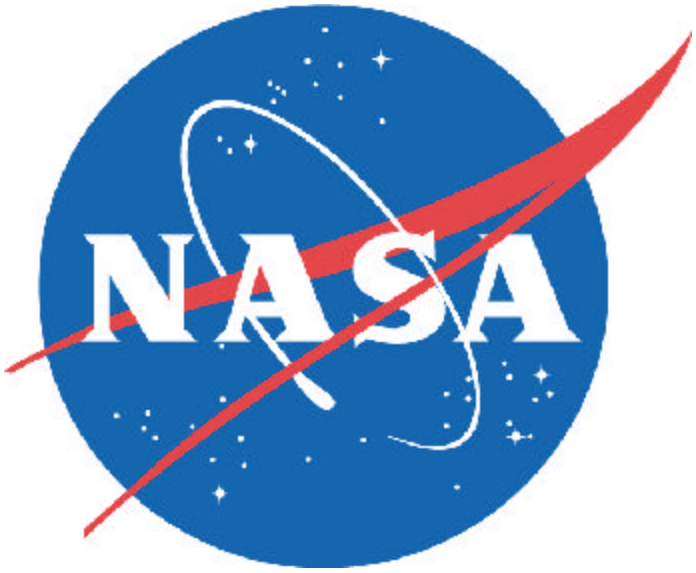
Responsible Office: J/Office of Management Systems
Subject: Document and Data Control



HEADQUARTERS COMMON PROCESS

DOCUMENT AND DATA CONTROL

Approved by 2/20/02

_____ _____
Daniel R. Mulville Date
Associate Deputy Administrator

DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Admin Change/ Canceled)	Document Revision	Effective Date	Description
Baseline		January 15, 1999	
Revision	A	April 28, 1999	Revisions resulting from DNV Preregistration Audit nonconformances and ISO Program Office comments to improve the clarity, readability, and instructions of the document. The changes do not materially impact the intent or usage of this HCP. For details, see HCP1400-1, Document and Data Control Comment Disposition. Joan Verbeck 3/22/99
Revision	B	March 9, 2000	Revisions were made for the following reasons: 1) to implement the policy of ensuring concurrence on fundamental dependencies with other Headquarters offices (steps 6.4 through 6.8), 2) to modify and mandate Flowchart Symbology (Sec. 2.3 and Sec. 5), 3) to incorporate an ISO Documentation Style Guide (Sec. 2.3 and Appendix D), and 4) to bring the process more in line with the Headquarters process for document review and approval (most of Sec. 6 and the accompanying flowchart). Previous versions of this document relied heavily on use of the ISO Document Management System for online document review and approval. This revised procedure includes a detailed review and approval process, but does not define the process based upon the use of the online system for this.
Administrative Change	B	April 25, 2000	Administrative Change to all ISO Level 1, 2, and 3 documents. Per direction from the HQ Quality Council, the NASA Insignia on the cover page of each Level 1, 2, and 3 documents is being updated to remove the Administrator's seal. This update will take place over the next month. This document change will only be documented once in the History Log of HCP1400-1.
Revision	C	August 16, 2000	In response to NCR #377, fixed ambiguous wording with respect to review and approval of forms (Sec. 2.2 and 2.9). Removed conflicting words in Sec. 2.2 and added words to Section 2.9 concerning the use of appendices when material does not contain process form, fit or function of the process. Added words to paragraph 3.7 (Document History Log) and paragraph 6.1 to include guidance for making and documenting Administrative Changes to documents. Added 11/9/99 Mike Mann memo on Fundamental Dependencies to Reference List (Sec. 4) . Resorted the order of the Appendices so they are in order according to their being referenced in the document. In response to a Quality System Deficiency Notice, added a new paragraph 2.12 and 6.1 giving guidance on canceling documents. Updated Section 7, Quality Records Section, to include a reference to tables in the QSM, which gives the minimum set of required quality records. In response to a comment from Code S, added words to paragraph 6.2 regarding unique document identifiers for all documents and data that are within scope of the HQS Quality System. Added to 6.31, "Each code shall submit a Delegation of Authority memo to the DM from the Code's AA indicating the name of the OPR who has authority to transfer approved documents to the DM."

Administrative Change	C	October 29, 2000	Administrative Change to change responsible office from Code B to Code J due to the ISO Program Office being reassigned to Code J.
Revision	D	February 20, 2002	Added additional guidance to Sec. 2.0, (paragraph 2.2) Scope and Applicability that address the ISO 9001:2000 requirement paragraph 4.2.3b to ensure that procedures reflect the process as implemented. Replaced ISO Project Office with ISO Program Office throughout document. Made other minor changes to clarify document and change references to the new QMS Manual. Added a definition to section 3 for "critical process." Added new Appendix (F) to incorporate minimum set of required quality records. This was removed from the QMS Manual and added here.

1 Purpose

The purpose of this Headquarters Common Process (HCP) is to provide a consistent method for reviewing, approving, distributing, revising, tracking, maintaining, and canceling Quality System documentation. This HCP establishes the method for implementing the provisions identified in the Headquarters Quality Management System (QMS) Manual.

2 Scope and Applicability

2.1 This HCP is applicable to all Quality System documentation and data at Headquarters. It specifically addresses the following documentation: the QMS, HCP's, and Office Work Instructions (OWI) which constitute Quality System documentation at Levels 1, 2, and 3, respectively. All documented procedures/instructions for the control of other types of documentation and data within scope must meet the requirements of the QMS and this document (e.g., Standard Operating Procedures and other Manuals that guide quality system behavior).

2.2 ISO 9001, as implemented by the HQ QMS, requires that employees work to controlled procedures, i.e., procedures that reflect the process as implemented. All Levels 1, 2, and 3 documents, as well as all locally controlled procedures that guide quality system behavior such as Standard Operating Procedures and Manuals, shall either reflect the current procedure as implemented, or a process shall be in place to ensure currency within a specified timeframe. In addition, the Office of Primary Responsibility (OPR) shall ensure that any interim changes to the controlled process are communicated to all who are affected by it.

To ensure currency and to ensure that all Levels 1, 2, and 3 documents continue to meet the requirements of the HQ QMS the following actions will be performed: 1) the HQ ISO 9001 Program Manager will maintain continuous monitoring of the overall HQ QMS; 2) the Document Manager (DM) will review all Levels 1, 2, and 3 document update submissions to ensure they meet documented requirements of the HQ QMS and monitor varying mission requirements and their impact on the HQ QMS associated documentation; and 3) the HQ Audit Manager shall sample and

review documentation to ensure they conform to the HQ QMS during periodic internal audits.

2.3 The Document Management System (DMS) is the repository for all current Levels 1, 2, and 3 documentation and for obsolete versions of Levels 1, 2, and 3 documentation.

2.4 The HCP and OWI formats, specified in this HCP, are intended to be used as guidelines for document preparation. All Headquarters HCP's and OWI's shall meet this guideline but do not need to be in exact conformance with respect to format and structure. A recommended document format is contained in Appendix A, HCP and OWI template. The one exception to this guideline is the flowchart symbology legend contained in Section 5. The flowchart symbols must be drawn and used as described in Section 5. If the need exists to use a symbol that is not identified in Section 5, then a legend must be included on the flowchart. See Appendix B for the ISO Documentation Style Sheet. The Style Sheet should be used to assist in preparing HCP's and OWI's.

2.5 Any revisions to this HCP shall not mandate immediate revisions of other previously approved documents. However, future revisions to these documents shall reflect appropriate guidance as provided from any revisions to the Document and Data Control HCP.

2.6 Any documents external to NASA HQS that affect final product quality and not covered by the NASA Online Directives Information System (NODIS) will be available either via Web sites or databases, or the affected organization must maintain a master list (either paper or electronic) with the latest revision.

2.7 The official controlled electronic version of a Level 1, 2, or 3 document is the electronic file accessible at the following Web address: http://hqiso9000.hq.nasa.gov/dms.htm

2.8 Any hard-copy document printed from the DMS is considered an uncontrolled document. Any office or organization using uncontrolled documents is responsible for ensuring that documentation used is current and that obsolete documentation is removed, deleted, or otherwise assured against unintended use.

2.9 Obsolete documents that are retained will be governed for identification per requirements of the NASA Procedures and Guidelines (NPG) 1441.1, NASA Records Retention Schedules.

2.10 Electronic data will be controlled through standard management information system protocols. Read/write access will be granted through user accounts and passwords. Form NHQ 224 will be used to request and authorize systems access.

2.11 Use of appendices within Levels 1, 2, and 3 documents is permitted. Appendices can be modified without requiring document review and approval. However, the content contained within an appendix cannot materially change the form, fit, or function of the process or procedure. Appendices shall be under document control by use of a Revision Date.

2.12 To ensure proper ownership, responsibility, and accountability, action officer(s) shall be identified for each task step within OWI's. The action officer(s) shall be specified as unique individual positions such as Associate Administrator, Division Director, Budget Analyst, or Working Group Chair.

2.13 Any requirement in HCP 1400-1 may be superceded by Federal regulations, Office of Management and Budget (OMB) Circulars, or Executive Orders, in particular: OMB Circular A-130, "Management of Federal Information Resources," 36 CFR Part 1220 et al., "Records Management Regulations;" and Executive Memorandum, "Plain Language in Government Writing," (June 1, 1998; detailed guidance in "Plain Language Guidelines" issued by the National Partnership for Reinventing Government).

2.14 The Approving Authority may cancel ISO 9001 documents only if the process is not a critical process per the NASA Strategic Management Handbook, NPG 1000.2, or the NASA Organization, NPG 1000.3.

3 Definitions

3.1 Approved Version. The document authorized by the Approving Authority and stored online in the DMS.

An external reference document that is maintained in an electronic library, such as NODIS, shall automatically be the official controlled

version in effect on the date of use as established by the external document, regardless of the citation in the DMS.

3.2 Approving Authority (AA). The designated management representative with authority to approve Levels 1, 2, or 3 documents. The Approving Authority for Levels 1 and 2 documents is the Associate Deputy Administrator. The Approving Authority for Level 3 documents is the Assistant or Associate Administrator, Deputy Assistant or Associate Administrator, or the Functional Office Head of the originating office.

3.3 Controlled Electronic Version. The official version of a Level 1, 2 or 3 document. All electronic versions of documents in DMS are controlled.

3.4 Critical Process. A process which defines the products and processes used to meet an organization's mission requirements as defined in NPG 1000.3, The NASA Organization, and NPG 1000.2, the NASA Strategic Management Handbook.

3.5 Data. A collection of factual information used as a basis for reasoning, discussion, or calculation.

3.6 Disposition. Refers to actions taken with regard to records that are no longer required or which are referred to so infrequently in the conduct of current business that they are removed from the office and either retired to a Federal Records Center or destroyed. NPG 1441.1, NASA Records Retention Schedule, is the official procedure governing this.

3.7 Document. An original or official paper relied on as the basis, proof, or support of something. For the purposes of this HCP, documents include hardcopy or electronic media that present policies, procedures, work instructions, or instructional materials made part, directly or by reference, to the QMS. All quality documents are simply referred to as documents.

3.8 Document History Log. A table included in each Level 1, 2, and 3 document containing the document status, effective date, revision level, and a description of modifications to approved documents. Possible document status categories are Baseline, Revision, Administrative Change, and Canceled. The description will provide a detailed description of substantive changes. Grammatical changes

need only be noted but not detailed. A document can be reissued under the same revision level if the changes are administrative in nature and do not involve process form, fit, or function changes.

3.9 Document Manager (DM). The person who administers the DMS and maintains the Master List of Levels 1, 2, and 3 documents. The DM also provides a review of Levels 1, 2, and 3 documents for conformance with the Headquarters QMS.

3.10 External Documents. Those which come from a source other than Levels 1, 2, or 3 quality system documents and are included by reference as part of the QMS. They include such things as Federal regulations, military specifications, industry standards, Agency-level and Headquarters directives, standards, and specifications.

3.11 Form. An approved QMS document, which, when executed, becomes a quality record.

3.12 Fundamental Dependency. Work one must have another office perform in order to satisfy the requirements of an OWI or process. Offices with fundamental dependencies are required to demonstrate an understanding of work requirements during ISO audits by providing substantiating documentation from an organization with which they have a Fundamental Dependency.

3.13 Guideline. A document or statement in a document that provides information, suggestions, best practices, or other direction and that is recommended, but is usually optional, rather than mandatory.

3.14 Historical Document. A document that is preserved for historical purposes. Obsolete versions of Levels 1, 2, and 3 ISO documents are considered historical documents.

3.15 Interface. An activity within a process that defines an input, output, or requirement with another Headquarters organization.

3.16 Level 1 Document. QMS Manual. This Manual defines Headquarters policy in applying the ISO standard to Headquarters. See http://hqiso9000.hq.nasa.gov/dms.htm (internal to Headquarters) or http://www.hq.nasa.gov/hqiso9000/library.htm (external to Headquarters) to view this document.

3.17 Level 2 Documents, HCP's. HCP's are Headquarters interorganizational documents that describe common processes shared by many or all Headquarters organizations, which meet requirements for conformance with ISO standards and provide principles and operating procedures (see the QMS Manual). An HCP describes what is to be done, when, where, and by whom. A step-by-step process description will be included with a process flow chart. See http://hqiso9000.hq.nasa.gov/dms.htm (internal to Headquarters) or http://www.hq.nasa.gov/hqiso9000/library.htm (external to Headquarters) to view these documents.

3.18 Level 3 Documents, OWI's. OWI's are quality system documents that provide step-by-step instructions stating how to perform specific duties within one or more organization, but do not apply to all Headquarters organizations. See http://hqiso9000.hq.nasa.gov/dms.htm (internal to Headquarters) or http://www.hq.nasa.gov/hqiso9000/library.htm (external to Headquarters) to view these documents.

3.19 Level 4 Documents, Data. Written or electronically completed or in-process forms, reports, records, and other information that provides objective evidence that the quality system is followed and is effective.

3.20 Limited Applicability. That which has been superseded, is obsolete or applies only under specified conditions; user must have documented authority to use these documents.

3.21 Maintaining Documentation. Providing storage, distribution, reproduction, document revisions, replacement of documents with the latest revisions, and disposition of obsolete and/or invalid documents and reference documents for the Master List documentation.

3.22 Master List. Controlled roster for Levels 1, 2, and 3 documents that identifies current revision status. See http://hqiso9000.hq.nasa.gov/dms.htm (internal to Headquarters) or http://www.hq.nasa.gov/hqiso9000/library.htm (external to Headquarters) to view the Master List.

3.23 Obsolete Version. An archived Level 1, 2, or 3 document that has been superseded or canceled. All obsolete versions of approved documents will be available in the DMS with read-only access.

3.24 Office of Primary Responsibility (OPR). The office responsible for preparing, submitting for review and approval, and maintaining the

accuracy and currency of Levels 1, 2, and 3 documents from baseline release through each revision until cancellation.

3.25 Organization (Org). Generic term used to describe any Headquarters element, as set forth in The NASA Organization and that is part of the QMS.

3.26 Process Form, Fit or Function Changes. Refers to changes made to a process that could affect process controls such as new criteria for workmanship, new review and reporting requirements, or other controlled conditions such as compliance with reference documents. An example of a process change that affects form, fit, or function is changing the record retention and disposition times for quality records. An example of a change that does not affect form, fit, or function is editing a quality record title so it is referred to consistently and clearly throughout the document.

3.27 Quality Record. Objective evidence of the fulfillment of Headquarters requirements for quality or the effectiveness of the operation of the Headquarters QMS. These are Level 4 documents.

3.28 Quality Management System. A process-based management system used to control the quality of an organization's products and services.

3.29 Reference Document. Agency-level, Headquarters, or other external material cited in the QMS and required to carry out the quality system. The requirements established by approved Reference Documents that are identified in QMS documents shall be fully applicable within the context and procedures of those documents (e.g., the QMS, HCP's, and OWI's).

3.30 Repository. A centrally accessible location in an organization for storing and controlling documents and data.

3.31 Responsible Organization. A Headquarters entity charged with carrying out any activity or maintaining data related to the QMS as set forth in Levels 1, 2, or 3 documentation. The Responsible Organization, as distinguished from the Office of Primary Responsibility, may or may not be involved in preparing, submitting, revising, maintaining, or carrying out any other functions with respect to Levels 1, 2, or 3 documentation.

3.32 Retention. The length of time that a record and document is to be kept. See NPG 1441.1, NASA Records Retention Schedules.

3.33 Reviewers. Those offices or individuals tasked with reviewing Levels 1, 2, or 3 documents to ensure accuracy, agreement, and the overall effectiveness of the process.

3.34 Revision. A change, modification, or newly edited version of a document. The Document Manager will determine whether a change requires a document revision.

3.35 Uncontrolled Copies. Those that are printed from the Master List system or duplications of the signed hard-copy document.

4 References

Documents listed in this section are used as reference materials for performing the processes covered by the QMS. Since all Levels 1 and 2 documents are applicable to the QMS, they need not be listed in the Reference Documents section of HCP's and OWI's unless specifically referenced in the procedure (Section 6).

4.1 HQSM1200-1, Headquarters QMS Manual

4.2 NPG 1441.1, NASA Records Retention Schedules

4.3 NODIS, NASA Online Directives Information System http://nodis.hq.nasa.gov/Nodis1.1/Welcome.html

4.4 ANSI/ASQC Q9001:2000, American National Standards Institute, Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

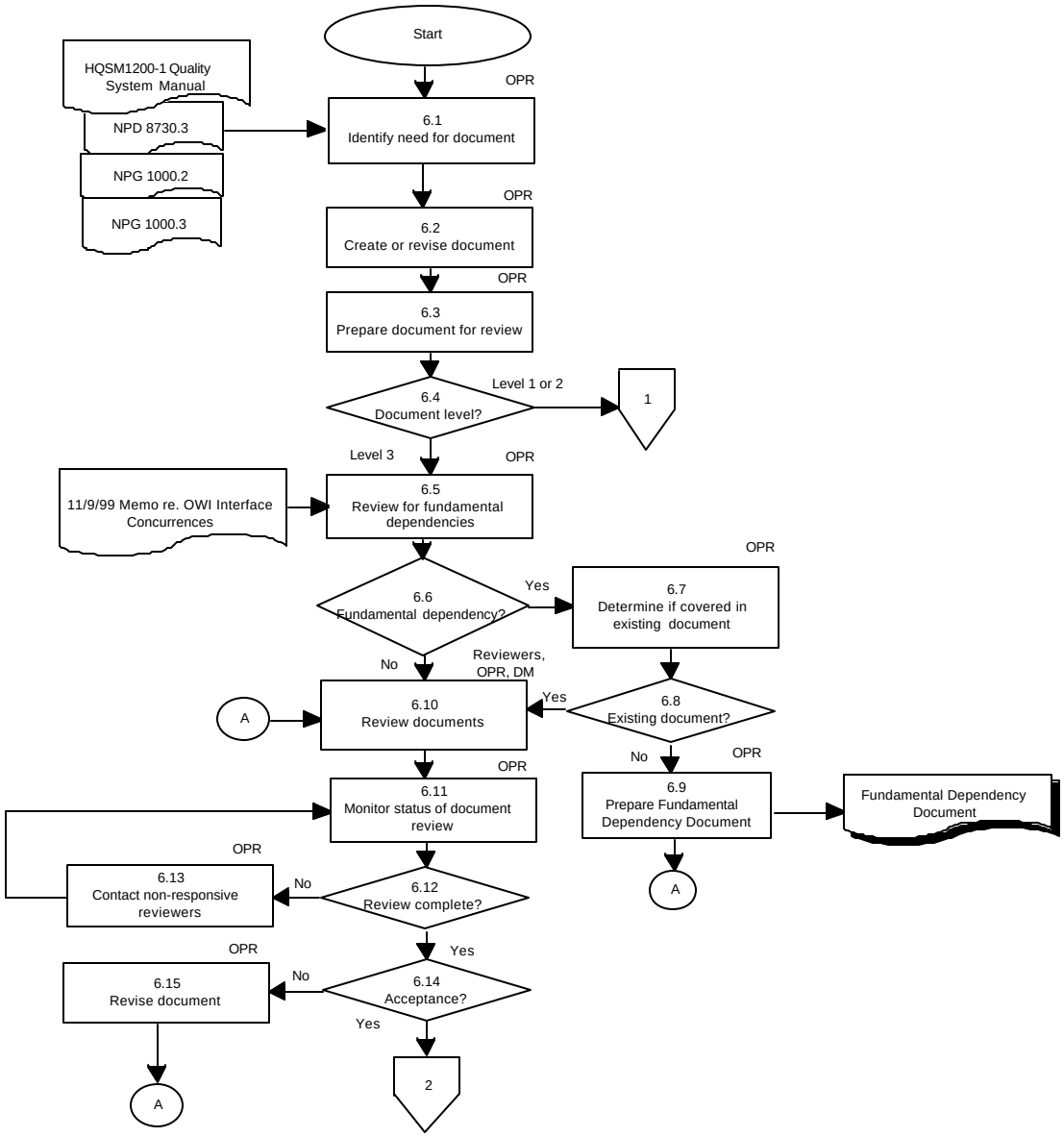
4.5 11/9/99 memo to distribution from HQS ISO 9001 Executive Management Representative, Subject: HQS OWI Interface Concurrences

4.6 NPG 1000.2, NASA Strategic Management Handbook

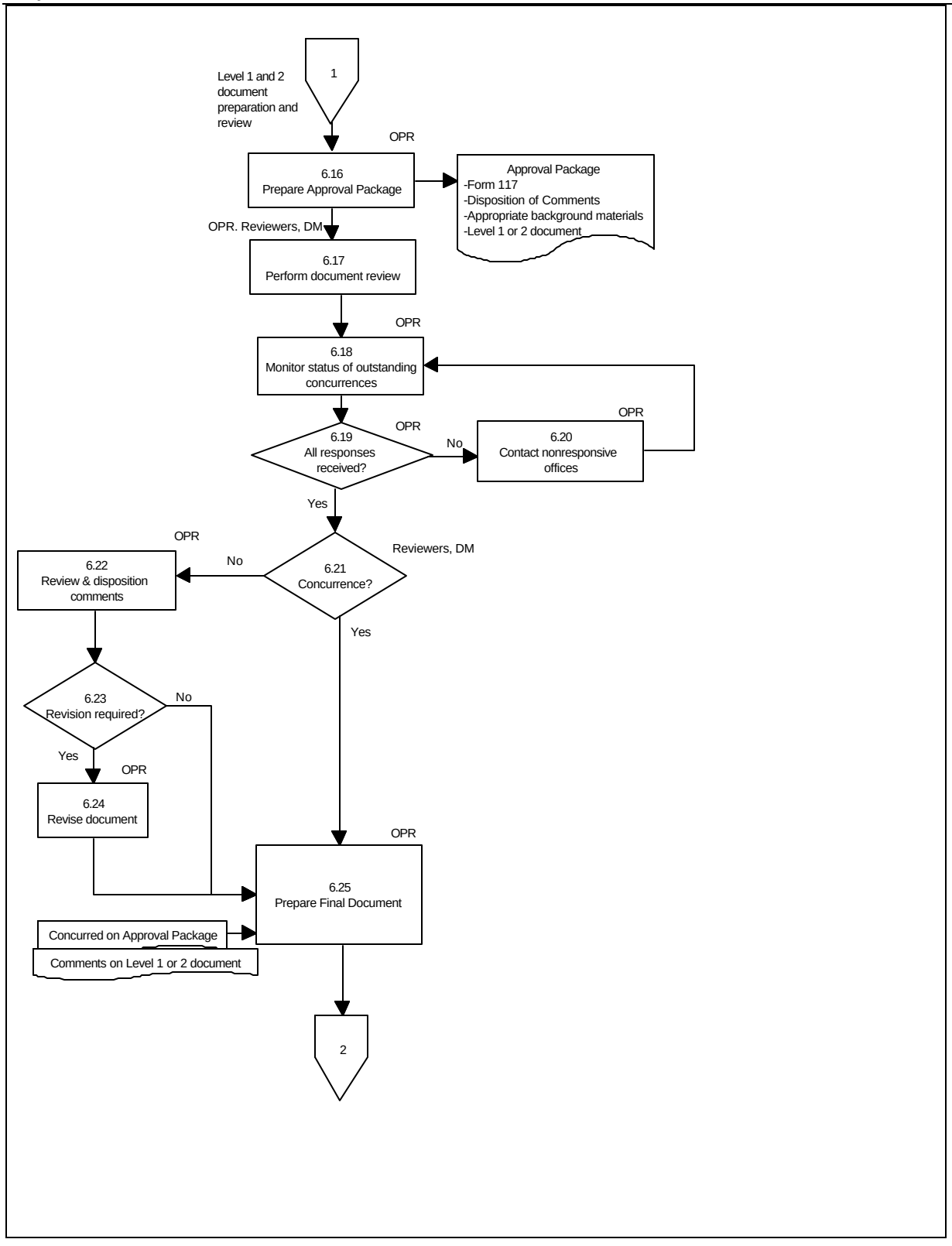
4.7 NPG 1000.3, The NASA Organization

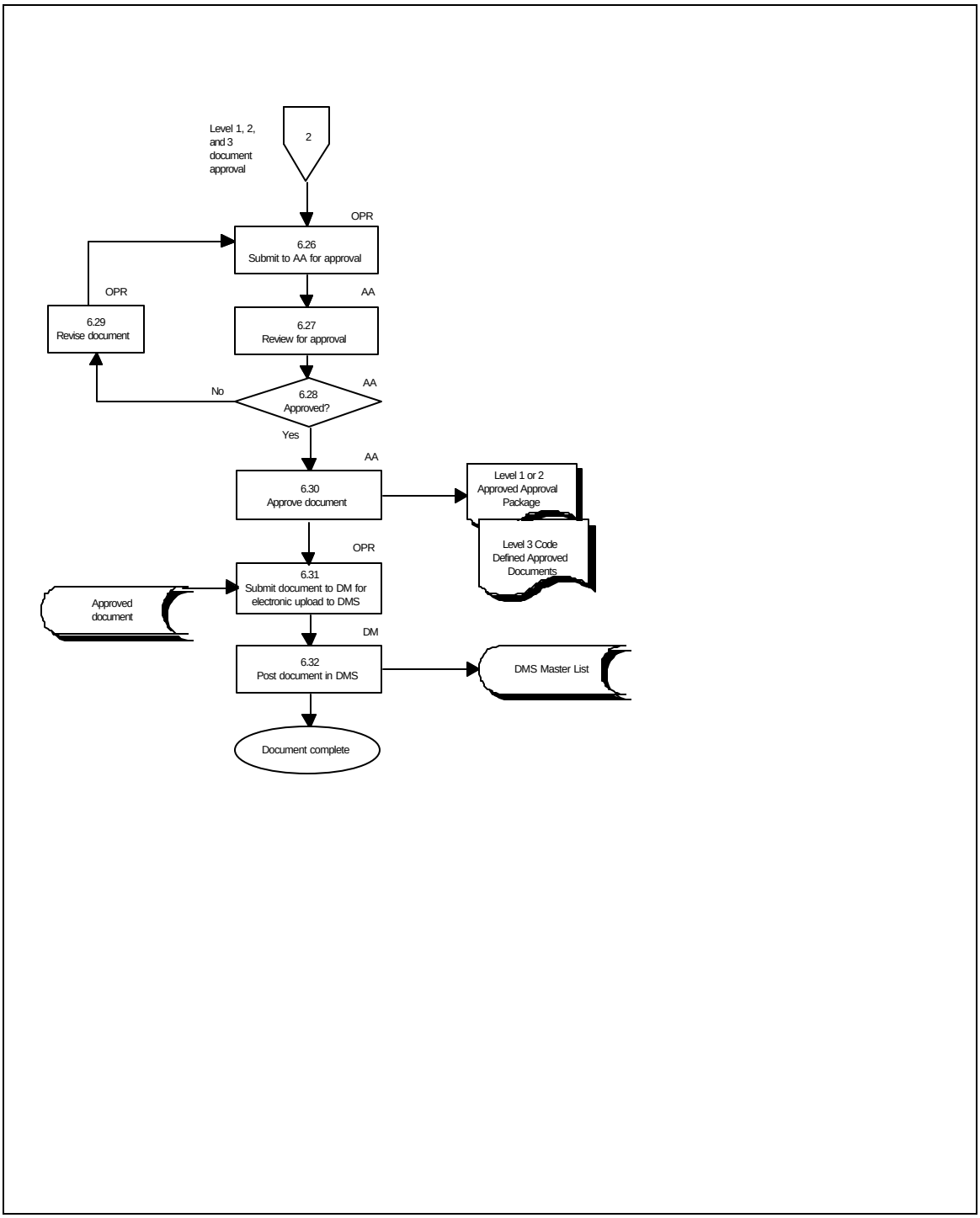
4.8 NPD 8730.3, NASA Quality Management System Policy (ISO 9000)

5 Flowchart


Start
HQSM1200-1 Quality System Manual
NPD 8730.3
NPG 1000.2
NPG 1000.3
OPR
6.1 Identify need for document
OPR
6.2 Create or revise document
OPR
6.3 Prepare document for review
6.4 Document level?
Level 1 or 2
1
Level 3
OPR
11/9/99 Memo re. OWI Interface Concurrences
6.5 Review for fundamental dependencies
6.6 Fundamental dependency?
Yes
OPR
6.7 Determine if covered in existing document
No
Reviewers, OPR, DM
A
6.10 Review documents
Yes
6.8 Existing document?
No
OPR
6.9 Prepare Fundamental Dependency Document
Fundamental Dependency Document
A
OPR
6.11 Monitor status of document review
OPR
6.13 Contact non-responsive reviewers
No
6.12 Review complete?
Yes
OPR
6.15 Revise document
No
6.14 Acceptance?
Yes
A
2

Responsible Office: J/Office of Management Systems
Subject: Document and Data Control

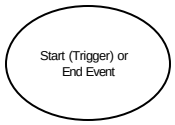



Level 1, 2, and 3 document approval
2
OPR
6.26
Submit to AA for approval
AA
6.27
Review for approval
AA
6.28
Approved?
No
OPR
6.29
Revise document
Yes
AA
6.30
Approve document
Level 1 or 2 Approved Approval Package
Level 3 Code Defined Approved Documents
OPR
6.31
Submit document to DM for electronic upload to DMS
Approved document
DM
6.32
Post document in DMS
DMS Master List
Document complete

5 Flowchart (continued)

FLOWCHART SYMBOLOGY LEGEND

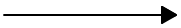
Note: The symbology in this legend is the Headquarters standard and must be followed. Any deviations must be documented.



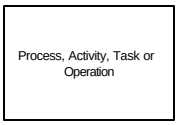
Represents the beginning and end points of flowchart

Represents exit/entry from another part of the flowchart on the same page. Label sequentially, A, B, C)

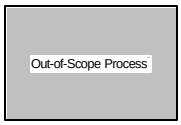
Represents continuation of flowchart to another page. Label sequentially (1, 2, 3). Destination page should have a corresponding receiving off-page connector.



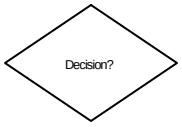
Flow line. Indicates the direction of a process flow.



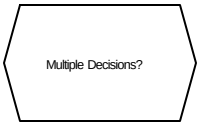
Represents any kind of processing function, involving a defined operation or set of operations or steps.



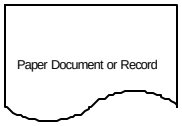
Represents any kind of processing function that occurs outside the scope of the documented process. Must be shaded,



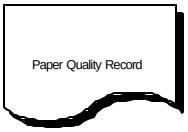
Represents a decision operation resulting in 2 flows.



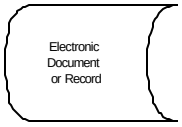
Represents a decision operation with multiple options resulting in 3 or more flow lines.



Represents a nonquality formal input/ output in paper format.



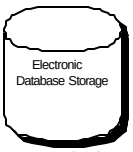
Represents a quality record formal input/ output in paper format. Must shadow.



Represents a nonquality document or record in electronic format.

Represents quality records stored in electronic format. Must shadow.

Represents nonquality electronic database data.



Represents data that may be used to generate a quality record. Must shadow.

6 Procedure

Step	Action Officer	Action
6.1	OPR	Identify need for a Level 1, Level 2, or Level 3 document. A document is needed if the process is a key process identified by HQSM1200-1, the QMS Manual, NPG 1000.2, the NASA Strategic Management Handbook, or NPG 1000.3, the NASA Organization. Other processes can be documented as needed and determined by OPR's.
6.2	OPR	Create or revise a Level 1, Level 2, or Level 3 document. The need for an HCP or OWI does not always necessitate the creation of a new document. If a NASA document, such as an NPG, already exists that defines the process, then this document can be used in lieu of creating a new quality system document. For the creation or revision of a document such as an NPG, see Code J's OWI on Agency Directives Management. Prepare draft documents using the standard word processing software currently in use at NASA HQ. See Appendix A for instructions and document templates for HCP's and OWI's. It should be noted that the same format will be used for HCP's and OWI's. Also see the legend in Section 5 for the mandatory flowchart symbology and Appendix B for a Documentation Style Sheet. All documents and data that are within the scope of the Headquarters QMS shall be controlled, using the document's title/subject, effective date, and the Office of Primary Responsibility's organizational code. Levels 1, 2, and 3 documents shall conform to the document-naming convention in Appendix C. For revised documents, download the current version from the Document Management System Master List at http://hqiso9000.hq.nasa.gov/dms.htm. To aid in the document review process, it is recommended that revision marks such as side bars, underline, and strikeouts be included in the revised document. Revise the document and update the Document History Log according to paragraph 3.7. Grammatical changes including spelling and punctuation may be noted but not detailed. Each time the document is reissued, update the document revision level (e.g., Baseline, A, B, C), unless the change is administrative in nature, and then the document can be issued under the same revision level but with a new document effective date. To cancel a document, add the status of Canceled to the Document History Log and include an explanation in the description section. Documentation should be provided to the Document Manager showing evidence that the Approving Authority authorized the canceling of the document.
6.3	OPR	Prepare the document for the review and approval process. The document level determines the review and approval process. Because Level 1 and 2 documents (the QMS and HCP's) are to be signed by the Associate Deputy Administrator, they are to be reviewed by all

		Headquarters single-letter codes and two-letter organizations within the Office of the Administrator. Level 2 documents are also to be reviewed by the ISO Program Office to ensure there are no system integration problems with the Headquarters QMS. Level 3 documents (OWI's) are owned by the originating office and, therefore, are to be signed by the Associate Administrator, Deputy Associate Administrator, or the Functional Office Head of the originating office. Level 3 documents should be reviewed by the following employees: 1) those employees within the originating office who are either responsible for the process or play a role in carrying out the process, 2) the Headquarters ISO DM, and 3) any Headquarters organization the OPR designates to review the process. When preparing a document for review, the OPR should designate a review schedule.
6.4	OPR	Is the document a Level 1, 2, or 3 document? If Level 1 or 2 go to step 6.16. If Level 3, proceed to step 6.5.
6.5	OPR	The document is a Level 3 document (OWI). The document needs to be reviewed to determine if interfaces in the form of fundamental dependencies exist within the procedure with other Headquarters organizations. A Fundamental Dependency is work that must be performed by another office in order to satisfy the requirements of the OWI or process. An interface is an activity identified in the process that defines an input, output, or requirement with another Headquarters organization. The intent of reviewing for fundamental dependencies is to ensure that all performing organizations are aware of the fundamental dependencies identified in OWI's, understand the requirements, and agree to comply with the form, substance, and schedule of the requirements. Concurrence is limited to a specific Fundamental Dependency and does not denote agreement with other interfaces or the process as a whole. By definition, a process is owned by the developing organization, and the developing organization has the authority to approve its internal processes. If an approved document is revised, the review shall be performed by the same organizations that performed the original review, unless specifically designated otherwise. Reconcurrence on fundamental dependencies should be reassessed whenever changes to the process, or policy underlying the process, are made and the master list updated. If nothing about the Fundamental Dependency changes, then reconcurrence may not be needed. Offices requested to concur on fundamental dependencies may decide the level within the organization, e.g., Associate Administrator, Division Director, or other level, where concurrence needs to occur to ensure commitment to perform the work.
6.6	OPR	Does a Fundamental Dependency exist? If yes, go to step 6.7. If no, go to step 6.10. See Appendix D for guidance on determining fundamental dependencies.

6.7	OPR	A Fundamental Dependency exists. Identify the step(s) in the OWI where Fundamental Dependencies occur. Ensure that the nature of each Fundamental Dependency is clearly stated, including any references or acceptability criteria. A review of existing Headquarters documents shall be performed to determine if a document exists that clearly demonstrates awareness, understanding, and agreement between the two organizations. When a Fundamental Dependency exists, the OPR shall ensure that they are able to produce substantiating documentation from the organization with which the Fundamental Dependency exists. The documentation can take on a number of forms. The following are four examples. 1) There is an existing policy, e.g., NPD, NPG, or direction from the Administrator that clearly states the requirement. By definition, all NPD's/NPG's need concurrence from all affected codes. Therefore, if the NPD/NPG requirement is clear regarding a Fundamental Dependency, then the requirement for concurrence has been met. 2) Concurrence is built into the process and is documented and controlled as a quality record. For example, if the process has a Fundamental Dependency with another code, but the code's concurrence is one of the explicit steps in the process, then the requirement for the Fundamental Dependency concurrence has been met. 3) There is some other type of document, e.g., memo, which indicates awareness, understanding and agreement. 4) A separate concurrence to an OWI by the performing organization. Only when there is no existing documentation that indicates awareness, understanding, and agreement with a Fundamental Dependency identified in the process, is the organization required to obtain a separate concurrence on the Fundamental Dependency.
6.8	OPR	Is there an existing document that demonstrates awareness, understanding, and agreement between the two organizations? If yes, proceed to 6.10. If no, proceed to 6.9.
6.9	OPR	Prepare Fundamental Dependency documentation. See Appendix E for guidance on preparing this documentation. This documentation should identify any form, substance, acceptance criteria, and schedule considerations necessary to meet work requirements. When a separate concurrence is obtained where one did not previously exist, the record of the concurrence shall be controlled in accordance with NPG 1441.1, Schedule 1, Item 72B. These records will be quality records for purposes of demonstrating conformance to this HCP (Document and Data Control). All other objective evidence of concurrence shall be controlled in accordance with the appropriate subject classification as detailed in NPG 1441.1.
6.10	OPR, Reviewers, DM	Submit documents for review based on review criteria specified in 6.3 above. The review package should consist of the Fundamental Dependency Document prepared in step 6.9 if a Fundamental Dependency exists and is not documented elsewhere in the OWI. Before the documents are submitted for review, check the presubmission checklist (Appendix F) to ensure completeness of the document. The reviewers read the process for conformance to the standard, acceptance of the process, applicability of referenced documents, and

		existence of fundamental dependencies. The Document Manager also provides a review for conformance with the HQ QMS.
6.11	OPR	Monitor status of document review to ensure that review is complete.
6.12	OPR	Is review complete? If yes, proceed to 6.14. If no, go to 6.13.
6.13	OPR	Contact nonresponsive document reviewers to determine status of review. The OPR should discuss a new review schedule.
6.14	Reviewers, DM	Does the reviewer concur and accept the process? If yes, go to step 6.26. If no, go to step 6.15. It is important to note that some document reviewers only need to indicate acceptance of the process and do not need to formally concur. When a Fundamental Dependency exists, the reviewer involved in the Fundamental Dependency needs to actually concur on the Fundamental Dependency Document (if any) and return this document to the OPR.
6.15	OPR	The reviewer had a problem with the process and did not accept and/or concur. The OPR should assess the need to revise the document based on the reviewer's comments and resubmit the documents for review.
6.16	OPR	Document is a Level 1 or 2 document. Prepare approval package as required by the Headquarters Correspondence and Mail Communications Management Office. Approval Package consists of 1) the Level 1 or 2 document, 2) NHQ Form 117, Action Document Summary, 3) Comment Disposition Document, and 4) background materials.
6.17	OPR, Reviewers, DM	Submit document for review. Because the document is either a Level 1 or 2 document, the document shall be reviewed by all Headquarters single-letter codes and two-letter organizations within the Office of the Administrator. Level 2 documents are to be reviewed by the ISO Program Office to ensure there are no system integration problems with the HQ QMS. The document is also to be forwarded to the ISO DM for review. Document is reviewed for conformance to the ISO standard, acceptance of the process, and applicability of referenced documents. When document review is complete, the returned document can be in the form of concurrence, concurrence with comments, or nonconcurrence with comments. Comments should be specific enough that the OPR understands the issues or problems.
6.18	OPR	Monitor status of outstanding concurrence.
6.19	OPR	Have all responses been received? If yes, proceed to 6.21. If no, proceed to 6.20.
6.20	OPR	The OPR should contact nonresponsive offices to determine whether they will have comments or intend to concur.
6.21	Reviewers, DM	Did the document reviewers concur on the document? If yes, go to step 6.25. If concurrence was not obtained, go to step 6.22.
6.22	OPR	The OPR reviews and dispositions the comments. Some comments may require modifications to the document, whereas others may not. Update the Disposition of Comments Document in the approval package.
6.23	OPR	Is a revision to the document required as a result of the comments received? If no, proceed to 6.25. If yes, proceed to 6.24.
6.24	OPR	Revise document and update the Document History Log.
6.25	OPR	Prepare final document for approval. Document is ready for approval

		when all comments have been dispositioned and/or concurrence has been received. Note: A document can be submitted for approval even when concurrence has not been obtained provided that an explanation is provided in the Disposition of Comments Document.
6.26	OPR	Levels 1, 2, and 3 documents. Submit to approving authority for approval.
6.27	AA	Review document for acceptance of the process.
6.28	AA	Is document approved? If yes, go to step 6.30. If no, go to step 6.29.
6.29	OPR	The approving authority did not approve the document. Take appropriate action to revise the document per the comments/concerns received from the approving authority.
6.30	AA	The approving authority approves the process. The output of this step is the Level 1 or 2 Approved Approval Package or the Level 3 Code Defined Approval Documents.
6.31	OPR	The OPR shall submit the approved document to the DM for electronic upload to the Master List. The approved document shall contain the effective date and an indication within the document that the approving authority approved it. Each code shall submit a Delegation of Authority memo to the DM from the Code's AA indicating the name of the OPR who has authority to transfer approved documents to the DM.
6.32	DM	Post document to the Master List in the Document Management System. It should be noted that the DM could request that changes be made to the document so it meets the requirements of this HCP. Changes of this nature would be format related rather than content related. Because this type of change would not materially change the process or policies within the process, the document can be posted on the Master List with a new effective date and under the same revision level.

7. Quality Records

This section is used to identify quality records, record owners, their location, media, schedule and item number, and retention/disposition of records that are created and maintained. It is important to note that not all documents created as a result of implementing a process are quality records. The OPR is to identify those quality records that result from key steps in the process. See Appendix G for guidance on the minimum set of required quality records. When listing Quality Records, attention shall be paid to ensure that the records cited in the flowchart and procedure sections are identified in the same context as those listed in the Quality Records section.

NPG 1441.1, NASA Records Retention Schedule, is the official procedure governing the retention, retirement, and destruction of Agency records. These schedules shall be reviewed to determine into which item and series the records best fit. Once a best fit is

determined, the schedule number, item number, and minimum retention shall be cited in a table similar to the one below.

It is recommended that the record owner and location sections of the table below contain information that will generally guide employees to the record, but not be so detailed that an office reorganization or relocation will necessitate the update of this table.

Record Media refers to the official record and whether it is in electronic or hard copy format. The official file copy is either the electronic copy or the hard copy but not both.

RECORD IDENTIFICATION	RECORDOWNER	LOCATION	RECORD MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION
Fundamental Dependency Document	OWI OPR	OPR Files	Hard	Schedule 1, Item 72B	Retire to FRC 5 years after cancellation or when superseded.
Level 1 or 2 Approved Approval Package	Code JI	ISO Program Office Files	Hard	Schedule 1; Item 72.B	Retire to FRC 5 years after cancellation or when superseded.
Level 3 Code Defined Approved Document	OWI OPR	OPR Files	Hard	Schedule 1, Item 72.B	Retain to FRC 5 years after cancellation or when superseded.
DMS Master List	Code JI	http://hqiso9000.hq.nasa.gov or http://www.hq.nasa.gov/hqiso9000/library.htm	Electronic	Schedule 1; Item 72.B	Retire to FRC 5 years after cancellation or when superseded.

APPENDIX A - Headquarters Common Process (HCP) or Office Work Instructions (OWI) Template

Header

Page 1
Unique Document Number
Effective Date mm/dd/yy

Responsible Office: [Enter name of office here]
Subject: [Enter Document Subject]

Document Subject

Document History Log

Status (Baseline/ Revision/ Admin Change/ Canceled)	Document Revision	Effective Date	Description
Baseline		*	#

* Added after the Approving Authority approves.
# Information on changes must be specific enough to make clear what the revision means. Identification of pages changed is insufficient

---------- Page Break---------

1 Purpose

2 Scope and Applicability

3 Definitions (list each word and the corresponding definition)

4 References (list each reference document)

Identify those documents that are used as references for carrying out the processes covered by the Quality System. Since all Levels 1 and 2 documents are applicable to the Quality System, they need not be listed in the Reference Documents section of HCP's and OWI's unless specifically referenced in the flowchart (Section 5) and procedure (Section 6).

The requirements established by approved Reference Documents that are identified in Quality System documents shall be fully applicable within the context and procedures of those documents (e.g., the QMS Manual, HCP's, and HOWI's).

5 Flowchart (chart)

6 Procedure

Procedures shall correspond to the flowchart in Section 5. To ensure proper ownership, responsibility, and accountability action officer(s) shall be identified for each task step within work instructions. The action officer(s) shall be specified as unique individual positions such as Associate Administrator, Division Director, Budget Analyst, or Working Group Chair.

7 Quality Records (complete table below)

RECORD IDENTIFICATION	RECORD OWNER	LOCATION	RECORD MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION

Appendices (include all)

Footer

Appendix B: ISO Documentation Style Sheet

This style sheet contains recommendations to help ensure a standard approach for preparing HQS Common Procedures and Office Work Instructions (OWI). This style sheet serves as supporting documentation to HCP1400-1, Document and Data Control, but it is not part of HCP1400-1.

Document Header.

1. The document title should be entered in the header in the following format: HOWI7400-S001Baseline (Note placement of "-" and no spaces. For a subsequent version, the word "Baseline" would be replaced with A, B, C).
2. Page numbering should be included in the header and should be in the following format: Page x of x. It is best to set this up in Word, using dynamic update of page numbering rather than hard coding in the page numbers.

Section 4, References.

1. Any reference documents in the OWI should not contain revision designation (e.g., NPG 7120.5 not 7120.5A).
2. A hot link should be included with the reference document title when reference documents are available via the Internet. Hot links should point to the official document repository, such as NODIS, and the ISO DMS for internal documents. For external reference documents, the hot link should point to the Agency that created the documents.

Section 5, Flowchart.

1. Process steps and decision boxes are numbered 6.n to correspond with the narrative in Section 6.
2. The ending oval should not have outputs.
3. Decision boxes should not have inputs or outputs.
4. Decision boxes should end with a question mark.
5. Each process step should begin with a verb.
6. Flows should be prepared in portrait orientation with inputs to process steps on the left of the box and outputs on the right, unless necessitated by complexity of the flowchart.
7. It is not necessary to show output of 6.n as input to the next step. If showing this level of granularity is needed for clarity, then state the input in Section 6.
8. Process steps resulting from branches should be shown on the same page as the decision or on separate pages connected by off-page connectors.
9. A single process block can contain multiple action officers (e.g., a process block may be performed by multiple positions such as AA/DM).
10. Action officers should be shown in the flowchart outside and adjacent to the process box. If acronyms are used on the flowchart, you should define them in one of the following ways: a) in the text of the OWI, b) in Section 4 of the OWI, or c) in a legend on the flowchart.

Section 7, Quality Records.

1. Quality records should be listed in Section 7 in the order in which they appear in the flowchart.
2. The title of the quality record should be the same as that shown on the flowchart, described in Section 6, listed in Section 7, and retrieved to show the auditor.

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APPENDIX C - QMS Controlled Document Naming Convention

A slightly different naming convention will be used for HCP's and OWI's. The only difference is that OWI's will include a mail code identifier. Since the HCP's span several codes, a single-letter mail code cannot be specified. The following are sample HCP and OWI document names.

HCP and QSM Sample Document Name

HCP0000-001A

- Revision Level
- Document Number
- Subject Classification (consistent with NASA filing and document retirement scheme)
- Document Type (QSM or CP)
- Center (H for HQS)

OWI Sample Document Name

HOWI0000-R001A

- Revision Level
- Document Number
- Originating Office Single-Letter Mail Code
- Subject Classification (consistent with NASA filing and document retirement scheme)
- Document Type (OWI)
- Center (H for HQS)

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Appendix D: Guidance for Determining Fundamental Dependencies

An interface is defined as an activity called out in your process that defines an input, output or work requirement with another Headquarters organization. A subset of interfaces is the fundamental dependencies between offices. A Fundamental Dependency is defined as work that must be performed by another office to satisfy the requirements of the OWI or process.

The following examples are presented to help Headquarters offices determine if a Fundamental Dependency concurrence is required. They are intended to be examples only, not a portrayal of actual fundamental dependencies.

Example 1 – Code B has a budget formulation process which requires the Strategic Enterprise codes to provide them with inputs in a specified format.

Strategic Enterprise concurrence required? Yes, the Strategic Enterprise inputs are a Fundamental Dependency. Code B cannot complete their budget formulation process without the Strategic Enterprise codes performing work and providing the input. Therefore, a separate concurrence would be required if no documentation exists to reflect concurrence, or concurrence is not part of the process.

Example 2 – Code R has a budget formulation process which has as an input (interface), from the Code B POP call.

Code B Concurrence required? No, the Code B input is not a Fundamental Dependency. The Code R process only points to the fact that they receive a POP call from Code B. Code R is not requiring Code B to do work to complete their internal process. They are merely recognizing the fact that Code B provides them with a requirement. Therefore, no concurrence is required.

Example 3 – Code R completes their budget formulation process and provides an output to Code B, in terms of the Code R input to the POP.

Code B concurrence required? No, the Code R output is not a Fundamental Dependency. The Code R budget process is complete at this point. Code R is not requiring Code B to do work. Code R is merely answering the Code B POP as required by Code B, and concurred upon (in the earlier example) by Code R.

Example 4 – Code U formulates the details of an international agreement that is approved by Code I. The Code U OWI states that the official quality record is kept in Code I.

Concurrence by Code I required? Yes, the quality record for the Code U process is a Fundamental Dependency. Code U is depending on Code I to keep the official quality record consistent with existing NASA policy. Therefore, a separate concurrence would be required if no documentation exists to reflect concurrence, or concurrence is not part of the process.

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Appendix E: Sample Documentation for Obtaining Concurrence on Fundamental Dependencies

TO: (Offices in which fundamental dependencies' concurrence is requested)

FROM: (Office requesting fundamental dependencies' concurrence)

SUBJECT: Concurrence of Code HOWIxxxx-xxxx fundamental dependencies

Enclosure 1 is a copy of HOWxxxx-xxxx. Enclosure 2 provides a table, which lists the fundamental dependencies with your office contained in HOWIxxxx-xxxx, and requests your concurrence. Please return your office's concurrence, reflecting a full understanding and agreement to support the requirement, within 10 business days of the date of this memo. Questions regarding HOWIxxxx-xxxx should be directed to (contact name) at (telephone number).

2 Enclosures

OWI Fundamental Dependency Table

OWI Number	Step Where Fundamental Dependency Occurs (enter step number)	HQ Organization Where Fundamental Dependency Occurs	Description of Fundamental Dependency(ies)
HOWI9999-V9999	6.1	B,C,E,F,G,H,I, J,K,L,M,P,Q,R ,S, U, Y,Z, CIC, PMC, Union	Fundamental Dependency is request for info to meet POP call

Concurrence:

I am aware of the fundamental dependencies contained in HOWIxxxx-xxxx as detailed in the table above. I understand the requirements of the fundamental dependencies identified and agree to comply with the form, substance, and schedule of the requirements.

Code	Name	Title	Signature	Date
____	_____	_____	_____	_____

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APPENDIX F - Presubmission Checklist

1. Identify reference documents such as NASA Policy Directives (NPD), NASA Procedures and Guidelines (NPG), NASA regulations, standards, or other reference documentation. Do not use version numbers unless use of a specific version of a document is specifically required by the procedure.
2. Identify those forms, reports, and other Quality Records that are the result of key steps in the process. Include this information in the Quality Records Table. Check Quality Records against Appendix F of this document to ensure that the minimum required records have been identified.
3. Search the ISO documentation Master List and compare the document against existing documents. If other organizations have similar procedures, a determination may need to be made among these offices and the ISO Program Office concerning whether a procedure should be documented as a group of OWI's or as an HCP. If it is determined early in the process that an HCP should be developed, it may streamline the document system and reduce work.
4. Prepare a flowchart of all processes or procedures including inputs and outputs.
5. Review the draft against the Headquarters QMS Manual. Assess the draft procedure to ensure that it meets the requirements of the QMS Manual.
6. Check the ISO Corrective Action System for outstanding issues and nonconformances that must be addressed.
   See http://hqiso9000.hq.nasa.gov/cas.htm
7. Check with your office's Corrective and Preventive Action System Representative for ISO system audit issues or recommendations.
8. Have the employee(s) who perform any part of the procedure review it. For HCP's, employees from all affected offices shall review.
9. Ensure a top-level review within the originating office.
10. Review to ensure that the document meets the intent of the guidelines as specified in this HCP.
11. Avoid the use of ambiguous or unclear terminology (e.g., "if appropriate", "significant", "minor") in describing activity or decision steps in the procedure. If such terms are used, they should be defined.
12. Update the history log for revisions of approved documents.
13. Review OWI for fundamental dependencies with other Headquarters organizations and ensure that concurrence on the interface exists or obtain concurrence.
14. Do a cross-check between Sections 5, 6, and 7 to ensure that Quality Records are consistently identified.
15. Ensure that the databases used or created as part of a procedure are official, controlled, and secured against unauthorized entry or destruction.
16. Be aware that certain terms (e.g., "training", "review", "verification", "rework") have specific connotations when used in connection with the ISO 9001 standard and are, therefore, audited within those connotations. If such terms are used, be certain that all elements of the standard regarding the term are addressed.

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APPENDIX F – Records Required by the HQS QMS

Section 4.2.4 of the ISO 9001-2000 QMS requires that records be established and maintained to provide evidence of conformity to requirements and of the effective operation of the QMS. Below is the minimum set of records required by the HQS QMS.

Sec. 5.6 Management Review
- Records from management reviews

Sec. 6.2 Human Resources
- Records of education, training, skills, and experience

Sec 7 Product Realization
- Records to provide evidence that the realization processes and resulting product meet requirements

7.2.2 Review of Requirements Related to the Product
- Records of the results of the review and actions arising from the review

7.2.3 Design and Development Inputs
- Records related to the inputs of product requirements

7.4.1 Purchasing Process
- Records of the results of evaluations and actions arising from the evaluation

8.2.2 Internal Audit
- Records from internal audits

8.2.4 Monitoring and Measurement of Product
- Records to indicate the person(s) authorizing release of product

8.3 Control of Nonconforming Product
- Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained

8.5.2 Corrective Action
- Records of the results of action taken to eliminate the cause of nonconformities

8.5.3 Preventive Action
- Records of results of action taken to eliminate the causes of potential nonconformities in order to prevent their occurrence

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