



Goddard Procedures and Guidelines

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Responsible Office: 300/Office of Systems Safety and Mission Assurance
Title: INTERNAL AUDIT SYSTEM

Preface

P1. PURPOSE

This procedure establishes the process for coordinating, scheduling, planning, performing, documenting and closing out internal audits of the GSFC Quality Management System.

P2. APPLICABILITY

This procedure applies to all policies, system level procedures, Directorate procedures, work instructions, and related records which form the GSFC Quality Management System.

P3. AUTHORITY

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

P4. REFERENCES

- a. ANSI/ASQC Q9001, Quality Systems – Model for Quality Assurance in Design, Development, Production, Installation, and Servicing
- b. GPG 1710.1, Corrective and Preventive Action
- c. GPG 5100.2, Supplier Performance Records
- d. GPG 5340.2, Control of Nonconforming Product

P5. CANCELLATION

GPG 9980.1A, Internal Audit System

Procedure

1. DEFINITIONS

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- a. Quality Audit - Systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.
- b. Audit Nonconformance - A failure to meet a specified requirement.
- c. Objective Evidence - Quantitative or qualitative 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. It is based on observation, measurement, or test which can be verified.
- d. Audit Contact – The representative of the audited organization/function who is the primary point of contact with the Lead Auditor and is responsible for managing and approving corrective actions resulting from the internal audit.
- e. Escort - The representative of the audited area who accompanies the auditor during the investigation and analysis of the objective evidence. This individual will (a) provide access to data records and physical areas, (b) offer interpretation of the audited organization’s documents, (c) interface with other audited organization personnel, and (d) witness the discovery of nonconformances.
- f. NCR/CA Database – An inter-active on-line database, accessed via the GSFC Quality Management System web-site, used to document and track the status of identified nonconformance reports (NCRs) and associated corrective action (CA).
- g. Audit Database - An inter-active on-line database, accessed via the GSFC Quality Management System web-site, used to document and track the schedule, participants, results, follow-up, and status of internal and supplier audits.

2. IMPLEMENTATION

2.1 The Director, Office of Systems Safety and Mission Assurance, shall designate an individual to be the GSFC Audit Coordinator.

2.2 Audit Scheduling

The Audit Coordinator shall schedule internal audits in the Audit database covering a period of no less than one calendar year and updated as necessary, but at least annually, thereafter. Audits may be based on a project, function, location, or combination thereof, as deemed most suitable for the element(s) being audited. The schedule shall be such that the implementation of all ANSI/ASQC Q9001 element requirements shall be audited at least once annually. The schedule may be modified by the Audit Coordinator based upon results of previous internal or external audits, trending data, observed conditions, nonconformance reports, importance of the element to a product, or as otherwise deemed appropriate.

2.3 Internal Audit Preparation (documented in Audit database)

2.3.1 Approximately six weeks prior to each scheduled internal audit, the Audit Coordinator selects the Lead Auditor, using the following criteria:

- a. The individual has successfully completed Lead Auditor training, has led an audit team on at least one previous audit of a quality system in their GSFC or non-GSFC career, or has been an auditor on at least three quality system audits.
- b. The individual has no direct responsibilities for the area/functions being audited.

2.3.2 The Lead Auditor, subject to the approval of the Audit Coordinator, selects internal audit team members using the following criteria:

- a. Individuals have successfully completed auditor training or have participated in at least one audit of a quality system in their GSFC or non-GSFC career.
- b. Individuals have no direct responsibility for the area/functions assigned to them for audit.

2.3.3 The Lead Auditor shall:

- a. Identify the Quality Management System documentation (i.e., system level procedures, Directorate/Project level procedures, work instructions) applicable to the area/function being audited;
- b. Review the results of the last internal audit performed on this area/function and any other quality audits conducted on this area/function since the last internal audit;
- c. Negotiate the exact internal audit date, scope, escorts and facilities required with the Audit Contact;
- d. Ensure audit checklists are available to or prepared by Team Members (documented in the Audit database);
- e. Prepare for the internal audit by identifying:
 - 1. Identification of the organization/function to be audited;
 - 2. Audit Contact;
 - 3. Scope of the audit;
 - 4. Date of the audit;
 - 5. Team Member names and element assignments;
 - 6. Agenda for the entrance, daily and exit briefings, facility access, and security arrangements,
- f. Notify the Audit Contact approximately 30 calendar days in advance of the planned audit;
- g. Schedule and chair a pre-audit meeting with audit Team Members to (1) review the audit schedule and Team Member assignments and responsibilities, (2) review the results of earlier related audits, (3) review and establish checklists, and (4) identify, review, and distribute, as necessary, related Quality Management System documentation.

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2.4 Conducting the Internal Audit

2.4.1 The Lead Auditor shall conduct an entrance briefing. Attendees shall include (as a minimum) the Team Members, the Audit Contact, and escort personnel. The entrance briefing agenda should address the following:

- a. Introduction of all attendees (route attendance sheet for audit record)
- b. Review purpose and scope of audit
- c. Identify Team Member element assignment responsibilities and determine escort personnel assignments
- d. Review audit terms and definitions (e.g., nonconformance, objective evidence)
- e. Confirm negotiated resources/facilities/clearances needed by the team are available
- f. Confirm time and date for the closing meeting and daily briefings
- g. Provide a short summary of audit methods and procedures to be used to conduct the audit
- h. Invite the Audit Contact to provide a brief overview of area operations/organization (Note: If the Lead Auditor desires this overview, it should be indicated in advance of the entrance briefing)

2.4.2 Using audit checklists as a guide, Team Members shall examine objective evidence collected through interviews, and examination of documents, records and conditions in audited areas. Results of examination shall be documented on the appropriate checklist. Each observed nonconformance shall be discussed with the escort and noted by the Team Member for presentation at daily team meetings (see 2.4.3).

2.4.3 The Lead Auditor shall conduct daily meetings with the Team Members to discuss progress and issues and revise the schedule and assignments as necessary. The Team Members shall present proposed NCR's (Nonconformance Reports) to the Lead Auditor for review and approval. The Lead Auditor shall determine the validity of each NCR and determine if any valid NCR's can be combined into a single NCR.

2.4.4 The Lead Auditor shall conduct a daily briefing with the Audit Contact and Team Members to report audit status, and to discuss nonconformances and associated objective evidence.

2.5 Conducting the Exit Briefing

2.5.1 At the conclusion of the internal audit the Lead Auditor shall conduct the exit briefing with the Audit Contact and Team Members (route and retain a meeting attendance sheet for the audit record). The exit briefing agenda shall address the following:

- a. A summary of the internal audit activities;

- b. Identification of proposed nonconformances;
- c. Discuss corrective action responsibilities, procedure, follow-up, and closure. Unless otherwise agreed at this point, corrective actions shall be scheduled for completion and follow-up no later than 30 working days from NCR entry into the NCR/CA database.

2.6 Internal Audit Results

The Lead Auditor shall document audit NCRs in the NCR/CA database for notification to the Audit Contact.

Following completion of the audit, the Lead Auditor shall prepare a short Executive Summary of the results of the audit as an attachment to the audit record in the Audit Database. The Executive Summary shall address overall QMS compliance status of the organization audited, emphasizing areas for improvement as well as areas of commendable performance. The audit record shall also contain attachments (separately or as part of the Executive Summary) of entrance and exit briefing attendance lists.

2.7 Corrective Action and Follow-up

2.7.1 For each NCR resulting from the audit, the Audit Contact shall schedule proposed corrective action completion (within the not-to-exceed date) and determine corrective action in accordance with GPG 1710.1. Corrective action response, documented via the NCR/CA database, is made available to the Lead Auditor.

2.7.2 The Lead Auditor shall review and determine the adequacy of corrective action. Inadequate responses or those requiring follow-up evaluation shall be identified at that time. The Lead Auditor shall schedule any follow-up audits with the Audit Contact, using the original auditors whenever possible. The Lead Auditor shall initiate new NCR(s) (associated with the original audit) if a follow-up audit reveals ineffective corrective action.

2.7.3 The Audit Coordinator shall escalate inadequate/untimely resolution of corrective action to the QMSR for resolution.

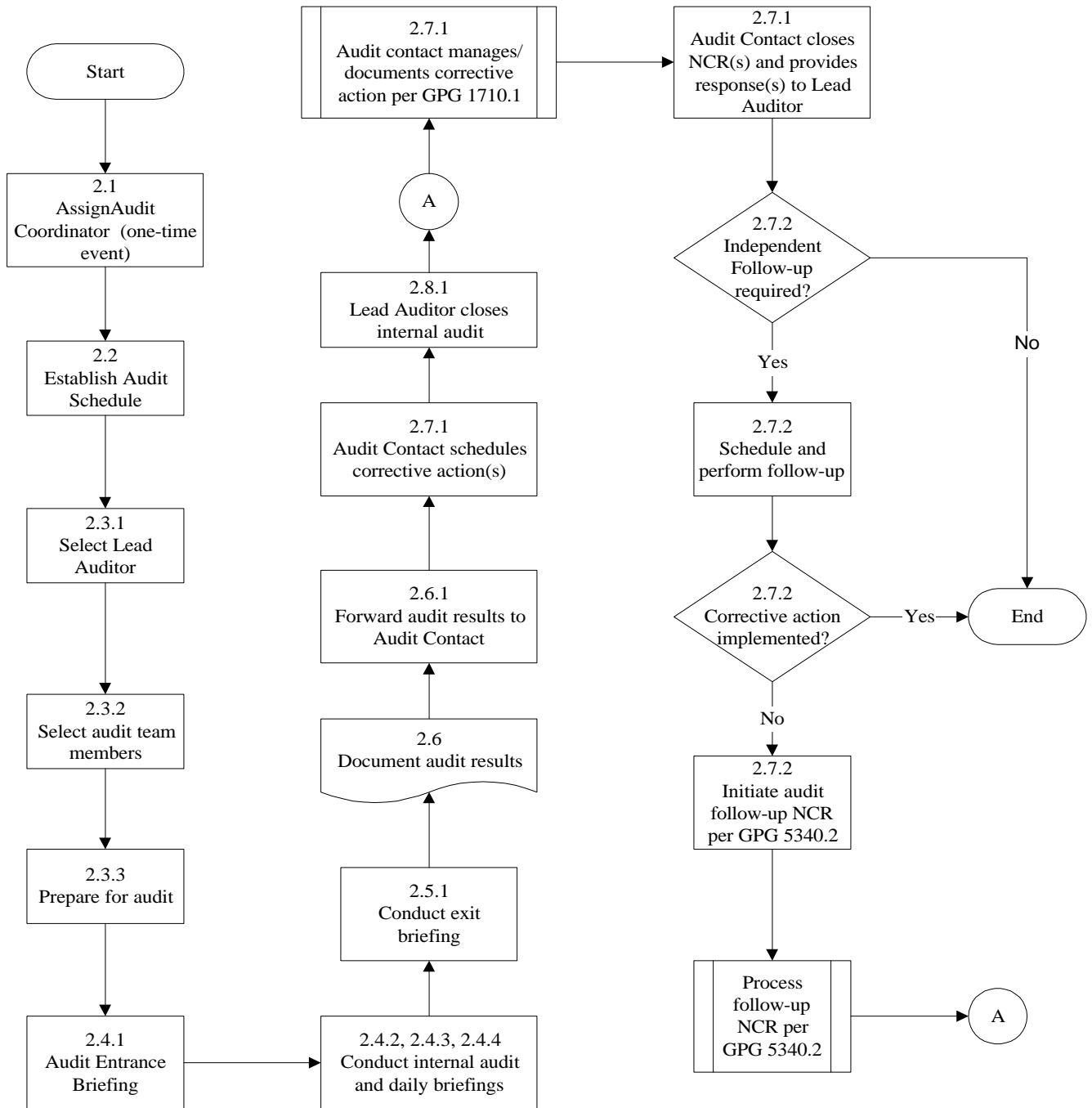
2.8 Internal Audit Close-Out

2.8.1 An internal audit is considered closed when the Audit Contact has scheduled closure dates for corrective action on all associated NCR's. Close-out of internal audit NCR's shall be done in accordance with GPG 5340.2 and GPG 1710.1.

3. RECORDS

- a. Audit Database (Maintained by the GSFC Audit Coordinator)
- b. NCR/CA database (Maintained by Code 302)

Internal Audit System Flowchart



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CHANGE HISTORY LOG

Revision	Date	Description of Changes
Baseline	8/12/98	
A	10/6/98	Header and footer format changes. 1(b) – Changed “process” to “requirement”. 1(e) – reworded element (b). 2.2 – Removed limitation of one audit per year per organization. 2.3.1/2.3.2 – Removed third criterion of “The individual is available”. 2.3.3.(f) – Added “approximately”. 2.4.1 – Changed “shall” to “should” in third sentence. 2.4.2 – Removed requirement for audit activities to be performed in the presence of the escort. 2.5.1(b) – Inserted “proposed” and removed second sentence “Limit conversation to clarifications and avoid lengthy discussions about the merits of the nonconformances or possible corrective actions”. 2.5.1(d) – Changed “the Exit Briefing date” to “NCR entry into the NCR/CA database”. 2.7.1 – Inserted “proposed” in first sentence. 3. – Identified quality records maintenance responsibilities.
B	02/19/99	Changed definition of "audit nonconformance". In 2.2 added "importance of the element to a product". 2.3.3c - added "exact". Reworded 2.3.3e.6. 2.4.3 last word of second sentence changed from "discussion" to "approval". 2.5.1 - deleted requirement to present documented NCR's at exit briefing. 2.6 - added second paragraph.