***BY ORDER OF THE COMMANDER***
***WARNER ROBINS AIR LOGISTICS COMPLEX***

***WARNER ROBINS AIR LOGISTICS COMPLEX MANUAL 90-115***

***17 AUGUST 2023***

***Special Management***

***BUSINESS AND QUALITY MANAGEMENT SYSTEM***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: WR-ALC/QAX

Certified by: WR-ALC/QA
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Supersedes: WR-ALCMAN 90-115, 19 August 2021

Pages: 69

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This manual implements Department of the Air Force (DAF) Policy Directive (DAFPD) 90-1, *Policy, Publications, and DoD Issuance Management.* It defines the Business and Quality Management System (BQMS) and Quality Assurance Plan (QAP) within Warner Robins Air Logistics Complex (WR-ALC). It addresses the management and application of commercial quality standards as required by Air Force Materiel Command Instruction (AFMCI) 21-100, *Depot Maintenance Management.* This manual implements AS9110 Revision C, *Quality Management Systems – Requirements for Aviation Maintenance Organizations,* for the development of a representative model for a Quality Assurance (QA) program for production, installation, and servicing within the maintenance environment. This manual applies to all WR-ALC groups and staff offices. Refer recommended changes and questions about this manual to the Office of Primary Responsibility (OPR) using Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Requests for waivers must come through the chain of command from the commander or civilian director of the maintenance group or staff office seeking relief from compliance. Waiver requests must then be submitted to the OPR; waiver authority has not been delegated. This publication is exempt from tiering pursuant to Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*. Ensure that all records created as a result of processes prescribed in this manual are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW the AF Records Information Management System (AFRIMS) and Records

Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rds/rds_series.cfm**. See **Attachment 1** for glossary of references and supporting information. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

***SUMMARY OF CHANGES***

This document is substantially revised and must be completely reviewed. The changes consist of the following: Removed the Political, Economic, Social, Technological, Legal, and Environmental (PESTLE) requirement. Added calibration recall information. Changed location of GPC information. Added that each WR-ALC group will ensure WR-ALC QAX AS9110 Program Managers will have access to group SharePoint sites. Added 5-day mitigation period for AS9110 internal audits. Added QAI inspection team information. Completely revised the corrective action request (CAR) process, **Attachment 3**. Removed **Attachment 8** and **Attachment 9**.

## 1. Introduction.

1.1. Purpose. This document is the Business and Quality Manual and documents the WR-ALC Business and Quality Management System (BQMS). It also fulfills all requirements for a Quality Assurance Manual. The organization is obliged to ensure the quality policy is understood by all employees, and the procedures are implemented and maintained. The assurance of quality is fundamental to the work undertaken by WR-ALC, as well as the procedures established and practiced by all personnel at every level in the organization's structure.

1.2. Scope and Exclusions. WR-ALC complies with requirements identified within this document.

1.2.1. WR-ALC has authority and control over the selection of external providers for processes, products, and services described in AS9110C paragraph 8.4. The AS9110C Standards can be accessed through the QA SharePoint (See **paragraph 5.2**.).

1.2.1.1. Generally, "purchasing processes" (AS9110C, paragraph 8.4.1) responsibilities and control fall within the domain of the Air Force Sustainment Center (AFSC) and are covered in the Federal Acquisition Regulations (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS), and the Air Force Federal Acquisition Regulation Supplement (AFFARS), which outline mandatory purchasing procedures.

1.2.1.2. Generally, "purchasing information" (AS9110C, paragraph 8.4.2) responsibilities and control fall under the scope of the system and/or sustainment program offices within Air Force Materiel Command (AFMC) Air Force Life Cycle Management Center (AFLCMC). The role of the program manager is defined under AFI 63-101/20-101, *Integrated Life Cycle Management*.

1.2.2. Authority for the operational safety, suitability, and effectiveness requirements used to specify contracted or purchased items for use on aircraft and aircraft components, within the Air Force, resides outside of WR-ALC. For example, refer to AFMCI 63-1201, *Integrated Life Cycle Systems Engineering and Technical Management*.

1.2.3. Processes for obtaining engineering approval (e.g., AFMC Form 202, *Engineer Technical Assistance Request*) are covered in Air Force Materiel Command Manual (AFMCMAN) 63-1202, *Engineering Technical Assistance Request (ETAR) Process.*

1.2.4. Supplies, raw materials, and parts are procured for WR-ALC by a variety of Air Force and Department of Defense (DoD) agencies outside the scope of the AS9110C certificate. Procedures and authorities are controlled by statutory and administrative law, including DoD and/or Air Force directive documents (i.e., policies, standards, specifications, instructions, regulations, protocols and/or mandatory procedures). For all intents and purposes, such directive documents are a substitute for an interface agreement of an outsourced process. These directive documents define roles, responsibilities, and expectations that would otherwise fall to the registered entity, but typically exist outside the control and execution of WR-ALC. WR-ALC customers, such as, but not limited to, Air Force Commands (e.g., AF Special Operations Command, AF Reserve Command), industry (e.g., Boeing, Northrop Grumman), and officially designated supply activities (ODSA) (e.g., Material Support Division, Defense Logistics Agency (DLA)) are aware of

established directive documents and have expectations that WR-ALC will comply with such directive documents, which relieves WR-ALC of purchase authority as described by AS9110C, paragraph 8.4. BQMS scope does not include oversight of ODSAs, such as DLA or 448th Supply Chain Management Wing (448 SCMW), or ODSA-supplied items.

1.3. Application. This manual was written to be general in nature and is not intended to reflect the detailed processes, procedures, and methods for day-to-day maintenance operations, with the exception of Attachments **3-5**. It is designed to give the reader a broad overall familiarization with WR-ALC processes. WR-ALC processes, to include management activities, provisions of resources, product realization, monitoring and measurement, in conjunction with the appropriate department managers are developed and maintained locally. Procedures include the methods needed to ensure the operation and control of processes' effectiveness. All processes, procedures, and documented information will be managed IAW the requirements of AS9110C; compliance with AS9110C is mandatory unless specifically exempted herein. This document is designed to ensure adequate controls are in place to guarantee compliance to technical and safety requirements and IAW customer, statutory, and regulatory guidance.

1.4. Publications**.** References to various publications and acronyms are used in this manual and can be found in **Attachment 1**. In addition, WR-ALC/QAX maintains a cross-reference matrix that associates AS9110 clauses (paragraphs) with specific Air Force, AFMC, AFSC, or other organizational directives. The document is posted on the SharePoint site: References and Manual - All Documents (dps.mil).

1.5. Documentation Hierarchy. Directive documentation can be issued at all levels, starting with Secretary of the Air Force (SAF) and Headquarters Air Force (HAF). All technical orders (TOs) are issued under the authority of the SAF. Local supplements to TOs are published under the authority of SAF. SAF and HAF directive documents may be further supplemented by AFMC, AFSC, Robins Air Force Base (AFB), WR-ALC, Maintenance Groups (MXG), and Maintenance Support Squadrons (MXS). Precedence follows in the order presented unless an authorized deviation is published in the lower-level directive document.

1.6. Record of Documentation Review. Records of reviews, amendments, changes, and revisions to this manual are maintained in the Operations Support Section, WR-ALC/OMO. A copy of this of this manual can be found on SharePoint site: usaf.dps.mil/sites/21617/operating%20instructions/forms/allitems.aspx.

1.7. Organizational Products and Services. WR-ALC products and services encompass depot-level maintenance for the C-5, C-130, F-15, C-17 aircraft and any other weapons systems assigned to depot, as well as software development and overhaul of avionics and aircraft components, in support of all DoD customers who have negotiated workload with WR-ALC. These activities may also include Public-Private Partnerships (PPP), which are discussed in paragraphs **1.8** and **1.9**.

1.7.1. AFMC is the parent organization to AFSC. WR-ALC is a complex within AFSC, whose primary mission includes sustainment of Air Force Weapon Systems to include aircraft and aircraft components. The Complex (WR-ALC) consists of five groups providing customer support and staff offices. The groups are broken down as follows: 402d Aircraft Maintenance Group (402 AMXG), 402d Commodities Maintenance Group (402 CMXG), 402d Electronics Maintenance Group (402 EMXG), 402d Software

Engineering Group (402 SWEG), and 402d Maintenance Support Group (402 MXSG). The Complex is led by a military commander, vice commander, and civilian senior leader. Staff offices support WR-ALC: Aerospace Sustainment (AS), Engineering (EN), Financial Management (FM), Inspector General (IG), Operations Management (OM), Business Operations (OB), Quality Assurance (QA), and Safety (SE).

1.7.2. Mission statements and organizational SharePoint sites are maintained separate from this document. WR-ALC/OBMB maintains the official mission statements for all organizational units. Official organizational charts are found on the WR-ALC/OM SharePoint site. See **next paragraph** for Uniform Resource Locator (URL). Mission statements are found via the OB site under OBM, OBMB, and OBMB Continuity Book.

1.7.3. SharePoint URL (available via intranet) WR-ALC **https://usaf.dps.mil/sites/21617/SitePages/Home.aspx**.

1.8. Partnership Agreements and Contract Workloads. PPPs are governed by Title 10 of U.S. Code. Partnership Agreements (PA) and contract workload within WR-ALC will fall under the guidance established IAW AFI 63-101/20-101. Personnel working under contractual workloads ensure production requirements are met, including Statements of Work (SOW), also known as work specifications; PAs, Implementation Agreements (IA), and regulatory/statutory guidance. Compliance with workload and technical requirements will be accomplished to meet customer expectations and operational needs. Maintenance technicians will be certified to perform tasks accomplished under contractual workloads. Contractor supplied work control documents (WCD) must meet the requirements levied by any Air Force or subordinate unit directive publication. Contracted workloads must be included within each group Quality Assurance Surveillance Plan (QASP) and will be considered when implementing monthly/quarterly surveillance requirements to ensure adequate oversight. All contracts, PAs, and IAs are managed within OB.

1.9. WR-ALC/QA Requirements Relative to PPPs. OBP is responsible for PPP planning. A multifunctional team comprised of government and contractor personnel will be responsible for defining the requirements and developing all appropriate documentation/attachments. Example documents include SOWs, work specifications, QA criteria, data requirements, and reports for inclusion in the task-specific "ordering" document. Prior to issuance, every "ordering" document must be coordinated and signed by the private sector partner and approved by the WR-ALC Commander (CC) or designated representative.

**2. Quality and Safety Policy.** Maintenance and overhaul that support warfighter readiness through a safe and effective work environment with a commitment toward continuous improvement: right quality, right quantity, right time!

2.1. Right quality is achieved through conformance to technical specifications and directives and a commitment to excellence.

2.2. Right quantity is achieved through well-defined processes.

2.3. Right time is achieved through continuous process improvement and focus on constraints.

2.4. The quality and safety policy is strategically aligned with WR-ALC's daily operations to provide a quality product in a safe manner. WR-ALC implemented the Air Force Safety Management System (SMS) to ensure products and personnel safety objectives are achievable. The SMS promotes a proactive safety environment that fosters zero mishaps. Through the SMS, the WR-ALC Safety Office will set Safety Objectives, assess their effectiveness, and articulate them to the workforce. Through the Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP), WR-ALC will measure the SMS's effectiveness and encourage employee involvement by empowering them to report hazards without fear of reprisal. These efforts are essential to the success of WR-ALC's mission to support the warfighter. See **paragraph 5.2** for quality and safety policy implementation. The WR-ALC Safety Office will provide the Safety Objectives.

**3. References and Supporting Information.** See **Attachment 1** for references, abbreviations, acronyms, terms, definitions, and a list of adopted forms. AS9110C adds definitions for risk, special requirements, critical items, and key characteristics. For the purpose of this manual, the definitions given in International Organization for Standardization (ISO) 9000:2015, *Quality Management Systems – Fundamentals and Vocabulary*, are defined for user clarity.

**4. Context of the Organization.**

4.1. Understanding the Organization and Its Context. The organization determines the external and internal issues relevant to the strategic direction and purpose of the organization with respect to its ability to achieve the intended results of the BQMS (refer to **paragraph 6.1**.). The organization will review its context annually. This will be documented in the form of a strengths, weaknesses, opportunities, threats (SWOT) analysis.

4.2. Understanding Needs and Expectations of Interested Parties. Due to the potential effect that external and internal issues may have on the organization's ability to meet mission requirements, and applicable statutory and regulatory requirements, the organization determined:

4.2.1. The interested parties to be considered will include, but are not limited to, WR-ALC employees, regulatory agencies (e.g. Environmental Protection Agency), Warner Robins community, US tax payers, other ALCs, mission partners including customers and public/private partnerships, System Program Offices (SPO), Air Force Life Cycle Management Center (AFLCMC), 78th Air Base Wing (78 ABW), and suppliers such as 448 SCMW and DLA.

4.2.2. The issues and requirements related to interested parties are monitored and reviewed by the activities of WR-ALC/CC/CV, MXG/CC/CLs, and staff office chiefs. These entities engage with the parties identified in **paragraph 4.2.1** through various management meetings, conferences, and other forums in order to identify relevant issues, requirements, concerns, and opportunities.

4.3. Scope of the Business and Quality Management System. The scope of WR-ALC's BQMS is described in paragraphs **1.7**, **4.1**, and **4.2** of this manual.

4.4. Business and Quality Management System and Its Processes.

4.4.1. The BQMS is developed, documented, implemented, and maintained IAW the requirements of AS9110C using established regulations, technical data, policies, procedures, and Continuous Process Improvement (CPI). The BQMS addresses customer needs, applicable statutory and regulatory requirements, and is based on a process approach to quality management. Responsibilities and authorities for the BQMS are identified in the organizational chart as well as **paragraph 1.7**. WR-ALC/CC, MXG commanders/directors, staff office chiefs, and subordinate supervisors will:

4.4.1.1. Determine the processes and application of the BQMS throughout the organization through the use of directive documents established IAW DAFI 90-160 and the Process Interaction Map (**Attachment 2**).

4.4.1.2. Determine the sequence and interaction of these processes via the Process Interaction Map (**Attachment 2**).

4.4.1.3. Determine the criteria and methods required to ensure the control, effective operation, and management of these processes (**Attachment 2**).

4.4.1.4. Ensure the availability of resources and information in order to support the operation and monitoring of these processes (**Attachment 2**).

4.4.1.5. Monitor, measure (where applicable), and analyze these processes for risks and opportunities IAW **paragraph 6.1**.

4.4.1.6. Implement actions required to produce the desired outcome and continual improvement of these processes (**Attachment 2**).

4.4.1.7. Continually maintain and improve these processes IAW requirements in Air Force publications, and AS9110C. QA assistance should be considered for CPI events.

4.4.2. Documentation Requirements.

4.4.2.1. Documentation to support this manual can include, but is not limited to, the following: technical data, WCDs, drawings, historical records, test procedures, calibration procedures, quality records, process orders, and/or other documents. WR-ALC utilizes the AF publications management program, Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS), and DAFI 90-160, *Publications and Forms Management*, for implementing directives regarding the development, use, change, and disposal of BQMS documents. See **paragraph 7.5** for more information.

## 5. Leadership.

5.1. Leadership and Commitment.

5.1.1. All levels of supervision at WR-ALC will provide evidence of commitment to the development, implementation, and continual improvement of the BQMS. They will do this by communicating to all employees the importance of meeting customer, statutory, and regulatory requirements. All levels of leadership will encourage communication within the organization in order to support the effectiveness of the BQMS and promote AF core values. The quality policy is established and maintained to be compatible with the strategic direction of the Complex and to be integrated into daily operations.

5.1.2. Customer Focus. Management will ensure that customer needs and expectations are identified, transformed into requirements, and fulfilled with the intent of achieving and exceeding customer satisfaction. OB manages customer needs and expectations which are identified through PAs, IAs, work specifications, and SOWs; all of which should comply with statutory and regulatory requirements. Results of Inspector General (IG) inspections, Air Force Audit Agency (AFAA) audits, quality assessments and internal quality audits are communicated to WR-ALC leadership through ALC and group level staff meetings, which occur at least quarterly.

5.2. Quality and Safety Policy. It is the responsibility of leadership at all levels and areas of the organization to communicate the quality and safety policy as it applies to their organizations. The Quality and Safety Policy can be found on the WR-ALC SharePoint site located at: **https://usaf.dps.mil/sites/21617/QA/AS9100/Forms/AllItems.aspx**

5.3. Organizational Roles, Responsibilities, and Authorities. WR-ALC/CC/CV/DV, MXG commanders/directors, and staff office chiefs (through subordinate supervisors and chiefs, as necessary) will ensure that responsibilities and authorities are defined and communicated throughout the organization. Authority for the effective implementation of all procedures and the communication used in the organization is defined by the chain of command. WR-ALC/CC appoints the Director of Quality as the AS9110 management representative and AS9110 Quality Manager. WR-ALC/CC is the AS9110 Accountable Manager.

## 6. Planning.

6.1. Actions to Address Risks and Opportunities.

6.1.1. The planning of the BQMS considers the issues referred to in **paragraph 4.1**, and the requirements referred to in **paragraph 4.2**, to determine the organizations' risks and opportunities to achieve intended results, enhance desirable effects, prevent or reduce undesired effects, and for continued improvement.

6.1.2. WR-ALC plans actions to address risks and opportunities by taking into consideration the integration and implementation of the BQMS and its effectiveness as defined in **paragraph 4.4**. Strategic risks and opportunities are addressed by OB and AS through their respective missions. Planning teams and production personnel address the tactical accomplishment of these goals by using established guidance.

6.2. Quality Objectives and Planning to Achieve Them.

6.2.1. Quality objectives identified within the BQMS and the quality policy include business performance indicators and will:

6.2.1.1. Provide measurable results.

6.2.1.2. Meet applicable requirements.

6.2.1.3. Achieve conformity of products and services to include customer satisfaction related to quality, cost, schedule, and safety.

6.2.1.4. Be monitored and communicated through activities such as management reviews and production meetings.

6.2.1.5. Provide continual improvement of production and support processes.

6.2.1.6. Maintain and posture the Complex for future workloads, including partnering with the private sector.

6.2.1.7. Maintain a highly skilled and proficient workforce that is provided the training, resources, and support to consistently produce world-class products.

6.2.2. WR-ALC/CC/CV/DV, MXG/CC/CLs, and staff office chiefs, through the business management and planning offices, will ensure the achievement of quality objectives by identifying:

6.2.2.1. The requirements to be accomplished.

6.2.2.2. The resources required.

6.2.2.3. The responsible organizations.

6.2.2.4. The timeframe for requirements to be completed.

6.2.2.5. The methods and procedures to evaluate results.

6.3. Planning Changes.

6.3.1. Any changes to the BQMS will be carried out in a controlled manner (**see paragraph 4.4**) and must consider:

6.3.1.1. The purpose of the changes and their potential consequences.

6.3.1.2. The integrity of the BQMS.

6.3.1.3. The availability of resources.

6.3.1.4. The allocation or reallocation of responsibilities, resources, and authorities.

6.3.2. Operational Risk Management (ORM) will be used to identify risks with appropriate mitigation actions put into place during the transition period.

**7. Support.**

7.1. Resources.

7.1.1. General. WR-ALC, via OB and AFSC/DP, determines and provides resources needed to implement, maintain, and continually improve the BQMS. Resource considerations include the capabilities, capacities, and constraints on internal resources and requirements from external providers during planning and daily operations as required by, but not limited to: AFI 1-2, *Commander's Responsibilities*, AFSCMAN 21-102, *Depot Maintenance Management*, and other governing instructions.

7.1.2. People. Personnel, to include both government and contractor employees, performing work will be competent with regards to appropriate education, training, skills, and experience. Maintenance training is documented in the Training Scheduling System-Production Acceptance Certification Standard System (TSS-PACSS). Sections IIIC and IIIQ are often referred to as an employee's PAC folder.

7.1.3. Infrastructure. WR-ALC/CC/CV/DV, MXG commanders/directors, and staff office chiefs will determine, provide, and maintain the necessary infrastructure which includes suitably maintained buildings, transportation, workspaces, facilities, utilities, process equipment, computer hardware and software, and communication technology.

7.1.4. Environment for the Operation of Processes. WR-ALC/CC/DV/CV, MXG commanders/directors, and staff office chiefs will ensure that the work environment within offices, production areas, and storage areas are suitable to achieve conformity to product and service requirements. The conditions of the work environment include, but are not limited to social, psychological, physical, environmental, and other factors (i.e., noise, temperature, humidity, lighting, or weather) which will be determined and managed.

7.1.5. Monitoring and Measuring Resources.

7.1.5.1. The 402 MXSG has primary equipment maintenance responsibilities. However, additional requirements and activities have been assigned to the user which are identified in TO 00-20-14, *Air Force Metrology and Calibration Program*, TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, AFSCMAN 21-102, and other governing instructions. Documented information is retained in appropriate mission information systems to serve as evidence of equipment serviceability and conformity. See AS9110 cross-reference matrix for other applicable requirements; refer to **paragraph 1.4**.

7.1.5.2. The Precision Measurement Equipment Laboratory (PMEL) maintains a register of test, measurement, and diagnostic equipment (TMDE).

7.1.5.3. Calibration device recall procedures are detailed in TO 00-20-14. 802 MXSS Metrology and Calibration Flight (MCF) and the Precision Measurement Equipment Laboratory (PMEL) are responsible for notifying work centers of an item experiencing an "out-of-tolerance" condition during recertification. The owning work center then determines the impact of the condition on shop production and what steps should be taken. The determination will be supported by technical data (such as technical order, drawing, or an AFMC Form 202).

7.1.6. Organizational Knowledge. Organizational knowledge is specific to each organization. Organizational knowledge can be based on the following examples: knowledge gained from experience, lessons learned from failure, successful projects, standards, and by gathering knowledge from customers.

7.2. Competence. WR-ALC has established procedures for the identification and provision of education and training for all employees performing activities affecting conformity to product requirements, airworthiness management and maintenance activities. AFSCMAN 21-102 establishes the requirements for the organization's training.

7.3. Awareness.

7.3.1. WR-ALC/CC, MXG commanders/directors, staff office chiefs, and subordinate supervisors or chiefs will ensure all personnel have access to and are aware of relevant BQMS documentation and changes, the quality and safety policy, and the business and quality manual which are located at **https://usaf.dps.mil/sites/21617/qa/as9100/forms/allitems.aspx**.

7.3.2. Personnel will be aware of the relevance and importance of their activities, the implications of not conforming with the BQMS, and how they contribute to the achievement of the quality objectives, product and service conformity, and safety. Personnel are made aware of the importance of ethical behavior through various training courses and an organizational culture founded on the AF Core Values: Integrity First, Service Before Self, and Excellence in all We Do.

7.4. Communication. Authority for the effective implementation of all procedures and communication used in the organization is defined by the chain of command. However, all levels of leadership will encourage communication within the organization in order to support the effectiveness of the BQMS and promote AF Core Values.

7.5. Documented Information.

7.5.1. Documented information is defined as any paper or electronic media used to contain or store information as evidence of completed work, traceability, nonconformities, quality, and conformity. Documented information will be maintained and/or retained IAW the appropriate AFRIMS rule.

7.5.2. Creating and Updating Documented Information. All documented information required by the BQMS has appropriate identification and formatting, and is reviewed and approved for adequacy prior to issue. Documents are updated, reviewed, and approved for re-issue as necessary, and identified with current revision status.

7.5.3. Control of Documented Information. Established procedures for the control of documents will be strictly followed and enforced. The primary AF requirements for documentation are as follows: AFI 33-322, DAFI 90-160 *Publications and Forms Management*, DAFMAN 90-161 *Publishing Processes and Procedures*, TO 00-5-1, *AF Technical Order System*, and TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*.

7.5.3.1. Documented information will be current, legible, readily identifiable, retrievable, and available at points of use. Corrections to errors are made by making a single line through the entry and initialing and dating the marking. Corrected entries will not be obliterated or covered. A maintenance stamp may be substituted for name and/or initials.

7.5.3.2. Documented information available electronically will be managed with access or control permission to prevent unauthorized alterations or loss. Publication, accessibility, and releasability requirements are defined by and controlled IAW DAFI 90-160 and AFI 33-322.

**8. Operation.**

8.1. Operational Planning and Control. There are several areas within the Complex that are responsible for planning, implementation, and control of the processes needed for product and/or service realization. These policies and procedures are outlined in AFSCMAN 21-102 Chapter 14 and AFI 63-101/20-101.

8.1.1. The Air Logistics Complex (ALC) has functions that perform strategic planning, master scheduling and analytical activities needed to ensure production requirements are fully supportable prior to induction (AFSCMAN 21-102). These activities may include customer requirements, analysis, long to short range production planning, master production scheduling, capacity and material requirements planning, and contingency (what-if) management (AFSCMAN 21-102). Other important components include, but are not limited to:

8.1.1.1. Aircraft and Missile Requirements (AMR). The AMR process is used to develop, review, validate, and approve depot level maintenance and repair for aircraft and missile systems within the weapon system sustainment portfolio. This applies to all AF organizations requiring and providing depot maintenance on AF systems, whether the work is performed organically, contractually, or via inter-service.

8.1.1.1.1. Production Meeting. The ALCs will establish scheduled Production Meetings. The purpose of the meeting is to discuss scheduled/impending production requirements, establish work priorities, and coordinate schedule changes. This meeting ensures all depot maintenance (DM) production requirements are effectively scheduled and problems are resolved.

8.1.1.1.2. Depot maintenance strategic planning is the process used by the AF to articulate depot maintenance goals and objectives so that funding, requirements, equipment, manpower, infrastructure, recapitalization, and business processes align to achieve these goals and objectives.

8.1.1.2. WR-ALC (and its subordinate organizations) will do the following:

8.1.1.2.1. Establish criteria for the processes and the acceptance of products and/or services.

8.1.1.2.2. Determine the resources needed to achieve the requirements and to meet on-time delivery to the customer. Outsourced processes will be controlled IAW AS9110C paragraph 8.4.

8.1.1.2.3. Establish and implement controls of the many processes, especially those needed to manage critical items and prevent nonconforming products and/or services.

8.1.1.2.4. Determine the requirements for documenting and maintaining information in order to provide evidence that the processes occurred as intended and the resulting products meet conformity requirements as necessary. This is accomplished by the planning office.

8.1.1.2.5. Take into consideration the configuration management appropriate to the product and resources in order to support the use and maintenance of the product. This is accomplished by the planning office.

8.1.1.3. MXG commanders/directors (through subordinate planners, chiefs or supervisors, as necessary) will ensure representatives of affected organizations are engaged as necessary for operational planning and control.

8.1.1.4. Responsible or cognizant MXG commanders/directors (through subordinate planners, chiefs or supervisors, as necessary) will control and document changes affecting processes, production equipment, tools, or software programs. The results of changes to production processes are assessed to confirm that the desired effect has been achieved without adverse effects to product conformity. Any changes affecting product conformity or resulting in a departure from the tech data or contractual requirements are authorized only after specific authorization by the customer or controlling authority (e.g., AFMC Form 202).

8.1.1.5. Control of Work Transfer. Work transferred outside of WR-ALC's facilities is planned and controlled. This may include temporary, contractual, or PPP agreement as required by United States Code (USC) Title 10, Section 2464, *Core Logistics Capabilities*. Internal work transfers will insure the requirements of work to be performed, identification of item, and status. See AS9110C paragraph 8.4 for more information on transfers involving external organizations.

8.1.1.6. Project Management. Product realization is planned and managed in a structured and controlled manner to meet requirements at acceptable risk, within resource and schedule constraints. It is a process described to some extent by Air Force Sustainment Center Instruction (AFSCI) 60-101, *Art of the Possible*, and AFSCI 21-402, *Industrial Process Control*.

8.1.1.6.1. Operational Risk Management. Risk Management is defined as a decision-making process to systematically evaluate possible courses of action, identify risks and benefits, and determine the best course of action for any given situation. Refer to AFI 90-802, *Risk Management*.

8.1.1.6.2. Configuration Management (CM). CM is a process for establishing and maintaining consistency of a product's performance, functional and physical attributes with its requirements, design, and operational information throughout its life. The process is discussed in more detail in AFMCMAN 21-102, *Engineering Data Storage, Distribution, Control, and Configuration Control*.

8.1.2. Configuration Management Life Cycle Planning and Management. Plan and manage the CM process and provide for monitoring and improving the CM processes planning to include required changes.

8.1.2.1. Configuration Identification: Identify and document the function and physical characteristics of configuration items and provide traceability.

8.1.2.2. Configuration Change Management: Control changes to configuration items and their related documentation.

8.1.2.3. Configuration Status Accounting: Record and report information needed to manage configuration items effectively, including the status of proposed changes and their implementation.

8.1.2.4. Configuration Verification and Audit: Audit configuration items in order to verify conformance to specifications, drawings, interface documents, and other contractual requirements. WR-ALC performs configuration audits through quality verification inspections (QVI), personnel evaluations (PE), first article inspection, process audits, and other process reviews deemed necessary for the integrity of the BQMS.

8.1.3. Product Safety. The organization plans, implements, and controls the processes needed to assure product safety during the product life cycle stages applicable to the work performed at WR-ALC. Life cycle management policy is contained in, but not limited to, AFI 63-101/20-101. WR-ALC's primary responsibility is to ensure product safety requirements are met through adherence to policy, procedures, and regulatory and statutory guidance, including compliance with all technical data. WR-ALC addresses product safety through following:

8.1.3.1. IAW AFSCMAN 21-102, Chapter 8, QA's efforts focus on the soundness of design and the improvement of depot maintenance processes, conformance of products and services to technical requirements, and the prevention of product and service deficiencies.

8.1.3.2. IAW AFSCMAN 21-102, pre-planning meetings will identify critical tasks/items according to technical data and process performance criteria. When applicable, QA and planning functions identify secondary and Q-coded PAC certification tasks to ensure critical items receive the appropriate level of attention.

8.1.3.3. WR-ALC Safety enhances operational capability by effective risk management, which is achieved through comprehensive inspections, investigations, analyses, and reporting in the interest of mishap prevention.

8.1.3.4. Communications of these processes are completed through the training of personnel, safety briefings, continuous process improvement events, and other activities.

8.1.4. Prevention of Counterfeit Parts. The organization addresses concerns for the prevention, handling and reporting of counterfeit parts IAW DAFI 23-101, *Materiel Management Policy*.

8.1.4.1. Documents suggested to verify parts are authentic, serviceable, and approved for installation include, but are not limited to, certificates of conformance, DD Forms 1574, *Serviceable Tag – Materiel*, shipping documents, original equipment manufacturer (OEM) labels, and proof of visual inspection. Vigilance is key to ensuring that parts are genuine. All mechanics/technicians, scientists/engineers, science/engineering technicians (to include planners), QA inspectors, QA auditors, parts attendants, schedulers, and logistics specialists will be trained on counterfeit parts prevention with recurring training no less than every 3 years. Individuals supporting installation or repair of electronics components or other articles at high risk for

counterfeiting will undergo training specific to that risk at the same or higher frequency. WR-ALC will rely on guidance for what is high risk from DoD, HAF or SAF offices, Defense Acquisition University, Society of Automotive Engineers, International Aerospace Quality Group, American Society for Quality, industrial partners, or other authorities found to be competent by QAX.

8.1.4.2. Detection of counterfeit and unapproved parts is a joint effort between the contractors manufacturing the part, the DLA, and the organization. Suspect counterfeit parts discovered by WR-ALC personnel will be initially reported to QA for processing through the Product Quality Deficiency Report (PQDR) and Joint Deficiency Reporting System (JDRS) IAW TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution*, or AFI 91-202, *The US Air Force Mishap Prevention Program*.

8.1.4.3. Contractors are required by DFARS to have an acceptable Counterfeit Detection and Avoidance Program to ensure traceability and rigorous testing in order to have an approved purchasing system by the Contracting Officer (DLA).

8.1.4.4. Anti-counterfeiting checklists will be integrated into the purchasing process and eventually into the Financial Database.

8.1.4.5. The only approved parts that are authorized for installation are parts that are listed in technical requirements (e.g. technical data, technical orders, blueprints, AFMC Form 202).

8.2. Requirements for Products and Services.

8.2.1. Customer Communication. Numerous venues and methods are in place to facilitate customer communication including the internet, 24-hour contact points, customer service offices, program and weapon system reviews, deficiency report action offices, and customer surveys.

8.2.1.1. WR-ALC/OB provides information relating to products/services and handles enquiries, contracts, orders, and quotes.

8.2.1.2. Customer feedback relating to products and services, including customer complaints, is performed IAW in **paragraph 9.1.2**.

8.2.1.3. Customer property is handled, controlled, and communicated IAW **paragraph 8.5.3**.

8.2.1.4. The organization establishes specific requirements for contingency actions, when relevant, during planning and production operations as risk management identifies the need.

8.2.2. Determining the Requirements for Products and Services. The Organization will ensure that the following are met:

8.2.2.1. That the product or service has clearly defined requirements to include any statutory and/or regulatory requirements.

8.2.2.2. Customer requirements and expectations are clearly identified, including the requirements for delivery and post-delivery support.

8.2.2.3. Any risks have been identified.

8.2.2.4. Capacity and capabilities have been assessed.

8.2.2.5. A risk assessment has been performed.

8.2.2.6. Delivery schedule can be met.

8.2.3. Review of the Requirements for Products and Services. Prior to final acceptance of a workload, applicable planning teams and WR-ALC/OB will negotiate mutually acceptable requirements when those requested by the customer can be fully met, resolve any prior agreed upon arrangements that cannot be met, and are confirmed with the customer ensuring that particular attention is given to items mentioned in **paragraph 8.2.2** and the following:

8.2.3.1. Contract or order requirements differing from those previously expressed are resolved prior to contract implementation.

8.2.3.2. Results of the reviews and any new requirements, pertinent related correspondence, and necessary follow-up actions are documented. Where the customer provides no documented statement of requirements, the customer requirements are established from available technical data and confirmed by WR-ALC before acceptance. This information is entered into an internally generated WCD, process order, and/or project plan.

8.2.3.3. Where product requirements are changed, the commander/director/chief/supervisor of the organizational unit (MXG, squadron, flight, section, staff office, work center, or shop, as appropriate) responsible for implementation and/or oversight of the change will ensure relevant documents under the unit's control are amended and relevant personnel under its control are made aware of the changed requirements. This includes customers or regulatory agencies per contract requirements.

8.3. Design and Development of Products and Services. In most cases, the cognizant SPO or other customer retains engineering design authority (EDA). SPOs fall under the Air Force Life Cycle Management Center and outside the scope of WR-ALC's certification. In some cases, EDA is delegated to WR-ALC engineers for specific purposes. Responsibility for overall product design, function, safety, other key performance parameters, and systems engineering belongs to the SPO or customer, except as explicitly delegated. WR-ALC has some organizations involved in prototyping, reverse engineering, and related functions.

8.4. Control of Externally Provided Processes, Products, and Services.

8.4.1. WR-ALC has a limited role in external providers (see paragraphs **1.2.2.1** and **1.2.2.2**), mainly falling into the Government Purchase Card (GPC) Program.

8.4.2. The requirements, control, and information for providers is covered in this manual, the DAFI 64-117, *Government Purchase Card Program*, AFI 64-117_WR-ALCSUP, all local and higher tiered directive guidance, as well as the local GPC process guide 64-101/20-101 located on the Maintenance Acquisition Program Office (MAPO) SharePoint.

8.4.3. Provider performance is measured by on-time delivery and product defect rate. Each group will email these metrics quarterly to the WR-ALC/**QAXHighRiskGPCreview@us.af.mil**. If no email is received, purchases will be considered 100% on-time with no defects.

8.5. Production and Service Provision.

8.5.1. Control of Production and Service Provision.

8.5.1.1. Production and service provision will be implemented under controlled conditions. Controlled conditions include, as applicable:

8.5.1.1.1. The availability of documented information that describes the characteristics of the product or service, the work to be performed, and the results to be achieved, which can include drawings, parts lists, materials, and process specifications, flow charts, production documents such as WCDs, work instructions, work orders, process cards, and inspection documents.

8.5.1.1.2. The availability and use of monitoring and measuring resources. Also see **paragraph 7.1.5**.

8.5.1.1.3. The QA office uses QVIs performed by a Quality Assurance Specialist (QAS) in conjunction with audits of associated WCDs, TOs, process orders, etc., to monitor and measure the characteristics of the product to verify that product requirements have been met. This is carried out at appropriate stages of the product realization process IAW the group QASP. Evidence of conformity with the acceptance criteria is maintained in Logistics Evaluation Assurance Program (LEAP). Measurement requirements for product acceptance are documented and include the following:

8.5.1.1.3.1. Criteria for acceptance and/or rejection.

8.5.1.1.3.2. Where in the sequence measurement and testing operations are performed.

8.5.1.1.3.3. Required records of the measurement results (as a minimum, indication of acceptance or rejection).

8.5.1.1.3.4. Any specific measurement instruments required, and any specific instructions associated with their use.

8.5.1.1.3.5. When WR-ALC/QA uses sampling inspection as a means of product acceptance, the plan is justified on the basis of recognized principles and appropriate for use. Sampling plans are developed based on factors such as criticality of the product, availability of personnel, analysis of data, and process capability.

8.5.1.1.4. The use of environment and infrastructure. Infrastructure can include suitable equipment which may include product specific tools, jigs, fixtures, molds, and software programs. Also see paragraphs **7.1.3** and **7.1.4**.

8.5.1.1.5. The implementation of actions to prevent human error, product release, delivery, and post-delivery activities.

8.5.1.1.6. Criteria for workmanship specified in the clearest manner such as written standards, representative samples, or illustrations.

8.5.1.1.7. Accountability for all products during production (e.g., parts quantities, split orders, nonconforming product).

8.5.1.1.8. When critical items, including key characteristics, have been identified, they are monitored and controlled IAW the established processes.

8.5.1.1.9. The identification of in-process verification points when adequate verification of conformance cannot be performed at later stages.

8.5.1.1.10. Availability of evidence that all operations have been completed as planned, or as otherwise documented and authorized.

8.5.1.1.11. Provision for the prevention, detection, removal of foreign objects (FO), contamination, and investigation of incidents involving FO or contamination.

8.5.1.1.12. Monitoring and control of utilities and supplies such as water, compressed air, electricity, and chemical products to the extent they affect conformity to product requirements.

8.5.1.1.13. Where product is released for production pending completion of all required measurement and monitoring activities will be identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet requirements.

8.5.1.2. Control of Production Equipment, Tools, and Software Programs. Production equipment, tools, and software programs used to automate, control and/or monitor production processes are approved prior to release for production and are maintained. Storage requirements, including periodic preservation/condition checks, are defined for production equipment or tooling in storage.

8.5.1.3. Validation and Control of Special Processes. The responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will validate any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement and, as a consequence, deficiencies become apparent only after the product is in use or the service has been delivered. These processes are often referred to as special processes. Validation demonstrates the ability of these processes to achieve planned results. The responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will establish arrangements for these processes, including, as applicable:

8.5.1.3.1. Defined criteria for review and approval of the processes.

8.5.1.3.2. Determination of conditions to maintain the approval of the process.

8.5.1.3.3. Approval of facilities and equipment.

8.5.1.3.4. Approval of qualification of personnel.

8.5.1.3.5. Use of specific methods and procedures for implementation and monitoring the processes.

8.5.1.3.6. Requirements for documented information to be retained.

8.5.1.4. Production Process Verification. Production activities use a representative item from the first production run of a new part or assembly to verify that the production processes, production documentation, and tooling are capable of producing parts and assemblies that meet requirements.

8.5.1.4.1. This process is repeated when changes occur that invalidate the original results. Included in this category are engineering changes, manufacturing process changes, tooling changes, etc.

8.5.1.4.2. This activity is often referred to as first article testing and usually involves validation/verification by form, fit, and function processes. First article tests are usually conducted in collaboration with or under the direction of a SPO or similar customer design authority. However, internal process changes may undergo similar reviews after significant process changes are made to ensure product or service conformity. Risk assessments, capacity verifications, or process controls may be implemented to validate desired results are achieved. The planning office will determine the level of risk that the government is willing to accept.

8.5.1.4.3. Documented information will be retained on the results of production process verifications as necessary or required.

8.5.2. Identification and Traceability.

8.5.2.1. Where appropriate, the responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will identify products by suitable means throughout any and all steps or stages of product realization, including and through hand-off to other responsive or cognizant MXG or staff office to ensure the conformity of products and services.

8.5.2.2. The responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will maintain the identification of the configuration of the product in order to identify any differences between the actual configuration and the agreed upon configuration.

8.5.2.3. The responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary), will identify the product status with respect to monitoring and measurement requirements throughout product realization.

8.5.2.4. When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), the responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will establish appropriate controls for the media. Where traceability is a requirement, the responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will control and record the unique identification of the product and maintain records.

8.5.2.5. Traceability requirements may include:

8.5.2.5.1. Identification to be maintained throughout the product life.

8.5.2.5.2. The ability to trace all products manufactured from the same batch of raw material or from the same manufacturing batch to the destination (e.g., delivery, scrap).

8.5.2.5.3. For an assembly, the ability to trace its components to the assembly and then to the next higher assembly.

8.5.2.5.4. For a product, a sequential record of a given product's production (manufacture, assembly, inspection/verification) to be retrievable.

8.5.2.6. Additional product identification and traceability requirements are defined in DAFI 23-101.

8.5.3. Property Belonging to Customers and External Providers. All WR-ALC personnel will exercise care with customer or external provider property while it is under the organization's control or being used by the organization. The responsive or cognizant MXG commander/director or staff office chief (through subordinate chiefs or supervisors, as necessary) will identify, verify, protect, and safeguard customer property provided for use or incorporation into the product. If any customer property is lost, damaged, or otherwise found to be unsuitable for use, it is reported to the customer and records are maintained (see **paragraph 7.5**.). When customer property is received damaged or unsuitable for use, the appropriate QAS is notified to facilitate required disposition. Discrepancy reports are prepared IAW TO 00-35D-54. Customer property can include intellectual property and personnel data.

8.5.4. Preservation.

8.5.4.1. Established procedures preserve the product during internal processing and delivery to the intended destination in order to maintain conformity to requirements. As applicable, preservation includes identification, handling, packaging, storage, and protection. Preservation also applies to the constituent parts of a product.

8.5.4.2. Preservation of product also includes, where applicable IAW product specifications and applicable statutory and regulatory requirements, provisions for:

8.5.4.2.1. Cleaning.

8.5.4.2.2. Prevention, detection, and removal of foreign objects.

8.5.4.2.3. Special handling for sensitive products.

8.5.4.2.4. Marking and labeling, including safety warnings.

8.5.4.2.5. Shelf-life control and stock rotation.

8.5.4.2.6. Special handling for hazardous materials.

8.5.4.3. Products are cleaned per TO. Painting, de-painting, and finishing are covered in each weapon system's -23 TO unless the customer notifies the planner of specific requirements. Those requirements are placed on the work instruction as would be for special aircraft (Foreign Military Sales, Navy, Special Operations Aircraft, etc.). Process Orders or general shop practice TOs may also be used, such as TO 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance, and Test of Electrical Equipment*.

8.5.5. Post-Delivery Activities. WR-ALC post-delivery support includes but is not limited to:

8.5.5.1. Guidance from TO 00-35D-54 which establishes policies and procedures regarding post-delivery defects.

8.5.5.2. Preventative maintenance which allows for modification of a software product after delivery to detect and correct latent faults in the software product before they become effective faults.

8.5.5.3. Controls required for offsite work (e.g., the Complex's work undertaken at the customer's facilities).

8.5.6. Control of Changes.

8.5.6.1. Configuration changes in the sustainment phase of a weapon system occur at many levels and across many organizations responsible for the management of items at the subsystem and component level. Configuration control over widespread changes is necessary to ensure such changes are reviewed and approved by competent and cognizant authorities. These procedures are outlined in AFMCMAN 21-102.

8.5.6.2. WCD changes will be conducted by the responsible planning organization. An AFSC Form 957, *Work Control Document (WCD) Change Request*, is used to identify additions, deletions, and corrections to an existing WCD.

8.5.6.3. Technical Data Deviations. When work cannot be performed using the TO as written, an authorized deviation must be processed and approved. The AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*, is processed in accordance with TO 00-5-1, or the AFMC Form 202 is sent to the appropriate engineering/planning function which processes the request in accordance with AFMCMAN 63-1202, or other applicable directive.

8.5.6.4. Engineering drawing changes are documented on AFMC Form 3925, *Engineering Order,* (EO) as described in AFMCI 21-401, *Engineering Drawing, Data Storage, Distribution and Control System*, and AFMCMAN 63-1202.

8.6. Release of Products and Services. The release of products/services to the customer will not proceed until the planned arrangements have been completed. Records that show evidence that products/services met defined requirements and which identify the person or persons authorizing release will be kept as documented information.

8.7. Control of Nonconforming Outputs. Policies and procedures regarding the control of nonconforming outputs can be found in but not limited to **paragraph 10.2** and AFSCMAN 21-102, TO 00-35D-54, and any applicable Group level operating instructions. Each MXG will have a directive publication for management of enclave information technology assets (ITA) to include nonconforming output.

**9. Performance Evaluation.**

9.1. Monitoring, Measurement, Analysis, and Evaluation.

9.1.1. WR-ALC, through the MXG commanders/directors and staff office chiefs, will determine metrics to be monitored and measured, methods to be used, when the monitoring and measuring are being performed, when the results will be analyzed and evaluated, and what information will be retained as documented information.

9.1.2. Customer Satisfaction. The organization will monitor customer satisfaction and the methods for obtaining and reviewing this information. Customer complaints and product/service nonconformities are identified in PQDRs, Acceptance Inspection Deficiency Reports (AIDRs), Pilot-Reported Defects, Customer Reported Defects, Supplier Corrective Action Notifications, and other official reports.

9.1.3. The above-mentioned reports along with customer satisfaction surveys, user opinion surveys, conferences, trip reports, and on-time delivery performance allow the organization to monitor performance and customer satisfaction.

9.1.4. Analysis and Evaluation. Analysis identified in **paragraph 9.1.1** will be evaluated to determine the organization's ability to meet conformity and customer requirements, to evaluate the effectiveness of planning and the BQMS, and the actions taken to address risks, opportunities, and corrective actions.

9.2. Internal Audit.

9.2.1. QA has a planned and systematic pattern of actions necessary to provide adequate confidence that products conform to established technical requirements. QA's internal auditing process is used to monitor and measure the effectiveness of the organization's BQMS. QA staff offices at the three ALCs share information via the combined AFMC/AFSC QA Working Group.

9.2.2. QASs perform and document QA Assessments (QAA) of products/services, processes, procedures, and any other factor that may influence the integrity of the product using AFMC Form 343, *Quality Assurance Assessment*. The following are types of QAAs: PEs, QVIs, Evaluator Proficiency Evaluation (EPE), Routine Inspection (RI), Special Inspection (SI), Management Inspection (MI), Detected Safety Violation (DSV), Technical Data Violation (TDV), and Unsatisfactory Condition Report (UCR). AFSCMAN 21-102 identifies the basic requirements for these QAAs. WR-ALC QASA, QASC and QASE will establish AFMC Form 343 writing guides to ensure standardization of QAAs and will be required for use by all QA inspectors once available.

9.2.2.1. When an extension is requested by the responsible production flight chief (or similar/higher level supervisor) at least 2 work days prior to the responsible person's suspense date and justified to the satisfaction of the QA lead or QA supervisor, the responsible person's suspense date for response to a QAA may be extended by the QA lead or QA supervisor in increments not to exceed 10 working days from the original suspense date (AFMC Form 343, Block 26). Multiple extensions may be granted up to 30 work days total after the date of evaluation (Block 2). In addition, the following requirements apply:

9.2.2.2. Quality Verification Inspection Q-Stamp (QVIQ). QVIQ will be Q-coded, which requires a Quality Assurance inspection IAW AFSCMAN 21-102. Q-codes may be implemented on a temporary or recurring basis. The QVIQ list is a compilation of operations determined to be mandatory Q-codes by the Quality Assurance Chief. The list is based on requirements such as customer agreements and/or negative trends. The QVIQ list will include tasks directly related to trends in deficiency reports, safety of flight, of a complex nature, or as otherwise determined necessary. QVIQs will be identified in the respective QASPs.

9.2.2.2.1. All tasks listed on the Q-code list or coded with a Q on a WCD require mandatory call in to QA each time the maintenance action/function is accomplished. The QAS will perform the inspection and, if there are no findings, stamp and date the operation in the Q-coded block. If there are defects, the QAS will follow rework procedures. All QVIQs, regardless of rating, will be entered into LEAP.

9.2.2.2.2. Downgraded Q-code. A Q-code may be downgraded IAW WR-ALCI 21-101, *Work Control Documents and Technical Data*, and AFSCMAN 21-102, Chapter 7.

9.2.2.3. A QAA will be documented in LEAP for all quality escapes that were not documented elsewhere. Any inspections tied to an accepted AIDR or PQDR will be documented in LEAP and referencing the report control number from JDRS in accordance with the respective production group QA 343 writing guide.

9.2.3. QA support can be requested by AFSC Form 77, *Request for Quality Assistance (RQA)*, which allows QA to review a process, procedures, and/or products/services in order to provide information as part of analysis conducted to improve processes. Any person assigned to or otherwise engaged in activities of WR-ALC may report a product, process, or BQMS problem by contacting the QA office. In addition, maintenance personnel can complete an AFSC Form 77. The form is available from QA focal points or by accessing the AF E-publishing Web site at **http://www.e-publishing.af.mil/**. The form must be downloaded to the desktop. The purpose of the RQA program is to provide all employees a medium to seek solutions for a known or suspected problem that may affect product quality.

9.2.3.1. The initiator completes the top portion of the form (to, from, date, subject, problem/recommendation, and signature). The initiator will not fill out the form beyond the report block. The documented condition must be stated in sufficient detail to aid in the investigation.

9.2.3.2. The initiator will enter the information and email to the corresponding WR-ALC Quality Office. RQA control numbers will be issued by the corresponding WR-ALC Quality Office: Office Symbol - # - year. For example (QAX-001-2020). Each organization will keep a database on their SharePoint with the control numbers for the AFSC Form 77. The form will be forwarded to the applicable quality office responsible for assessing the quality of the product or service.

9.2.3.3. The receiving organization will have 25 calendar days to conduct an investigation and document complete details of the results and the corrective action. Corrective action will be coordinated with all activities having primary or collateral responsibilities. Once corrective action is implemented, the receiving organization will complete the bottom portion of the form (signature, organization, phone, and man-hours if applicable).

9.2.3.4. RQA data will be reviewed and analyzed quarterly for trends and improvement opportunities by the initiating and receiving organization's quality office.

9.2.4. The QASP is each group's quality surveillance plan and is signed by the MXG/CC/CL. The WR-ALC/QA Director has delegated his/her oversight authority to the respective MXG-level QA chief. Each QASP will address the following:

9.2.4.1. Assessment type (i.e., task specific item, procedure, or process).

9.2.4.2. Minimum number of inspections to be performed by the QA organization. (This does not include production inspections. Production inspections are the responsibility of the production unit.)

9.2.4.3. Identification of major workloads in assessment areas.

9.2.4.4. Sampling method (e.g., American National Standards Institute (ANSI) Z1.4, *Sampling Procedures and Tables for Inspection by Attributes*) or rationale to determine minimum number of each type of assessment. Refer to **Attachment 4**.

9.2.4.5. Acceptable Quality Levels (AQL) for each assessment type/area.

9.2.4.6. QVIQ list.

9.2.4.7. RI categories applicable to the organization.

9.2.5. Assessments.

9.2.5.1. QA assessments. Assessments performed by QASs are given a Quality Assessment Rating (QAR). A QAR-1 rating indicates that the evaluated product/process met the AQL standard and is considered a pass rating. A QAR-3 rating indicates that the evaluated product/process did not meet the AQL standard. All QAR-3s and QAR-1s with defects, require correction of the particular finding or findings. All assessments will be documented on an AFMC Form 343 using LEAP. AFSCMAN 21-102 provides definitions of major/minors and additional AFMC Form 343 guidance. PE, QVI, and routine inspection list (RIL) assessments proceed via a standardized checklist developed by HQ/A4. The checklist is not all-inclusive, but is the starting point for performing the assessment.

9.2.5.1.1. All QAR-1s with minor findings requiring corrective action/planned action (CAPA) will have corrective action (CA) verified by the responsible QAS; no follow-up statement is required in block 40 of the AFMC Form 343. If the CAPA is inadequate, notate rejection and copy/paste CAPA in block 39, email production that the CAPA statements are rejected, and update the suspense date 3 days from date of rejection.

9.2.5.1.2. All QAR-3s requiring a follow-up will have all CAPA validated. The responsible QAS will accept or reject the responses based on root cause, effectiveness of the corrective action statement, and the planned action to prevent recurrence. The follow-up assessment is documented in block 40 of the AFMC Form 343 and will include at a minimum a statement describing the objective evidence of the effectiveness of the corrective action observed during the follow-up, validation of the root cause, and overall effectiveness of the planned action to prevent recurrence.

9.2.5.1.3. If the CAPA is inadequate, notate rejection and copy/paste CAPA in block 39, email production that the CAPA statements are rejected, and update the suspense date 3 days from date of rejection. If the CAPA is rejected a second time, the AFMC Form 343 will be closed and a new QAA AFMC Form 343, categorized as an SI, will be input at the next level of management.

9.2.5.1.4. During the follow up if it is found that the CAPA statements were not implemented a new QAA AFMC Form 343, categorized as a SI, will be issued to the next level. The original AFMC Form 343 control number will be notated in block 19. The original AFMC Form 343 will then be closed with the new AFMC Form 343 control number in block 40. Each time an AFMC Form 343 is closed due to failed sustainment, the elevation will rise.

9.2.5.1.5. Once a QAS enters a valid QAA into LEAP, regardless of the rating, it will not be deleted from the database and will not be altered to an invalid rating. Deleting valid assessments or changing their rating alters the Maintenance Standardization and Evaluation Program (MSEP) metrics to a desired outcome and is not objective.

9.2.5.2. Assessments of QA Specialists. EPEs will incorporate a general QA knowledge and skills assessment based on a standard checklist developed by the QA office. Each individual MXG-level QA chief may supplement the standard checklist by adding workload-specific knowledge or skills as appropriate. Obtaining and maintaining access to relevant databases and information systems is also required. QA specialists are expected to have and use general knowledge and skills in the process of performing QA assessments. QA specialists are expected to demonstrate fluency and proficiency in general knowledge and skills at all times as a minimum standard of performance. Failing an EPE is evidence of unacceptable performance.

9.2.5.3. Role of QA Versus Production Personnel. QA assessments will not take the place of production inspections. QA specialists are not an extension of the production workforce and will not be tasked to carry out production or production inspections. Production inspections are those inspections that are necessary either to determine what work needs to be done or to verify the correctness of completed work and its conformance to technical data. The production organizations are responsible for the quality and conformance of outgoing products. Q-codes will not be used in place of secondary certification for those tasks that require an additional layer of verification.

9.2.6. Maintenance Standardization and Evaluation Program (MSEP).

9.2.6.1. The MSEP is the maintenance component designed to provide unit maintenance managers with a method of evaluating compliance with AF, Lead Command, and local maintenance directives and policies.

9.2.6.2. MSEP Metrics. The purpose of MSEP metrics is to measure compliance and provide regular feedback to management on the health of the processes, products, systems, programs and personnel evaluated. The formula for metrics is the number of QAR-1 rated assessments divided by the total number of that type assessment conducted in an organization for a given time period. Deduct a 0.5 percentage points for each TDV, DSV and UCR from the overall percentage grade. These metrics will be reported to the Group monthly and the ALC/CC quarterly.

9.2.7. AS9110 Program.

9.2.7.1. Program Managers. AS9110 program managers are responsible for planning and conducting audits, establishing records, and reporting/documenting the results. These auditors will conduct internal audits at planned intervals to evaluate BQMS capability to conform to the planned arrangements of the organization and to the requirements of AS9110, AFSCMAN 21-102, and contract and regulatory requirements.

9.2.7.2. Internal Audits. Internal audits focus on the effectiveness of the Quality Management System. Internal audits are planned per calendar year, taking into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The results are reported to the responsible organization and top management as required. The audit criteria, scope, frequency, and methods are essentially defined by the audit schedule, which is maintained on WR-ALC/QA Share Point site: usaf.dps.mil/sites/21617/qa/as9100/forms/allitems.aspx. To assist in internal audits, WR-ALC groups will ensure that WR-ALC QAX AS9110 program managers have complete access to Group SharePoints, taking into consideration that the AS9110 program manager possesses the proper security clearance. The list of current AS9110 program managers can be obtained from WR-ALC/QAX.

9.2.7.3. Audit Plan. The audit plan will identify the areas and the potential AS9110 clauses (paragraphs) to be audited and will be followed as closely as possible. Each group will be audited each year. The audits may involve staff offices and/or other support activities. Effort will be made to cover as many clauses (paragraphs) as possible within each group, however all clauses (paragraphs) will be audited at least once within WR-ALC over the course of one year.

9.2.7.4. Plan modifications/deviations. Significant events or needs (e.g., external audits, higher headquarters inspections, other investigations, and warfighter support) will be given precedence over the schedule. Deviation from or modification of the plan will be based on the greatest need. Additionally, special or limited scope audits may be selected in place of the scheduled audit plan when determined to have a greater benefit for the organization’s BQMS.

9.2.7.5. Level. Audits conducted at the flight level and below may be conducted at the discretion of an AS9110 program manager and management officials.

9.2.7.6. Selection of auditors and the conduct of the audits themselves ensure objectivity and impartiality of the audit process. Auditors will not audit their own work. Lead internal auditors will be trained in a formal quality auditing course. All other auditors performing internal audits require training by a lead or experienced internal auditors.

9.2.7.7. Records and/or results of the audits will be maintained. The dates of the audit or audits and the auditor's name will be noted in the records to determine if the schedule was met. Objective evidence will be examined to determine compliance to the applicable elements being audited. The objective evidence reviewed will be described in the internal audit documentation record. The record will be stored on the WR-ALC/QA SharePoint. All findings during internal and external audits will require a corrective action request (CAR) to be input in accordance with **Attachment 3.**

9.2.7.7.1. Conducting the internal AS9110 Audit. An in-brief will be provided to each unit's leadership prior to the start of the AS9110 internal audit. This in-brief will provide unit leadership with an overview of the clauses being audited, a list of the auditors, and a timeline for the inspection. Each week during audits a weekly wrap-up will be emailed to the group's workflow. This will usually be on Friday. Mitigation for any findings must be submitted within 5 business days after the end of the group audit utilizing the following procedure:

9.2.7.7.1.1. Notify and work with your group QA organization to document your concern and gather all supporting mitigation data.

9.2.7.7.1.2. Once supporting data has been gathered, the organization will contact the WR-ALC QAX chief. The chief or designated representative will meet with the supervisor and CC/CL/CV to determine if the data provided justifies elimination/de-escalation of the finding. All mitigations will take place prior to the out-brief for unit leadership.

9.2.7.7.1.3. Once the 5-day mitigation period has passed, an out-brief will be provided to unit leadership and interested parties.

9.2.8. WR-ALC/QAI.

9.2.8.1. The QAI team is composed of Inspectors/Auditors that perform the Activity Inspection in accordance with AFSCMAN 21-102. The inspections are conducted annually across all groups located at the ALC and at the staff level. Inspections encompass a statistical sampling of all sections and/or flights of each, providing actionable feedback to unit leadership and command staff. QAI will also conduct process reviews as necessary at the direction from leadership.

9.2.8.2. Inspection Timeline. Activity inspections are conducted annually and encompass a full calendar year. Activity inspection notifications will be provided to CC/CL a minimum of 2 weeks prior to the beginning of the scheduled inspection date. Any exception to this will be coordinated with CC/CL prior to the start of the inspection cycle. A 2-year inspection plan will be projected on a continuous basis.

9.2.8.3. Inspection Method. Each team member is assigned multiple programs for which they are responsible. Utilizing an available checklist such as self-assessment checklist from the Management Internal Control Toolset (MICT), an inspector/auditor will utilize statistical sampling within a given section and/or flight to ensure compliance with all regulatory guidance. If a condition arises where a potential finding has occurred, the inspector/auditor will contact supervision (when available) to attempt to immediately identify the condition. If minor in nature no contact with supervision is immediately required. Minor findings will only be addressed with supervision when it becomes apparent to the inspector/auditor that the issue is systemic in nature and due to its recurrence has elevated it to a major finding that will require corrective action/planned action (CAPA) to prevent recurrence. This is determined by sample size and rejection criteria as seen in table 2.3 from the AFCSMAN 21-102 which mirrors ANSI/ASQ Standard Z1.4-2008, *General Inspection Level II*. All Major findings will require a CAR to be input in accordance with **Attachment 3**.

9.2.8.4. Augmentation. The WR-ALC/QAI Activity Inspection Team may require augmentation depending upon the programs to be assessed. If augmentation is required, augmentees will be assigned from within the production group quality organizations and/or program management offices. Augmentee requests will be coordinated through the appropriate group quality chief and/or applicable program management office leadership. Augmentee support, if utilized, will be required for the duration of the activity phase.

9.2.8.5. Inspection Reporting. An in-brief will be provided to each unit's leadership for dissemination prior to the start of the activity inspection. This in-brief will provide unit leadership with an overview of the programs being inspected, a list of the inspectors/auditors, and a timeline for the inspection. Each week during inspections a draft report will be provided to CC/CL/CV of the assessed squadron. Once the entire group has been assessed, a final report will be sent to CC/CL for review. Mitigation for any findings must be submitted within 5 business days utilizing the following procedure:

9.2.8.5.1. Notify and work with your group QA organization to document your concern and gather all supporting mitigation data.

9.2.8.5.2. Once supporting data has been gathered, the organization will contact the Activity Inspection team chief. The team chief will meet with the supervisor and CC/CL/CV to determine if the data provided justifies elimination/de-escalation of the finding. All mitigations will take place prior to the out-brief for unit leadership.

9.2.8.5.3. Once the 5-day mitigation period has passed or all mitigation has occurred, an out-brief will be provided to unit leadership for dissemination. A formal (face-to-face) out-brief can be requested by CC/CL through the QAI Chief.

9.3. Management Review.

9.3.1. Management review is an ongoing process of the BQMS to ensure the continuing suitability, adequacy, effectiveness, and alignment with the strategic direction of the organization. The management review is also conducted by a series of planned weekly meetings, briefings, or communications coordinated or chaired by the management representative or a senior leader.

9.3.2. The management review meetings will discuss/review the following:

9.3.2.1. Status of actions from previous management reviews.

9.3.2.2. Changes in external/internal issues relevant to the BQMS.

9.3.2.3. Information on the performance and effectiveness of the quality management system.

9.3.2.4. Review of customer satisfaction and feedback from relevant interested parties.

9.3.2.5. Process performance.

9.3.2.6. Whether the objectives of the BQMS have been met.

9.3.2.7. Discuss the nonconformities and corrective actions.

9.3.2.8. The results of audits.

9.3.2.9. Performance of external providers.

9.3.2.10. On-time delivery performance.

9.3.2.11. Effectiveness of actions taken to address risks and opportunities.

9.3.2.12. Opportunities for improvement.

9.3.2.13. Product safety monitoring.

9.3.2.14. Training program.

9.3.2.15. Changes to competent authority and customer requirements.

9.3.2.16. Adequacy of resources.

9.3.3. Management Review Outputs. Outputs from the management review will include decisions and actions related to opportunities for improvement, changes to the BQMS, resources needed, and the risks that were identified.

9.3.4. Records of management reviews are documented and maintained to provide evidence of the results.

9.3.5. This allows for WR-ALC and senior staff to keep informed of the health and well-being of the organization and to promote communication at all levels.

**10. Improvement.**

10.1. General. WR-ALC/CC/CV/DV, as well as responsive or cognizant MXG/CC/CLs and staff office chiefs (through subordinate supervisors, as appropriate) determine and select opportunities for improvement and implement necessary actions to meet customer requirements and enhance customer satisfaction. CPI events are led by facilitators. These events are held to accomplish the following: improvement of products/services/processes in order to meet requirements and to be able to meet future needs and expectations, correction, prevention and reduction of undesired effects, and the improvement of the performance and effectiveness of the BQMS.

10.2. Nonconformity and Corrective Action.

10.2.1. Corrective action guidance and policy is implemented through TO 00-35D-54, AFMCI 21-100, AFSCMAN 21-102, and this BQM (including fulfilling QAP requirements). Corrective action is the process of identifying nonconformities, assigning responsibility, determining the cause, developing a plan to correct the problem, dealing with the consequences, and taking action to eliminate the causes so as to prevent recurrence. Corrective actions must be appropriate to the effects of the nonconformities encountered. Additionally, actions taken or situations determined to be relevant as cross-feed to other ALCs should be forwarded to the applicable QA Chief and considered for agenda items at the Quality Assurance Working Group or other appropriate venues.

10.2.2. QA focal points administer and track corrective action requests. Once nonconformities have been discovered, the deficiency is defined by providing a complete description and identifying the requirement that was not met. The appropriate QA focal point determines the validity of the nonconformity before entering the finding into the associated corrective action process.

10.2.3. Nonconforming products will be immediately identified, have the appropriate rework documentation created, and segregated to ensure they do not continue through the production machine. They may also be returned to inventory with the appropriate condition tag and repaired at a later date.

10.3. Continual Improvement. All MXG/CC/CLs and staff office chiefs (through subordinate supervisors, as appropriate) continually improve the effectiveness of the BQMS through the use of the quality policy, quality objectives, audit results, analysis and evaluation of data, corrective actions, management review meetings, and continuous process improvement events WR-ALC/CC/CV/DV, as well as responsive or cognizant MXG/CC/CLs and staff office chiefs, will monitor the implementation of improvement activities and evaluate the effectiveness of results. Continual improvement opportunities can result from lessons learned, problem areas, suggestions/ideas from any airman, and benchmarking of best practices.

KRISTOFER S. TERRY, Colonel, USAF
Mobilization Assistant to the Commander

**Attachment 1**

**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

***References***

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48 CFR 227.7103-7, *Use and Non-Disclosure Agreement*

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48 CFR 252.204-7008, *Compliance with Safeguarding Covered Defense Information Controls*

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***Prescribed Forms***

None

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DD Form 1423, *Contract Data Requirements List*

DD Form 1574, *Serviceable Tag – Materiel*

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DAF Form 847, *Recommendation for Change of Publication*

AFTO Form 22, *Technical Manual Change Recommendation and Reply*

AFTO Form 95, *Significant Historical Data*

AFTO Form 244/245, *Industrial/Support Equipment Record*

AFMC Form 202, *Engineer Technical Assistance Request*

AFMC Form 343, *Quality Assurance Assessment*

AFMC Form 3925, *Engineering Order*

AFSC Form 77, *Request for Quality Assistance (RQA)*

AFSC Form 957, *Work Control Document (WCD) Change Request*

WR-ALC QF-6401, *Documentation to Support Request for Information (Rough Order of Magnitude) for Items and/or Services (High Control)*

***Abbreviations and Acronyms***

**AIA**—Aerospace Industries Association

**AF**—Air Force

**AFAA**—Air Force Audit Agency

**AFFARS**—Air Force Federal Acquisition Regulation Supplement

**AFI**—Air Force Instruction

**AFLCMC**—Air Force Life Cycle Management Center

**AFMAN**—Air Force Manual

**AFMC**—Air Force Materiel Command

**AFMCI**—AFMC Instruction

**AFRIMS**—Air Force Records Information Management System

**AFSC**—Air Force Sustainment Center

**AFTO**—Air Force Technical Order

**AIDR**—Acceptance Inspection Deficiency Report

**ALC**—Air Logistics Complex

**AMR**—Aircraft and Missile Requirements

**ANSI**—American National Standards Institute

**AQL**—Acceptable Quality Level

**AS**—Aerospace Standard

**AWS**—American Welding Society

**BQM**—Business and Quality Manual

**BQMS**—Business and Quality Management System

**CA**—Corrective Action

**CAPA**—Corrective Action Planned Action

**CAR**—Corrective Action Request

**CC**—Commander

**CDRL**—Contract Data Requirements List

**CL**—Civilian Leader

**CM**—Configuration Management

**CO**—Contracting Officer

**COMPUSEC**—Computer Security

**COR**—Contracting Officer Representative

**CPI**—Continuous Process Improvement

**CUI**—Controlled Unclassified Information

**CV**—Vice Commander

**DAFI**—Department of the Air Force Instruction

**DCMA**—Defense Contract Management Agency

**DDTC**—Directorate of Defense Trade Controls

**DFARS**—Defense Federal Acquisition Regulation Supplement

**DIPE**—Depot Industrial Plant Equipment

**DLA**—Defense Logistics Agency

**DM**—Depot Maintenance

**DoD**—Department of Defense

**DoS**—Department of State

**DRI&R**—Deficiency Reporting, Investigation, and Resolution

**DSV**—Detected Safety Violation

**DV**—Vice Director

**EDA**—Engineering Design Authority

**EO**—Engineering Order

**EPE**—Evaluator Proficiency Evaluation

**ETAR**—Engineering Technical Assistance Request

**FAR**—Federal Acquisition Regulation

**FM**—Financial Management

**FO**—Foreign Object

**FOD**—Foreign Object Damage

**FORMAT**—Fabrication, Overhaul, Repair, Maintenance, Adjustment, or Testing

**GPC**—Government Purchase Card

**GSA**—General Services Administration

**HAF**—Headquarters Air Force

**IA**—Implementation Agreement

**IAW**—In Accordance With

**IEC**—International Electrotechnical Commission

**IG**—Inspector General

**INFOSEC**—Information Security

**IP**—Industrial Partners

**IPI**—In-Process Inspection

**ISO**—International Organization for Standardization

**ITA**—Information Technology Assets

**ITAR**—International Traffic in Arms Regulation

**JCO**—Joint Certification Office

**JDRS**—Joint Deficiency Reporting System

**LEAP**—Logistics Evaluation Assurance Program

**LCSE**—Life Cycle Systems Engineering

**MAPO**—Maintenance Acquisition Program Office

**MCF**—Metrology and Calibration Flight

**MI**—Management Inspection

**MICT**—Management Internal Control Toolset

**MSEP**—Maintenance Standardization and Evaluation Program

**MXG**—Maintenance Group

**MXS**—Maintenance Squadron

**NAS**—National Aerospace Standard

**NASA**—National Aeronautics and Space Administration

**NDI**—Nondestructive Inspection

**NIST**—National Institute of Standards and Technology

**OA**—Organization Assessed (typically used in reference to AFMC Form 343 Block 11)

**OAA**—Organization Approval Authority

**OB**—Business Operations

**ODSA**—Officially Designated Supply Activities

**OEM**—Original Equipment Manufacturer

**OM**—Operations Management

**OPR**—Office of Primary Responsibility

**OPSEC**—Operations Security

**ORM**—Operational Risk Management

**OSHA**—Occupational Safety and Health Administration

**OSS&E**—Operational Safety, Suitability and Effectiveness

**PA**—Partnership Agreement

**PAC**—Production Acceptance Certification

**PCO**—Procurement Contracting Officer

**PE**—Personnel Evaluation

**PESTLE**—Political, Economic, Social, Technological, Legal, and Environmental

**PMEL**—Precision Measurement Equipment Laboratory

**PM**—Political-Military

**PPP**—Public-Private Partnership

**PQDR**—Product Quality Deficiency Report

**PWS**—Performance Work Statement

**QA**—Quality Assurance

**QAA**—Quality Assurance Assessment

**QAFRR**—Quality Audit Finding and Response Record

**QAP**—Quality Assurance Plan

**QAR**—Quality Assessment Rating

**QAS**—Quality Assurance Specialist

**QASP**—Quality Assurance Surveillance Plan

**QMS**—Quality Management System

**QVI**—Quality Verification Inspection

**QVIQ**—Quality Verification Inspection Q-Stamp

**RASCIV**—Responsible, Accountable, Supportive, Consulted, Informed, Veto

**RCA**—Root Cause Analysis

**RCC**—Resource Control Center

**RFI**—Request For Information

**RDS**—Records Distribution Schedule

**RI**—Routine Inspection

**RIL**—Routine Inspection List

**RQA**—Request for Quality Assistance

**RT**—Radiographic Testing

**SAF**—Secretary of the Air Force

**SE**—Safety Office

**SI**—Special Inspection

**SMS**—Safety Management System

**SOW**—Statement of Work

**SP**—Special Procedure

**SPO**—System Program Office

**SSC**—Sample Size Code

**SSQ**—Special Skills Qualification (from para A6.2.5)

**STINFO**—Scientific and Technical Information

**SVA**—Supplier Verification Audit

**SWOT**—Strengths, Weaknesses, Opportunities, Threats

**TCP**—Technology Control Plan

**TDV**—Technical Data Violation

**TMDE**—Test, Measurement, and Diagnostic Equipment

**TO**—Technical Order

**TSS**—Training Scheduling System

**TSS-PACSS**—Training Scheduling System-Production Acceptance Certification Standard System

**UCR**—Unsatisfactory Condition Report

**URL**—Uniform Resource Locator

**USC**—United States Code

**VPP**—Voluntary Protection Program

**WCD**—Work Control Document

**WR-ALC**—Warner Robins Air Logistics Complex

**WSCAP**—Weapon System Component, Assembly, or Part

***Terms***

**Audit**—A planned examination of a function carried out either by determining conformance to procedures in process or by critical analysis of the product or service that is the result of the process.

**Business and Quality Manual**—A document setting out the specific quality practices, resources and activities relevant to a particular product, process, service, contract or project.

**Business and Quality Management System**—A web of interconnected processes, procedures, and directive documents. Each process uses resources to turn inputs into outputs with product realization as the end result. All of these processes are interconnected by means of many input-output relationships. Every process generates at least one output, and this output becomes an input for another process. These input-output relationships glue all of these processes together and make them into a system.

**Containment**—Any action or series of actions designed or intended to mitigate a problem, lessen its severity, control its spread, or reduce its impact, including, but not limited to, a temporary or permanent solution.

**Corrective Action**—The overall process of correcting a nonconformance. It starts with assigning responsibility and accountability, determining the root cause, and developing a plan to correct the problem. It is completed when actions have been taken to eliminate the root cause to prevent recurrence, and monitoring indicates the nonconformance does not recur due to the same root cause. The intent is to eliminate the cause of the nonconformity in order to prevent recurrence.

**Critical Items**—Critical items are those having significant effect on the product realization and use of the product including safety, performance, form, fit, function, producibility, service life, etc. that require specific actions to ensure they are adequately managed.

**Key Characteristics**—Attributes whose variation have a significant effect on product form, fit, function, performance, service life or producibility that require specific actions for the purpose of controlling variation. Special requirements and critical items are new terms, and along with key characteristics, are interrelated. Special requirements are identified when determining and reviewing requirements related to the product.

**Major**—(AS9110 definition) Categorizes a nonconformance by severity; describes a non-fulfillment of a requirement which is likely to result in the failure of the BQMS. The absence or total breakdown of a system to meet a requirement, local or higher guidance, the aerospace standard or a nonconformity that would result in the probable shipment of a nonconforming product.

**Management Representative**—A member of top management (usually the Vice Director) appointed by the Commander and chartered with the responsibility of ensuring that the BQMS is established, implemented, and maintained, and assuring the timely reporting on the system through a WR-ALC-level management review.

**Management Review**—A senior management (Complex-level) meeting intended to review the overall effectiveness or certain aspects of the BQMS with regard to the stated quality objectives.

**Minor**—(AS9110 definition) Categorizes a nonconformance by severity; a non-fulfillment of a requirement which is not likely to result in the failure of the BQMS, single system failure or lapse in conformance with a requirement, local or higher guidance, or the aerospace standard.

**NadCap**—National Aerospace and Defense Contractors Accreditation Program is an industry-managed approach to conformity assessment of special processes.

**Nonconforming Output**—A product, service, or material generated internally, received from an external source, or identified by a customer that does not conform to customer requirements or specifications.

**Preventive Action**—Action taken to identify and eliminate the causes of potential nonconformities (before they occur) or other undesirable potential situations.

**Product**—The result of activities or processes. A product may include service, hardware, processed materials, software, or a combination thereof.

**Product Realization**—The overall process by which inputs are transformed into technically conforming outputs sought by a customer.

**Production Inspection**—An inspection that is carried out as part of the production-assigned responsibility and not a QA office responsibility. Production inspections take a number of forms and are central to the work being performed. MXG/MXS personnel conduct inspections necessary to determine whether an incoming part or end-item is serviceable. MXG/MXS personnel must also carry out secondary certification that a task was performed properly and stamp WCDs accordingly (AFSCMAN 21-102 Chapter 20). Other examples include inspections specified under TO 00-20-1, such as in-process inspections (IPI). In addition to production inspections on end-items or weapon system materiel, MXG/MXS personnel also carry out a wide variety of prior-to-use or preventive maintenance inspections on equipment in accordance with DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*; TO 00-20-1; or AFSCMAN 21-102 Chapter 15, using forms such as AFSC Form 306, *Preventative Maintenance Instructions and* completing AFTO Form 95, *Significant Historical Data*; AFTO Form 244/245, *Industrial/Support Equipment Record*, and AFSC Form 355, *Operator Maintenance Certification.*

**Quality Escape**—Any product released from the certificate-holding organization that produced it that is subsequently determined to be nonconforming to contract and/or product specification requirements. A quality escape occurs when WR-ALC receives a defective product from a supplier or when WR-ALC releases a defective product to a customer. The quality escape occurs whether or not the customer recognizes the defect or reports it.

**RASCIV Chart**—A chart used to identify stakeholders and participants in complex problem-solving activities, showing who is responsible, accountable/approving, supportive/supporting, consulted, informed, or has veto authority. A RASCIV chart is typically created for each significant, independent activity necessary to bring about permanent solution to a problem. It is used in responding to deficiencies/nonconformities and in CPI. A template is loaded on the /AS9110 SharePoint site; it includes more detailed explanations of each role.

**Record**—A type of documented information. Records encompass all books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and/or processed documents are not included (Title 44 U.S.C., *Public Printing and Documents*, Chapter 33, *Disposal of Records*, Section 3301, *Definition of Records*, and AFI 33-322, paragraph 2). Records provide documented evidence of conformance to specified requirements and the effective operation of the BQMS.

**Repeat Nonconformance**—A nonconformance within the same organization assessed with the same root cause or causes previously identified.

**Risk**—A measure of future uncertainties in achieving program performance goals and objectives within defined cost, schedule, and performance constraints.

**Special Requirements**—Special requirements are those identified by the customer or determined by the organization which have high risks to being achieved, thus requiring their inclusion in the BQMS. Factors used in the determination of special requirements include product or process complexity, past experience, and product or process maturity.

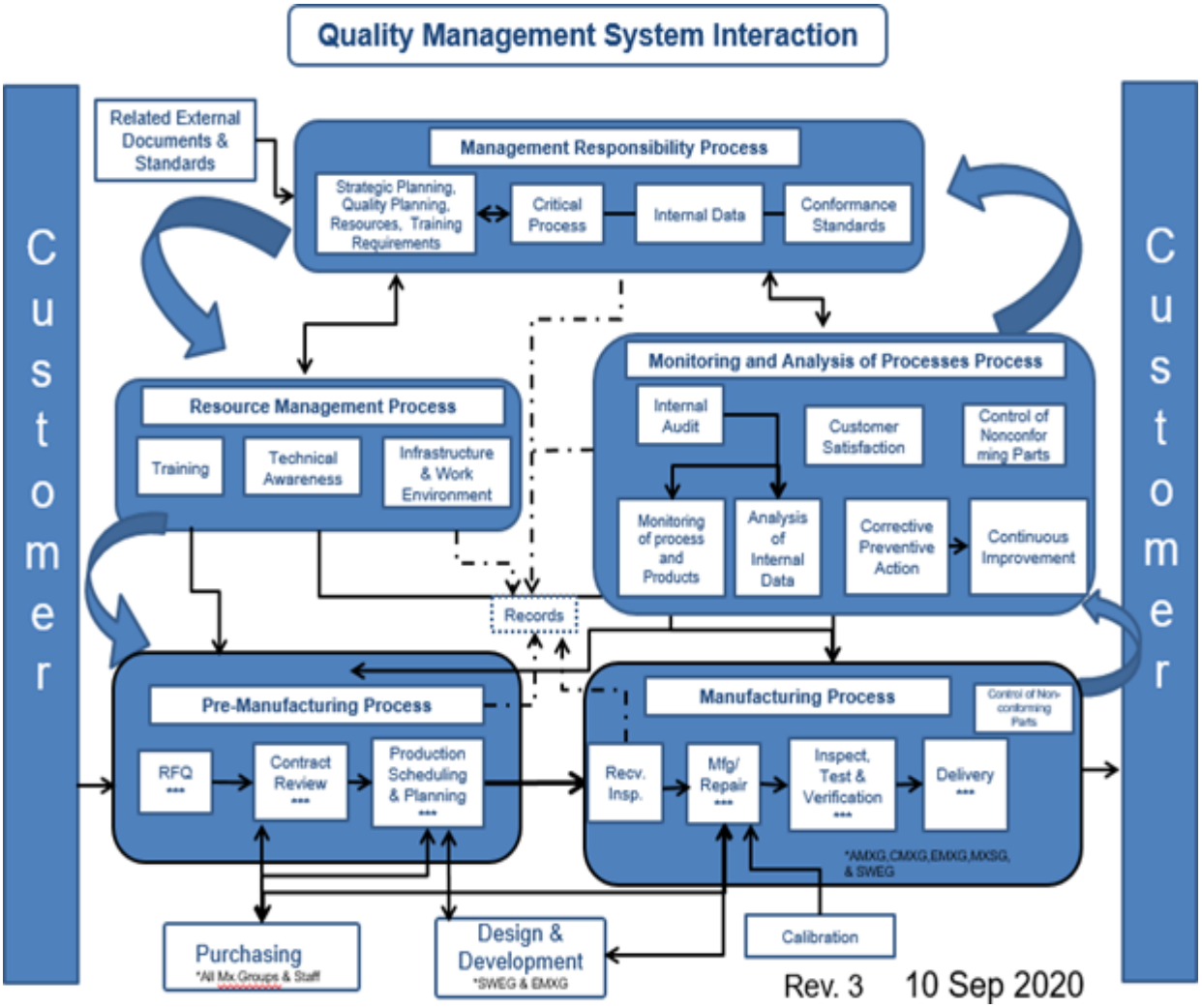
**Suspect**—Describes a product, service, or material with unknown or uncertain authenticity, conformance, inspection status, or origin. The absence of necessary documentation is sufficient to arouse suspicion. Proof of nonconformance or falsification of documentation indicates a known, rather than suspect, counterfeit or faulty product.

**Verification**—Confirmation of conformance, proof by evidence, check for accuracy.

## Attachment 2

## PROCESS INTERACTION MAP

**Figure A2.1. Process Interaction Map.**



## Attachment 3

## CORRECTIVE ACTION REQUEST PROCESS

**A3.1. Purpose.** The purpose of this procedure is to establish and document a process for submitting and managing corrective action requests (CAR). A corrective action is any action taken to eliminate the causes of any nonconformities in order to prevent recurrence.

**A3.2. Organization Approval Authority (OAA) Appointment.** An OAA will be appointed by appointment letter for each Group (AMXG, CMXG, EMXG, MXSG, and SWEG) and all staff offices. The OAA will have LEAP access and will be able to be listed in block 24 of the AFMC FORM 343 as the responsible person. The OAA will:

A3.2.1. Act as a liaison between the organization audited and WR-ALC/QAI and WR-ALC/QAX AS9110 program managers for Level I – III CARs. The OAA will work with the organization to provide a realistic corrective action plan.

A3.2.2. Receive PDF AFMC Form 343 and review all CARs assigned for accuracy and validity.

A3.2.3. Assign the CAR to a POC within the relevant organization for Root Cause Analysis (RCA) and CAP development and implementation.

A3.2.4. Monitor organization's open CARs to ensure the suspense is met.

A3.2.5. Provide an update for each "OPEN" CAR to the CAR issuer via e-mail every 5 workdays.

A3.2.6. Review submitted identified root cause and associated CAPs for accuracy, adequacy, and feasibility before approving. Any RCA or CAP with missing, invalid, or inconsistent information will be referred back to the Organizational POC for revision. Mitigation plans may be required when estimated CAP completion dates extend beyond 30 workdays.

A3.2.7. Notify the CAR issuer via e-mail with attached PDF AFMC Form 343 that RCA/CAP is ready for review and approval.

A3.2.8. Ensure all disapproved CAPs returned from the CAR issuer are forwarded to the POC for revision.

A3.2.9. Monitor, provide guidance, and assist the POC with CAP revision.

A3.2.10. Review revised CAP.

A3.2.11. Be assigned as the responsible person in LEAP as required. See **paragraph A3.4**.for CAR levels.

**A3.3. Procedures.**

A3.3.1. Initiation. Any organization or individual within WR-ALC who identifies potential or actual nonconformance that will adversely affect WR-ALC BQMS may request to initiate a CAR. The organization or individual will contact QAX via AFSC Form 77 or via e-mail. A CAR will be initiated for nonconformance(s) identified during external and internal AS9110 audits and Activity Inspections. CARs will be documented on a PDF AFMC Form 343 as an SI. Then it will be input and tracked on an internal database that is located on the individual QA group's SharePoint site. Control number (AFMC Form 343, Block 5) will be issued by

the corresponding WR-ALC Quality Office by the next available number in the format of: Office Symbol - # - year(For example: QAX-343-2022 or QAI-004-2022). Once the CAR is closed, it will be input into LEAP for the official record. LEAP will provide a system-generated control number but user should document the internal control number in block 15s of the AFMC Form 343.

A3.3.2. Issuing a CAR. CARs will be issued to the organization assessed (OA) via PDF AFMC Form 343 issued through e-mail to the OAA. Responsible person will depend upon the CAR level. See **paragraph A3.4**. Both MXG-level and ALC-level QA offices may issue CARs. Collectively, persons authorized to issue CARs will be referred to henceforward as CAR issuers. The CAR issuer will complete Blocks 1 through 26 of the PDF AFMC Form 343 as required. See **Figure A3.1** below for additional information. CARs will clearly, accurately, and completely state the failure in Block 19. Ensure all applicable references, including AS9110 clauses (paragraphs) are well documented in Block 20. The CAR issuer will then record the CAR in their internal database and email the PDF AFMC Form 343 to the OAA for all CARs, except a level IV CAR. The OAA will assign the CAR to a POC within the relevant organization for RCA and CAP development and implementation.

A3.3.3. Response Times (Suspense Dates). Containment will be performed immediately upon notification if required. From the date a CAR is issued to the OAA, the OA will have 20 workdays to input blocks 27 through 36. A root cause statement must be included in block 27. Suspense dates may be extended when significant events prevent meeting the suspense times identified in this paragraph. Extensions will be requested by the OAA to the CAR issuer. The request for extension will be in writing at least two work days before the suspense and will include the justification for the extension. The CAR issuer will determine whether the justification is valid. Approved requests will be extended for 10 workdays. Extended due dates will be updated in block 26 and the internal database. If an extension is not requested or granted or the 10-day extension has expired and the CAR is not answered, or is answered ineffectively, the CAR issuer will issue a new CAR elevated to the next higher level. Once the issuer receives the CAP response from the OAA via emailed PDF AFMC Form 343, the issuer will proceed to the evaluation and follow-up.

A3.3.4. Evaluation of OA Responses. Each CAR that is submitted will include objective evidence of correction and corrective action if applicable. This objective evidence will be maintained by the respective CAR issuer and will be readily available upon request. Objective evidence may be maintained electronically. Objective evidence includes copies of documents, photographs, and lists of observations. CAR issuers will review and evaluate containments and mitigations, not only for remedy of the instant defect, but also for impacts of that defect or evidence of its existence. Appropriate actions might include quarantine or recall, ETAR, or risk assessment. Although a QA office might conduct its own activities in response to a nonconformance, OAs will not use QA inspections as part of containment or corrective action. CAR issuers evaluate root cause analysis, and actions to prevent recurrence for clarity, thoroughness, and potential to lead to lasting resolution of the nonconformance. CAR issuers will look for evidence of an effective root cause analysis and actions that address each

contributing cause or condition, to include human factors. CAR issuers may require OAs to create responsible, accountable, supportive, consulted, informed, veto (RASCIV) charts, fishbone diagrams, 8-step problem-solving documents, or undertake other activities prior to accepting the OA's response. These documents will be retained separate from the CAR but identified with it using the CAR control number.

A3.3.5. Follow-up. CAR issuers will follow up no more than 22 workdays, or 32 workdays if an extension was granted, from the date in Block 2 of AFMC Form 343. The follow-up assessment will determine if the original nonconformance was corrected and if the proposed corrective action will prevent any future occurrence. If the OA passes the follow-up, the finding will be closed, input into LEAP, and the CAR issuer will maintain surveillance until completion of the proposed corrective action is implemented. If the OA fails the follow-up for the same finding, The CAR issuer will use the elevation process below. If a different issue is notated during follow0up, a CAR will be initiated at the appropriate level.

A3.3.6. LEAP Entry. When the CAR is closed, it must be input into LEAP (which will be the official record of the CAR). The date, Block 2, will be the date that the information is input into LEAP. Document the internal control number in block 15s when it is input into LEAP. Only the final elevation of the CAR will be input into LEAP. If a CAR starts at Level II but is elevated to Level III, only the Level III will be input into LEAP. Ensure all previous internal control numbers are captured in block 19 to account for each elevation with the most current internal control number listed in block 15s.

A3.3.7. Elevation. In the event the corrective action plan or the containment plan is found to be ineffective, the CAR issuer will initiate a new PDF AFMC Form 343, and document the ineffectiveness that was observed during the follow-up in Block 19 with a reference the original CAR control number. Each time a CAR is closed due to failed follow-up or is not answered before the suspense date, the elevation level will rise. If the CAR was initiated as a Level I, the CAR will then become Level II. Each time an elevation occurs ensure the control number of the new PDF AFMC Form 343 is captured in block 19 of the original AFMC Form 343.

**A3.4. CAR Levels.** CAR levels will be input into block 10 on AFMC Form 343. The OAA will be the point of contact for CAR Levels I - III, the WR-ALC/CC or designated representative will be the point of contact for Level IV.

A3.4.1. Level I. Level I is initiated if the nonconformance is found in one or more shops or RCCs within one squadron. The OAA will be assigned as the responsible person (Block 24) and will be the point of contact.

A3.4.2. Level II. Level II is initiated if the nonconformance is found in multiple squadrons within the group. The OAA will be assigned as the responsible person (Block 24) and will be the point of contact. A level II CAR is also issued if a level I CAR response was not approved or the suspense was not met. In this instance the CAR will be assigned with the squadron director as the responsible person (Block 24) but the OAA will still be the point of contact.

A3.4.3. Level III. Level III is initiated if a level II CAR response was not approved or the suspense was not met. It is assigned with the group director as the responsible person (Block 24) but the OAA will still be the point of contact.

A3.4.4. Level IV. Level IV is initiated if the nonconformance is found in multiple Groups within the complex or a Level III CAR response was not approved or suspense was not met. Level IV CARs are always assigned with the WR-ALC/CC or designated representative as the responsible person (Block 24) and that person also being the point of contact.

**A3.5. AFMC Form 343 Required Information.** The figure below indicates sections of an AFMC Form 343 that must filled out prior to submitting the CAR to the responsible party. Sample AFMC Form 343 is color coded as follows:

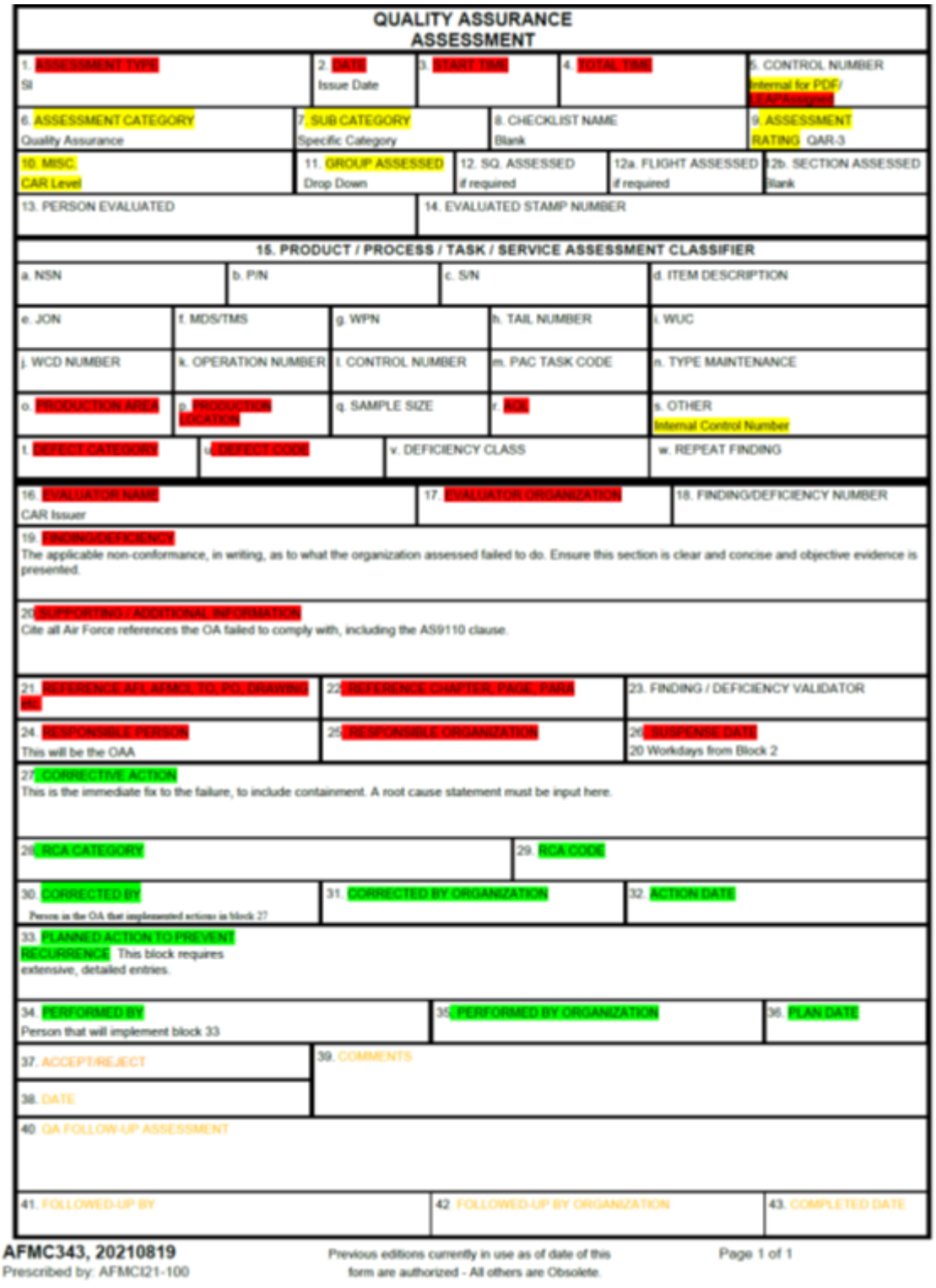
A3.5.1. Red = System required

A3.5.2. Yellow = WR-ALC/QA required

A3.5.3. Green = Responsible Person entry requirements

A3.5.4. Orange = QA Follow-up requirements

**Figure A3.1. Sample AFMC Form 343, Requirements for CARs.**



**QUALITY ASSURANCE ASSESSMENT**

| | | | | |
|---|---|---|---|---|
| 1. ASSESSMENT TYPE: SI | 2. DATE: Issue Date | 3. START TIME | 4. TOTAL TIME | 5. CONTROL NUMBER: Internal for PDF/ FLAP Assigned |
| 6. ASSESSMENT CATEGORY: Quality Assurance | 7. SUB CATEGORY: Specific Category | 8. CHECKLIST NAME: Blank | | 9. ASSESSMENT RATING: QAR-3 |
| 10. MISC.: CAR Level | 11. GROUP ASSESSED: Drop Down | 12. SQ. ASSESSED: if required | 12a. FLIGHT ASSESSED: if required | 12b. SECTION ASSESSED: Blank |
| 13. PERSON EVALUATED | | 14. EVALUATED STAMP NUMBER | | |

**15. PRODUCT / PROCESS / TASK / SERVICE ASSESSMENT CLASSIFIER**

| | | | | |
|---|---|---|---|---|
| a. NSN | b. P/N | c. S/N | d. ITEM DESCRIPTION | |
| e. JON | f. MDS/TMS | g. WPN | h. TAIL NUMBER | i. WUC |
| j. WCD NUMBER | k. OPERATION NUMBER | l. CONTROL NUMBER | m. PAC TASK CODE | n. TYPE MAINTENANCE |
| o. PRODUCTION AREA | p. PRODUCTION LOCATION | q. SAMPLE SIZE | r. AOE | s. OTHER: Internal Control Number |
| t. DEFECT CATEGORY | u. DEFECT CODE | v. DEFICIENCY CLASS | w. REPEAT FINDING | |

| | | |
|---|---|---|
| 16. EVALUATOR NAME: CAR Issuer | 17. EVALUATOR ORGANIZATION | 18. FINDING/DEFICIENCY NUMBER |

19. FINDING/DEFICIENCY
The applicable non-conformance, in writing, as to what the organization assessed failed to do. Ensure this section is clear and concise and objective evidence is presented.

20. SUPPORTING / ADDITIONAL INFORMATION
Cite all Air Force references the OA failed to comply with, including the AS9110 clause.

| | | |
|---|---|---|
| 21. REFERENCE: AFI, AFMCI, TO, PO, DRAWING etc. | 22. REFERENCE: CHAPTER, PAGE, PARA | 23. FINDING / DEFICIENCY VALIDATOR |
| 24. RESPONSIBLE PERSON: This will be the OAA | 25. RESPONSIBLE ORGANIZATION | 26. SUSPENSE DATE: 20 Workdays from Block 2 |

27. CORRECTIVE ACTION
This is the immediate fix to the failure, to include containment. A root cause statement must be input here.

| | |
|---|---|
| 28. RCA CATEGORY | 29. RCA CODE |

| | | |
|---|---|---|
| 30. CORRECTED BY: Person in the OA that implemented actions in block 27 | 31. CORRECTED BY ORGANIZATION | 32. ACTION DATE |

33. PLANNED ACTION TO PREVENT RECURRENCE This block requires extensive, detailed entries.

| | | |
|---|---|---|
| 34. PERFORMED BY: Person that will implement block 33 | 35. PERFORMED BY ORGANIZATION | 36. PLAN DATE |

| | |
|---|---|
| 37. ACCEPT/REJECT | 39. COMMENTS |
| 38. DATE | |

40. QA FOLLOW-UP ASSESSMENT

| | | |
|---|---|---|
| 41. FOLLOWED-UP BY | 42. FOLLOWED-UP BY ORGANIZATION | 43. COMPLETED DATE |

**AFMC343, 20210819**
Prescribed by: AFMCI21-100

Previous editions currently in use as of date of this form are authorized - All others are Obsolete.

Page 1 of 1

## Attachment 4

## ACCEPTABLE QUALITY LEVELS

**A4.1. Basis for Computation.** The formula will be used to calculate the QAR rating based on the total number of applicable minor questions and the total number of minor findings on the applicable checklist. It is based on: ANSI/ASQ Z1.4, *Sampling Procedures and Tables for Inspection by Attributes*. Refer to the applicable QASP for specific AQLs when performing inspections such as EPEs, Pes, QVIs, and etc.

**A4.2. AQLs will be input into LEAP using the AFMC Form 343.** Use the applicable checklist questions to evaluate one piece of equipment, tool kit, document, process, area/spot/ramp, etc., being inspected. All assessments will be rated QAR-1 for a PASS rating or QAR-3 for a FAIL rating.

**A4.3. Block 20: Supporting/Additional Information.** When documenting an RIL assessment rated a QAR 1 with no findings, annotate this block with the following statement: **"Note**: Special Inspections (SI): This AQL does not apply to SI stumble on findings."

**Table A4.1. Assessment Ratings.**

| Applicable Minor Questions | QAR-1/Pass | QAR-3/Fail |
|---|---|---|
| 1-2 | 0 Minors | 1 or More Minor/1 or More Majors |
| 3-8 | 0-2 Minors | 3 or More Minors/1 or More Majors |
| 9-15 | 0-3 Minors | 4 or More Minors/1 or More Majors |
| 16-25 | 0-5 Minors | 6 or More Minors/1 or More Majors |
| 26-50 | 0-7 Minors | 8 or More Minors/1 or More Majors |

**A4.4. For example:** If the total number of applicable minor questions is 4, the QAR rating would be as follows:

**Figure A4.1. Example 1.**

| |
|---|
| QAR-1/Pass = 2 or less Category I Minor Findings |
| QAR-3/Fail = 3 or More Category I Minor Findings or 1 or more Major Findings |

**A4.5. For example:** If the total number of applicable minor questions is 13, the QAR rating would be as follows:

**Figure A4.2. Example 2.**

| |
|---|
| QAR-1/Pass = 3 or less Category I Minor Findings |
| QAR-3/Fail = 4 or More Category I Minor Findings or 1 or more Major Findings |

**A4.6. For example:** If the total number of applicable minor questions is 20, the QAR rating would be as follows:

**Figure A4.3. Example 3.**

| |
|---|
| QAR-1/Pass = 5 or less Category I Minor Findings |
| QAR-3/Fail = 6 or More Category I Minor Findings or 1 or more Major Findings |

## Attachment 5

## SAMPLING FOR QUALITY VERIFICATION INSPECTIONS

**A5.1. Basis for Computation.** ANSI/ASQ Z1.4-2008, *Sampling Procedures and Tables for Inspection by Attributes*, will be used as the statistical basis for computing the number of QVIs.

**A5.2. Procedure.** This procedure excludes Q-coded operations. Q-coded operations are additional to this calculation and are set at the discretion of the MXG-level QA chief or his/her designee.

A5.2.1. AMXG and CMXG procedure. Using a database acceptable to the MXG-level QASA and QASC chiefs, look up the quarter's actual hours "h" for each squadron. Treat the actual hours h as the batch size and determine the appropriate sample size code (SSC) from Table I – Sample size code letters from ANSI/ASQ Z1.4 at general inspection level II.

A5.2.2. EMXG procedure. Using a database acceptable to the MXG-Level QASE chief, look up the quarter's produced assets "a" for each squadron. Treat the produced assets a as the batch size and determine the appropriate sample size code (SSC) from Table I – Sample size code letters from ANSI/ASQ Z1.4 at general inspection level II.

A5.2.3. MXSG procedure. MXG-Level QASC chief will use a standard 6.5 actual hours per day per technician surveilled for MXSG workload.

A5.2.3.1. Multiply the total number of technicians by 6.5 to establish the total number of hours per day.

A5.2.3.2. Multiply the total hours per day by the average work days in a month m.

A5.2.3.3. Multiply m by 12 for the 12 month period total z.

A5.2.3.4. Treat the mean m as the batch size and determine the appropriate sample size code (SSC) from Table I – Sample size code letters from ANSI/ASQ Z1.4 at general inspection level II.

A5.2.4. Read the sample size s from Table II-A – Single sampling plans for normal inspection using the sample size code.

A5.2.5. Divide the sample size s by 3 and call it n; this is the number of QVIs for the squadron for each month in the quarter.

A5.2.6. Summary

A5.2.6.1. Look up actual hours h (AMXG, CMXG), produced assets a (EMXG), or calculate average work hours z (MXSG).

A5.2.6.2. Look up sample size code (SSC) in Table I using h, a, or z as batch size.

A5.2.6.3. Compute nQVI = s/3.

**A5.3. Workload.**

A5.3.1. A standard QVI will be treated as taking 3.0 hours for the purpose of computing QASP requirements. Although some QVIs will be shorter and others longer, these durations will be used for computational purposes.

A5.3.2. Manpower demand will be calculated using the standard QVI so that the manpower requirement (work hours) to perform QVIs is 3.5 hr × nQVI to allow for database entry.

A5.3.3. Manpower demand for QVIs on Q-coded operations listed in the QASP will be calculated using a standard duration of 1.25 hr. Because Q-coded operations take time away from the overall surveillance of all workloads and are typically narrowly construed or focused on a specific problem area, the MXG-level QA chief will have discretion not to count Q-coded operations towards the quarterly QVI quotas.

## Attachment 6

## SAMPLING FOR ROUTINE INSPECTIONS

**A6.1. Sampling Scheme.** Routine inspections will follow a simplified sampling scheme in order to maximize use of QA time spent on quality verification inspections and other efforts better able to ensure product quality and prevent quality escapes.

**A6.2. Inspected Areas.** Routine inspections will be conducted in the following areas unless they do not apply to an assessed unit. The AFMC/A4 checklists will represent the starting point for any inspection. Individual MXG-level QA chiefs (or their supervisors) may supplement the AFMC/A4 checklists with additional questions tailored to the workload assessed.

A6.2.1. Material Control.

A6.2.2. Foreign object damage (FOD).

A6.2.3. Tool control.

A6.2.4. WCDs.

A6.2.5. PAC/Special Skills Qualification (SSQ) Training.

A6.2.6. Equipment.

A6.2.7. Safety (Flight Line/Industrial/Explosive).

A6.2.8. Tech Data.

A6.2.9. TOs.

A6.2.10. Engine Management.

A6.2.11. Forms Documentation.

**A6.3. Frequency.** The responsible QA office will schedule a minimum of one RI of each type per quarter on each responsible Squadron. Additional RIs may be scheduled or performed at the discretion of the MXG-level QA chief.

**A6.4. Comprehensive Sampling.** Representative sampling will be used to the greatest extent possible. For example, toolkit inspections will not be repeated on the same toolkit until all available toolkits in the area have been inspected. WCD inspections will vary as to the operation inspected.

## Attachment 7

## DEVELOPING CONTRACTS FOR OUTSOURCED SUPPLIES AND SERVICES

**A7.1. Supplier Verification Audits (SVA).** SVAs are one mechanism by which the quality of outsourced products and processes is ensured. The term supplier is used to mean any external provider of a good or service. It is not limited to private sector or commercial entities. In addition, the term supplier includes manufacturers, distributors, wholesalers, and retailers. Where transportation, packaging, or handling services are procured deliberately, it can also include suppliers of these services. In general, when transportation services are incidental to an outsourced process or product, they will be a minor element of an SVA, if examined at all.

A7.1.1. SVAs may be conducted on-site, virtually, or by records review. The distinction between virtual audits and records review is that virtual audits may involve interaction with the supplier (e.g., via e-mail), while records review will be limited to those documents already in WR-ALC's possession. The term mixed will be used to refer to an SVA that can include multiple formats; however, where there is authority to use a mixed SVA, the audit team may ultimately rely on only one format at its discretion. Records review will be used when there is limited access to the supplier. Note that SVAs are distinct from periodic reviews of suppliers to determine status as, for example, conditional or approved.

A7.1.2. Only auditors with AS9100 and/or AS9110 auditor training may conduct SVAs. Only WR-ALC/QAX internal auditors (to include augmentees appointed by the QAX chief) will conduct SVAs.

A7.1.3. All WR-ALC units will support SVAs as needed to fulfill the requirements of this manual and AS9110C.

A7.1.4. The Maintenance Acquisition Program Office (MAPO) will ensure that the potential for SVAs is incorporated into WR-ALC contracts resulting in fabrication, overhaul, repair, maintenance, adjustment or testing (FORMAT) of a weapon system component, assembly or part (WSCAP) or any specialized processes such as plating and/or calibration. Additionally, the requirement for supplier corrective action requests will be included in those FORMAT WSCAP applicable contracts in the form of a DD Form 1423, *Contract Data Requirements List,* (CDRL) and utilizing the Data Item Description Authority DI-SESS-81923, *Quality Audit Finding and Response Record (QAFRR).*

A7.1.4.1. Contracts with annual value under $100,000 will include provision for one on-site SVA of 1 business day per year (base year and each option).

A7.1.4.2. Contracts with annual value $100,000-$250,000 will include provision for one on-site SVA of up to 3business days per year (base year and each option).

A7.1.4.3. Contracts with annual value over $250,000 will include provision for two on-site SVAs of up to 6business days in total per year (base year and each option).

A7.1.4.4. SVAs are distinct from contract oversight performed by a contracting officer representative (COR) within the Contract Surveillance Management Office. SVAs will be conducted by WR-ALC/QAX (AS9110 Program Managers), however, documentation provided by CORs may be used to support virtual or records review SVAs.

A7.1.4.5. Contracting Office Representative (COR) Support. As designated by the Contracting Officer (CO), the COR will provide necessary support for the assessment of any contractor. Noncompliance or nonconformance identified during an SVA will be reported through the COR.

A7.1.4.6. Certified Contractors. Contractors with ISO9001, AS9100, and/or AS9110 certification will provide corrective action for any identified nonconformance or noncompliance, regardless of determinations made by a contracting officer or COR. Otherwise, a complaint may be filed with the appropriate registrar (certifying body).

A7.1.5. Local Purchase via Government Purchase Card. SVA provisions will apply to products and/or services identified in WR-ALC/OBCA Process Guide (PG) 64-101/20-101, Local Purchase by GPC as High Risk, High Control purchases or purchases that result in FORMAT of a WSCAP. Whenever there is a potential for an SVA, the vendor will be told this during the request for information (RFI) process by the individual who submits the WR-ALC/QA form QF-6401, *Documentation To Support Request For Information (Rough Order Of Magnitude) For Items And/Or Services (High Control)*. Vendors will be expected to acknowledge the right of access for an SVA at no cost to the Government.

A7.1.6. Risk-based Auditing. Suppliers whose products and/or services are identified as Low Risk, Low Control per PG 64-101/20-101 will not be subject to scheduled audits. Long-term suppliers whose products and/or services are identified as High Risk, Low Control per PG 64-101/20-101 may be subject to at least one audit every \5 years. Long term suppliers whose products and/or services identified as High Risk, High Control per PG 64-101/20-101, local purchase by GPC may be subject to at least one audit every other year. The audit duration and format will be at the discretion of the AS9110 program manager, but will not exceed lengths specified above.

**A7.2. Quality Management System (QMS) Certification.** As applicable, any Performance Work Statement (PWS) for contracts resulting in FORMAT of a WSCAP will include certification requirements for quality management systems with at least one applicable certification prior to award and other applicable certifications within 12 months of award. Nadcap (National Aerospace and Defense Contractors Accreditation Program), anti-counterfeiting, and other certifications will be required as appropriate. So-called higher level quality requirements are called out by the FAR in 48 CFR 46.311, and the clause at 48 CFR 52.246-11 is incorporated along with a list of standard certifications. **Note**: This requirement was jointly sought by DoD, General Services Administration (GSA), and National Aeronautics and Space Administration (NASA) in 2012 and was finalized in 2014.

A7.2.1. All contract PWSs involving WSCAP FORMAT, TMDE calibration/verification, hardware/fastener production, support equipment fabrication, or high-dollar (over $100,000) Depot Industrial Plant Equipment (DIPE) purchase or repair will require contractor QMS certification to ISO9001 (or Nadcap AC7004) at time of award. This includes all process chemicals, such as adhesives, paints, primers, depainting agents, coating/plating chemicals, laboratory gases, etc. This requirement will include flow-down into subcontracts.

A7.2.2. All contract PWSs involving WSCAP FORMAT will incorporate a requirement for the contractor QMS to be certified to AS9100 and/or AS9110, depending on whether the work is more oriented towards manufacturing or maintenance prior to performing work on defense articles under the contract. This includes contracts for maintenance, refurbishment, installation, and/or design/building new facilities tied closely to the mission, such as contracts for radome test ranges, aircraft ground equipment, and painting aircraft. This requirement will include flow-down into subcontracts.

A7.2.3. Special Risks and Processes. Special risks and special processes will be subject to more stringent requirements in addition to those stated above. The AS9110 Program Office (WR-ALC/QAX) will determine appropriate certifications for individual contracting efforts. MAPO will coordinate with WR-ALC/QAX on any PWS for contracts resulting in FORMAT of a WSCAP.

A7.2.3.1. Plating and Coating. Nadcap chemical processing (AC7108) and coating (AC7109) will be required for outsourced plating contracts. Plating contractors will demonstrate process control using test specimens and coupons. Contracts will require periodic sets of test coupons to be sent to a third-party laboratory (or to the Government) for testing. Such testing may include corrosion resistance testing (salt fog), destructive surface analysis, and embrittlement relief effectiveness, among others.

A7.2.3.2. Welding. Welding PWSs will call out specific standards to the extent possible. The contractor will be responsible for ensuring the competence of individual welders to specific welding standards. The contractor will be an American Welding Society (AWS) Certified Welding Fabricator prior to award. The contractor will ensure that all weldments are inspected by an individual who holds an AWS Certified Welding Inspector credential. The contractor will have Nadcap welding (AC7110) accreditation prior to award; the associated Nadcap accreditation scope document will show audits against checklists applicable to work under the scope of the PWS. If welding requires radiographic nondestructive inspection (NDI), the individual carrying out the work will be an AWS Certified Radiographic Interpreter and hold an approved NDI (see next paragraph) Level II credential radiographic testing (RT). Nadcap AC7110/13 is strongly encouraged.

A7.2.3.3. NDI. All individuals performing NDI will be at least Level II certified. All individuals providing training for certification or approving procedures will be Level III certified. Aerospace Industries Association (AIA) National Aerospace Standard (NAS) 410, *NAS Certification and Qualification of Nondestructive Test Personnel*

A7.2.3.4. Testing Laboratories. Testing laboratories will obtain certification to ISO/IEC 17025, *General Requirements for the Competence of Testing and Calibration Laboratories*, or accreditation to Nadcap AC7006, *Nadcap Audit Criteria Equivalent to ISO 17025*, prior to award. Persons performing laboratory testing must have at least a bachelor's degree in the appropriate scientific or engineering discipline or be working under the direct observation of someone who does.

A7.2.3.5. Electronics (components and parts). Counterfeiting is a significant concern for these materials. Contracts with intermediaries will require certification to AS6496, *Authorized Distributor Counterfeit Mitigation*, or AS6081, *Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Independent Distributors*. Contracts with electronics manufacturers will require certification to AS5553, *Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition*. Requirements from AS6174A, *Counterfeit Materiel, Assuring Acquisition of Authentic and Conforming Materiel*, may also be considered. Whenever possible, electronics manufacturers already evaluated by Defense Contract Management Agency (DCMA) will be used preferentially. Refer to AS6171, *Test Methods Standard; General Requirements, Suspect/Counterfeit, Electrical, Electronic, and Electromechanical Parts*, for assistance in determining testing requirements to be imposed when contracts are for parts of this type.

A7.2.3.6. Metals. Contracts with metals refineries and smelters will include requirements from AS6174A. Contracts with intermediaries that sell metals will require and incorporate periodic testing requirements to verify the composition of materials sold. Sample contract clauses from AS6174A will be incorporated regarding guarantee of material source, supply chain traceability, and certificates of conformance and traceability.

A7.2.3.7. Manufacturers and Intermediaries. The roles are very different between manufacturers and intermediaries. Their scopes of certification and quality manuals are likewise different. While intermediary QMSs may be certified to AS9100 and AS9110 directly, certification to AS9120, *Quality Management Systems — Aerospace Requirements for Stockist Distributors*, is acceptable for QMSs of intermediaries who are not manufacturers. Intermediaries under contract will provide certificates of authenticity; refer to AS6174A clause D3.4.

A7.2.4. Order of Precedence for Vendor Selection. Vendors with QMS certifications should be used when available. This applies to both manufacturer and intermediary (e.g., distributor, dealer, and retailer). Refer to Tables **A7.1** and **A7.2**. Note that additional guidance is given for GPC purchases in PG 64-101/20-101.

**Table A7.1. Order of precedence for vendor selection for supplies, materials, and services (non-laboratory).**

| Order | QMS certification |
|---|---|
| 1 | AS9100/AS9110 registered manufacturers (see **Note 1**) |
| 2 | ISO9001 or Nadcap AC7004 registered manufacturers (see **Notes 1, 2**) |
| 3 | Nadcap-accredited manufacturers with the applicable Nadcap accreditation for the specific material or supply (see **Note 1**) |
| 4 | AS9120, ISO9001, or AC7004 registered authorized intermediaries (e.g., distributors or dealers) of AS9100, AS9110, ISO9001, or AC7004 registered manufacturers (see **Notes 1, 2**) |
| 5 | authorized intermediaries of AS9100, AS9110, ISO9001, or AC7004 registered manufacturers (see **Notes 1, 2**) |
| 6 | intermediaries selling products of AS9100, AS9110, ISO9001, or AC7004 registered manufacturers (see **Notes 1, 2**) |
| 7 | industry-recognized expertise and/or past business dealings |
| 8 | manufacturers without a registered QMS (see **Notes 1, 3**) |
| 9 | intermediaries without a registered QMS (see **Notes 1, 3**) |
| Note 1. All other things being equal, an ISO14001 registered supplier is preferred.<br>Note 2. Any non-AS standard that incorporates ISO9001, such as IATF 16949, *Automotive Quality Management Standard*, will be treated as equivalent to ISO9001.<br>Note 3. Special permission from the WR-ALC AS9110 program manager must be obtained prior to making these purchases. | |

**Table A7.2. Order of Precedence for Laboratory Service Selection.**

| Order | QMS certification |
|---|---|
| 1 | ISO/IEC17025 or AC7006 and either AS9100 or AS9110 |
| 2 | ISO/IEC17025 or AC7006 |
| 3 | ISO9001, AS9100, AS9110, AS9110, or AC7004 |
| 4 | industry-recognized expertise and/or past business dealings |

**A7.3. Security Concerns.** All contracts involving technical data and defense articles will include security considerations. At a minimum, the items in **Table A7.3** will be included if they apply to the particular contracting effort.

**Table A7.3. Security elements for contract performance work statements.**

| If contract involves ... | Then item below is required (recommended) ... | Reasoning | Unless ... |
|---|---|---|---|
| Working on or with classified assets or documents | (Required) The Contractor will maintain a facility security clearance in good standing for itself throughout the lifetime of this contract (to include exercised options).<br><br>The Contractor will ensure its personnel have a valid security clearance appropriate to the access required for proper accomplishment of contract and order requirements.<br><br>Contractor personnel will not be authorized access to classified information or work on classified projects or programs without a valid security clearance. Contractor personnel whose clearances have been suspended or revoked will immediately be denied access to classified information and defense articles. At award, the contractor will enter into a Visitor Group Security Agreement prior to obtaining access to classified information or assets. In addition, the Contractor will complete DD Form 441, *Department of Defense Security Agreement*, and DD Form 441-1, *Appendage to Department of Defense Security Agreement*, as applicable.<br><br>(Required if access to classified information is necessary to bid.) Prospective contractors must have a valid U.S. security clearance of [insert level] or higher in order to bid on this contract, because the solicitation | Classified work is protected IAW DoDM5220.22V2_AFMAN16-1406V2 *National Industrial Security Program: Industrial Security Procedures for Government Activities*; DoD Regulation 5220.22-R, *Industrial Security Regulation*, and 32 CFR Part 117 *National Industrial Security Program Operating Manual*.<br><br>48 CFR 52.204-2, *Security Requirements*.<br><br>48 CFR 252.204-7003, *Control of Government Personnel Work Product*. | NA |

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| | includes an annex (information) classified at the [insert level] level which will be released only to offerors possessing the appropriate clearance. All classified material must be handled in accordance with 32 CFR Part 117, *National Industrial Security Program Operating Manual*, and DoD Regulation, 5220.22-R, *Industrial Security Regulation.* | | |

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| Working on, with, or around defense articles or military Scientific and Technical Information (STINFO), including for purposes of bidding | (Required) Qualified U.S. Contractor. Prior to award, prospective contractors will register with the Joint Certification Office (JCO) by completing and submitting DD Form 2345, *Militarily Critical Technical Data Agreement*, in accordance with DoD Directive 5230.25, *Withholding of Unclassified Technical Data From Public Disclosure*.<br><br>Accessing STINFO needed for purposes of submitting a bid is contingent upon obtaining certification as a "qualified U.S. contractor" and a JCO registration number. If STINFO access is not required for bidding purposes, award is contingent upon obtaining such certification. After award, the successful contractor will continually renew JCO certification to prevent any lapse and will maintain JCO certification throughout the life of the contract (to include options). The Contractor will inform the Procurement Contracting Officer (PCO) and COR immediately if its JCO registration status changes. | In addition to classified protections, there are protections on other types of documents, in particular, where export controls are concerned. Because a visual inspection of defense articles is a deemed export (treated as a technical data or technology transfer), prospective contractors must be authorized.<br><br>The JCO ensures that prospective contractors are not debarred or otherwise prohibited from participating in these procurements. | NA |

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| Working on, with, or around defense articles or military STINFO, including for purposes of bidding (same as above) | (Required) Technology Control Plan (TCP). The contractor will implement a TCP that includes the security provisions for operations (OPSEC), information (INFOSEC), and computers (COMPUSEC) necessary to safeguard defense articles, military technical data, and other Government-owned controlled unclassified information (CUI) from improper or accidental release to or inspection by foreign persons. CUI is defined in DoD Manual 5200.01, *DoD Information Security Program*; see Vol. 1, *Overview, Classification, and Declassification)*. The TCP will address, at a minimum, six topics:<br><br>(1) description of information to be protected,<br><br>(2) access control measures (primarily operations security),<br><br>(3) procedures to control access to equipment (primarily information security),<br><br>(4) training and associated documentation,<br><br>(5) procedures to identify foreign persons and obtain their acknowledgment to abide by the TCP, and<br><br>(6) oversight and monitoring. The TCP will be available for inspection at any time.<br><br>While it is not necessary that the TCP be a single document, there must be a document that maps each of the six topics identified above to the Contractor's responsive documents. For the purposes of this contract, the | It provides OPSEC and INFOSEC protections similar to DoDM5220.22V2_AFMAN16-1406V2. An acceptable TCP will ensure that access to physical assets and tech data (including access through IT systems) is controlled to prevent unauthorized disclosure to a foreign person, i.e., an individual who is neither a U.S. citizen nor permanent resident (i.e., green card holder).<br><br>48 CFR 52.239-1, *Privacy or Security Safeguards*.<br><br>48 CFR 252.225-7048, *Export-Controlled Items*. | The contractor employees are onsite, all STINFO remains on the installation and/or on Government IT systems (no contractor site or IT system), and the PWS states that:<br><br>(1) the Government will provide all INFOSEC, OPSEC, and COMPUSEC training,<br><br>(2) the Government will retain all training records, and<br><br>(3) contractor employees will adhere to the same regulations and practices that apply to co-located Government employees. |

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| | TCP itself is treated as two deliverables: an OPSEC portion and an INFOSEC/COMPUSEC portion. Prior to award, the Contractor will certify that its TCP (OPSEC and INFOSEC/ COMPUSEC Plans) meets all the requirements laid out here or necessary to obtain any registration or license required by this contract.<br><br>(Recommended) Independent TCP Certification. Within 60 days of award, the Contractor will obtain a certification from third-party expert (subcontractor) subject to Government approval) that its TCP is adequate, and will provide legible copies of the third-party certification to the COR. Such certification will be re-accomplished any time there is a substantive modification. A substantive modification is any change other than an administrative change. Administrative changes include correcting or updating spelling, names of people, titles or numbers of documents, office symbols, page numbers, heading and sub-headings, formatting (e.g., fonts, margins, or spacing), phone numbers, addresses, websites, and physical locations. Whenever substantive modifications affect less than 10% of the TCP (based on percentage of pages changed), the Contractor may elect to have only the modified portion recertified. CDRL item, DI-MISC-80678, *Certification/Data Report)*. | | |

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| | (Required) OPSEC Plan. The Contractor will ensure compliance with OPSEC requirements including procedures to protect classified and/or sensitive, but unclassified, Government projects and/or programs. The Contractor will ensure that physical security protects CUI and defense articles from accidental or improper disclosure to or inspection by foreign persons as well as loss from theft. (CDRL item, DI-MGMT-80934C, *Operations Security* (*OPSEC) Plan*) | | |
| | (Required) INFOSEC/ COMPUSEC Plan.<br>The Contractor will implement this plan as part of its TCP.<br>(DI-MGMT-82247 *Contractor's Systems Security Plan and Associated Plans of Action to Implement NIST SP 800-171 on a Contractor's Internal Unclassified Information System*) | | |
| | (Required) TCP Training. The contractor will train employees on the TCP to the extent necessary to ensure its effectiveness. Training will take place initially and at least annually thereafter. The contractor will maintain records of TCP training. Both the training materials and training records will be made available for Government inspection at any time. Training records will be retained throughout the life of the contract (to include all options) and for 10 years thereafter. | DoDM5220.22V2_AFMAN16-1406V2 requires such training take place. An untrained workforce cannot follow a TCP. | NA |

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| | (Required) Photography. Contractor and its staff will not take any photographs of defense articles or copies of military STINFO except as explicitly required for performance of the contract. When on an Air Force installation or Air Force controlled site, contractor staff will not take any photographs without explicit, written approval from the cognizant maintenance group commander or director (or higher authority). Photographs will be subject to DoD and Air Force STINFO regulations. Digital photographic images will be protected using procedures for data-at-rest and data-in-transit. At no time will personally owned cameras or recording devices be used to take photographs of defense articles or military STINFO. | Contractors working around defense articles may be unaware that these items are export-controlled and cannot be photographed to prevent accidental foreign disclosure. | |
| Contractor storing, reading, or creating data-at-rest in its own IT system, and the data are export-controlled military STINFO or other CUI. | (Required) IT system certification and data-at-rest. Prior to award, the Contractor will certify that IT systems on which Government CUI will be stored (data-at-rest) comply with the latest revision of National Institutes of Standards and Technology (NIST) Special Procedure (SP) 800-171 (Revision 2), *Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations*.<br><br>(Recommended) Within [insert number, typically 30-90] days of award, the Contractor will obtain certification from an independent, third-party expert (subcontractor subject to Government approval) that each | Export-controlled information and CUI must be protected.<br><br>48 CFR 52.204-21, *Basic safeguarding of covered contractor information systems.*<br><br>48 CFR 52.204-23, *Prohibition on contracting for hardware, software, and services developed or provided by Kaspersky Lab and other covered entities*.<br><br>48 CFR 252.204-7008, *Compliance with* | NA |

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| | IT system used to create, collect, process, or store CUI complies with NIST SP 800-171, and will provide legible copies of each third-party certification to the COR. Such certification will be re-accomplished any time that NIST SP 800-171 is revised or the Contractor makes a substantive change to an IT system. (CDRL item, DI-SESS-81922, *Certificate of Quality Audit Compliance*) | *safeguarding covered defense information controls*.<br><br>48 CFR 252.204-7012, *Safeguarding covered defense information and cyber incident reporting*.<br>. | |
| Contractor staff will have access to electronic Government CUI (on-site or off-site) | (Required whenever electronic STINFO is involved) Data-in-transit. Contractor will secure data-in-transit using encryption that complies with Federal Information Processing Standard (FIPS) 140-2, *Security Requirements for Cryptographic Modules*. In particular, all scientific and technical information (to include design or manufacturing technical data, inspection or test results, and product performance data) will be secured in transit.<br><br>(Required) STINFO Distribution Statements. The Contractor will comply with all STINFO distribution statements on Government CUI. The Contractor will not access any STINFO marked Distribution Statements E (DoD only) or F (dissemination by direction only). If the Contractor receives such STINFO, it will delete the STINFO immediately. The Contractor will not disclose STINFO except to its employees, to its subcontractors, or to the Government and only in accordance with the distribution statement. If the Contractor | Information assurance regulations require data-in-transit be protected.<br><br>48 CFR 227.7103-7, *Use and non-disclosure agreement.* | NA |

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| | receives STINFO (such as a drawing) that is not marked with a distribution statement authorized by DoD Instruction 5230.24, *Distribution Statements on DoD Technical Documents*, the Contractor will identify it to the COR. In addition, the Contractor will temporarily mark it as Distribution Statement D by inserting the word "TEMPORARY" at the beginning of the distribution statement along with the rest of that distribution statement pending further guidance.<br><br>(Required) Export-Controlled Presumption. The Contractor will treat all Government STINFO as well as any STINFO created during work under this contract (such as test results) as export-controlled.<br><br>The Contractor will verify that the DoD standard export control warning in DoDI 5230.24 is affixed to all Government STINFO prior to release to its employees or to its subcon-tractors. Typeface and font size are at Contractor's discretion so long as the distribution statement is similar in size to other markings and remains readable. Note that the box outline is a mandatory part of the warning. Where possible, the export-control warning will be placed immediately underneath the distribution statement. | | |

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| Contractor staff will have access to Government CUI subject to intellectual property rights | (Required) Protecting Government-furnished proprietary information. The Contractor will protect from disclosure any proprietary information or intellectual property that has been provided for use under Government purpose rights. The Contractor will ensure that any proprietary information or intellectual property provided by the Government is used only for Government purposes. The Contractor will sign the nondisclosure agreement in DFARS clause 227.7103-7. | Copyright and patent law require this.<br>48 CFR 252.227-7025, *Limitations on the use or disclosure of Government-furnished information marked with restrictive legends*. | All proprietary or other intellectual property rights are owned by the awarded contractor. |
| Defense articles or technical data on the U.S. Munitions List (subject to International Traffic in Arms Regulations (ITAR) | Prior to award, the Contractor will register with the U.S. Department of State (DoS), Bureau of Political-Military Affairs (PM), Directorate of Defense Trade Controls (DDTC). This license will be for the purpose of manufacturing defense articles on the U.S. Munitions List subject to International Traffic in Arms Regulations. The Contractor will provide a legible copy of the DoS PMDDTC registration letter, including renewals, showing the expiration date (registration number to be redacted) to the COR. The Contractor will continually renew its DoS PMDDTC registration to prevent any lapse and will maintain registration throughout the life of the contract (to include options).<br>The Contractor will inform the PCO and COR immediately if its DoS PMDDTC registration status changes. (CDRL item, DI-MISC-80678, *Certification/ Data Report*) | The ITAR requires such registration. | |

**A7.4. Industry Partners (Title 10 Public-Private Partnerships) as Suppliers.**

A7.4.1. Industrial partners (IP) that also serve as suppliers of technical data, goods, or services, will be subject to SVAs. If the individual agreements do not address SVAs explicitly, the following rules will be applied.

A7.4.1.1. Any industry partner who supplies over $100,000 annually in goods and/or services to WR-ALC will be subject to up to two SVAs per year totaling no more than 6business days in length at a contractor's site as determined by the audit team.

A7.4.1.2. Any industry partner who supplies at least $25,000 but no more than $100,000 annually in goods and/or services to WR-ALC will be subject to one on-site SVA per year no more than 3 business days in length.

A7.4.1.3. Industry partners who supply less than $25,000 annually in goods and/or services will be subject to no more than one 3-day on-site SVA every 3years.

A7.4.2. The decision to exercise the SVA provision will be at the discretion of the WR-ALC/QAX chief. All affected partnerships and implementation agreements will be brought into compliance at their next revision or by 01 October 2024, whichever comes sooner.

A7.4.3. On-site IP employees will comply with Air Force, AFMC, AFSC, WR-ALC, and/or MXG regulatory guidance that affects day-to-day operations, such as but not limited to, safety, security, tool control, maintenance discipline, accountable property management, and documentation. Any exemption to compliance with guidance applicable to WR-ALC personnel will be explicitly stated in the partnership agreement and approved by the designated level of management with authority to waive the tiered requirements. In the event of an invalid waiver of authority, the mandatory compliance publication will take precedence over the partnership or implementation agreement. It is the responsibility of any on-site industrial partner personnel to comply with regulations if the WR-ALC (or other management) signatory to the agreement lacked proper authority to waive them. All new and revised partnership agreements will incorporate a mechanism for resolution and elevation of on-site compliance issues and will identify a management official responsible for acting upon documented noncompliance. WR-ALC managers may expel IP employees from their respective work areas for noncompliance.

A7.4.4. Unless an agreement calls out a specific process explicitly, USAF, AFMC, AFSC, and WR-ALC business processes will be understood to take precedence over IP business processes and will be the preferred method of working. In general, it is counterproductive to use multiple customer processes rather than a single ALC business process. The AFMC Form 202 process will be used for all technical data clarifications unless a specific IP process has been called out and agreed to. Likewise, the Deficiency Reporting, Investigation, and Resolution (DRI&R) process in TO 00-35D-54 will be used unless a specific IP process has been called out and agreed to. Existing and/or established processes within the ALC will continue to be used with all partnership workloads unless the applicable agreement explicitly requires an alternative process. Whenever alternative processes are agreed to, their use will be construed narrowly and used with the minimum applicability that complies with the agreement terms and conditions.

**A7.5. DLA.** WR-ALC is mandated to use DLA as a source for many items; however, WR-ALC has no authority to audit DLA since it is a DoD agency within the Fourth Estate rather than one of the Services. DLA has resisted Service efforts to audit its processes. DLA is a buyer and distributor rather than a manufacturer. DLA-procured items are subject to TO 00-35D-54 if defects are found. In addition, DLA relies on DCMA to carry out a surveillance and inspection. WR-ALC will not carry out SVAs on DLA, DLA-procured goods and services, or DLA-provided goods and services prior to the point of delivery. Nothing herein will be construed to limit WR-ALC's ability to address deficiencies in goods or services procured or provided by DLA personnel.

**A7.6. Air Force Logistics and Supply Chain Functions.** These units fall under the authority of the Air Force Sustainment Center, WR-ALC's parent organization, have internal QA functions, and will not normally be subject to SVAs. Should the opportunity to arise to conduct an SVA either by invitation or direction, this paragraph will not be interpreted as a bar to doing so.