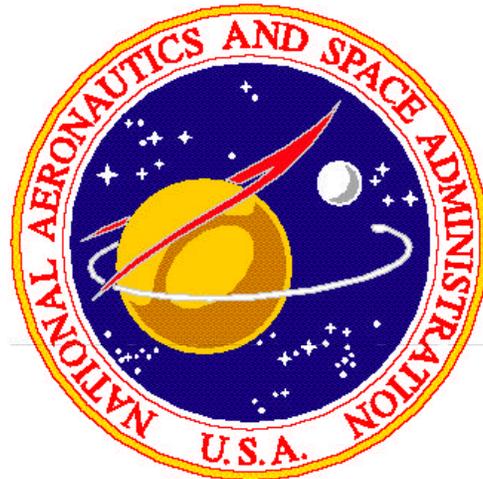


Responsible Office: R/Headquarters ISO 9001 Project Office  
**Subject: Document and Data Control**



## HEADQUARTERS COMMON PROCESS

# DOCUMENT AND DATA CONTROL

Original Signed By

April 28, 1999

\_\_\_\_\_  
J. R. Dailey  
Associate Deputy Administrator

\_\_\_\_\_  
Date

Responsible Office: R/Headquarters ISO 9001 Project Office  
**Subject: Document and Data Control**

### DOCUMENT HISTORY LOG

| <b>Status<br/>(Baseline/<br/>Revision/<br/>Canceled)</b> | <b>Document<br/>Revision</b> | <b>Effective<br/>Date</b> | <b>Description</b>   |
|--|------------------------------|---------------------------|--|
| Baseline   |                              | January 15,<br>1999       |  |
| Revision   | A                            | April 28, 1999            | Revisions resulting from DNV Pre-registration Audit nonconformances and ISO Project 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 |
|  |                              |                           |  |
|  |                              |                           |  |
|  |                              |                           |  |

## 1 Purpose

The purpose of this Headquarters Common Procedure (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 section 4.5 of the Headquarters Quality System Manual (QSM). This procedure does not cover the preparation or review of proposed documentation or revisions to documentation prior to submission to the Document Management System (DMS), although a presubmission checklist is provided in appendix D.

## 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 QSM, 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 QSM and this document. The DMS is the repository for all current Levels 1, 2, and 3 documentation and for obsolete versions of Levels 1, 2, and 3 documentation. All forms relating to Levels 1, 2, or 3 documentation shall be made part of or an attachment to, the pertinent document and subject to the same review, approval, distribution, tracking, maintenance, and cancellation procedures of the QSM, HCP, or OWI.
- 2.2 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 the intent of this guideline but do not need to be in exact conformance with respect to format and structure. Any revisions to this HCP shall not mandate immediate revisions of other previously baselined documents. However, future revisions to these documents shall reflect appropriate guidance as provided from any revisions to the Document and Data Control HCP.
- 2.3 Any documents external to NASA HQS that affect final product quality and not covered by the NASA On-Line Directives Information System (NODIS) will be available either via external

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web sites or databases, or the affected organization must maintain a paper master list with the latest revision.

- 2.4 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*
- 2.5 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 per section 2.4 above and that obsolete documentation is removed, deleted, or otherwise assured against unintended use.
- 2.6 Obsolete documents that are retained will be governed for identification per requirements of the NASA Procedures and Guidelines (NPG) 1441.1, Records Retention Schedules.
- 2.7 Electronic data will be controlled through standard management information system protocols. Access will be granted through user accounts and passwords. Form NHQ 224 will be used to request and authorize systems access.
- 2.8 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 policy of the process or procedure. Appendices shall be under document control by use of a Revision Date.
- 2.9 To ensure ownership and responsibility, an action officer should be identified for each step within work instructions. The action officer should be specified at the position level (i.e., Associate Administrator, Director).

### 3 Definitions

- 3.1 Approved Version. The adaptation approved online by the Approving Authority.

The adaptation of an external reference document that is maintained in an electronic library, such as NODIS, shall automatically be the official 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. The designated management representative with authority to approve Levels 1, 2, or 3 documents.
- 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 Data. Information, especially information organized for analysis or used as the basis for a decision.
- 3.5 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.
- 3.6 Document. A statement or form in hardcopy or electronic media that presents policies, procedures, work instructions, or instructional materials made part, directly or by reference, to the Quality System. For example, a training manual, established pursuant to an HCP or OWI, is a document; records indicating completion of training are data. For the purpose of this HCP, all quality documents are simply referred to as documents.
- 3.7 Document Control Board (DCB). A functional body within the HQ Quality System responsible for directing the implementation of and the review and approval of all baseline documents, revisions, cancellations, deviations, and waivers for Levels 1 and 2 documents and the review of all Level 3 documents.
- 3.8 Document History Log. A table included in each Level 1, 2, and 3 document containing the effective date and a description of modifications to approved documents. The description will provide a detailed description of substantive changes. Grammatical changes need only be noted but not detailed.
- 3.9 Document Manager (DM). The person who administers the Document Management System, serves as the secretariat for the Document Control Board, and maintains the Master List of Levels 1, 2, and 3 documents.

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- 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 Quality System include Federal regulations, military specifications, industry standards, Agency-level and Headquarters directives, standards, and specifications.
- 3.11 Form. An approved Quality System document, which, when executed, becomes a quality record.
- 3.12 Guideline. A document or statement in a document that provides information, suggestions, best practices, or other direction and that is usually optional rather than mandatory.
- 3.13 Historical Document. That which has been superseded or canceled or data for which retention control is required; any obsolete version of a document retained for historical reference.
- 3.14 Level 1 Document, QSM. The QSM defines Headquarters policy and commitment to quality.  
See <http://hqiso9000.hq.nasa.gov/dms.htm> to view this document.
- 3.15 Level 2 Documents, HCP's. HCP's are interorganizational documents that describe common processes shared by all appropriate Headquarters organizations, which meet requirements for conformance with ISO standards and provide principles and operating procedures (see the QSM). An HCP describes what is to be done, when, where, and by whom. A step-by-step process description will generally be included with a workflow chart.  
See <http://hqiso9000.hq.nasa.gov/dms.htm> to view this document.
- 3.16 Level 3 Documents, OWI's. OWI's are quality system documents that provide step-by-step or general instructions stating how to perform specific duties within one or more organizations but do not apply Headquarterswide.  
See <http://hqiso9000.hq.nasa.gov/dms.htm> to view this document.
- 3.17 Level 4 Documents, Data. Written or electronically completed or partly completed forms, reports, records, and other information that establishes evidence that Levels 1, 2, and 3 quality system documentation is followed.
- 3.18 Limited Applicability. That which has been superseded or is obsolete; user must have documented authority to use superseded/obsolete documents.

- 3.19 Maintaining Documentation. Providing storage, distribution, reproduction, document revisions, replacement of documents with the latest revisions, and disposition of obsolete and/or invalid documents such as historical, limited applicability, and reference documents for the Master List documentation.
- 3.20 Master List. Controlled roster for Levels 1, 2, and 3 documents that identifies current revision status.  
See <http://hqiso9000.hq.nasa.gov/dms.htm> to view the Master List.
- 3.21 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.
- 3.22 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.
- 3.23 Organization (Org). Generic term used to describe any Headquarters element, as set forth in the NASA Organization Manual and that is part of the Quality System.
- 3.24 Quality Record. Objective evidence of the fulfillment of Headquarters requirements for quality or the effectiveness of the operation of the Headquarters Quality System.
- 3.25 Quality System. A management system which defines and documents an organization's quality policy, quality objectives, and commitment to quality.
- 3.26 Reference Document. Agency-level, Headquarters, or other external material cited in the Quality System and required to carry out the quality system. 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 (i.e., the QSM, HCPs, and HOWIs).
- 3.27 Repository. A centrally accessible location in an organization for storing and controlling documents and data.

Responsible Office: R/Headquarters ISO 9001 Project Office  
Subject: Document and Data Control

- 3.28 Responsible Organization. A Headquarters entity charged with carrying out any activity or maintaining data related to the Quality System 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.
- 3.29 Retention. The length of time that records and documents are to be kept. See the NASA Records Retention Schedule, NPG 1441.1.
- 3.30 Revision. Any change, modification, or newly edited version of a document. The Document Manager will determine whether a change requires a document revision.
- 3.31 Uncontrolled Copies. Those that are printed from the Master List system or duplications of the signed hard-copy document.
- 3.32 User. Any person who uses or refers to any document during the performance of a specific task.

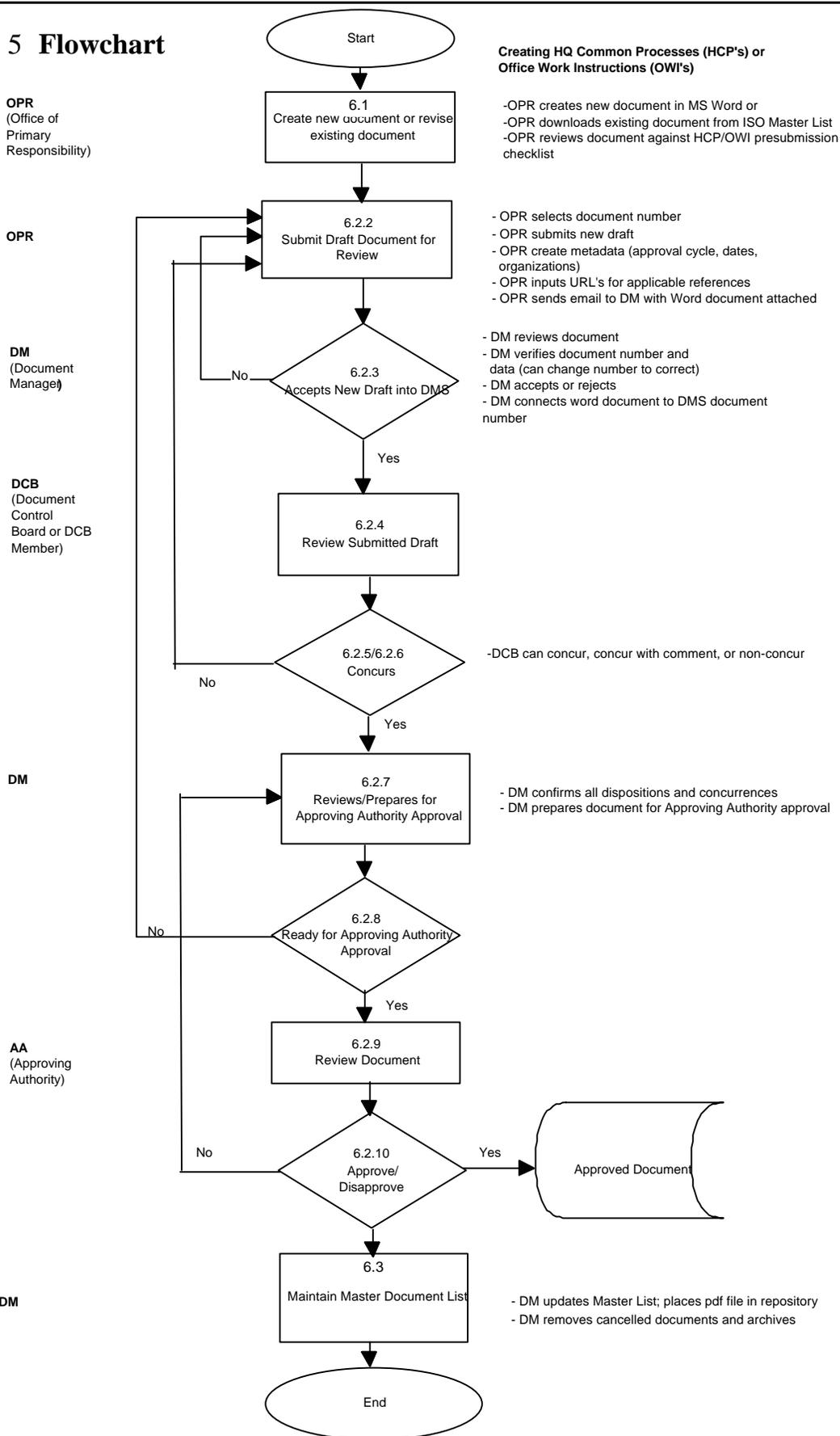
#### 4 References

Documents listed in this section are used as reference materials for performing the processes covered by the Quality System. Since all Level 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 procedure (section 6).

- 4.1 HQSM1200-1, Headquarters Quality System Manual
- 4.2 NPG 1441.1, NASA Records Retention Schedules (NRRS)
- 4.3 NODIS NASA Online Directives Information System  
*<http://nodis.hq.nasa.gov/Nodis1.1/Welcome.html>*
- 4.4 ANSI/ ASQC 9001:1994, American National Standards Institute, Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

Responsible Office: R/Headquarters ISO 9001 Project Office  
**Subject: Document and Data Control**

## 5 Flowchart



## 6 Procedure

### 6.1 New Document Preparation and Revisions to Existing Documents

#### New Documents

6.1.1 **OPR** Identify need to create or revise an HCP or OWI. The need for an HCP or OWI does not always necessitate the creation of a new document. If an existing 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.

6.1.2 **OPR** Prepare draft document using MS-WORD. 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 appendix B for guidance on flowchart symbols.

#### Revised Documents

6.1.3 **OPR** For revised documents, download the current version from the Document Management System Master List.

6.1.4 **OPR** For revised documents, activate the **Track Changes** features under **Tools** in MS-Word. This step is optional because it will only be useful while under internal review within the originating office. When the document is placed in the Document Management System, the Track Changes formatting will be lost.

6.1.5 **OPR** For revised documents, update the document log to indicate changes being made.

### 6.2 Document Review and Approval

6.2.1 **OPR, DCB, Approving Authority, DM** A unique user name and password is required to access the system for document review and approval. Submit a Form 224, NASA HQS Automated Systems Access Request and complete the online user registration form at <http://hqiso9000.hq.nasa.gov/dms.htm>

6.2.2 **OPR** Submit draft for review. It should be noted that drafts submitted to the system should be drafts that have already been reviewed internally by the originating organization and are now ready for review by the Document Manager and DCB Member(s).

The steps in this process include--obtain a unique document number (see appendix C for document-naming convention), identify the reviewing official(s), identify the approving authority, assign a due date for review to be complete, check the presubmission checklist (appendix D), and identify the names and locations of any reference documents. If this is a revised document, the review and approval shall be performed by the same organizations that performed the original review and approval, unless specifically designated otherwise. For Levels 1 and 2 documents, the approving authority is the Associate Deputy Administrator. For Level 3 documents, the approving authority is the Associate Administrator in the originating office or the Deputy.

#### 6.2.3 DM

For Level 1 and 2 documents, review draft document, verify completeness of data in 6.2.2, and provide a cursory review for conformance with the HQ Quality System. Either accept or reject the new draft document into the electronic Document Management System. If the Document Manager rejects the draft document, he/she is to contact the OPR, giving an explanation, and the OPR either repeats step 6.2.2 to resubmit the draft for review or withdraws the document. This step is optional for Level 3 documents since full DCB review and concurrence is not mandatory.

#### 6.2.4 DCB

Review document. The full DCB reviews only Levels 1 and 2 documents in draft form. This review is for conformance to the standard, acceptance of the process, and applicability of referenced documents. It is important to note that concurrence by the DCB member constitutes single-letter code approval.

Level 3 draft documents are reviewed only by the originating office's DCB member. A Level 3 document may only be reviewed by the full DCB after the OPR's Associate Administrator has approved the document and only if the Document Manager identifies a need for this review. The Document Manager would recommend full DCB review if there is concern over the document's conformance to the HQ Quality System and potential commonality with other OWI's. If a document is referred to the full DCB, the review is conducted outside formal DCB meetings when possible. If the DCB recommends a document revision, the OPR will be notified, and the process will begin at step 6.1.4 of this HCP.

#### 6.2.5 DCB

Following review of the document, indicate concurrence, concurrence with comments, or nonconcurrence. Failure to review

and respond by the designated due date constitutes concurrence. Members who nonconcur are expected to furnish comments and recommended solutions. As stated above, concurrence by the DCB member constitutes single-letter code approval.

**6.2.6 OPR** Upon receipt of concurrence with comments or nonconcurrence, review and disposition comments and, if necessary, prepare document for another review (6.2.2). Establish a new due date of not more than 10 working days for review of second or third drafts. If concurrence cannot be obtained from all parties within 10 days after the due date, the Chairman of the DCB will take unresolved issues to the Approving Authority for resolution.

**6.2.7 DM** Upon concurrence by the DCB, review and prepare final document for the Approving Authority's signature. This applies to Level 1 and 2 documents only. Level 3 documents do not require review by the full DCB and, therefore, may be processed internally by the OPR.

**6.2.8 DM** When the document is ready for the Approving Authority's review, forward the document. If the document is not ready, return it to the OPR for resolution.

**6.2.9 AA or Designee** Review Levels 1, 2, and 3 documents. The Approving Authority for Level 1 and 2 documents is the Associate Deputy Administrator. The Approving Authority for Level 3 documents is the OPR's Associate Administrator or Deputy Associate Administrator.

**6.2.10 AA or Designee** Approve document. An electronic copy of the approved document will be placed in the on-line document repository (Master List). If the Approving Authority does not want to approve the document, return the nonapproved document through the Document Manager to the OPR for rework. It should be noted that although ISO does not require signing of paper to constitute approval, NASA records management policies require paper signatures for Levels 1 and 2 documents.

### **6.3 Master List**

**6.3.1 DM** File current version in the ISO Master List, <http://hqiso9000.hq.nasa.gov>. This URL contains all ISO documents created specifically to support the ISO Quality System. Documents included in this Master List are the QSM, HCP's and OWI's.

## 7. Quality Records

This section is used to identify quality records, their owners, 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 carrying out a process are quality records. The OPR is to identify those quality records that result from key steps in the process.

NPG 1441.1, the NASA Records Retention Schedule, is the official procedure governing the retention, retirement, and destruction of Agency records. Process owners should review these schedules to determine into which item and series their records best fit. Once a best fit is determined, the schedule number, item number, and minimum retention should be cited in a table similar to the one below.

It is recommended that the 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. Generally, the official file copy is either the electronic copy or the hard copy but not both.

| RECORD IDENTIFICATION | OWNER   | LOCATION  | RECORD MEDIA: ELECTRONIC OR HARD COPY | SCHEDULE NUMBER AND ITEM NUMBER | RETENTION/DISPOSITION  |
|-----------------------|---------|---|---------------------------------------|---------------------------------|--|
| NASA FORM 224         | CODE CI | Code CI/ADP Support Contractor  | Hard                                  | Schedule 2; Item 16.B           | Destroy when no longer needed for reference or work use.     |
| Master List           | Code R  | <a href="http://hqiso9000.hq.nasa.gov">http://hqiso9000.hq.nasa.gov</a> | Electronic                            | Schedule 1; Item 72.B           | Retire to FRC 5 years after cancellation or when superseded. |

Responsible Office: R/Headquarters ISO 9001 Project Office  
Subject: **Document and Data Control**

## 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<br>(Baseline/<br>Revision/<br>Canceled) | Document<br>Revision | Effective<br>Date | Description |
|--|----------------------|-------------------|-------------|
| Baseline                                       |                      | *                 | #           |
|  |                      |                   |             |

\* System Administrator will add when the Approving Authority signs

# 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 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 (i.e, the QSM, HCPs, and HOWIs).

#### 5 Flowchart (chart)

Responsible Office: R/Headquarters ISO 9001 Project Office  
**Subject: Document and Data Control**

## 6 Procedure

Procedures should correspond to the flowchart in section 5. To ensure ownership and responsibility, an action officer should be identified for each step within work instructions. The action officer should be specified at the position level (i.e., Associate Administrator, Director).

## 7 Quality Records (complete table below)

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

## Appendices (include all)

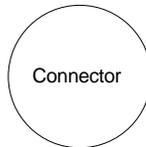
## Footer

CHECK THE MASTER LIST at <http://hqiso9000.hq.nasa.gov>  
TO VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

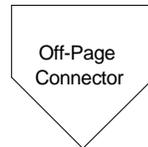
Rev: APR 1999

CHECK THE MASTER LIST at <http://hqiso9000.hq.nasa.gov>  
TO VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

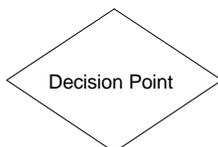
## APPENDIX B - Flowchart Symbology



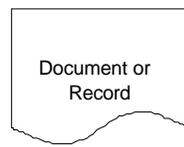
Represents exit/entry from another part of the flowchart. Label sequentially, A, B,C, etc.



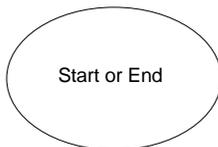
Represents continuation of flowchart to another page. Label sequentially (1, 2, 3). Destination page should have a corresponding receiving off-page connector



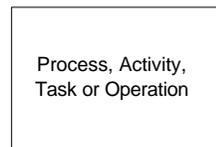
Represents decision operation resulting in Yes or No flow lines.



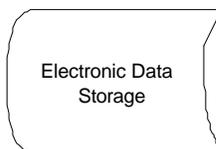
Represents formal input/output, typically in paper form, but may be electronic. Procedure should indicate form and destination of record.



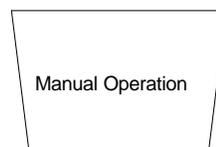
Represents the beginning and end points of flowchart.



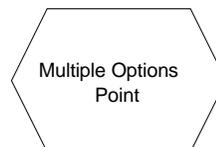
Represents any kind of processing function, involving a defined operation or set of operations or steps.



Represents storage of data in electronic form. Procedure should indicate if stored in desktop/PC (single user) or in shared data system (multi-user).



Represents tasks such as paper duplication, filing of paper data, or records.



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

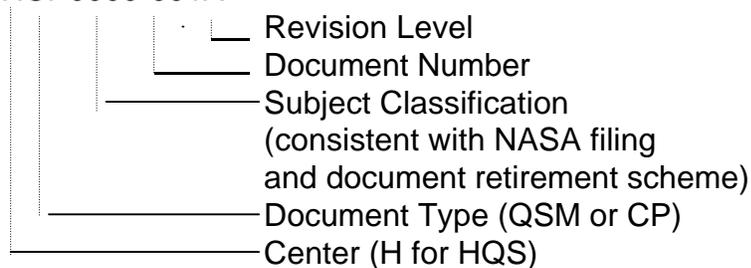
Rev: APR 1999

## **APPENDIX C - Quality System Controlled Document Naming/Numbering 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 across several codes, a single-code owner will not be identified. The following are sample HCP and OWI document names.

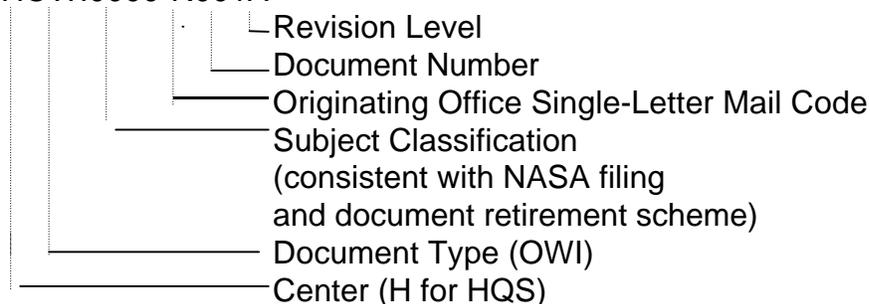
### HCP and QSM Sample Document Name

HCP0000-001A



### OWI Sample Document Name

HOWI0000-R001A



**Rev: APR 1999**

## APPENDIX D - Presubmission Checklist

1. Identify NASA Policy Directives (NPD), NASA Program Guidelines (NPG's), NASA regulations, standards, or other reference documentation.
2. Identify those forms, reports, and other quality records that are the result of key steps in the process. Include this information in Section 7, Quality Records Table.
3. Search the ISO documentation master list and compare your document against existing documents. If other organizations have similar procedures, the originating officer's DCB member should be notified before submitting the OWI.\*
4. Prepare a flowchart of all processes or procedures including inputs and outputs.
5. Review the draft against the ANSI/ ASQC 9001:1994. Assess the draft procedure to ensure that the standards are adequately addressed.
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 Audit Liaison Representative for ISO system audit issues or recommendations.
8. Have the employee(s) who carry out any part of the procedure review it. For HCP's, employees from all affected offices should review.
9. Ensure a top-level review within the originating office. Draft HCP's should be reviewed by each affected office before entering the draft into the Document Management System.
10. Review to ensure that the document meets the intent of the guidelines as specified in this HCP.
11. Check for spelling and grammar.
12. Update the history log for revisions of approved documents.

\*The DCB makes determinations as to whether a procedure should be documented as a group of OWIs 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.

Rev: MAR 1999