

**BY ORDER OF THE COMMANDER
ROBINS AIR FORCE BASE**

ROBINS AIR FORCE BASE MANUAL 63-501

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Acquisition

**WARNER ROBINS AIR LOGISTICS CENTER
QUALITY MANAGEMENT SYSTEM**

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This manual implements Air Force Policy Directive (AFPD) 63-1/AFPD 20-1, *Acquisition and Sustainment Life Cycle Management*, Air Force Instruction (AFI) 63-501, *Air Force Acquisition Quality Program*, AFI 21-102, *Depot Maintenance Management*, Air Force Materiel Command Instruction (AFMCI) 63-501, *AFMC Quality Assurance*. Quality assurance policy for operational aircraft/equipment for WR-ALC depot maintenance production divisions will be in accordance with the requirements of AFI 21-101, AFMCSUPI, *Aircraft and Equipment Maintenance Management*. It provides quality management system policy and assigns quality responsibilities for all Warner Robins Air Logistics Command (WR-ALC) product support, supply management, depot maintenance mission areas, and acquisition functions. This manual includes implementation instructions for establishing a quality management system that aligns to and is comparable with the Engineering Society for Advancing Mobility, Land, Sea and Space (SAE) *Quality Systems – Aerospace, Model for Quality Assurance in Design, Development, Production, Installation, and Servicing*, AS 9100 Rev C, 2009. It is a representative model of a quality management system for the functional areas of design, development, production, installation, and servicing. Send comments and suggestions about this publication for improvements on AF Form 847, *Recommendation for Change of Publication*, to the Office of Primary Responsibility (OPR). This publication does not apply to Air Force Reserve Command (AFRC) Units or the Air National Guard (ANG). Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS)

located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

Each paragraph of this document has been reviewed and revised to meet the intent and requirements of parent document AFMCI 63-501.

Per AFI 33-360 paragraph 2.27. This document has been substantially revised and must be completely reviewed . Major changes include updating the Quality Management System from AS9100 Revision B to AS9100 Revision C. Significant additions and deletions have been made to sections 1., 3., 4., 5., 6., 7., 8., Attachment 1, Attachment 2, Attachment 3, and Attachment 4.

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1. Introduction.

1.1. WR-ALC Responsibilities.

1.1.1. Consists of organic and non-organic sustainment support and depot level maintenance for Department of Defense aircraft, overhaul of avionics and aircraft components, and support equipment and services in support of the Air Force operations.

1.2. Scope of the Quality Management System.

1.2.1. Requirements of the release of AS9100 Revision C are satisfied by the implementation of the Center’s Quality Management System. The “organization”, interchangeably referred to as the “Center”, is illustrated in **Attachment 2**. The WR-ALC 402d Maintenance Wing is registered. The remainder of the Center is required to ensure compliance with AS9100 Revision C requirements.

1.3. Exclusions.

1.3.1. The Center's scope does not include design or development in this release as the Center is not considered to function as an Original Equipment Manufacturer (OEM) which designs and develops end products and/or provides services as its primary business (i.e. "for profit"). While internal design and development is performed within the Center, it is done so in direct support of the sustainment and acquisition responsibilities associated with existing assets and is not bound by the requirements of SAE AS9100 Revision C, section 7.3.

2. Quality Policy. To be a "World-Class" Center of acquisition and sustainment excellence with focus on exceeding warfighter and customer expectations, leading the Department of Defense in cost management, and re-energizing and sustaining continuous process improvement.

3. Terms and Definitions.

3.1. See [Attachment 1](#) for definitions. For purpose of this manual the definitions given in ISO 9000: 2005 apply. Acronyms can also be found in [Attachment 1](#).

4. Quality Management System.

4.1. General Requirements:

4.1.1. WR-ALC has established, documented, implemented and maintains a quality management system and continually improves its effectiveness in accordance with the requirements of AS9100 Revision C.

4.1.2. The Center Through Various Levels of Documentation Throughout the Organization Has:

4.1.2.1. Determined the processes needed for the quality management system and their application throughout the organization.

4.1.2.2. Determined the sequence and interaction of these processes.

4.1.2.3. Determined criteria and methods needed to ensure that both the operation and control of these processes are effective.

4.1.2.4. Ensured the availability of resources and information necessary to support the operation and monitoring of these processes.

4.1.2.5. Monitored, measured where applicable, and analyzed these processes.

4.1.2.6. Implemented actions necessary to achieve planned results and continual improvement of these processes.

4.1.3. These processes are managed by the Center in accordance with the requirements of AS9100 Revision C.

4.1.4. Where the Center has chosen to outsource processes that affect product and/or service conformity to requirements, the appropriate controls have been implemented. The type and extent of control has been detailed within the quality management system through lower level documentation.

4.2. Documentation Requirements:

4.2.1. General:

4.2.1.1. The Center utilizes the Air Force publications management program, Air Force *Records Disposition Schedule*, for implementing directives regarding the development, use, change and disposal of QMS documents. Current AFI 33-360, *Publications and Forms Management*, outlines requirements and procedures. System documentation includes this manual and other wing operating instructions, standard work guides, work instructions, process orders, Quality Program Plans (QPP) and other forms of documentation used to guide, control or measure Center processes. Documentation is available to all personnel by various types of media.

4.2.1.2. The quality management system documentation includes:

4.2.1.2.1. Documented statements of a quality policy and quality objectives.

4.2.1.2.2. This quality manual.

4.2.1.2.3. Documented procedures required by AS9100 Revision C.

4.2.1.2.4. Documents, including records, determined by the Center to be necessary to ensure the effective planning, operation and control of its processes.

4.2.1.2.5. Records required by AS9100 Revision C. (see [para 4.2.4](#))

4.2.1.2.6. Quality system requirements imposed by the applicable regulatory authorities.

4.2.1.3. Customer and/or regulatory authorities representatives are given access to quality management system documentation as required.

4.2.2. Quality Manual: The Center has established and maintains this document as a quality manual that includes:

4.2.2.1. The scope of the quality management system, including details of and justification for any exclusions. (see [para 1.2](#))

4.2.2.2. The systems level, as well as selected operational level of documented procedures established for the quality management system, are referenced in [Attachment 3](#). Operational level procedures provide more detail to accommodate day to day operations by describing how processes are accomplished. These documents reside in areas of the Center such as Wings, Groups, Directorates, Divisions, etc. Selected documentation hierarchy is referenced in [Attachment 4](#).

4.2.3. Control of Documents:

4.2.3.1. Documents required by the quality management system are controlled.

4.2.3.2. These are used to define the controls needed:

4.2.3.2.1. To approve documents for adequacy prior to issue.

4.2.3.2.2. To review and update as necessary and re-approve documents.

4.2.3.2.3. To ensure changes and the current revision status of documents are identified.

4.2.3.2.4. To ensure relevant versions of applicable documents are available at points of use.

4.2.3.2.5. To ensure documents remain legible and readily identifiable.

4.2.3.2.6. To ensure documents of external origin determined by the Center to be necessary for the planning and operation of the Quality Management System are identified and their distribution controlled.

4.2.3.2.7. To prevent the unintended use of obsolete documents and to apply suitable identification to them if they are retained for any purpose.

4.2.3.3. The Center coordinates document changes in accordance with document control procedures.

4.2.3.4. Questions concerning publications are addressed to the Center's Office of Publications Management.

4.2.3.5. Records are a special type of document and are controlled according to the requirements given in [para 4.2.4](#)

4.2.4. Control of Records:

4.2.4.1. Records are established and controlled which provide evidence of conformity to requirements and of the effective operation of the quality management system. Records are legible, readily identifiable and retrievable.

4.2.4.2. The Center follows established documented procedures for the identification, collection, indexing, access (availability), filing, storage, maintenance and disposition of records. Record retention is specified in accordance with Air Force governing directives.

4.2.4.3. Supplier records, generated through government contracts, shall be retained by the government for the life of the contract, unless otherwise specified by the customer.

4.2.5. Documentation Supporting the Quality Management System (QMS).

4.2.5.1. General. WR-ALC areas included in the organizational diagram ([Attachment 2](#)) shall have and maintain QMS documentation as follows:

4.2.5.1.1. Documents necessary to ensure effective operation and management of processes which produce products and/or services as required by this manual. Work instructions, test procedures, calibration procedures, or other documents, which describe specific methods or requirements for performing any work affecting quality (i.e., where applicable, process maps, quality plans, technical data, forms, quality records, samples, drawings and bills of materials).

4.2.5.1.2. Documents and/or specific records (governed by higher-level publication or collaborating and contracting agreements) as required by this manual.

4.2.5.1.3. Documented Quality Program Plan (QPP), or equivalent, for each sustainment group, division, or higher level entity within the organizational structure such as Wing or Directorate. Enabling areas as per [Attachment 2](#) are not required to have a QPP, but are required to follow existing procedures and regulations within their areas of responsibility. Any conflicting requirements

between the Enabler's documentation and this manual shall be addressed to the OPR of this manual. QPPs shall address how compliance will be achieved with respect to the applicable requirements of this Manual. The plan will serve as the means of assuring products and services conform to requirements. Documentation in each plan will also include:

4.2.5.1.3.1. **Organizational Structure.** An organizational structure and synopsis of organizational or functional roles and responsibilities will be included in or attached to the plan. The organizational structure will clearly identify where the Quality Representative fits into the overall organizational structure and their relationship to the most senior level of leadership responsible for the plan.

4.2.5.1.3.2. **Quality Representative.** The Quality Representative serves as the focal point for the development and communication of the plan, ensures necessary training to implement the plan, and functions as the spokesperson for quality related matters. The appointment of a Quality Representative will include the authority and corresponding responsibility to assure the requirements of the WR-ALC QMS Manual and the plan are communicated, executed, and sustained. A copy of the Quality Representative appointment letter (upon assignment or as personnel changes occur), signed by the most senior level of leadership responsible for the plan, will be provided to the Center Quality Focal Point, located within WR-ALC/ENSP, no later than 10 days after initial appointment.

4.2.5.1.3.3. **Requirements.** QPPs, or equivalent, shall address all applicable requirements (sections 4, 6, 7, and 8) within this manual. AS9100 registered areas such as the 402d MXW shall address each requirement in all sections of this manual unless exceptions apply. Refer to [para 1.3](#)

4.2.5.1.3.4. **Documented Process/Procedures.** Documented processes, procedures and methods required to accomplish or meet the requirements of this manual not already included or referenced in this manual, will be included or referenced in the plan. In some cases, local level processes, procedures, instructions, etc. must be developed to carry out these requirements. Processes and procedures shall include:

4.2.5.1.3.4.1. Why the process is necessary. State the requirement.

4.2.5.1.3.4.2. What the process will accomplish.

4.2.5.1.3.4.3. Who performs the process.

4.2.5.1.3.4.4. When the process is performed. Proper sequencing.

4.2.5.1.3.4.5. Where the process is to be performed. This can be a certain office of responsibility, specialized facility, required environment, contractor's premises, etc.

4.2.5.1.3.4.6. How the process is accomplished. Documented step by step instructions.

4.2.5.1.3.5. **Record of Review.** Each sustainment group, division, or higher

level entity within the organizational structure such as Wing or Directorate will review the plan at least annually for compliance and currency to all applicable requirements. Review and revision information will be accurately and promptly documented and must be included as part of the plan (change history). Quality Representatives will ensure the review is accomplished annually. After accomplishment of the review, each sustainment group, division, or higher level entity within the organizational structure such as Wing or Directorate, will provide, or make available the reviewed/revised document to the Center Quality Focal Point within WR-ALC/ENSP. Documented changes shall be coordinated with appropriate contract/partnering customers as required.

4.2.5.1.3.6. Management Review. Each plan will identify and document the metrics and review forum that will be used to support the requirements of this manual. Metrics should include product and/or service data utilized for plan sustainment, corrective and preventive actions, as well as continuous improvement. The purpose of the review is to keep Center senior-level managers informed of the health and well being of Center processes, quality program, cross-feed information, review and evaluate program performance, develop implement, and sustain necessary improvements.

4.2.5.1.3.7. Review of Requirements Related to the Product and/or Service Provided. Each wing and/or group shall ensure a documented process is developed or made reference to, for an organized review of their workloads. All review activities shall be documented. All workload negotiations, including pre-quotation activities, shall be conducted with coordination/input from representatives directly involved in the workload (production, production planning, engineering, program management, contracting, quality assurance, purchasing, scheduling and inventory management/control functions.) and other functions as required. Each wing (or required equivalent organization) is responsible for the development, implementation and management of Depot Maintenance Public-Private Partnerships issued at WR-ALC. All WR-ALC Partnering Agreements are subject to the procedures and coordination/approval process established by WR-ALC/XPL. Pursuant to the guide, a multifunctional team comprised of government and contractor personnel shall be responsible for defining the requirement and developing all appropriate documentation/attachments (e.g. Performance-Based Work Statement (PBWS), work specification, quality assurance criteria, data requirements, reports, etc.) for inclusion in the task-specific "ordering" document (e.g. Implementation Agreement, Specific Workload Agreement, Direct Sales Order, etc.). Prior to issuance, every "ordering" document shall be coordinated and signed by the private sector partner and coordinated through MXW and the appropriate production division, then approved by MXW. The Contracting Officer assigned to MXW may sign the "ordering" document upon MXW approval.

5. Management Responsibility:

5.1. Management Commitment (Center Operations Review, Executive Council, etc.):

5.1.1. The Center Commander provides evidence of commitment to the development and implementation of the quality management system and continually improving its effectiveness by:

- 5.1.1.1. Communicating to the organization the importance of meeting customer as well as statutory and regulatory requirements.
- 5.1.1.2. Establishing the quality policy.
- 5.1.1.3. Ensuring that quality objectives are established.
- 5.1.1.4. Conducting management reviews.
- 5.1.1.5. Ensuring the availability of resources.

5.2. Customer Focus:

5.2.1. Center Management ensures customer requirements are determined and are met with the aim of enhancing customer satisfaction. (see **paragraphs 7.2.1** and **8.2.1**)

5.2.2. Center management ensures product and/or service conformity and on-time delivery performance. When necessary, appropriate action is taken to resolve these matters.

5.3. Quality Policy:

5.3.1. Center Management has developed a quality policy and ensures that the quality policy per **Paragraph 2** of this Manual:

- 5.3.1.1. Is appropriate to the purpose of the organization.
- 5.3.1.2. Includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system.
- 5.3.1.3. Provides a framework for establishing and reviewing quality objectives.
- 5.3.1.4. Is communicated and understood within the organization.
- 5.3.1.5. Is reviewed for continuing suitability.

5.3.2. The quality policy is communicated across the organization via banners, email, bulletin and other forms of communication. All employees are expected to understand this policy and how it applies to them and their work.

5.4. Planning:

5.4.1. Quality Objectives:

5.4.1.1. Center Management, through the Center Quality Office, ensures that quality objectives, including those needed to meet requirements for products and/or services (see **para 7.1**), are established at relevant functions and levels within the organization. The quality objectives are measurable and consistent with the quality policy.

5.4.2. Quality Management System Planning:

5.4.2.1. Center Management, through the Center Quality Office, ensures:

5.4.2.1.1. The planning of the quality management system is carried out in order to meet the requirements given in **para 4.1**, as well as the quality objectives.

5.4.2.1.2. The integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

5.5. Responsibility, Authority and Communication:

5.5.1. Responsibility and Authority:

5.5.1.1. Center leadership ensures that the responsibilities and authorities are defined and communicated within the organization by utilizing job descriptions, management meetings, organizational charts, this manual and other procedures and documents.

5.5.2. Management Representative:

5.5.2.1. For areas within the Center that are AS9100 Revision C registered, the Management Representative currently resides within the WR-ALC 402d MXW who, irrespective of other responsibilities, has responsibility and authority that includes:

5.5.2.1.1. Ensuring processes needed for the quality management system are established, implemented and maintained.

5.5.2.1.2. Reporting to necessary levels within the organization on the performance of the quality management system and any need for improvement.

5.5.2.1.3. Ensuring the promotion of awareness of customer requirements throughout the organization.

5.5.2.1.4. The organizational freedom and unrestricted access to top management to resolve matters pertaining to quality/management issues.

5.5.2.2. For areas within the Center that are AS9100 Revision C compliant but not registered, the responsibilities and authorities as aforementioned reside within WR-ALC/ENSP (Policies and Procedures Branch of the Engineering Directorate).

5.5.3. Internal Communication: Center Management ensures that appropriate communication processes are established within the organization and that communication takes place regarding the effectiveness of the quality management system. Processes used to communicate include but are not limited to: The Center Operations Review, Executive Council, production meetings, weekly management meetings, the use of a production schedule, and Work Control Documents (WCDs) associated with the product and/or service, specification sheets, metrics, e-mails and memos.

5.6. Management Review (Center Operations Review, Executive Council, etc.):

5.6.1. General: Center Management reviews the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. This review includes assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and

quality objectives. This generally takes place via the Center Operations Review, Executive Council, etc.

5.6.1.1. Records of reviews are maintained, providing a history of items of interest, action items designated and actions taken. (see [para 4.2.4](#))

5.6.2. Review Input: The input to management review includes information on:

5.6.2.1. Results of audits.

5.6.2.2. Customer feedback.

5.6.2.3. Process performance and product/service conformity.

5.6.2.4. Status of preventive and corrective actions.

5.6.2.5. Follow-up actions from previous management reviews.

5.6.2.6. Changes that could affect the quality management system.

5.6.2.7. Recommendations for improvement.

5.6.3. Review Output: The output from the management review includes any decisions and actions related to:

5.6.3.1. Improvement of the effectiveness of the quality management system and its processes.

5.6.3.2. Improvement of product and/or service related to customer requirements.

5.6.3.3. Resource needs.

6. Resource Management:

6.1. **Provision of Resources:** The Center determines and provides the resources needed:

6.1.1. To implement and maintain the quality management system and continually improve its effectiveness.

6.1.2. To enhance customer satisfaction by meeting customer requirements.

6.2. **Human Resources:**

6.2.1. General: Personnel performing work affecting conformity to product and/or service requirements are considered competent on the basis of appropriate education, training, skills and experience.

6.2.2. Competence, Awareness and Training: The Center utilizes various methods to ensure competence, training, and awareness of its personnel. These methods are combined with other Air Force guidance to:

6.2.2.1. Determine the necessary competence for personnel performing work affecting product and/or service quality.

6.2.2.2. Provide training, where applicable, or takes other actions to satisfy these needs.

6.2.2.3. Evaluate the effectiveness of the actions taken.

6.2.2.4. Ensure its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

6.2.2.5. Maintain appropriate records of education, training, skills and experience. (see [para 4.2.4](#))

6.3. Infrastructure:

6.3.1. The Center determines, provides and maintains the infrastructure needed to achieve conformity to product and/or service requirements.

6.3.2. Infrastructure includes, as applicable:

6.3.2.1. Buildings, workspace and associated utilities.

6.3.2.2. Process equipment (both hardware and software).

6.3.2.3. Supporting services (such as transport or communication).

6.4. **Work Environment:** The Center determines and manages the work environment necessary to achieve conformity to product and/or service requirements. The environment may include physical, environmental, noise, temperature, humidity, lighting, weather, etc.

7. Product/Service Realization (i. e. producing the product and/or service):

7.1. Planning of Product/Service Realization:

7.1.1. The Center plans and develops the processes needed for product and/or service realization. Planning of product and/or service realization is consistent with the requirements of the other processes of the quality management system. (see [para 4.1](#))

7.1.1.1. In planning product and/or service realization, the Center determines the following, as appropriate:

7.1.1.1.1. Quality objectives and requirements for the product and/or service:

7.1.1.1.1.1. Product/Service and personal safety.

7.1.1.1.1.2. Reliability, availability, and maintainability.

7.1.1.1.1.3. Producibility, and inspectibility.

7.1.1.1.1.4. Suitability of parts and materials used in the product or service.

7.1.1.1.1.5. Selection and development of embedded software.

7.1.1.1.1.6. Recycling or final disposal of the product and/or service at the end of its useful life.

7.1.1.2. The Center establishes processes, and documents and provides resources specific to the product and/or service.

7.1.1.3. The Center performs required verification, validation, monitoring, measurement, inspection and test activities specific to the product and/or service and the criteria for product and/or service acceptance.

7.1.1.4. The Center maintains records needed to provide evidence that the realization processes and resulting product and/or service meet requirements. (see [para 4.2.4](#))

7.1.1.5. The Center provides resources to support the use of, and maintenance of the product and/or service.

7.1.1.6. The Center utilizes configuration management appropriate to the product and/or service.

7.1.1.7. The Center provides resources to support the use and maintenance of the product and/or service.

7.1.1.8. The output of this planning is in a form suitable for the Center's methods of operations.

7.1.2. Project Management:

7.1.2.1. Project management is utilized within the Center to plan and manage product and/or service realization in a structured and controlled manner to meet requirements at acceptable risk levels, within resource, and schedule constraints.

7.1.3. Risk Management:

7.1.3.1. The Center has established, implemented, and maintains processes for managing risks with regard to achieving applicable requirements as appropriate to the Center and the product and/or service.

7.1.3.2. Risk criteria are defined as appropriate. i.e. likelihood, consequences, mitigation, acceptance, etc.

7.1.3.3. Risks are identified, assessed, and communicated throughout the product and/or service realization process.

7.1.3.4. Risks that exceed acceptance criteria are identified, communicated, and mitigated through management involvement at the necessary levels within the Center.

7.1.3.5. Remaining risks are reviewed and accepted where possible after mitigation actions have been taken.

7.1.4. Configuration Management.

7.1.4.1. The Center has established and maintains a configuration management process that includes as appropriate to the product and/or service:

7.1.4.1.1. Configuration management planning.

7.1.4.1.2. Configuration identification.

7.1.4.1.3. Change control.

7.1.4.1.4. Configuration status accounting.

7.1.4.1.5. Configuration audit.

7.1.5. Control of work transfers:

7.1.5.1. The Center maintains a process to plan and control the temporary or permanent transfer of work (both internal and external to the Center).

7.1.5.1.1. Verification of conformity to requirements is included as part of this process.

7.2. Customer-Related Processes:

7.2.1. Determination of Requirements Related to the Product and/or service:

7.2.1.1. The Center determines:

7.2.1.1.1. Requirements specified by the customer, including the requirements for delivery and post-delivery activities.

7.2.1.1.2. Requirements not stated by the customer but necessary for specified or intended use, where known.

7.2.1.1.3. Statutory and regulatory requirements applicable to the product and/or service.

7.2.1.1.4. Any additional requirements considered necessary by the Center.

7.2.1.1.5. Special requirements, warranty provisions, contractual obligations such as maintenance services, and supplementary services such as recycling and final disposal are all considered.

7.2.2. Review of Requirements Related to the Product and/or Service:

7.2.2.1. The Center reviews the requirements related to the product and/or service. This review is conducted prior to the Center's commitment to supply a product and/or service to the customer (e.g. submission of tenders, acceptance of contracts or orders, acceptance of changes to contracts or orders) and ensures:

7.2.2.1.1. Product and/or Service requirements are defined.

7.2.2.1.2. Contract or order requirements differing from those previously expressed are resolved.

7.2.2.1.3. The Center has the ability to meet the defined requirements.

7.2.2.1.4. Special requirements for the product and/or service are determined.

7.2.2.1.5. Risks (e.g., new technology, short delivery timeframe) have been identified.

7.2.2.2. Records of the results of the review and actions arising from the review are Maintained. (see [para 4.2.4.](#))

7.2.2.3. Where the customer provides no documented statement of requirement, the customer requirements will be confirmed by the Center before acceptance.

7.2.2.4. Where product and/or service requirements are changed, the Center ensures that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

7.2.3. Customer Communication: The Center determines and implements effective arrangements for communicating with customers in relation to:

7.2.3.1. Product and/or Service information

7.2.3.2. Enquiries, contracts or order handling, including amendments

7.2.3.3. Customer feedback, including customer complaints

7.3. **Design and Development:** Refer to [paragraph 1.3](#) of this manual.

7.4. **Purchasing:**

7.4.1. Purchasing Process:

7.4.1.1. The Center ensures that purchased products and/or services conform to specified purchase requirements. The type and extent of control applied to the supplier and the purchased product and/or service is dependent upon the effect of the purchased product and/or service on subsequent product and/or service realization or the final product and/or service.

7.4.1.2. The Center is responsible for the conformity of all products and/or services purchased from suppliers, including products and/or services from sources defined by the customer.

7.4.1.3. The Center evaluates and selects suppliers based on their ability to supply products and/or services in accordance with the Center's requirements. Criteria for selection, evaluation and re-evaluation are established. Records of the results of evaluations and any necessary actions arising from the evaluation are maintained. (see [para 4.2.4](#))

7.4.1.4. The Center:

7.4.1.4.1. Maintains a register of its suppliers that includes approval status (approved, conditional, disapproved) and the scope of the approval.

7.4.1.4.2. Periodically reviews supplier performance; records of these reviews are used as a basis for establishing the level of controls to be implemented.

7.4.1.4.3. Defines the necessary actions to take when dealing with suppliers that do not meet requirements.

7.4.1.4.4. Ensures where required, both the organization and all suppliers use customer-approved special process sources.

7.4.1.4.5. Has determined the process, responsibilities, and authorities for the approval status decision, changes of approval status and conditions for a controlled use of suppliers depending on the supplier's approval status.

7.4.1.4.6. Has determined, and manages the risk when selecting and using suppliers.

7.4.2. Purchasing Information:

7.4.2.1. Purchasing information describes the product and/or service to be purchased, including where appropriate:

7.4.2.1.1. Requirements for approval of product and/or service, procedures, processes and equipment.

7.4.2.1.2. Requirements for qualification of personnel.

7.4.2.1.3. Quality management system requirements.

7.4.2.1.4. The identification and revision status of specifications, drawings, process requirements, inspection/verification instructions and other relevant

technical data.

7.4.2.1.5. Requirements for design, test, inspection/verification (including production process verifications, use of statistical techniques for product and/or service acceptance) and related instructions for acceptance by the organization.

7.4.2.1.6. Requirements for test specimens (e.g., production method, number, storage conditions) for design approval, inspection, investigation or auditing.

7.4.2.1.7. Requirements regarding the need for the supplier to:

7.4.2.1.7.1. Notify the Center of nonconforming product and/or service.

7.4.2.1.7.2. Obtain Center approval of nonconforming product and/or service disposition.

7.4.2.1.8. Notify the Center of changes in product and/or service and/or process changes of suppliers, changes of manufacturing facility location and, where required, obtain organization approval.

7.4.2.1.9. Flow down to the supply chain the applicable requirements, including customer requirements.

7.4.2.1.10. Records retention requirements.

7.4.2.1.11. Right of access by the Center, their customer and regulatory authorities to the applicable areas of all facilities, at any level of the supply chain, involved in the order and to all applicable records.

7.4.2.2. The Center ensures the adequacy of specified purchase requirements prior to their communication to the supplier.

7.4.3. Verification of Purchased Product and/or Services:

7.4.3.1. The Center establishes and implements the inspection or other activities necessary for ensuring that purchased product and/or service meets specified purchase requirements.

7.4.3.2. Verification activities can include:

7.4.3.2.1. Obtaining objective evidence of the conformity of the product and/or service from the suppliers (e.g., accompanying documentation, certificate of conformity, test reports, statistical records, process control records).

7.4.3.2.2. Inspection and audit at supplier's premises.

7.4.3.2.3. Review of the required documentation.

7.4.3.2.4. Inspection of products and/or service upon receipt or provision.

7.4.3.2.5. Delegation of verification to the supplier, or supplier certification.

7.4.3.3. Where purchased product and/or service is released for production use pending completion of all required verification activities, it is identified and recorded to allow recall and replacement if it is subsequently found that it does not meet requirements.

7.4.3.4. Where delegation of verification activities has been given to the supplier, requirements for delegation are defined. Delegations are maintained on file.

7.4.3.5. Where the Center utilizes test reports to verify purchased product, the data in those reports is acceptable per applicable specifications. The Center periodically validates test reports for raw material.

7.4.3.6. Where the Center delegates verification activities to the supplier, the requirements for delegation are defined and a register of delegations maintained.

7.4.3.7. Where the Center or its customer intends to perform verification at the supplier's premises, the Center states the intended verification arrangements and method of product and/or service release in the purchasing information.

7.4.3.8. Customer verification activities performed at any level of the supply chain is not used by the Center as evidence of effective control of quality and does not absolve the organization of its responsibility to provide acceptable product and/or service and comply with all requirements.

7.5. Production and Service Provision:

7.5.1. Control of Production and Service Provision:

7.5.1.1. The Center plans and carries out production and service provision under controlled conditions. Controlled conditions include, as applicable.

7.5.1.1.1. The availability of information that describes the characteristics of the product and/or service. This can include drawings, parts lists, materials, and process specifications.

7.5.1.1.2. The availability of work instructions, as necessary. This can include process flow charts, production documents such as manufacturing plans, travelers, routers, work orders, process cards, work control documents, and inspection documents.

7.5.1.1.3. The use of suitable equipment. This includes product and/or service specific/generic tools, jigs, fixtures, molds, and software programs.

7.5.1.1.4. The availability and use of monitoring and measuring equipment.

7.5.1.1.5. The implementation of monitoring and measurement.

7.5.1.1.6. The implementation of product and/or service release, delivery and post-delivery activities.

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

7.5.1.1.8. Evidence that all manufacturing and inspection operations have been completed as planned, or as otherwise documented and authorized.

7.5.1.1.9. Provision for the prevention, detection and removal of foreign objects.

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

7.5.1.1.11. Criteria for workmanship specified in the clearest practical manner (e.g., written standards, representative samples or illustrations).

7.5.1.2. Planning considers, as appropriate:

7.5.1.2.1. The establishment, implementation and maintenance of appropriate processes to manage critical items including process controls where key characteristics have been identified.

7.5.1.2.2. The identification of in-process inspection/verification points when adequate verification of conformance cannot be performed at a later stage of realization.

7.5.1.2.3. The design, manufacture and use of tooling so that variable measurements can be obtained particularly for key characteristics.

7.5.1.2.4. Special processes. (see [para 7.5.2](#))

7.5.1.3. The Center uses a representative item from the first production run or assembly to verify (First Article Testing) that the production processes, production documentation, and tooling are capable of producing parts and assemblies that meet requirements.

7.5.1.3.1. 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.

7.5.1.4. Control of Production Process Changes: Personnel authorized to approve changes to production processes are identified.

7.5.1.4.1. The Center identifies and obtains acceptance of changes that require customer and/or regulatory authority approval in accordance with contract or regulatory requirements.

7.5.1.4.2. The Center controls and documents 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 and/or service conformity.

7.5.1.5. Control of production equipment, tools and software programs: Production equipment, tools and software programs are validated prior to production release and maintained. Storage requirements, including periodic preservation/condition checks, are defined for production equipment or tooling in storage.

7.5.1.6. Post delivery support includes:

7.5.1.6.1. Collection and analysis of in-service data.

7.5.1.6.2. Actions to be taken, including investigation and reporting when problems are detected after delivery.

7.5.1.6.3. Control and updating of technical documentation.

7.5.1.6.4. Approval, control, and use of repair schemes.

7.5.1.6.5. Controls required for off-site work (e.g., the Center's work undertaken

at the customer's facilities).

7.5.2. Validation of Processes for Production and Service Provision: The Center validates 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 and/or service is in use or the service has been delivered.

7.5.2.1. Validation demonstrates the ability of these processes to achieve planned results. The Center establishes arrangements for these processes including, as applicable:

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

7.5.2.1.2. Approval of equipment and qualification of personnel.

7.5.2.1.3. Use of specific methods and procedures.

7.5.2.1.4. Requirements for records. (see [para 4.2.4](#))

7.5.2.1.5. Revalidation.

7.5.3. Identification and Traceability:

7.5.3.1. Where appropriate, the Center identifies products and/or services by suitable means throughout product and/or service realization.

7.5.3.2. The Center maintains the identification of the configuration of the product and/or service in order to identify any differences between the actual configuration and the agreed configuration.

7.5.3.3. The Center identifies the product and/or service status with respect to monitoring and measurement requirements throughout the realization process.

7.5.3.4. When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), the Center establishes appropriate controls for the media. Where traceability is a requirement, the Center controls the unique identification of the product and/or service. (see [para 4.2.4](#))

7.5.3.5. Traceability requirements include where applicable:

7.5.3.5.1. Identification to be maintained throughout the product and/or service life.

7.5.3.5.2. 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).

7.5.3.5.3. For an assembly, the identity of its components and those of the next higher assembly to be traced.

7.5.3.5.4. For a product and/or service, a sequential record of its production (manufacture, assembly, inspection) verification to be retrievable.

7.5.4. Customer Property: The Center exercises care with customer property while it is under the organization's control or being used by the organization. The Center identifies, verifies, protects, and safeguards customer property provided for use or incorporation

into the product and/or service. If any customer property is lost, damaged or otherwise found to be unsuitable for use, the Center reports this to the customer and maintains records as necessary. (see [para 4.2.4](#))

7.5.5. Preservation of Product:

7.5.5.1. The Center preserves product during internal processing and delivery to the intended destination in order to maintain product conformity to requirements. This preservation includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

7.5.5.2. Preservation of product also includes, where applicable in accordance with product specifications and applicable statutory and regulatory requirements, provisions for:

7.5.5.2.1. Cleaning.

7.5.5.2.2. Prevention, detection and removal of foreign objects.

7.5.5.2.3. Special handling for sensitive products.

7.5.5.2.4. Marking and labeling including safety warnings.

7.5.5.2.5. Shelf life control and stock rotation.

7.5.5.2.6. Special handling for hazardous materials.

7.6. Control of Monitoring and Measuring Equipment:

7.6.1. The Center determines the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of product and/or service to determined requirements. (see [para 7.2.1](#))

7.6.2. The Center maintains a register of these monitoring and measuring equipment, and defines the process employed for their calibration/verification including details of equipment type, unique identification, location, frequency of checks, check method and acceptance criteria. This includes but is not limited to:

7.6.2.1. Test Hardware.

7.6.2.2. Test Software.

7.6.2.3. Automated Test Equipment.

7.6.2.4. Plotters used to produce inspection data.

7.6.2.5. Personally owned equipment used to determine/provide evidence of product and/or service conformity.

7.6.2.6. Customer supplied equipment used to determine/provide evidence of product and/or service conformity.

7.6.3. The Center establishes processes to ensure that monitoring can be carried out in a manner that is consistent with the monitoring and measurement requirements.

7.6.4. The Center ensures that environmental conditions are suitable for the calibrations, inspections, measurement and testing being carried out.

7.6.5. Where necessary to ensure valid results, measuring equipment is:

7.6.5.1. Calibrated, verified or both at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification is recorded.

7.6.5.2. Adjusted or re-adjusted as necessary.

7.6.5.3. Have identification in order to determine its calibration status.

7.6.5.4. Safeguarded from adjustments that would invalidate the measurement result.

7.6.5.5. Protected from damage and deterioration during handling, maintenance and storage.

7.6.5.6. Recalled to a defined method when requiring calibration.

7.6.6. In addition, the Center assesses and records the validity of the previous measuring results when the equipment is found not to conform to requirements. The Center takes appropriate action on the equipment and any product and/or service affected. Records of the results of calibration and verification are maintained. (see [para 4.2.4](#))

7.6.7. When used in the monitoring and measurement of specified requirements, the ability of computer software to satisfy the intended application is confirmed. This is undertaken prior to initial use and reconfirmed as necessary.

8. Measurements, Analysis and Improvement:

8.1. General:

8.1.1. The Center plans and implements the monitoring, measurement, analysis and improvement processes needed:

8.1.1.1. To demonstrate conformity to product and/or service requirements.

8.1.1.2. To ensure conformity of the quality management system.

8.1.1.3. To continually improve the effectiveness of the quality management system.

8.1.2. This includes the determination of applicable methods, including statistical techniques and the extent of their use. Statistical techniques utilized can include:

8.1.2.1. Design verification (e.g. reliability, maintainability, safety).

8.1.2.2. Process Control:

8.1.2.2.1. Selection and inspection of Key Characteristics.

8.1.2.2.2. Process Capability measurements C_{pk} .

8.1.2.2.3. Statistical Process Control (SPC).

8.1.2.2.4. Design of Experiments (DOE).

8.1.2.3. Inspection.

8.1.2.4. Failure Mode Effect and Criticality Analysis (FMECA).

8.2. Monitoring and Measurement:

8.2.1. Customer Satisfaction: As one of the measurements of the performance of the quality management system, the Center monitors information relating to customer perception as to whether the Center has met customer requirements. The methods for obtaining and using this information have been determined.

8.2.1.1. Information to be monitored for the evaluation of customer satisfaction includes, but is not limited to:

8.2.1.1.1. Product and/or service conformity.

8.2.1.1.2. On time delivery performance.

8.2.1.1.3. Customer complaints.

8.2.1.1.4. Corrective Action Requests (CAR).

8.2.1.2. The Center implements plans for customer satisfaction improvement that addresses the evaluations and assesses effectiveness of the results.

8.2.1.3. To monitor customer perception the Center may utilize, as applicable, customer satisfaction surveys, customer data on delivered product and/or service quality, user opinion surveys, lost business analysis, complaints, warranty claims, and dealer reports.

8.2.2. Internal Audit:

8.2.2.1. The Center conducts internal audits at planned intervals to determine whether the quality management system:

8.2.2.1.1. Conforms to the planned arrangements (see [para 7.1](#)), to the requirements of AS9100 Revision C and to the quality management system requirements established by the Center. Planned arrangements included customer contractual requirements.

8.2.2.1.2. Is effectively implemented and maintained.

8.2.2.2. An audit program has been planned, taking into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods have been defined. Selection of auditors and conduct of audits ensure objectivity and impartiality of the audit process. Auditors do not audit their own work.

8.2.2.3. The audit program has been documented and defines the responsibilities and requirements for planning and conducting audits, establishing records, and reporting results (see [para 4.2.4](#)).

8.2.2.4. The management responsible for the area being audited ensures that necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities and their causes. Follow-up activities include the verification of the actions taken and the reporting of verification results. (see [para 8.5.2](#))

8.2.2.5. Internal audits also meet contract and/or regulatory requirements.

8.2.2.6. Records of audits and the results are maintained.

8.2.3. Monitoring and Measurement of Processes:

8.2.3.1. The Center applies suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action are taken, as appropriate, to ensure conformity of the product and/or service.

8.2.3.2. In the event of process nonconformity, the Center:

8.2.3.2.1. Takes appropriate action to correct the nonconforming process.

8.2.3.2.2. Evaluates whether the process nonconformity has resulted in product and/or service nonconformity.

8.2.3.2.3. Determines if the nonconformity is limited to a specific case or whether other processes or products and/or services are affected.

8.2.3.2.4. Identifies and controls the nonconforming product and/or service in accordance with ([para 8.3](#)).

8.2.4. Monitoring and Measurement of Products and/or Services:

8.2.4.1. The Center monitors and measures the characteristics of the product and/or service to verify that product and/or service requirements have been met.

8.2.4.2. This is carried out at appropriate stages of the product and/or service realization process in accordance with planned arrangements. Evidence of conformity with acceptance criteria are maintained (see [para 7.1](#)).

8.2.4.3. When critical items including key characteristics have been identified by the Center, they are monitored and controlled in accordance with established processes.

8.2.4.4. When the Center uses sampling inspection as a means of product and/or service acceptance, the plan is justified on the basis of recognized statistical principles, and appropriate for use.

8.2.4.5. Where product and/or service is released for production pending completion of all required measurement and monitoring activities it is identified and recorded to allow recall and replacement if it is subsequently found to be nonconforming to requirements.

8.2.4.6. Records indicate the person(s) authorizing release of product and/or service for delivery to the customer.

8.2.4.7. The release of product and delivery of service to the customer do not proceed until all the planned arrangements (see [para 7.1](#)) have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.2.5. Measurement requirements for product and/or service acceptance are documented and include:

8.2.5.1. Criteria for acceptance and/or rejection.

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

8.2.5.3. Record of the measurement results and whether acceptable or rejected.

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

8.3. Control of Nonconforming Product and/or Services:

8.3.1. The Center ensures that product and/or services which do not conform to product and/or service requirements are identified and controlled to prevent unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming products and/or services are defined and documented with responsibilities and authorities for the review and disposition of the nonconforming product and/or service. The process for approving personnel making these decisions is documented.

8.3.2. The Center handles nonconforming product and/or services in one or more of the following ways:

8.3.2.1. By taking action to eliminate the detected nonconformity.

8.3.2.2. By authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer.

8.3.2.3. By taking action to preclude its original intended use or application.

8.3.2.4. The Center takes appropriate action to the effects, or potential effects, of nonconformity when nonconforming product and/or service is detected after delivery or use has started. Timely reporting of delivered nonconforming product and/or service to the appropriate parties as necessary. This can include:

8.3.2.4.1. Suppliers.

8.3.2.4.2. Internal organizations within the Center.

8.3.2.4.3. Customers.

8.3.2.4.4. Distributors.

8.3.2.4.5. Regulatory authorities.

8.3.2.5. Actions are taken to contain the effect on nonconformities on other processes as necessary.

8.3.3. Product dispositioned for scrap is conspicuously and permanently marked, or positively controlled, until physically rendered unusable.

8.3.4. Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained, are maintained. (see [para 4.2.4](#))

8.3.5. When nonconforming product and/or service is corrected it is subject to re-verification to demonstrate conformity to the requirements.

8.4. Analysis of Data:

8.4.1. The Center determines, collects and analyzes appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where

continual improvement of the effectiveness of the quality management system can be made. This includes data generated as a result of monitoring and measurement and from other relevant sources.

8.4.2. The analysis of data provides information relating to:

8.4.2.1. Customer satisfaction. (see [para 8.2.1](#))

8.4.2.2. Conformity to product and/or service requirements. (see [para 7.2.1](#))

8.4.2.3. Characteristics and trends of processes and product and/or services including opportunities for preventive action.

8.4.2.4. Suppliers.

8.4.3. The Center monitors the implementation of improvement activities and evaluates effectiveness of the results. Continual improvement opportunities results from, but are not limited to:

8.4.3.1. Lessons learned.

8.4.3.2. Problem resolutions.

8.4.3.3. Benchmarking.

8.4.3.4. Other data as appropriate.

8.5. Improvement:

8.5.1. Continual Improvement: The Center continually improves the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

8.5.2. Corrective Action:

8.5.2.1. The Center takes action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions are appropriate to the effects of the nonconformities encountered.

8.5.2.2. Documented procedures have been established to define requirements for:

8.5.2.2.1. Reviewing nonconformities (including customer complaints).

8.5.2.2.2. Determining the causes of nonconformities.

8.5.2.2.3. Evaluating the need for action to ensure nonconformities do not recur.

8.5.2.2.4. Determining and implementing action needed.

8.5.2.2.5. Records of the results of action taken. (see [para 4.2.4](#))

8.5.2.2.6. Reviewing the effectiveness of the corrective action taken .

8.5.2.2.7. Flow down of the corrective action requirements to a supplier, when it is determined that the supplier is responsible for the nonconformity.

8.5.2.2.8. Specific actions where timely and/or effective corrective actions are not achieved.

8.5.2.2.9. Determining if additional nonconforming products and/or services exist

based on the cause(s) and taking further action(s) as required.

8.5.3. Preventive Action: The Center determines the actions needed to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions appropriate for the correction (or elimination) of the potential problems include:

8.5.3.1. Determining potential nonconformities and their causes.

8.5.3.2. Evaluating the need for action to prevent occurrence of nonconformities.

8.5.3.3. Determining and implementing action needed.

8.5.3.4. Records of results of action taken. (see [para 4.2.4](#))

8.5.3.5. Reviewing the effectiveness of the preventive action taken.

8.5.4. Preventive action opportunities include but are not limited to:

8.5.4.1. Risk Management (RM).

8.5.4.2. Error proofing.

8.5.4.3. Failure Mode and Effect Analysis (FMEA).

8.5.4.4. Information from external sources.

MITCHEL H. BUTIKOFER, Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

Acronyms and Abbreviations

AF—Air Force

AFI—Air Force Instruction

AFMA—Air Force Manual

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFMETCAL—Air Force Metrology and Calibration

AFOSH—Air Force Occupational Safety and Health

AFPD—Air Force Policy Directive

AFSO21—Air Force Smart Operations for the 21st Century

ALC—Air Logistics Center

AMRD—Aircraft and Missiles Requirements Database

ANSI—American National Standard Institute

CC—Center Commander

CMP—IMT —Content Management Program Information Management Tool

DMAP—Depot Maintenance Activation Planning

DO—Dropped Object

DoD—Department of Defense

DR—Deficiency Report

DREP—Depot Repair Enhancement Process

FAR—Federal Acquisition Regulation

FOD—Foreign Object Damage

ISO—International Organization for Standardization

MAR—Monthly Acquisition Report

NC—Numerical Control

OEM—Original Equipment Manufacturer

OI—Operating Instruction

OPR— —Office of Primary Responsibility

OSS&E—Operational Safety, Suitability and Effectiveness

PAC—Production Acceptance Certification

PDM—Programmed Depot Maintenance

POM—Program Objective Memorandum

PR—Purchase Request

QA—Quality Assurance

QMS—Quality Management System

QPP—Quality Program Plan

RAFBI—Robins Air Force Base Instruction

RDS—Records Distribution Schedule

SAE—Engineering Society for Advancing Mobility, Land, Sea and Space

SPO—System Program Office

WCD—Work Control Documents

WR—ALC —Warner Robins Air Logistics Center

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 results of the process.

Calibration—A comparison between items of equipment, one of which is a measurement standard of known accuracy, to detect, correlate, adjust, and report any variation in the accuracy of the other items.

(The) Center—Refers to the organization per SAE AS9100 Revision C. The Center, and its scope of registration, is limited to the areas illustrated in Attachment 2.

Center Quality Management Representative—A member of management appointed by the commander and chartered with the responsibility of ensuring that the quality system is established, implemented, and maintained and assuring the timely reporting on the system through a center-level Management Review.

Continual Improvement—A continuous search for methods to improve the QMS. Also, it is procedures in use to prevent nonconforming product occurrence.

Controlled Copy—A printed copy of any document that has been issued by the publications office and having the most recent revision.

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

Document—Any paper or electronic media used to contain or store information such as, but not limited to: policies, procedures, drawings technical orders, process orders, work control documents, work instructions, etc. as evidence of a documented quality system.

Inspection—An activity such as measuring, examining, testing, or gauging one or more characteristics of an entity and comparing the results with specified requirements in order to establish whether conformity is achieved for each measurable characteristic.

Instructions—Provide essential procedural guidance to implement Air Force policy in the field. Instructions direct action, ensure compliance, or provide detailed procedures for standard actions across the Air Force.

ISO Standards—The International Organization for Standardization's documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics, to ensure that materials, products, processes, and services are fit for their purpose.

Key Characteristics—the features of a material, process, or part whose variation has a significant influence on product fit, performance, service life, or manufacturability. In addition, secondary oversight inspections may represent key characteristics.

Management Review—A senior management (wing and command level) meeting intended to review the overall effectiveness of the quality management system with regard to the stated quality objectives.

Office of Primary Responsibility (OPR)—An organization assigned as the central point of contact for a program, project, directive, form, etc.

Operating Instruction (OI)—Assigns responsibilities, directs actions, and proscribes procedures within a Wing, Group, or Squadron. If a policy affects two or more of the entities listed, it must be published as a base-level instruction.

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

Process—A set of inter-related resources and activities which transform inputs into outputs.

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

Quality Management System—The QMS is a web of interconnected processes. Each process uses resources to turn inputs into outputs. 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.

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

Quality System—Organizational structure, procedures, processes, and resources needed to implement quality management.

Record—Records are 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 publication 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). (Reference AFI 33-322, para 2). Records provide documented evidence of conformance to specified requirements and the effective operation of the quality management system.

Reference Only—Usage is generally for unofficial information only. Policy clarification, implementation, administration, or otherwise, should be accomplished with the latest on-line revision only.

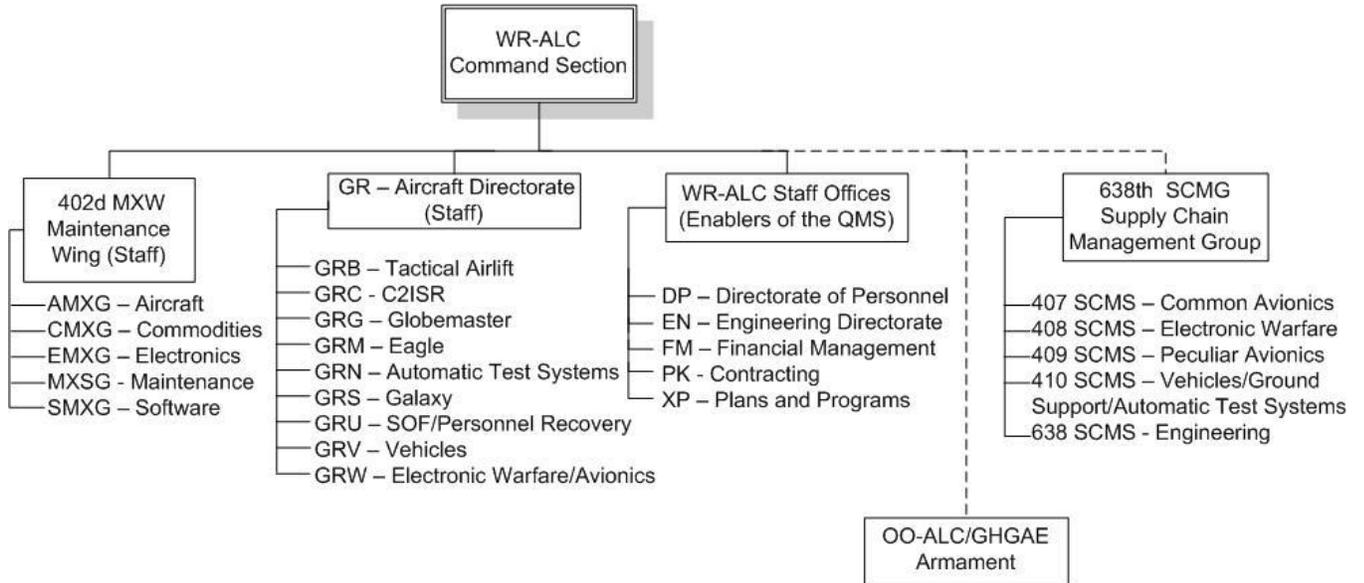
Registrar—A company that conducts quality system assessments to ISO 9000 requirements.

Verification—Confirmation; proof by evidence; check for accuracy.

Attachment 2

ORGANIZATIONAL CHART

Figure A2.1. Organizational Chart



Warner Robins Air Logistics Center (WR-ALC)

The "Organization" also Referred to as the "Center"

Attachment 3

CROSS REFERENCE TO GOVERNING PUBLICATIONS

Figure A3.1. Cross Reference to Governing Publications

Corresponding Paragraph	Governing Publications
4.1 General Requirements	<p>AFPD 63-1/AFPD 20-1, <i>Acquisition and Sustainment Life Cycle Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-102, <i>Depot Maintenance Management</i></p> <p>AFI 63-501, <i>Air Force Acquisition Quality Program</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>ROBINSAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Management System</i></p> <p>402 MXW <i>Quality Management Manual</i></p>
4.2 Documentation Requirements	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>402 MXW <i>Quality Management Manual</i></p>
4.2.2 Quality Manual	<p>ROBINSAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Management System</i></p> <p>402 MXW <i>Quality Management Manual</i></p>
4.2.3 Control of Documents	<p>AFI 21-101 AFMC SUP1, Chapter 19, <i>Aircraft Equipment Maintenance Management</i></p> <p>AFI 33-360, <i>Publications and Forms Management</i></p> <p>AFMCI 21-401, <i>Engineering Data Storage Distribution, and Control</i></p> <p>AFMCMAN 21-1, <i>Air Force Materiel Command Technical Order Procedures</i></p> <p>AFMCMAN 21-2, <i>Engineering Data Storage Distribution, and Control</i></p> <p>TO 00-5-1, <i>Air Force (AF) Technical Order System</i></p> <p>ROBINSAFBI 21-110, <i>Process Orders</i></p>

	<i>MXWOI 63-101, Maintenance, Distribution, and Control of Production Engineering Drawings</i>
4.2.4 Control of Records	<i>AFI 33-322, Records Management Program AFI 33-322 RAFB Sup 1, Records Management Program AFI 33-364, Records Disposition-Procedures and Responsibilities AFMAN 33-363, Management of Records TO 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures TO 00-20-2, Maintenance Data Documentation 402 MXW Quality Management Manual</i>
5.1 Management Commitment 5.2 Customer Focus 5.3 Quality Policy 5.4.1 Quality Objectives	<i>AFI 21-101 AFMC SUP 1, Aircraft and Equipment Maintenance Management AFMCI 63-501, AFMC Quality Assurance 402 MXW Quality Management Manual Center Operations Review, Executive Council, etc.</i>
5.4.2 Quality Management System Planning	<i>AFMCI 63-501, Air Force Quality Assurance</i>
5.5.1 Responsibility and Authority 5.5.2 Management Representative 5.5.3 Internal Communication	<i>AFI 21-101 AFMC SUP 1, Aircraft and Equipment Maintenance Management AFMCI 63-501, AFMC Quality Assurance 402 MXW Quality Management Manual AFI 90-821_ROBINSAFBSUP_I, Hazard Communication</i>
6.1 Provision of Resources	<i>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 37, Service Contracting AFI 21-101 AFMC SUP 1, Aircraft and Equipment Maintenance Management AFI 21-110, Engineering and Technical Services Management and Control AFMCI 63-501, AFMC Quality Assurance AFMAN 36-203_ROBINSAFBSUP_I, Staffing Civilian Positions</i>
6. 2.1 General	<i>AFI 36-502, Managing Civilian Personnel Resources</i>

	ROBNSAFBI 36-52, <i>Policy for the Management of RAFB Civilian Employment Levels</i>
6.2.2 Competence, Training and Awareness	AFPD 36-4, <i>Air Force Civilian Training, Education, and Development</i>
6.2.2 Competence, Training and Awareness (cont)	AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 36-201, <i>Education and Training</i> AFI 36-401, <i>Employee Training and Development</i> AFI 36-2232, <i>Maintenance Training</i> AFI 36-2232 AFMC SUP ROBNSAFBI SUP, <i>Maintenance Training</i> ROBNSAFBI 21-120, <i>Qualification of Nondestructive Inspection Procedures</i>
6.3 Infrastructure	AFH 32-1084, <i>Facility Requirements</i> AFI 21-109, <i>Air Force Depot Maintenance Activity Group Facilities and Equipment</i> AFI 32-1024, <i>Standard Facility Requirements</i> AFI 32-1032, <i>Planning and Programming Appropriated Funded Maintenance, Repair, and Construction Projects</i> AFMCI 21-127, <i>Depot Maintenance Plant Management</i> ROBNSAFBI 21-127, <i>Depot Maintenance Plant Management</i> ROBNSAFBI 31-101, <i>Installation Security</i> ROBNSAFBI 32-9008, <i>Facility Managers Guide</i>
6.4 Work Environment	AFOSHSTD 48-137, <i>Respiratory Protection Program</i> AFOSHSTD 91-25, <i>Confined Spaces</i> AFOSHSTD 91-66, <i>General Industrial Operations</i> AFOSHSTD 91-100, <i>Aircraft Flightline Ground Operations and Activities</i> AFOSHSTD 91-501, <i>Air Force Consolidated Occupational Safety Standard</i> AFI 10-2501_ROBNSAFBSUP, <i>Air Force Emergency Management (EM) Program Planning and Operations</i> AFI 32-7002, <i>Environmental Information Management System</i> AFI 91-301, <i>Air Force Occupational and Environmental, Safety, Fire Protection and Health (AFOSH) Program</i> TO 00-20-14, <i>Air Force Metrology and Calibration Program</i> ROBNSAFBI 10-3, <i>Release of Personnel Due to Hazardous</i>

	<p><i>Weather or Emergency Conditions</i></p> <p>ROBINSAFBI 21-103, <i>Lifting Devices, Restraints and Personnel Safety Equipment</i></p> <p>ROBINSAFBI 32-2001, <i>Fire Protection Operations</i></p> <p>ROBINSAFBI 48-103, <i>Occupational Vision Program</i></p> <p>ROBINSAFBI 48-123, <i>Occupational Medicine Services</i></p> <p>ROBINSAFBI 91-202, <i>Standardized WR-ALC Mishap Prevention Program</i></p> <p>ROBINSAFBI 91-521, <i>Control of Hazardous Energy (Lockout Tagout)</i></p>
7.1 Planning of Product Realization	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-110, <i>Engineering and Technical Services Management and Control</i></p> <p>AFI 63-101, <i>Acquisitions and Sustainment Life Cycle Management</i></p> <p>AFI63-101_AFMCSUP, <i>Acquisitions and Sustainment Life Cycle Management</i></p> <p>AFMCI 21-101, <i>Depot Maintenance Activation Planning (DMAP)</i></p> <p>AFMCI 21-129, <i>Depot Maintenance Management, Depot Repair Enhancement Process</i></p> <p>AFMCI 21-133, <i>Depot Maintenance Management for Aircraft Repair</i></p> <p>AFMCI 21-156, <i>Operational Workloading, Planning and Scheduling Control</i></p> <p>AFMCI23-301, <i>Weapon System Supply Chain Management</i></p> <p>AFMCI 63-1201, <i>Implementing Operational Safety Suitability and Effectiveness (OSS&E) and Life Cycle Systems Engineering (LCSE)</i></p> <p>AFMCI 99-103, <i>Test Management</i></p> <p>T.O. 00-20-1, <i>Aerospace Equipment Maintenance General Policies</i></p> <p>T.O. 33B-1-1, <i>Nondestructive Inspection Methods</i></p> <p>ROBINSAFBI 21-110, <i>Process Orders</i></p> <p>ROBINSAFBI 21-111, <i>Depot Maintenance Activation Planning (DMAP)</i></p> <p>ROBINSAFBMAN 99-103, <i>WR-ALC Test Manual (FOUO)</i></p>
7.1.1 Project Management	<p>AFOSHSTD 91-501, <i>Air Force Consolidated Occupational Safety Standard</i></p>

	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>ROBINSAFBI 63-101, <i>Multi Functional Independent Review Team</i></p> <p>AFI 91-301, <i>Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program</i></p> <p>AFMCMAN 21-1, <i>Air Force Materiel Command Technical Order System</i></p> <p>AFMCI 21-127, <i>Depot Maintenance Plant Management</i></p> <p>TO 00-5-1, <i>AF Technical Order System</i></p> <p>TO 00-20-14, <i>Air Force Metrology and Calibration Program</i></p> <p>ROBINSAFBI 21-127, <i>Depot Maintenance Plant Management</i></p>
7.1.2 Risk Management	<p>MIL-STD-882D, <i>Standard Practice for System Safety: ESOH Risk Management Methodology for Systems Engineering</i></p> <p>AFPD 90-9, <i>Operational Risk Management</i></p> <p>AFI 90-901, <i>Operational Risk Management</i></p> <p>AFPAM 90-902, <i>Operational Risk Management (ORM) Guidelines and Tools</i></p> <p>AFMCPAM 63-101, <i>Life Cycle Risk Management</i></p> <p>AFMCPAM 63-128, <i>Guide to Acquisition and Sustainment Life Cycle Management</i></p> <p>AFMCI 90-902, <i>Operational Risk Management</i></p> <p>ROBINSAFBI 90-901, <i>Operational Risk Management (ORM) Program</i></p> <p>MXWOI 90-901, <i>Operational Risk Management (ORM) Program</i></p>
7.1.3 Configuration Management	<p>AFPD 63-11, <i>Modification System</i></p> <p>AFI 63-131, <i>Modification Program Management</i></p> <p>AFMCI 63-1201, <i>Implementing Operational Safety Suitability and Effectiveness (OSS&E) and Life Cycle Systems Engineering</i></p> <p>MIL HDBK-61A, <i>Configuration Management Handbook</i></p> <p>ROBINSAFBI 63-104, <i>Configuration Management</i></p>
7.1.4 Control of Work Transfers	<p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p>

7.2.1 Determination of Requirements Related to the Product	<p>AFPD 63-12, <i>Assurance of Operational Safety, Suitability, & Effectiveness</i></p> <p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 63-101, <i>Operations of Capabilities Based Acquisition System</i></p> <p>AFI 63-107, <i>Integrated Product Support Planning Assessment</i></p> <p>AFI 10-601_AFMCSUP_I, <i>Operational Capability Requirements Development</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p>
7.2.2 Review of Requirements Related to the Product	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>402 MXW 63-501, <i>Quality Management Manual</i></p>
7.2.3 Customer Communication	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>402 MXW 63-501, <i>Quality Management Manual</i></p>
7.3 Design and Development	<p>Exclusion identified in the 402 MXW 63-501, <i>Quality Management Manual</i></p>
7.4.1 Purchasing Process	<p>DFARS, <i>Defense Federal Acquisition Regulation Supplement</i></p> <p>AFFARS, <i>Air Force Federal Acquisition Regulation Supplement</i></p> <p>AFMCFARS, <i>Air Force Materiel Command Federal Acquisition Regulation Supplement</i></p> <p>FAR, <i>Federal Acquisition Regulation</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 7, <i>Acquisition Planning</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 9, <i>Contractor Qualifications</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 13, <i>Simplified Acquisition Procedures</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 34, <i>Major System Acquisition</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 38, <i>Federal Supply Schedule Contracting</i></p>

	<p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 39, <i>Acquisition of Information Technology</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 42, <i>Contract Administration and Audit Services</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 1, CHAPTER 1, PART 46, <i>Quality Assurance</i></p> <p>CFR, TITLE 48 (FAR), VOLUME 2, CHAPTER 1, PART 52, <i>Solicitation Provisions and Contract Clauses</i></p> <p>AFI 64-117, <i>Air Force Government-Wide Purchase Card (GPC) Program</i></p> <p>AFMAN 23-110, <i>USAF Supply Manual</i></p> <p>AFMCI 23-102_ROBNSAFBSUP_I, <i>Purchase Request/Military Interdepartmental Purchase Request (MIPR) Operations</i></p> <p>ROBNSAFBI 23-101, <i>Diminishing Manufacturing Sources and Material Shortages</i></p>
<p>7.4.2 Purchasing Information</p>	<p>DFARS, <i>Defense Federal Acquisition Regulation Supplement</i></p> <p>FAR, <i>Federal Acquisition Regulation</i></p> <p>AFFARS, <i>Air Force Federal Acquisition Regulation Supplement</i></p> <p>AFMCFARS, <i>Air Force Materiel Command Federal Acquisition Regulation Supplement</i></p> <p>AFI 63-301, <i>Air Force Competition and Commercial Advocacy Program</i></p>
<p>7.4.3 Verification of Purchased Product</p>	<p>AFI 63-301, <i>Air Force Competition and Commercial Advocacy Program</i></p> <p>AFMAN 23-110, <i>USAF Supply Manual</i></p>

<p>7.5.1 Control of Production and Service Provision</p>	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-402, <i>Engineering Drawing System</i> AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-101 AFMC SUP 402 MXW SUP, <i>Aircraft and Equipment Maintenance Management</i> AFMCMAN 21-1, <i>Air Force Materiel Command Technical Order System Procedures</i> AFMCI 21-120, <i>Organic Depot Field Teams</i> TO 00-5-1, <i>Air Force Technical Order System</i> TO 00-20-1, <i>Aerospace Equipment Maintenance General Policies and Procedures</i> TO 00-20-14, <i>AF Metrology and Calibration Program</i> TO 00-25-107, <i>Maintenance Assistance</i> TO 00-25-245, <i>Operations Instructions Testing and Inspection Procedures for Personnel Safety and Rescue Equipment</i> TO 1-1A-15, <i>General Maintenance Instructions for Support Equipment</i> TO 32-1-101, <i>Use and Care of Hand Tools and Measuring Tools</i> TO 34-1-3, <i>Inspection and Maintenance of Machinery and Shop Equipment</i> ROBINSAFBI 21-120, <i>Qualification of Nondestructive Inspection Procedures</i> AFMCI 64-110_ROBINSAFBSUP1_I, <i>First Article Management</i></p>
<p>7.5.4. Customer Property</p> <p>7.5.4. Customer Property (cont)</p>	<p>AFI 23-111, <i>Management of Government Property in Possession of the Air Force</i> AFI 91-202, <i>The United States (US) Air Force Mishap Prevention Program</i> AFI 91-204, <i>Safety Investigating and Reporting</i> AF Manual 23-220, <i>Reports of Survey for AF Property</i> AFMCI 21-130, <i>Equipment Maintenance Material Control</i> TO 00-35D-54, <i>USAF Deficiency Reporting, Investigating, and Resolution</i> ROBINSAFBI 91-202, <i>Standardized WR-ALC Mishap Prevention Programs</i></p>

7.5.5. Preservation of Product	<p>AFOSH 48-8, <i>Controlling Exposures to Hazardous Materials</i> AFOSH 91-17, <i>Interior Spray Finishing</i> AFOSH 91-46, <i>Materials Handling and Storage Equipment</i> AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AF Manual 23-110, <i>USAF Supply Manual</i> AF Manual 91-201, <i>Explosives Safety Standards</i> AFMCI 21-117, <i>Corrosion Control and Prevention Program and Marking of Aerospace Vehicles/Equipment</i> AFMCI 21-130, <i>Depot Maintenance Material Control</i> AFMCI 24-201, <i>AFMC Packaging and Materials Handling</i> TO 00-20-3, <i>Maintenance Processing of Repairable Property and Repair Cycle Asset Control System</i> TO 00-20K-1, <i>Shelf-life Material</i> TO 00-25-234, <i>General Shop Practice Requirements for the Repair, Maintenance, and Test of Electrical Equipment</i> TO 00-85A-23-1, <i>Packaging, Packing and Storage - Aluminum Alloy Sheet and Plate</i> TO 1-1-8, <i>Exterior Finishes, Insignia and Marking Applicable to USAF Aircraft</i> TO 1-1-691, <i>Cleaning and Corrosion Prevention and Control, Aerospace and Non-Aerospace Equipment</i></p>
7.6. Control of Monitoring and Measuring Devices	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-113, <i>Air Force Metrology and Calibration (AFMETCAL) Program</i> TO 00-20-14, <i>Air Force Metrology and Calibration Program</i></p>
8. Measurement Analysis, and Improvement	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> AFMCI 90-104, <i>Implementing AFSO21 Initiatives</i> 402 MXW <i>Quality Management Manual</i></p>
8.2.1. Customer Satisfaction	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> 402 MXW 63-501, <i>Quality Management Manual</i> ROBINSAFBI 63-510, <i>Deficiency Reporting, Investigating and Resolution, and Exhibit Management</i></p>
8.2.2. Internal Audit	<p>AF SEAM, <i>Air Force Systems Engineering Assessment Model - Validation Assessments</i></p>

	<p>ROBINSAFBI 90-202, <i>Self Inspection Program</i> ROBINSAFBI 90-203, <i>Engineering Staff Assistance Visits</i> ROBINSAFBMAN 63-501, <i>Compliance Audit</i> 402 MXW <i>Quality Management Manual</i></p>
8.2.3. Monitoring and Measurement of Processes	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-101, AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 21-105, <i>Depot Maintenance Workload Measurement</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> ROBINSAFBI 63-101, <i>Multi Functional Independent Review Team</i></p>
8.2.4. Monitoring and Measurement of Product	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-115, <i>Product Quality Deficiency Reporting</i> AFI 21-118, <i>Improving Aerospace Equipment Reliability and Maintainability</i> AFMCI 64-110, <i>First Article Management</i> AFMCI 99-107, <i>Test Management</i> AFI 21-101, AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> TO-00-35D-54, <i>Deficiency Reporting and Investigating System</i> ROBINSAFBI 99-103, <i>Test and Evaluation Process</i> 402 MXW <i>Quality Management Manual</i></p>
8.3. Control of Nonconforming Product	<p>AFMCI 21-130, <i>Depot Maintenance Material Control</i> AFMC Manual 21-1, <i>Air Force Materiel Command Technical Order Procedures</i> TO 00-35D-54, <i>USAF Deficiency Reporting, Investigating, and Resolution</i> TO 00-5-1, <i>Air Force (AF) Technical Order System</i> ROBINSAFBI 63-510, <i>Deficiency Reporting, Investigating and resolution and Exhibit Management</i></p>
8.4. Analysis of Data	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> AFI 21-101, AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i> AFMCI 63-501, <i>AFMC Quality Assurance</i></p>

	402 MXW <i>Quality Management Manual</i>
8.5.1. Continual Improvement	<p>AFPD 38-4, <i>The Innovative Development Through Employee Awareness (IDEA) Program</i></p> <p>AFI 38-401, <i>The Air Force Innovative Development Through Employee Awareness (IDEA) Program</i></p> <p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>AFMCI 90-104, <i>Implementing AFSO21 Initiatives</i></p> <p>ROBINSAFBI 61-101, <i>Technology Insertion Process</i></p> <p>402 MXW <i>Quality Management Manual</i></p>
8.5.2. Corrective Action	<p>AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 21-101, AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFI 90-201, <i>Inspector General Activities</i></p> <p>ROBINSAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Management System</i></p> <p>ROBINSAFBI 90-202, <i>Unit Self Inspection Program</i></p> <p>402 MXW <i>Quality Management Manual</i></p>
8.5.3. Preventive Action	<p>AFI 21-101 AFMC SUP 1, <i>Aircraft and Equipment Maintenance Management</i></p> <p>AFPAM 90-902, <i>Operational Risk Management Guidelines and Tools</i></p> <p>ROBINSAFBI 90-901, <i>Operational Risk Management</i></p> <p>402 MXW <i>Quality Management Manual</i></p>

Attachment 4**SELECTED DOCUMENTATION HIERARCHY**

A4.1. AIR FORCE POLICY DIRECTIVE 63-1 / AIR FORCE POLICY DIRECTIVE 20-1 Air Force acquisition and sustainment integrated life cycle management (ILCM) framework for Air Force systems, subsystems, end-items, services and activities.

A4.2. AFI 63-501, *Air Force Acquisition Quality Program*. This instruction implements AFPD 63-5. Personnel engaged in acquisition must follow this instruction to ensure that products delivered to the Air Force meet or exceed quality requirements. It applies to service contracts when Federal Acquisition Regulations (FAR) higher-level contract quality requirements are applicable.

A4.3. AFMCI 63-501, *AFMC Quality Assurance*. This instruction provides Quality Assurance (QA) policy and assigns QA responsibilities for all AFMC centers, units, and headquarters (HQ) functions. AFMC is committed to providing superior quality weapon systems, end-items, supplies, and services. AFMC program offices, buying offices, Air Force Research Laboratory, and all centers must maintain acquisition and/or sustainment quality assurance processes that:

A4.3.1. Align the quality management system with strategic planning and AFMC's management commitment. Provide essential quality policy and objectives for quality planning.

A4.3.2. Ensure the overall effectiveness of these efforts throughout the life-cycle of weapon system management including operational support and disposal. Document the quality management system and how it will contribute to minimizing cost, schedule, and performance risks throughout the product life cycle. All acquisition and Sustainment personnel are responsible for performing quality functions involved in their assigned duties. Ensure the quality management systems is compatible with the provisions of ISO 9001 in order to allow expansion to achieve ISO 9000 registration if required by customers or desired in the future.

A4.4. AFI 21-101_AFMCSUP_I, *Aircraft and Equipment Maintenance Management*. This instruction provides procedures and responsibilities for depot maintenance Quality Assurance (QA) programs and applies to the WR-ALC 402d MXW. The overall quality program places responsibility for product quality on the management for conformance to requirements for products and services upon each employee. It mandates that QA efforts focus on, as a minimum, the soundness of design and improvement of depot maintenance processes, conformance of products and services to technical requirements, and the prevention of product and service deficiencies.

A4.5. ROBNSAFBMAN 63-501, *Quality Management System*. This manual fulfills the requirements of AFMCI 63-501 by identifying and documenting a Quality Management System that defines the WR-ALC organizational structure, responsibilities, procedures, processes and resources for implementing quality management. The WR-ALC Quality Management System Manual contains a description of the quality system and makes reference to quality policy; the responsibilities, authorities and interrelationships of personnel who manage, perform, verify, or review work affecting quality; and basic quality system procedures. This manual aligns to the AS9100 Revision C standard. It provides an organized way of communicating how quality is

managed; defines specific roles and responsibilities and defines how the organization's quality programs are implemented. It requires supporting Directorates and individual organizations to develop and implement a Quality Assurance Plan to carry out required portions of the manual.