

Administrative Changes to OC-ALCI 90-120, *Internal Audit System*

OPR: OC-ALC/QAI

References throughout to QAB are now changed to QAI.

References throughout to AFI 21-101 and AFMC_SUP to AFI 21-101 are now replaced with AFI 21-102 and AFSCMAN 21-102.

Reference to ISO 9001: 2008 in paragraph 4.3 has been replaced with ISO 9001: 2015.

24 MARCH 2016

**BY ORDER OF THE COMMANDER
OKLAHOMA CITY AIR LOGISTICS
COMPLEX**

**OKLAHOMA CITY AIR LOGISTICS
COMPLEX INSTRUCTION 90-120**

29 APRIL 2014

Special Management

INTERNAL AUDIT SYSTEM



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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The purpose of this instruction is to provide the framework for conducting effective internal audits and support to external audits at the Oklahoma City Air Logistics Complex (OC-ALC). Additional applicable guidance and procedures are found in OC-ALC Manual (OC-ALCMAN) 90-107, *OC-ALC Quality Manual*, Chapters 1 and 8, and Air Force Instruction (AFI) AFI 21-101_AFMCSUP_OC-ALCSUP, *Aircraft and Equipment Maintenance Management*. Instruction applies to OC-ALC organizations under Aerospace Standard (AS) 9110 certification which excludes 76th Software Maintenance Group (76 SMXG) under its own certification and does not include Air Force Reserve Command (AFRC) and Air National Guard (ANG) units. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) through publications/forms managers. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with (IAW) the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>.

SUMMARY OF CHANGES

This instruction contains minor administrative changes.

1. Scope and General Responsibilities: The entire Complex is under AS 9110 Certification with the exception of 76 SMXG.

1.1. The OC-ALC Quality Office (OC-ALC/QA) and OC-ALC Quality Audit Section (OC-ALC/QAB), audits processes of organizations within the scope of the aerospace standard

certification to requirements contained in the applicable aerospace standard as stated in OC-ALCMAN 90-107, their own internal guidance and higher guidance. All clauses within the applicable standard will be audited within the complex utilizing a process approach. The complex audit activity will be tracked using a clause tracker to ensure all aerospace standard clauses are evaluated at least once within a three year certification period. Group clauses will be tracked on the complex clause tracker using data from group audit reports. Audit activity, either scheduled or unscheduled, is linked to the applicable aerospace standard requirements including organizations' internal or higher guidance.

1.2. Organizational Approving Authorities (OAAs) shall coordinate and facilitate planned and unplanned audits within their respective organizations. They provide Complex Quality with points of contact, to assist with providing times and locations for interviews along with accomplishing requirements of OC-ALCI 90-420, *Corrective Action Tracking System (CATS)*

2. Internal Audit Process ([Attachment 2](#))

2.1. Audit Schedule: The OC-ALC/QAB office shall develop and maintain an annual audit schedule and track audit activity for compliance with applicable aerospace standard and OC-ALCMAN 90-107 requirements. Audit frequency may change as needed due to customer requests and/or trend analysis. Complex Quality annual audit schedules are arranged by fiscal year (FY) and posted to the Complex Quality Enterprise Information Management (EIM) site 20 working days before each FY. Group production/process audits will be identified in their individual quarterly quality assurance surveillance plans. Frequency of group audits will be determined by requirements identified in AFI21-101_AFMCSUP_OC-ALCSUP. Group quality audits will consist of inspections of product realization, e.g., process audits, management inspections (MIs), quality verification inspections (QVIs), special inspections (SIs), personnel evaluation (PEs), and other production related processes or operations that relate directly to output or through-put of customer requirements as required by management. When feasible, notify organizations of unscheduled audit intent before beginning the audit. Unscheduled audits may be initiated based on customer requests and/or complaints, management requests, significant changes in organizational structure and policies/procedures that could adversely affect the quality system.

2.2. Audit Planning: Planning should be based on process significance or risk to include: The objective and scope of the audit, processes to be audited and organizations impacted ([Attachment 2](#)). Establish audit in Corrective Action Tracking System (CATS) once scope is determined. Review current local and higher level instructions, standards, customer requests, management review action items, procedures, policy letter and web pages pertinent to the areas being evaluated. A review of the last two audit reports for the area being evaluated shall be completed. Officially notify organizations of the audit intent at least five days prior to start of each scheduled audit. The notification shall include the lead auditor's name and phone number, the processes and organizations to be audited, the dates of the audit, and any necessary instructions to OAA. Track progress toward completion of planned audit activity on an annual fiscal year basis for compliance to applicable aerospace standard requirements as well as any other AF and regulatory requirements. Develop, when needed, audit interview checklist questions unique to the area being audited.

2.3. Team Formation: Select the audit team and team lead. Request subject matter experts (SMEs) for specific areas where the lead auditor determines assistance is needed regarding

the process(es) being audited. If auditing an area where an audit team member is currently assigned, at least one audit team member shall be from outside the audit area.

2.4. Audit Process: Conduct the audit in-brief, and out-brief, as required, with the senior leadership of the organization/area being evaluated (**Attachment 2**). Ensure objective evidence has been documented for noted compliance to clauses observed during process audit.

2.5. Audit Findings: Determine whether processes conform to requirements. Debrief each auditee with feedback related to areas of excellence and/or concern upon completion of audit activity in that area.

2.5.1. Categorize all findings as either, minor, major and/or observation. Enter documented audit findings into CATS under the established audit number. OC-ALC 90-420, *Corrective Action Tracking System (CATS)*, describes this process in detail and provides specific instructions for processing OC-ALC Form 531, *Corrective Action Request*; and OC-ALC Form 531-1, *Root Cause Analysis Worksheet*, (used in conjunction with OC-ALC Form 531). Air Force Material Command (AFMC) Form 343, *Quality Assurance Assessment*, may be used if more appropriate for the type of issue to be resolved or if the problem is not considered an audit issue. Review all audit findings to ensure complete descriptions of the discrepancies are documented. Once all Corrective Action Requests (CARs) are entered into CATS, a CAR notification letter must be sent to the audited organization, via email, within 10 working days from end of audit. Thus announcing CARs have been posted for review and Root Cause Analysis/Corrective Action Plan development must be completed. Update clause tracker to reflect audited clauses whether conforming or nonconforming to include, requirements addressed, reviewed and evaluated as part of the audit. AFMC Form 343 findings will be handled IAW guidance identified in AFI21-101_AFMCSUP_OC-ALCSUP.

2.6. Audit Report: Consolidate audit material, prepare audit report and publish signed report to the organizational Quality EIM site.

2.6.1. Review the audit report to ensure it is complete, concise and unambiguous. The report will include the following: Scope, purpose, time frame, organization audited, team members, reference sources, processes audited and audit findings (positive and negative, as applicable). The report should also include improvement opportunities/recommendations and discrepancies beyond scope of organization, where applicable. Ensure conformities, nonconformities and/or observations are factual and traceable to the standard or governing directives. Audit reports will incorporate documentation reviewed and associated aerospace standard clause linkage for conformities and nonconformities. Forward the audit report to the appropriate management representative for signature.

2.6.2. Distribute the signed audit report to the assessed organization's workflow account(s) within 15 working days from the end of audit. All other organizations will receive the report for cross-tell purposes and report will be posted on the appropriate Quality EIM site.

Figure 1. Audit Activity and Suspense Date Criteria

AUDIT ACTIVITY	SUSPENSE DATE
a. Annual audit schedule	20 working days before the beginning of each FY
b. Specific audit notification letter	Five working days before beginning of each audit
c. CAR notification letter	10 working days after audit completion
d. Audit report	15 working days after audit completion

2.7. Metrics: Complex Quality Analysis Section (OC-ALC/QAY) shall trend OC-ALC internal and external audit results. Metric reviews are utilized to measure conformity of product, conformity to the Quality Management System (QMS), and/or to assess customer satisfaction.

3. Support of External Audits (Attachment 2) This information is to identify responsibilities to ensure successful preparation for registrar surveillance audits in support of the current AS.

3.1. The OC-ALC/QA Office shall

3.1.1. Provide organizations the registrar's template within five working days of receipt.

3.1.2. Finalize the audit plan based on external auditor's process selection and inform owning organizations of selected processes. Consideration will be given to mission requirements of organizations where areas or processes selected may impact the overall success of the mission.

3.1.3. Provide aerospace standard familiarization briefing to organizational QAs prior to the external audit covering necessary information and what to expect from the external auditors, for briefing within their organizations.

3.1.4. Provide for completion, the external surveillance audit prep checklist to organizational QAs.

3.2. Groups/Squadrons/Elements/Offices shall:

3.2.1. Review clause selections to prepare for possible process considerations.

3.2.2. The OAA shall provide the name and contact information of process owners and alternates to Complex Quality once organization is informed of the processes selected by external auditor for review.

3.2.3. Ensure process owners know their processes, including inputs, outputs and applicable governing directives.

3.2.4. Complete and execute the external surveillance audit prep checklist in applicable organizations.

4. Training: Selected auditors shall be impartial, objective, and have demonstrated ability to apply knowledge and skills to conduct an audit. Selected SMEs may be used to supplement the audit in conjunction with trained auditors. Organizations with their own internal audit program training criteria are subject to approval by Complex Quality.

4.1. Auditor: Minimum training completion for internal auditors consists of on-the-job-training (OJT) and recommended, but optional, formal three day internal or higher-level auditor course. Auditor OJT will include participating as an auditor for at least three audits witnessed by a lead auditor (trainer). After OJT is completed, the quality office supervisor will certify qualification of the auditor trainee to perform internal audits. Documentation of training completion shall be maintained in either the employee's personnel or training record. Previous auditing experience may be evaluated and waiver granted by supervisor with justification if auditor is deemed competent to audit.

4.2. Lead Auditor: Minimum training for lead auditor consists of completing the internal auditor training and completion of lead auditor OJT. Optional recommended training is completion of formal lead auditor training. Auditor OJT will include participating as a lead auditor for three audits witnessed by a lead auditor (trainer). After OJT is completed, the quality office supervisor will certify qualification of the lead auditor trainee to perform internal audits. Documentation of training completion shall be maintained in either employee's personnel or training record. Previous auditing experience may be evaluated and waiver granted by supervisor with justification if auditor is deemed proficient.

4.3. Additional Training Resources: ISO 9001: 2008, *Quality Management Systems-Requirements for Maintenance Organizations*, May 2012 American National Standard (ANS) ISO 9004: 2009, *Quality Management Systems – Guidelines for Performance Improvements*, October 2009, ISO 19011:2011, *Guidelines for Quality and/or Environmental Management Systems Auditing*, November 2011

5. Records. The following records are generated by this instruction: Annual audit schedules, notification letters, audit report, and training. All records resulting from an audit shall be electronic and must be controlled IAW AFM 33-363, *Management of Records* and shall be retained IAW applicable AFRIMS table and rule, T65-31 R 03.00. A three year retention period shall be used for audit reports. Informal documentation or documents considered to be objective evidence may be retained as supporting documentation for reference only.

DONALD E. KIRKLAND
Brigadier General, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101_AFMCSUP 1, *Aircraft and Equipment Maintenance Management*, 26 April 2012

AFI 21-101_OC-ALCSUP I, *Aircraft and Equipment Maintenance Management*, April 2014

AFMAN 33-363, *Management of Records*, 1 March 2008

AFMCI 63-501, *AFMC Quality Assurance*, 14 December 2001

OC-ALCI 90-420, *Corrective Action Tracking System (CATS)*, 5 May 2013

OC-ALCMAN 90-107, *OC-ALC Quality Manual*, 29 Oct 2013

AS9110B, *Quality Maintenance Systems-Aerospace-Requirements for Maintenance Organizations*, April 2012

ISO 9001:2008, *Quality Management Systems-Requirements for Maintenance Organizations*, May 2012

ANS ISO 9004: 2009, *Quality Management Systems – Guidelines for Performance Improvements*, October 2009

ISO 19011: 2011, *Guidelines for Quality and/or Environmental Management Systems Auditing* November 2011

Prescribed Forms

None

Adopted Forms

AFMC Form 343, *Quality Assurance Assessment*

OC-ALC Form 531, *Corrective Action Request*

OC-ALC Form 531-1, *Root Cause Analysis Worksheet*

Abbreviations and Acronyms

76 SMXG—76th Software Maintenance Group

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Material Command

AFMCI—Air Force Material Command Instruction

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AS—Aerospace Standard

CARs—Corrective Action Requests

CATS—Corrective Action Tracking System

EIM—Enterprise Information Management

FY—Fiscal Year

IAW—In Accordance With

MIs—Management Inspections

OAAs—Organizational Approving Authorities

OC—ALC – Oklahoma City Air Logistics Complex

OC—ALC/QA – Oklahoma City Air Logistics Complex Quality Assurance Office

OC—ALC/QAB – Oklahoma City Air Logistics Complex Quality Auditing Office

OC—ALC/QAY – Oklahoma City Air Logistics Complex Quality Analysis Office

OC—ALCMAN – OC-ALC Quality Manual

OPR—Office of Primary Responsibility

OJT—On the Job Training

PEs—Personnel Evaluation

QVIs—Quality Verification Inspections

RDS—Records Disposition Schedule

R—Rule

RDS—Records Disposition Schedule

SIs—Special Inspections

T—Table

Terms

Definitions of aerospace terms found herein can be located in the American National Standard ISO 9000:2005, *Quality Management Systems— Fundamentals and Vocabulary*.

Audit Finding— A conclusion of importance based upon observation(s).

Clause Tracker— A spread sheet utilized to track main aerospace standard clauses during the most current certification period.

Corrective Action— The process of identifying a problem, assigning responsibility, determining the root cause, develop a plan to correct the problem and take action to eliminate the root cause so as to prevent recurrence. The intent is to eliminate the cause of the nonconformity in order to prevent recurrence.

Corrective Action Request (CAR) Form, OC—ALC Form 531 - Form designed to capture, document, and resolve nonconformities or problems identified during scheduled or unscheduled quality audits.

Corrective Action Tracking System (CATS)— A network hosted database that provides authorized complex personnel direct access for the input and editing of CARs and RCA worksheet data generated from internal or external audits. It is the only authorized database for documenting and tracking CARs and their associated RCA.

External Audit, Complex—level - A scheduled review of conformance to an aerospace/ISO standard that is conducted by the complex registrar, usually annually.

Internal Audit, Complex—level - A scheduled review of conformance to aerospace standard. It is planned and implemented by the Complex Quality Office and/or Group Quality, independent from the complex aerospace registrar's oversight.

Internal Audit, Group—level - A scheduled review of conformance to aerospace standards. It is intra-organizationally planned and implemented by a group and its corresponding quality office or focal point. Groups shall perform internal audits. They shall develop a supplement instruction for their internal audit processes if they choose a direction that differs from the complex goals defined in this instruction.

Lead Auditor, Complex or Group— Person designated within an organization as having the authority to assess, and/or approve CARs, RCAs, and CAPs. Individual who has responsibility for all phases of an audit and has authority to make final decisions regarding the conduct of an audit and any observations/findings. They are considered second level approval for internal CARs written within their organization.

Organizational Approving Authority (OAA)— Group/Staff Office OAAs are first level approving authority for internal and external CARs/CAPs. Complex OAAs are second level approving authority for external CARs.

Process Approach— It is a set of interrelated or interacting processes, with regard to both effectiveness and efficiency, which transforms input into output. The appropriate Quality Management System (QMS) requirements are tied to the processes. Requirements may tie to many processes and some may tie to one. Emphasis on the process approach transforms the QMS into a business model instead of a compliance model.

Quality Management System (QMS)— A management system which conforms to requirements under The American National Standard Institute/International Organization for Standardization/American Society for Quality (ANSI/ISO/ASQ) 9001-2008/AS9110, *Quality Management Systems—Requirement*.

Root Cause Analysis (RCA) Work Sheet, OC—ALC Form 531-1 - Form used to document RCA using the natural progression of defining the problem, identifying the immediate cause of the problem, identifying all the intermediate causes, identifying the root cause, and identifying actions to prevent recurrence.

Attachment 2

INTERNAL/EXTERNAL AUDIT PROCESS MAP

Figure A2.1. Internal/External Audit Process Map

