REVISION D

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DOCUMENT HISTORY LOG

<table>
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<tr>
<th>Status (Draft/ Baseline/ Revision/ Canceled)</th>
<th>Document Revision</th>
<th>Effective Date</th>
<th>Description</th>
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<tr>
<td>Baseline</td>
<td></td>
<td>January 10, 2000</td>
<td>Added new reference 4.2; Editorial corrections to flowchart in section 5, and steps 6.01, 6.02, 6.05, 6.06, 6.07, 6.10, &amp; 6.11.</td>
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<tr>
<td>Revision</td>
<td>A</td>
<td>April 14, 2000</td>
<td>Added customer list, customer feedback to sections 5 and step 6.08. Added second check sheet to Appendix A. Other minor editorial changes.</td>
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<td></td>
<td>B</td>
<td>February 2, 2002</td>
<td>Updated section 3 definitions, section 4 references, and in section 6 made organizational and typographical corrections.</td>
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<td>C</td>
<td>March 31, 2004</td>
<td>Updated to new Organization Structure. Upgraded handouts in Appendix A to be Quality Records in Sections 5, 6.04, 6.05, 6.07, 6.10, and 7.</td>
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<td>January 17, 2006</td>
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HOWI Author: SARD/John W. Lyver, IV, C.S.P.

OSMA Staff Member Responsible for this HOWI: SARD/Michael G. Stamatelatos, Ph.D.

Customers for this HOWI: Internal: Chief SMA

External: none

Out-of-Scope Process Step

Optional Flow

Flow Junction

Customer Feedback

Sub-Process Identification Marker

Note: For All OSMA intermediate and final outputs: page numbers, the date, and document owner will be marked on the document.
1. **Purpose**
The purpose of this Office of Safety and Mission Assurance (OSMA) Headquarters Office Work Instruction (HOWI) is to document the process for the development and maintenance of OSMA HOWIs. This HOWI serves as an example of OSMA HOWI format. Additionally, this OSMA HOWI specifies the Quality Records associated with maintaining OSMA HOWIs.

2. **Scope and Applicability**
This OSMA HOWI is applicable to all members of the OSMA staff responsible for HOWI development or maintenance.

3. **Definitions**

3.1. **Chief SMA:** Chief Safety and Mission Assurance

3.2. **DMS:** NASA Headquarters Document Management System

3.3. **HATS:** NASA Headquarters Action Tracking System

3.4. **MSD:** OSMA Mission Support Division

3.5. **OSMA ISO 9001 Leadership Committee (LC):** A committee made up of representatives from each OSMA Division/Offices (MSD, SARD, RAD, Aerospace Safety Advisory Panel (ASAP), and the OSMA Resources Management Office) and is chaired by the OSMA lead for ISO 9001. The Committee is responsible for identifying the processes needed to fully develop OSMA's ISO 9001 Quality Management System.

3.6. **OSMA ISO 9001 Leadership Committee Chair (LCC):** The OSMA staff member leading the ISO 9001 efforts within OSMA.

3.7. **OSMA Management Council (MC):** A committee made up of the managers from the OSMA Division/Offices and headed by the Deputy Chief SMA.

3.8. **RAD:** OSMA Review and Assessment Division

3.9. **SARD:** OSMA Safety and Assurance Requirements Division

3.10. **OSMA Staff:** The NASA employees who are a part of the OSMA at NASA Headquarters.

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4. Reference Documents

The documents listed in this section are used as reference materials for performing the processes covered by the Quality Management System (QMS). Since all NASA Headquarters Level 1 (QMS Manual) and Level 2 (Headquarters Common Processes) documents are applicable to the QMS, they need not be listed in this section unless specifically referenced in this OSMA HOWI.

4.1. **NPD 8700.1: NASA Policy for Safety and Mission Success**

4.2. **HQPG 1400-1: Document and Data Control**

5. Flowchart

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6. Procedure

6.01 OSMA Staff Member Identify Need to Revise or Create New HOWI:
Any OSMA staff member may identify the need to create a new HOWI or revise an existing HOWI. The staff member brings the need to the attention of their Division Director or the OSMA ISO 9001 Leadership Committee Chair (LCC). Perceived need for a HOWI can come from a wide variety of sources.

6.02 OSMA LCC Review Needed?
The OSMA ISO 9001 LCC will review the need for the HOWI with OSMA management and the OSMA staff member identifying the need to either validate or clarify the perceived need. This determination will be based on the current status of OSMA procedures and interfaces and the LCC’s professional knowledge of ISO 9001.

6.03 OSMA LCC Stop:
If the LCC determines that the new HOWI or the changed HOWI is not needed then the process is stopped.

6.04 OSMA LCC Assign Lead:
If the need is verified, the LCC will assign an action to develop/change the HOWI to an OSMA staff member. The assignment may be entered into the Headquarters Action Tracking System (HATS) using HOWI 1450-GA027. The LCC will discuss the needed HOWI with the assignee to ensure that the assignee understands the process and documentation required with OSMA HOWIs. The procedures for developing NASA HQ HOWIs can be found in HQPG 1400.1. The OSMA HOWI must also be in compliance with NPD 8700.1 and associated NASA policies and procedures. This HOWI serves as the style guide for OSMA HOWIs. The LCC will initiate an HOWI Review Sheet for the HOWI.

6.05 OSMA Staff Member Develop New or Changed Draft HOWI:
The assignee prepares a draft HOWI for the LCC and includes any other supporting documentation necessary for the LCC to make a decision on the HOWI. The assignee will update the HOWI Review Sheet and return it to the LCC with the updated HOWI. Examples of supporting documentation used by OSMA can be found by reviewing the Appendices of the other OSMA HOWIs.

6.06 OSMA LCC LCC Review & Approve?
The LCC reviews the draft HOWI for completeness and compliance with NPD 8700.1 and HQPG 1400-1. The LCC asks selected OSMA LC member(s) to review the Draft HOWI based on their expertise. The LCC reviews the change in OSMA staff member workload caused by the draft HOWI with the affected Division Director(s) if necessary and reviews the draft HOWI against other HQ ISO 9001 guidance (i.e.; HQ Quality System Manual, HQ Common Procedures), integration with other HOWIs, and NASA Policy documentation. The OSMA LCC works with the assignee(s) to complete the draft HOWI. When the draft HOWI is complete, it is forwarded to the OSMA Management Council.
(MC) with a route sheet. If it is incomplete, the LCC returns the draft HOWI to the assignee for more work.

6.07 OSMA MC MC Review & Approve?
The OSMA MC reviews the draft HOWI for adequacy against the needs and resources of the OSMA. The route sheet and the review sheet are updated. If the draft HOWI is complete, it is forwarded to the Chief Safety and Mission Assurance for signature. If the OSMA MC determines that the draft is not complete, the draft is returned to the LCC for further work.

6.08 Chief SMA Chief SMA Review & Approve?
The Chief SMA reviews the draft HOWI for acceptability as a part of OSMA operations. When the HOWI is complete and acceptable, the Chief SMA signs the HOWI. If the draft is not ready for signature, the draft is returned to the LCC for further work. (Internal Customer Feedback).

6.09 Chief SMA Sign HOWI:
The Chief SMA signs the HOWI and returns the package to the LCC.

6.10 OSMA LCC Forward HOWI to DMS:
The LCC files the newly signed HOWI, the review sheet and the routing sheet in the OSMA HOWI files. In accordance with HQPG 1400-1 and NASA HQ Document Management System (DMS) operating procedures, the HOWI is forwarded to the DMS system manager for uploading.

6.11 OSMA LCC Notify OSMA of new HOWI:
The LCC notifies the OSMA staff that there is a new OSMA HOWI. The LCC can notify OSMA via e-mail, weekly OSMA standup, training, or any combination needed. The original signed HOWI is placed in the LC files as a Quality Record. The HATS action is recommended for closure per HOWI 1450-GA027 and the update to the OSMA webpage.

6.12 OSMA LC Chair Closeout.
The process is closed after all records are filed.

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### 7. Quality Records

<table>
<thead>
<tr>
<th>Record ID</th>
<th>Owner</th>
<th>Location</th>
<th>Media Electronic/hardcopy</th>
<th>Schedule Number &amp; Item Number</th>
<th>Retention &amp; Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signed OSMA HOWI</td>
<td>LCC</td>
<td>OSMA HOWI Files</td>
<td>Hardcopy</td>
<td>Schedule: 1 Item 72.C</td>
<td>Retire to FRC 1 year after being superseded then NARA when 20 years old</td>
</tr>
<tr>
<td>HATS Action Item Record</td>
<td>HATS Admin</td>
<td>W/in HATS</td>
<td>Electronic</td>
<td>Schedule: 1 Item 78.C</td>
<td>Retain as long as has reference value then delete</td>
</tr>
<tr>
<td>HOWI Review Sheet</td>
<td>LCC</td>
<td>OSMA HOWI Files</td>
<td>Hardcopy</td>
<td>Schedule: 1 Item 78.C</td>
<td>Retain as long as has reference value then destroy</td>
</tr>
<tr>
<td>HOWI Review Routing Sheet</td>
<td>LCC</td>
<td>OSMA HOWI Files</td>
<td>Hardcopy</td>
<td>Schedule: 1 Item 78.C</td>
<td>Retain as long as has reference value then destroy</td>
</tr>
</tbody>
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**Appendix A: OSMA HOWI Revision Sheets**

Sheet 1: HOWI Review Routing Sheet
Sheet 2: HOWI Review Sheet
Office of Safety and Mission Assurance
HQ Office Work Instruction Review Routing Sheet

HOWI ____________ - G___ - ______ Proposed Revision ___

Author Review:
__________________ initials: ____________ dated: ____________
__________________ initials: ____________ dated: ____________

After review, please return to John Lyver.

OSMA LC Review:
__________________ initials: ____________ dated: ____________

After review, please return to John Lyver.

OSMA Management Review:

Division Responsible: ____________ initials: ____________ dated: ____________

After review, please return to John Lyver

Final Review:

Deputy Chief SMA Review: initials: ____________ dated: ____________

Chief SMA Review: initials: ____________ dated: ____________

After review, please return to John Lyver for preparation of signature copy.

Final Processing Tracking:

Date signed by Chief SMA: ____________
Date OSMA Website updated: ____________
Date forwarded to DMS: ____________

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Office of Safety and Mission Assurance

ISO 9001:2000 HQ Office Work Instruction Review Sheet

HOWI ____________ - G__ - ______ Revision ____

HOWI Author: ____________________  Initials: _____
Staff Member Responsible for HOWI: ____________________  Initials: _____

Question #1: Is this HOWI still needed?  Yes ☐  No ☐

Question #2: Who is the customer(s) of this HOWI? _________________________________

Question #3: Page 2: Are the author and representative correct?  Yes ☐  No ☐

Question #4: Section 4: Are references correct and current?  Yes ☐  No ☐

Question #5: Section 5: Flowchart represents reality?  Yes ☐  No ☐

Question #6: Section 5: Mark steps where measuring customer feedback and satisfaction

Question #7: Section 5: Flowchart shows a continual improvement?  Yes ☐  No ☐

Question #8: Section 6: Text explains flowchart?  Yes ☐  No ☐

Question #9: Section 7: Is list of Quality Records complete/current?  Yes ☐  No ☐

Question #10: Section 7: Are records being stored/kept/disposed per HOWI?

Question #11: Appendices: Changes/Additions/Deletions needed?  Yes ☐  No ☐

Question #12: Changes marked in HOWI?  Yes ☐  No ☐

Question #13: Does HOWI apply to NASA Centers?  Yes ☐  No ☐

After review, please return to John Lyver for preparation of draft revision of HOWI.