the final concurrence (Requirement).

2.9 Adjudication of Emergency Waivers (Deviations)

The senior NASA management official at the worksite may adjudicate requests for emergency waivers/deviations provided the following conditions are met:

a. After identification of the need, the change in risk shall be analyzed, reviewed by the SMA lead at the worksite, and documented in the log being kept with the operation (Requirement).

b. The senior NASA management official at the worksite shall make a reasonable attempt to contact the local facility NASA management officials who would be involved with a nominal waiver request (Requirement).

c. The senior NASA SMA official at the worksite shall make a reasonable attempt to contact the local facility NASA SMA officials who would be involved with a nominal waiver request (Requirement).

d. The emergency waiver/deviation shall only be approved and implemented by signature of the senior NASA management official at the worksite for the immediate operation for a specific time period (Requirement).

e. The emergency waiver shall be reviewed by the NASA management and SMA officials that would be involved with a nominal waiver at the earliest opportunity if it needs to be converted to a nominal waiver (Requirement).

f. The emergency waiver shall be documented on the local or SMA TA waiver form and forwarded to the Center SMA waiver coordinator and, as appropriate, to the OSMA requirements point of contact within two business days (Requirement).

3. Waiver/Deviation Form to be Used

NASA Standard TA Relief Request

(July 2009 version)

Section 1: Submission Data

Local #: XXXX-#### **Title:** XXX	
Request Information	**Request Scope**
Request #: RFR-### **Date:** ##/##/#### **Requesting Entity:** XXX **Requesting Org:** XXX	**Relief Type:** Waiver/Deviation **Request Type:** XXX **Single/Fleet:** Single/Fleet **Criticality:** XXX **Duration:** XXX **Category:** Programmatic/Institutional/HQ
Initiator Information	**Adjudication Required**
Name: XXX **Phone:** XXX-XXX-XXXX **Email:** XXX@nasa.gov **Org:** XXX **Signature:**_____ **Date :**_____	**Mandatory Reviewers** XXX **Approvals** NASA Lead TA: Chief, OSMA
Affected Document	**Scope of Risk**
Doc #:XXX.XX **Title:** XXX **OPR**: XXX **Relief: XXX**	**Public Safety:** Yes/No **Public Assets:** Yes/No **NASA Personnel Safety:** Yes/No **Flight:** Yes/No **Ground:** Yes/No **Software:** Yes/No **Facility:** Yes/No **Security:** Yes/No
Risk Scope Items	
XXX	
Risk Scope Activities	
XXX	
Risk Scope Personnel	
XXX	

Request Summary
XXX
Request Justification
XXX
Additional Information
XXX
Risk Change
XXX
Risk Mitigation
XXX
Risk Analysis Summary
XXX
Attached Supporting Documents
XXX

Section 2: Requirement Information

Para: X.X.X	**Req ID:** #####	
Current Requirement Text: XXX		
Proposed Requirement Text: XXX		

Para: X.X.X	**Req ID:** #####	
Current Requirement Text: XXX		
Proposed Requirement Text: XXX		

Para: X.X.X	**Req ID:** #####	
Current Requirement Text: XXX		
Proposed Requirement Text: XXX		

Section 3: Review Signatures

SME Technical Review (Sign/Print Name)	Date	Concur Reject
SME Technical Review (Sign/Print Name)	Date	Concur Reject
SME Management Concurrence (Sign/Print Name)	Date	Concur Reject
SMA TA Risk Review (Sign/Print Name)	Date	Concur Reject
SMA TA Concurrence (Sign/Print Name)	Date	Concur Reject

Section 4: Approval Signatures

NASA Lead TA: XXX (Sign/Print Name)	Date	Approve Reject
Risk Acceptance (Sign/Print Name)	Date	Accept Risk Cancel Request Defer Request Approve Rejection

Section 5: Comments & Appeal

Technical Authority Comments
XXX
Justification for Appeal
XXX

ATTACHMENTS:

(add as needed)

Relief Request Form Field Definitions

Sample Interim Form Field Abbreviations

"XXX" indicates an alphanumeric entry is needed,
"###" indicates that a numeric entry is needed,
"Yes/No" indicates either Yes or No is needed.
"Single/Fleet indicates either word is needed.

SECTION 1: SUBMISSION DATA	
- Title	- Short title of the waiver (please limit to about 30 characters)
- Local	- Locally generated serial number(s) for local tracking/filing. (e.g.; KSC-012 or CxP-Orion-012)
Request Information:	
- Request #	- NASA-wide tracking number for the request (Sequential serial number assigned by SMARTS for SMA TA-wide tracking. If the initial form is provided via the SMARTS, then a number will be provided, otherwise, please leave blank)
- Date	- Date request being made (Month/Day/Year)
- Requesting Entity	- Title of the person or function requesting the relief request (e.g.; Orbital Debris Manager, Launch Services Program Office)
- Requesting Org	- Organization and mail code of requesting person or organization. Do not enter an office or program name. For contractor requests, list the contract reference (e.g.; HQ/OSMA - Code GD)
Request Scope:	
- Relief Type	- Enter either "Waiver" or "Deviation" (see paragraph 1.2, Definition of Terms, in the NID)
- Request Type	- Type of relief needed. Choose one: = "Non-Applicable" - Requirement does not apply = "Meet/Exceed" - Alternate document will replace NASA mandated document = "Additional Risk" - Acceptance of increased risk due to tailoring = "Known nonconformance" - Unable to meet requirements = "Change Requirement" - Request for alternate requirement (includes tailoring with risk increase and relief from fully meeting original requirement intent)
- Single/Fleet:	- Is this waiver for a single instance or for multiple items? Choose: 'Single' for applicability of this request to a single item, 'Fleet' if this request applies to multiple items.
- Criticality	- Criticality of the need associated with the request. (e.g.; critical, routine, emergency)
- Duration	- How long will this relief be needed (e.g.; until CDR, until launch, during launch only, until operations complete, until June 2012)? Be as specific as possible. Choose who is implementing this requirement? "Center,"

- Category:	"Program," or "Headquarters." "Program" includes any Program, project, or element. "Headquarters" includes NASA Headquarters, NASA Headquarters offices (like NASA Orbital Debris Program Office at JSC) and other agencies. Contractors should be listed with their parent organization. *(Found in SMARTS)*
Initiator Information: Name, Phone, E-mail, Org, Signature, & Date	NASA management official initiating the request. Include the phone number, organization code, and e-mail. The request is considered as initiated after the official signs and provides the date in this block.
Adjudication Required: - Mandatory Reviewers	- This is a summary of the personnel who must review and sign this request in Section 4 of this form. This should be a complete list in this block. = For individual subject matter experts (SME), ensure that a signature/date/concur line is provided in Section 4 of this form. = For any organizations listed, ensure that there are a pair of signature/date/concur lines in Section 4 of this form for the organization. One line is for the technical reviewer, one line for the management review. = All relief requests must contain a signature/date/concur line for the SMA TA Risk Review and one line for local SMA TA lead (aka, management).
-Approvals	- This is a summary of the personnel who will approve the relief request in Section 5 of this form. = Either list the Chief/SMA or the title of the SMA TA Manager who has been delegated adjudication authority per this NID. = List the title of the NASA management official who will be accepting the risk for NASA, the U.S. Government (USG), the public, and NASA personnel.
Affected Document: Document #	- This is the number of the document. Include the version letter and change number of the document or "baseline." (Note: Only one document is permitted on a relief request. Multiple documents require multiple requests.)
Title	- Enter the full title of the requirement document as published.
OPR (Office of Primary Responsibility)	- Enter the Office of Primary Responsibility (OPR) for the document. If it is not obvious who the OPR is, list the person who signed the document.
Relief	- Enter if this is a request for: individual requirement(s), a contiguous set of requirements, chapter, or whole document.
Scope of Risk:	The fields in this block give the initiator's opinion as to who/what may be affected by the request if approved or not approved. Enter "Yes" or "No" for each.
- Public Safety	- Could the effect of the request go outside the NASA (or surrounding USG property) to injure non-USG personnel? - Could the effect of the request go outside of the USG

- Public Assets - NASA Personnel Safety - Flight - Ground - Software - Facility - Security	property and damage non-USG items (e.g., other spacecraft)? - Are NASA personnel (NASA employees and contractors) at risk? - Does the request involve spaceflight or aircraft flight? - Does the request involve ground support (spaceflight or aircraft flight? - Does the request involve computer/processor software? - Does the request affect NASA (or other USG) facilities (structures or land)? - Does the request involve National Security issues (aka: security classification, USG protective security, or Department of Homeland Security issues)?
Risk Scope Items	List any items that are (or may be) effected by the request if approved or not approved. Please be specific and as complete as possible. If the items cover a physical area, please just state the area as all inclusive. (e.g.; LC39B, VAB, GRC, LaRC Transonic Wind Tunnel)
Risk Scope Activities	List any activities or processes that are (or may be) effected by the request if approved or not approved. Please be specific and as complete as possible. If the items cover a set of activities/processes, please just state the process as all inclusive. (e.g.; launch, budget cycle, lift of an Orbiter)
Risk Scope Personnel	List any persons or groups that are (or may be) effected by the request if approved or not approved. Please be specific and as complete as possible. If the items cover a set of people, please just state the group as all inclusive. (e.g.; KSC, GSFC Code 300)
Request Summary	A BRIEF summary of the request. Please keep to about 25 words or less.
Request Justification	A detailed explanation of the request. Please include a full text explanation of why the request is needed, why objectives cannot be accomplished without a relief request, and what is hoped to be achieved with issuing the relief.
Additional Information	Any information that will be helpful to NASA management not familiar with the specifics to understand why the request is needed or the background of other similar efforts needing (or not needing) requirements relief.
Risk Change	A quantification of the change in the risk associated with granting of the request. Please be specific and include any backup analysis as to how the risk was calculated. If there is NO change in risk, please explain why. Please include all risks defined in NPR 8000.4 (safety, performance, schedule, budgetary, etc.) that apply. The Center SMA Office should be assisting in the development of this field.
Risk Mitigation	A description of how any increase in risk will be (or can be) partially or totally mitigated. All requests with an increase in risk are required to provide this field's information. (e.g.; increase signage, reduce the altitude, fly slower, disburse workers). This data should also be included in the Mishap

	Contingency Plan if that is required for a mission or operation.
Risk Analysis Summary	A description of the net change in risk with the mitigation measures in place as compared to the system without the relief request being granted.
Attached Supporting Summary	List the documents that are attached to this request to aid a reviewer in knowing where to look for the supporting data. Please provide the necessary backup material to support the request. Remember, requests may not be reviewed and processed by personnel who are intimately familiar with your system. This supplemental material becomes a part of the official record of the relief requested. (Note: For the final approved relief request, the request is forwarded to HQ/OSMA for Agency-level storage. These documents will need to be sent along with the request. Electronic .pdf format is preferred.)
SECTION 2: REQUIREMENT INFORMATION	
** This block of information should be repeated for EACH paragraph for which relief is being requested**	
Para	- The paragraph number (include all levels in the number) of the first requirement being requested for relief.
Req ID	- Include the 5 digit ID number found in the requirements document for the primary (or first in most cases) requirement. This ID is also known as the SMARTS ID. The completed request will be filed against this SMARTS ID.
SMA Role	- Always use "L" (future use field)
Current Requirement Text	- Exact text from the requirement. For requirements that are not "complete thoughts" (e.g.; lists), include the higher level wording to make the requirement stand-alone. Note: SMARTS provides the 'complete thought' for each shall statement.
Proposed Requirement Text	- Exact text of the proposed requirement to be implemented. This requirement will become imposed on the requesting organization in place of the existing requirement. Remember that, like the original requirement, the new requirement should be specific as to who has the responsibility to perform the action and what action is to be performed including the quality evidence to assist management (and auditors) in knowing that the alternate requirement has been completed. (See NPR 1400.1 or HOWI 1400GD02 Appendix B for guidance on drafting a good requirement.) If the request is to make a paragraph not applicable, then enter "not applicable." If relief is being requested for other individual paragraphs, copy the whole block and enter data for each paragraph. Note: If relief is being requested for a contiguous series of

	paragraphs (to include a whole Chapter(s)), provide the first paragraph information as a stand-alone instance of this block, then enter a second instance of this block for the listing of the remainder of the series. (e.g.; for a request for Sections 3.1 through 3.5: Enter paragraph 3.1, Req ID: ## of that paragraph, SMA Role "L", Requirement Text for paragraph 3.1 and the whole proposed text for the contiguous series. In a second block enter: para is blank, Req ID is blank, SMA Role: "L", Current Requirement Text: (a statement like: "Paragraphs 3.1 thru 3.5, inclusive are being requested for this waiver").
SECTION 3: REVIEW SIGNATURES	
For each signature, the name is printed and the form is signed and dated. Either the "Concur" or "Reject" must be circled	For explanation of who is a mandatory reviewer, see the mandatory reviewer field in Section 1 above. Note: Add as many lines as necessary to capture all of the review signatures. Do not use additional forms for other signatures like the NASA Form 184 or an ADS form.
SECTION 4: APPROVAL SIGNATURES	
For the SMA TA signature, the name is printed and the form is signed and dated. Either the "Approve" or "Reject" is circled.	For explanation of who is a mandatory reviewer, see the mandatory reviewer field in Section 1 above. Note: The SMA TA signature signifies: (1) The request has been properly filled out. (2) The request is appropriate and in NASA's best interests. (3) The change in risk is quantified and appropriate mitigation measures have been listed. (4) All appropriate organizations and SMEs have reviewed the request. (5) All concerns with the request have been documented.
For the risk acceptance signature, the name is printed and the form is signed and dated. Then one of the options is circled.	For explanation of who is a mandatory reviewer, see the mandatory reviewer field in Section 1 above. The risk acceptance NASA official must either be senior to the request initiator in Section 1 above, and senior to (or equivalent to) the person signing as the Lead TA, or a Mission Directorate Associate Administrator or higher. Note: The risk acceptance signature signifies: (1) The request is appropriate and in NASA's best interests. (2) The change in risk is noted and that the risk is being accepted on behalf of the personnel listed in Section 1 as involved and on behalf of the US Government for

	USG property and personnel and the general public as noted in Section 1 above. (3) All concerns with the request have been documented.
SECTION 5: COMMENTS & APPEAL	
Both fields are for free form comments as per the titles of the blocks.	

Appendix A: Documents this Process is Applicable To

A.1 NASA Documents

NASA Policy Directives

- NPD 8700.1, NASA Policy for Safety and Mission Success
- NPD 8700.3, Safety and Mission Assurance (SMA) Policy for NASA Spacecraft, Instruments, and Launch Services
- NPD 8710.5, Policy for Pressure Vessels and Pressurized Systems
- NPD 8720.1, NASA Reliability and Maintainability (R&M) Program Policy
- NPD 8730.1, Metrology and Calibration
- NPD 8730.2, NASA Parts Policy
- NPD 8730.5, NASA Quality Assurance Program Policy

Note: NPD 8710.1 and NPR 8715.2 are not a part of the SMA TA and hence, the process does not apply.

NASA Procedural Requirements

- NPR 8000.4, Agency Risk Management Procedural Requirements
- NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping
- NPR 8705.2, Human-Rating Requirements for Space Systems
- NPR 8705.4, Risk Classifications for NASA Payloads
- NPR 8705.5, Probabilistic Risk Assessment (PRA) Procedures for NASA Programs and Projects
- NPR 8705.6, Safety and Mission Assurance Audits, Reviews and Assessments
- NPR 8715.1, NASA Occupational Safety and Health Programs
- NPR 8715.3, NASA General Safety Program Requirements
- NPR 8715.6, NASA Procedural Requirements for Limiting Orbital Debris
- NPR 8735.1, Procedures for Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government-Industry Data Exchange Program and NASA Advisories
- NPR 8735.2, Management of Government Quality Assurance Functions for NASA Contracts

Note: This process does not apply to: NPR 8715.5, Range Safety Program, NPR 8715.7, Expendable Launch Vehicle (ELV) Payload Safety Program, or NASA-STD-8719.8, Expendable Launch Vehicle Payload Safety Review Process (Cancelled).

NASA Standards

- NSS-1740.12, Safety Standard for Explosives, Propellants, and Pyrotechnics
- NSS-1740.14, Guidelines and Assessment Procedures for Limiting Orbital Debris
- NASA-STD-2202.93, Software Formal Inspections Standard

- NASA-STD-8709.2, NASA SMA Roles and Responsibilities for ELV Services
- NASA-STD-8719.7, Facility System Safety Guidebook
- NASA-STD-8719.9, Standard for Lifting Devices and Equipment
- NASA-STD-8719.10, Standard for Underwater Facility and Non-Open Water Operations
- NASA-STD-8719.11, Safety Standard for Fire Protection
- NASA-STD-8719.12, Safety Standard for Explosives, Propellants, and Pyrotechnics (*pending final approval*)
- NASA-STD-8719.13, Software Safety Standard
- NASA-STD-8719.14, Process for Limiting Orbital Debris
- NASA-STD-8719.17, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PV/S)
- NASA-STD-8729.1, Planning, Developing and Managing an Effective Reliability and Maintainability (R&M) Program
- NASA-STD-8739.1, Workmanship Standard for Polymeric Application on Electronic Assemblies
- NASA-STD-8739.2, Workmanship Standard for Surface Mount Technology
- NASA-STD-8739.3, Soldered Electrical Connections
- NASA-STD-8739.4, Crimping, Interconnecting Cables, Harnesses, and Wiring
- NASA-STD-8739.5, Fiber Optic Terminations, Cable Assemblies and Installation
- NASA-STD-8739.8, Software Assurance Standard

A.2 Other Documents

The process defined in this document also applies to any NASA, national, international, or industry standard that is listed as a "Mandatory Standard" on the OSMA Website at:

http://www.hq.nasa.gov/office/codeq/doctree/Mandatory_by_Called.pdf