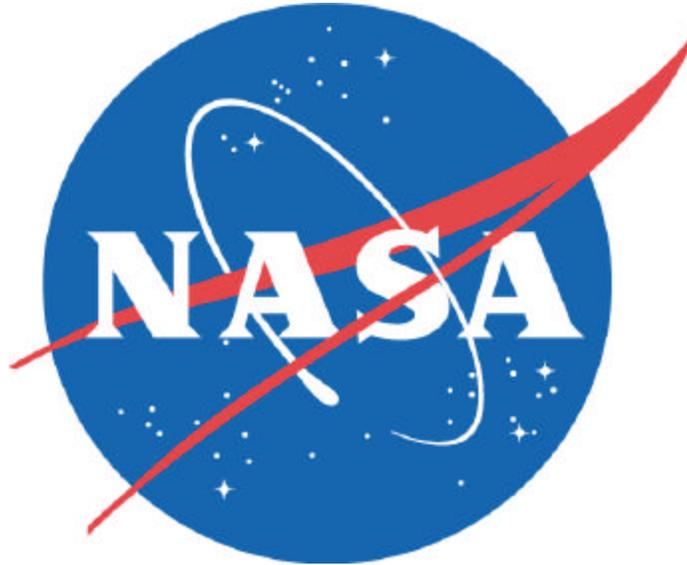


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HEADQUARTERS COMMON PROCESS

INTERNAL QUALITY AUDITS

Original signed by

J. R. Dailey
Associate Deputy Administrator

Date

1. Purpose

This NASA Headquarters Common Process (HCP) describes the process for organizing and conducting Headquarters quality system internal audits. The purpose of internal quality audits is to verify whether quality activities and related results comply with the quality system and to determine the effectiveness of the quality system.

2. Scope And Applicability

2.1 Scope This HCP identifies the responsible entities for staffing, planning, and conducting internal audits. These internal audits encompass all activities, processes, and documents which form a part of the NASA Headquarters Quality Program necessary to comply with the "Headquarters Quality System Manual, HQ QSM 1200-1".

2.2 Applicability

This HCP applies only to NASA Headquarters.

3. Definitions

- 3.1 Audit Manager (AM). The AM or his/her designated alternate is responsible for and has the authority for implementing, managing, maintaining, and reporting on the performance of the internal quality audit system. The AM must complete a Lead Assessor course and be granted organizational authority to manage Headquarters ISO internal quality audits.
- 3.2 Audit Plan. A plan that provides the audit schedule, names of auditors and audited individuals, and the organizations to be audited.
- 3.3 Auditee. The organization being audited.
- 3.4 Auditee Management. The manager or designee who signs the "Internal Quality Audit Summary Report" (Appendix A) for the organization being audited.
- 3.5 Auditor (AT). An individual qualified through training to perform a quality audit. The AT shall complete an Internal Auditor course or Lead Assessor course. Auditors may be NASA employees or qualified contractors.

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- 3.6 Escort. An auditee management representative who may accompany the auditor during an audit. This individual provides access to physical areas and witnesses or is informed of potential nonconformances.
- 3.7 Internal Audit. A systematic and independent examination to verify whether quality activities and related results comply with the quality system and to determine the effectiveness of the quality system.
- 3.8 Lead Auditor (LA). An individual qualified through training to organize and direct a quality audit and report nonconformances. The LA shall complete an Internal Auditor course or Lead Assessor course. The Lead Auditor may be a NASA employee or a qualified contractor.
- 3.9 Nonconformance. Nonfulfillment of a specified quality system requirement. The two levels of nonconformances are defined as follows:
- 3.9.1 Category 1 Nonconformance. A deficiency that could have a direct, first-order adverse effect on the quality of a product or service or on the ability to meet requirements for a product or service. Category 1 nonconformances may include a complete absence or breakdown of a required quality system element.
- 3.9.2 Category 2 Nonconformance. A deficiency that could have an indirect, lower order adverse effect on the quality of a product or service or on the ability to meet requirements for a product or service. Category 2 nonconformances may include isolated instances of failure to comply with a quality system requirement or failures to comply that would affect quality, only if another system failed as well. Based on analysis of the Audit Manager, a series of Category 2 nonconformances against systemic deficiencies may be elevated to a Category 1 nonconformance. (See HCP 1280-2, Corrective and Preventive Action).
- 3.10 Observation. A condition that can lead to nonconformance. Corrective action is not required but is strongly recommended.
- 3.11 Objective Evidence. Qualitative or quantitative information, records, or statements of fact pertaining to the quality of an item or service or to the existence and implementation of a quality system element, which is based on observation, measurement, or test and which can be verified.
- 3.12 Point of Contact. Contact person of an audited organization.

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3.13 Abbreviations.

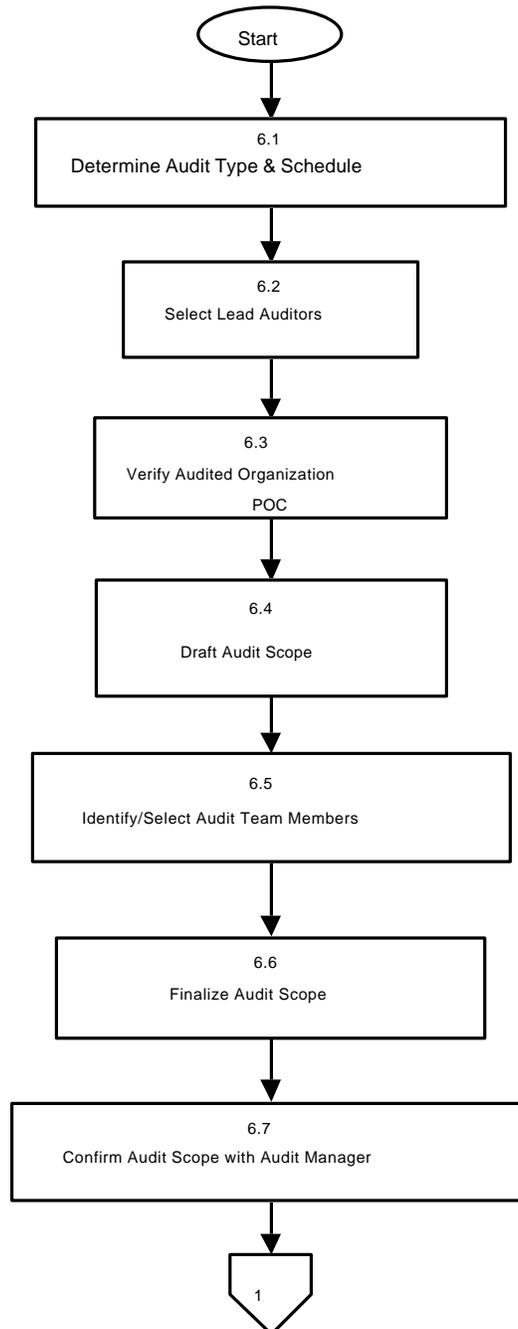
AM	Audit Manager
AT	Auditor
HCP	Headquarters Common Process
LA	Lead Auditor
NCR	Nonconformance Report
OWI	Office Work Instruction
POC	Point of Contact

4. References

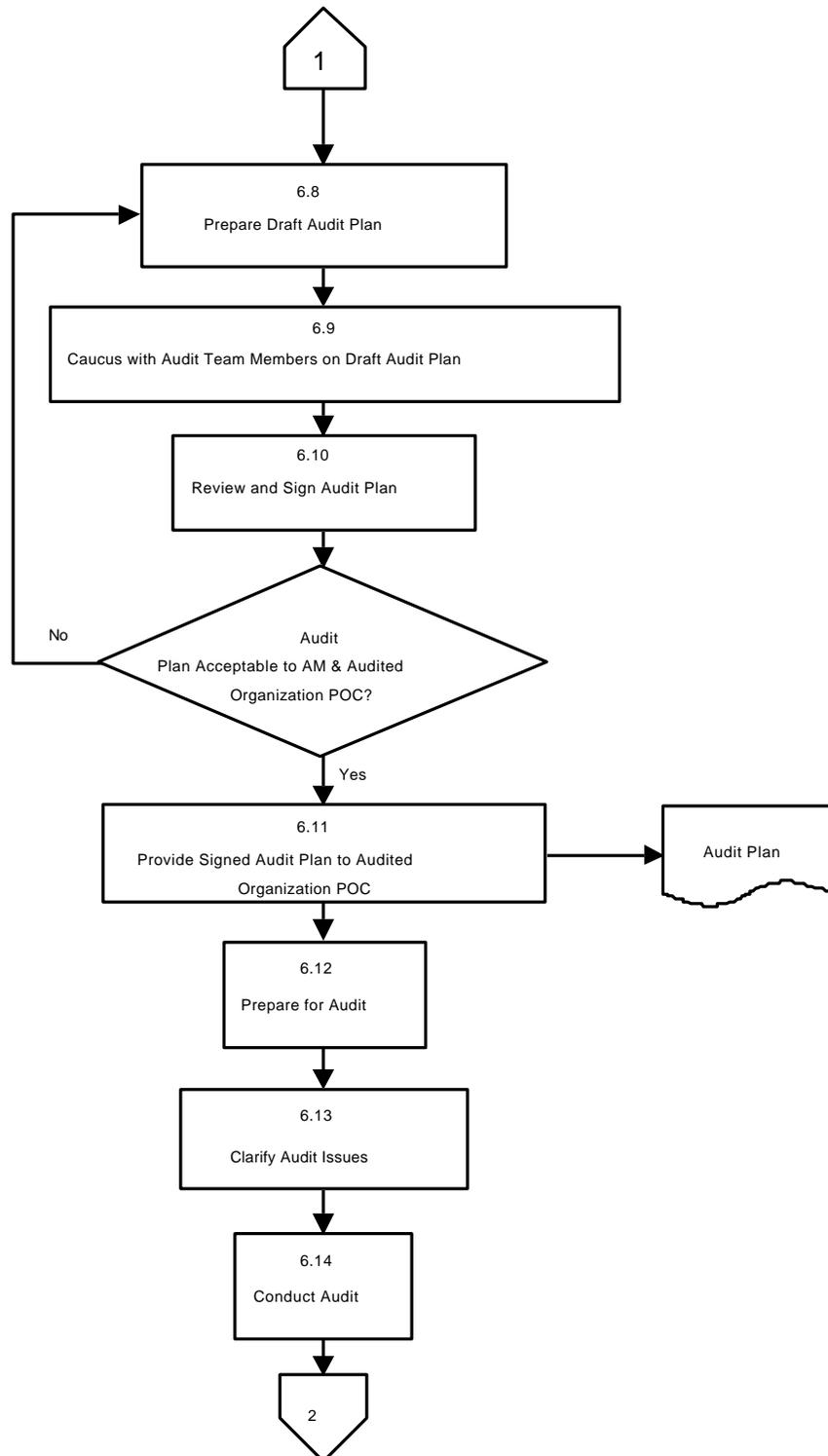
- 4.1 HCP 1280-2, Corrective and Preventive Action
- 4.2 Auditors User Guide, NCR System 1.0
- 4.3 NPG 1441.1, NASA Records Retention Schedules

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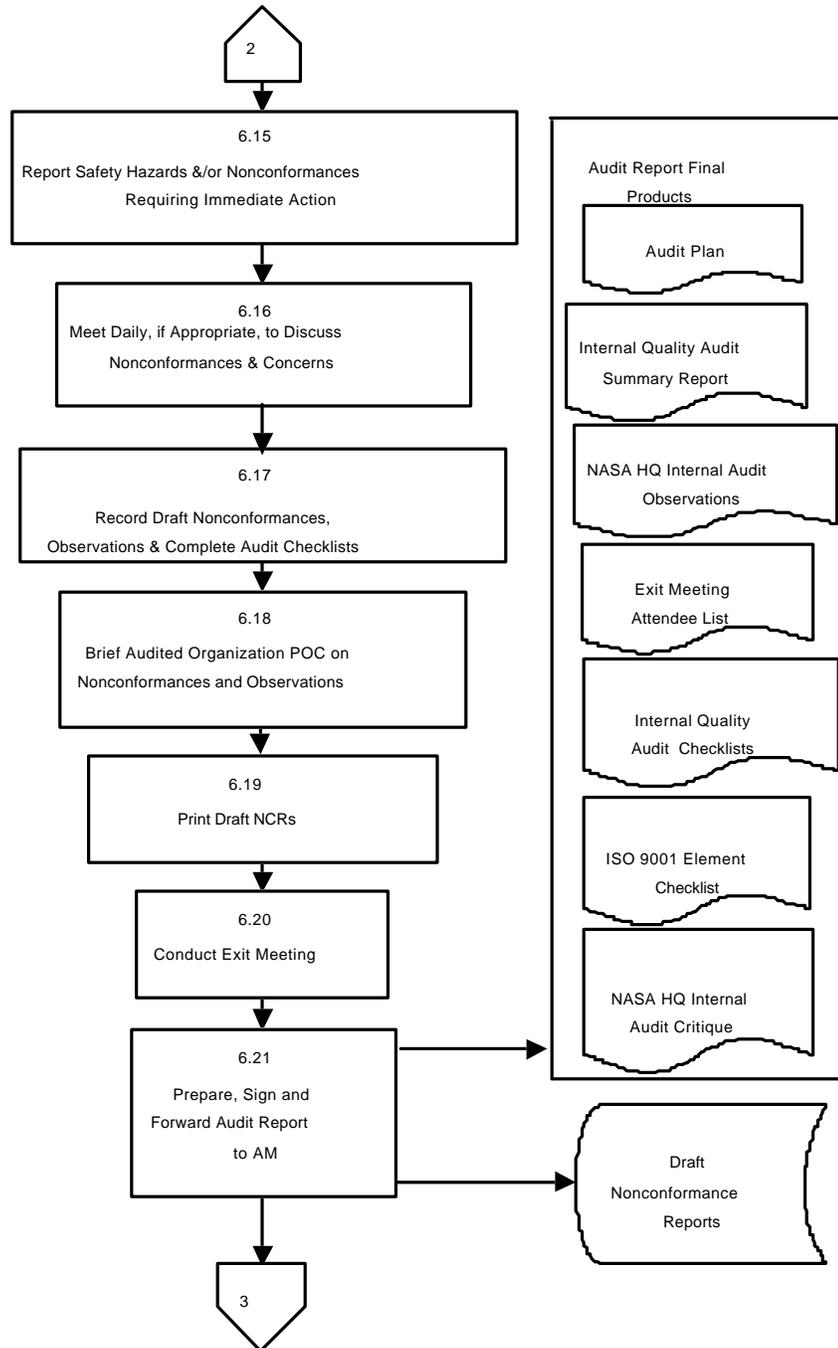
5. Flowchart



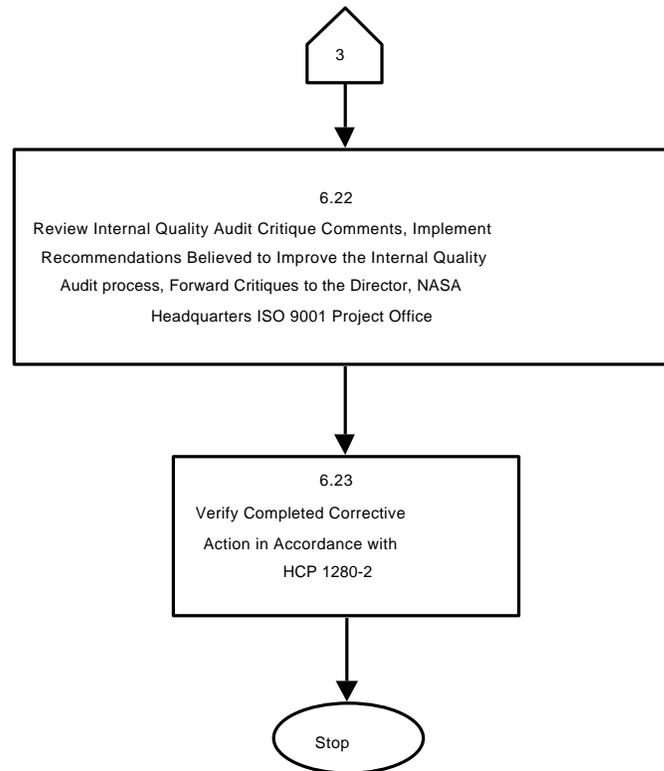
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6. Procedure

The procedure begins with the preparation of the overall audit schedule by the AM. This schedule is reviewed periodically and may be revised by the AM as necessary. Results of previous internal or external audits, trending data, observed conditions, and corrective action summary reports shall be taken into consideration when preparing or changing the schedule. As a minimum, all applicable ISO elements shall be audited annually.

<u>Number</u>	<u>Actionee</u>	<u>Action</u>
6.1	AM	Determine the type of audits to be performed by organization and develop Audit Schedule. The size of the Headquarters organization, applicability to the Headquarters Quality System, the results from previous internal and third-party audits, and corrective action summary reports will be considered when developing the schedule. Forward schedule to the Executive Management Representative for publication.
6.2	AM	Select LA's to support scheduled audits. LA's are responsible for all phases of their assigned audit. LA's shall be assigned to the audit task for the duration of the audit and related activities. LA's shall be assigned in sufficient time to prepare for the scheduled audit.
6.3	LA	Verify audited organization Point of Contact (POC).
6.4	LA	Work with audited organization POC to draft the scope of the audit. Nonconformances, corrective action(s), corrective action summary reports, and observations from previous audits will be taken into consideration when drafting the scope.
6.5	LA	Work with AM to identify/select AT's to conduct the audit under the supervision of the LA. LA shall contact team members and ensure that the resources committed to the audit are sufficient.

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- 6.6 LA Finalize audit scope with audited organization's POC:
Verify location of applicable HCP's and Headquarters Office Work Instructions (OWI) for the functions/areas to be audited.
Determine the date and time of the audit and the exit meeting.
Determine administrative assistance requirements (i.e., audit team office space, conference room for daily meetings, access to copy machines, and telephones).
- 6.7 LA Confirm audit scope with AM.
- 6.8 LA Prepare draft Audit Plan. The plan shall be flexible in order to permit changes in emphasis, based on information gathered during the audit, and to permit effective use of resources. The plan shall include the following:
The organization(s) to be audited.
Scope of audit activities.
Location and dates.
Name of the audited organization POC.
Names of the AT's and their assignments.
- 6.9 AM/LA Caucus with AT's on draft Audit Plan.
Discuss scope of audit activities.
Review general audit techniques, conduct, and confidentiality requirements.
Review and discuss applicable HCP's and OWI's.
Review nonconformances and corrective actions from previous audits of the organization(s) being audited.
Discuss plan and adjust audit assignments, if necessary.
AM distribute Internal Quality Audit Checklist forms (Appendix B) to each team member to tailor, as applicable, and the ISO 9001 Element Checklist form (Appendix C) for team members to review, as well as any other material and data applicable to the audit.
- 6.10 LA Review and sign Audit Plan.
Review Audit Plan with the audited organization POC and modify plan as necessary.
Sign and date Audit Plan and send it to the AM for approval and signature. Incorporate any AM changes and coordinate changes with audited organization POC.

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| 6.11 | LA | Provide a copy of the signed Audit Plan to the audited organization POC. |
| 6.12 | LA/AT | Prepare for Audit.
Review audited organization's documents applicable to the audit.
Review and tailor Internal Quality Audit Checklist forms as applicable.
Review previous audit reports of the organization being audited. |
| 6.13 | LA | Clarify the following audit issues from audited organization POC prior to beginning the audit:
Audited organization personnel including scribes and escorts.
Audit definitions such as Category 1 and Category 2 nonconformances, observations, and objective evidence. |
| 6.14 | LA/AT | Conduct the Audit. Positive findings, nonconformances, and observations shall be addressed in the audit report and discussed at the exit meeting. |
| 6.15 | LA | Report any safety hazards and/or nonconformances requiring immediate action to the audited organization POC. |
| 6.16 | LA/AT | During the audit, meet daily, if appropriate, to discuss nonconformances and observed concerns. |
| 6.17 | LA/AT | Record draft nonconformances on electronic Draft Nonconformance Report (NCR) forms (Appendix D). (See the "Auditors User Guide, NCR System 1.0, 2 June 1998" available on the automated NCR system, and Appendix E, NCR Status Codes and Definitions.)
Complete Internal Quality Audit Checklists and the ISO 9001 Element Checklist. The LA, with AT recommendations, shall determine if the draft nonconformance is a Category 1 or Category 2 nonconformance. Document audit observations and associated objective evidence in hardcopy on a NASA HQ Internal Audit Observation form (Appendix F). |

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| 6.18 | LA/AT | Brief audited organization POC on nonconformances and observations. |
| 6.19 | LA/AT | Print draft Nonconformance Reports. |
| 6.20 | LA | <p>Conduct exit meeting with auditee management.
Discuss the Internal Quality Audit Summary Report and applicable nonconformances and observations.
Provide the Internal Quality Audit Summary Report to auditee management to sign.
Provide the NASA Headquarters Internal Audit Critique form (Appendix G) to the audited organization POC to complete and return to the AM.
Record names of exit meeting attendees on an attendee list and file list with the audit report.</p> |
| 6.21 | LA | <p>Prepare, sign, date, and forward audit report to AM or his/her designee. The report shall contain the following items as applicable:</p> <ul style="list-style-type: none">Audit planThe Internal Quality Audit Summary Report.NASA HQ Internal Audit Observation(s).The exit meeting attendee list.Internal Quality Audit ChecklistsISO 9001 Element Checklists.NASA Headquarters Internal Audit Critique. <p>Draft Nonconformance Reports which identify the audit date, auditors, audited organization, nonconformance severity, nonconformance description, and cited ISO element are available on the automated NCR system.</p> |
| 6.22 | AM | Review NASA HQ Internal Audit Critique comments and recommendations, implement recommendations believed to improve the internal quality audit process and forward critiques to the Director, NASA Headquarters ISO 9001 Project Office. |
| 6.23 | AM/LA/
AT | Verify completed corrective action in accordance with HCP 1280-2. |

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7. Quality Records

7.1 Records

Internal audit quality records are listed in Table 7.1. These records are categorized, retained, and disposed of in accordance with NPG 1441.1, as identified below.

RECORD IDENTIFICATION	OWNER	LOCATION	MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION
Audit Plan	AM	AM	Hard Copy	Schedule 5 Item 30, B.	Close file at end of survey/audit at end of fiscal year. Destroy when 9 years old.
Internal Quality Audit Summary Report	AM	AM	Hard Copy	"	"
Internal Quality Audit Checklist	AM	AM	Hard Copy	"	"
ISO 9001 Element Checklist	AM	AM	Hard Copy	"	"
Draft Nonconformance Report	AM	NCR System	Electronic	"	"
NASA HQ Internal Audit Observation	AM	AM	Hardcopy	"	"
NASA Headquarters Internal Audit Critique	AM	AM	Hardcopy	"	"
Exit Meeting Attendee List	AM	AM	Hardcopy	"	"

Table 7.1

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Appendix A, Internal Quality Audit Summary Report

Code:		Internal Quality Audit Summary Report		Date:	
Code Representative:		Audit Team:		Reference Standard(s): ISO 9001	
Element:	No. N/Cs:	Element:	No. N/Cs:	Element:	No. N/Cs:
4.1		4.8		4.15	
4.2		4.9		4.16	
4.3		4.10		4.17	
4.4		4.11		4.18	
4.5		4.12		4.19	
4.6		4.13		4.20	
4.7		4.14			
Positive Findings:					
Signed: (Lead Auditor)			Signed: (Code/Enterprise Representative)		
Date:			Date:		

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Appendix B, Internal Quality Audit Checklist

Code:		Internal Quality Audit Checklist	Date:
Code Representative:		Audit Team:	ISO 9001 Reference Standard(s)
Element:	Question/Procedure:		
Signed: (Auditor) Date:		Signed: (Lead Auditor) Date:	

Note: Use Multiple Forms if Necessary
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Appendix C, ISO 9001 Element Checklist, Example

Code(s): Lead Auditor:	Audit Dates:	Conformance?		NCR #	N/A
		Yes	No	Or OBS.	Or N/AS
4 Quality System Requirements					
4.1 Management Responsibility					
4.1.1 Quality Policy					
Has management, with executive responsibility for quality, defined and documented its policy for quality?					
Does the policy include:					
a.) objectives for quality,					
b.) commitment to quality?					
Is the policy relevant to:					
a.) organizational goals;					
b.) customer expectations and needs?					
At all levels of the organization has the policy been:					
a.) understood;					
b.) implemented;					
a) Maintained?					
4.1.2 Organization					
4.1.2.1 Responsibility and authority					
Have the responsibilities, authorities and interrelation of personnel who manage, perform and verify work affecting quality been defined and documented?					
a.) to initiate action which prevents the occurrence of nonconformances relating to product, process and the quality system;					
b.) to identify and record any problems relating to the product, process and the quality system;					
c.) to initiate, recommend or provide solutions through designated channels;					
d.) to verify implementation of solutions;					
e.) to control further processing, delivery or installation of nonconforming product until the deficiency or unsatisfactory condition has been corrected?					
4.1.2.2 Resources					
Have resource requirements been identified and provided for management, performance or work and verification activities (including internal quality audits)?					

NCR = Nonconformance Report; OBS = Observation; N/A = Not Applicable; N/AS = Not Assessed

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**Appendix D, Draft Nonconformance Report (NCR)
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DRAFT NONCONFORMANCE REPORT (NCR)				
1. Organization Audited:	Month:	Year:	2. NCR Number:	
<u>Location</u> Building:	Area:	Severity Code: (Major-1, Minor-2)		
3. Auditor:	Escort::			
Others in Attendance:				
4. Nonconformance:			ISO Element:	
Lead Auditor's Signature:			Approval Date:	
5. Cause Identification/Proposed Corrective Action:				
Target Date To Complete Action:			Responsible Organization POC/Phone:	
			Responsible Organization:	
Auditee's Approval:			Approval Date:	
Lead Auditor's Approval :			Approval Date:	
6. Corrective Action Complete (Describe Action Taken If Other Than Action Proposed in Block 5):				
Auditee's Approval:			Approval Date:	
7. Corrective Action Verified As: Taken Not Taken Effective Not Effective				
Verification Action Taken:				
Auditor's Approval:			Verification Date:	
Lead Auditor's Approval:			Approval Date:	

Appendix E, NCR Status Codes and Definitions

Agreed: Lead auditor approval Block #5 – Cause. Auditee can now enter corrective action comments in Block #6.

Aud Reject: Auditor rejected Block #6 auditee's corrective action comments.

Closed: Lead Auditor approved the Auditor's verification in Block #7 that a corrective action was completed and is effective.

Completed: Auditee completed the corrective action and indicated completion in NCR Block #6.

Delayed: Auditee must enter the corrective action completed comments in Block #6 or Auditee entered corrective action comments in Block #6 and NCR is awaiting Auditor's approval/closure.

Disagreed: Lead auditor disagreed with Block #5 Auditee's Cause comments.

Draft: NCR entered into the automated NCR system but before it is made "Official".

Lead Reject: Lead rejected Block #6 Auditee's corrective action comments.

Official: Audit Manager approved Auditor's NCR generation.

Open: An official NCR that is not closed.

Proposed: Auditee entered cause and proposed corrective action in NCR Block #5.

Ready: Auditee entered corrective action comments in Block #6. NCR is ready for Auditor or Lead verification.

Verified: Auditor has verified completion of corrective action. NCR is ready for Lead closure.

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Appendix F, NASA HQ Internal Audit Observation

NASA HQ INTERNAL AUDIT OBSERVATION	
a) Organization Audited: Date (MMYY):	2. Observation Number:
3. Auditor: Others in Attendance:	Escort:
4. Description of the Observation:	ISO Element:
Lead Auditor's Approval:	
Date:	

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Appendix G. NASA Headquarters Internal Audit Critique

NASA HEADQUARTERS INTERNAL AUDIT CRITIQUE		
To improve the quality of NASA Headquarters ISO 9001 Internal Quality Audits, it is requested that the Audited Organization Point of Contact (POC) complete and return this form to the Audit Manager.		
Date:	POC Name:	Organization Code:
Date of Audit:	Lead Auditor's Name:	
1. Was the pre-audit planning with the Lead Auditor effective in helping you understand the scope of the audit and what resources are required from your organization to support the audit? Yes No		
2. On a scale of <input type="checkbox"/> - 10 (with 10 being the highest), please rate the preparation of the audit team which audited your organization? _____		
3. Do you feel that the time allotted for your audit and the size of the audit team were sufficient to properly evaluate your organization's compliance to the NASA Headquarters Quality System? If not, please provide recommendations for improvement. Yes No <input type="checkbox"/> <input type="checkbox"/>		
4. Do you believe the daily audit meetings, if held, were beneficial in helping you understand/ resolve issues discovered during the audit? Please provide recommendations for improvement.		
5. Please address any general recommendations you have to improve the NASA Headquarters internal quality audit process. (Please use the back of this form if necessary.)		
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