

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

**AIR FORCE MATERIEL COMMAND  
INSTRUCTION 21-115**



**ROBINS AIR FORCE BASE  
Supplement 1**

**28 MAY 2004**

**Maintenance**

**DEPOT MAINTENANCE QUALITY  
ASSURANCE (QA)**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**NOTICE:** This publication is available digitally on the AFDPO WWW site at:  
<http://www.e-publishing.af.mil>

---

OPR: WR-ALC/MAPQ (Rebecca Boyd)  
Supersedes RAFBMAN 21-115, 14 Jun 02;  
AFMCI 21-132\_RAFBSUP1,  
1 Oct 01

Certified by: WR-ALC/MA (Col Robert L. Geiger)  
Pages: 35  
Distribution: F

---

**AFMCI 21-115, 1 Dec 03, is supplemented as follows:**

This supplement establishes WR-ALC Directorate of Maintenance (MA) policies and procedures for the establishment of depot maintenance Quality Assurance as required by AFMCI 21-115. It implements the applicable portions of Robins Air Force Base Manual (RAFBMAN) 63-501, *Warner Robins Air Logistics Center Quality Systems Manual*, for establishing a quality system that aligns to and is comparable with the Americas Aerospace Quality Group (AAQG) “*Quality Management Systems - Aerospace - Requirements*”, AS 9100. It applies to all MA divisions performing depot maintenance or producing depot maintenance products or services.

### **SUMMARY OF REVISIONS**

This is a new document, which replaces RAFBMAN 21-115, 14 June 2002, and must be read in its entirety. It reflects changes related to the MA reorganization and refocus of the depot quality programs under the Logistics Standardization Evaluation Team (LSET) philosophy. It identifies standardized processes and procedures for quality functions within MA and incorporates parts of AFMCI 21-132, *Depot Maintenance Technical Compliance Review Procedures*, and RAFB Supplement thereto, which have been rescinded. The provisions of this publication supplement those of other applicable directives as they apply to depot maintenance production functions and cannot be used alone.

1.1. **General Information.** This supplement identifies standardized quality function responsibilities, quality evaluator training requirements, production division Quality Assurance Plan (QAP) requirements, quality assessments data collection and review and reporting requirements. It provides the necessary guidance for the MA Directorate to design and implement effective QAPs. These plans, when implemented, will enable the Director to evaluate and assess the depot maintenance production divisions.

1.2. **Local Instructions.** This supplement provides a standardized process with specific requirements for development of a QAP for each division and Quality Assurance Surveillance Plans (QASP) for each Quality Branch. The range and detail of these plans shall be based on the complexity of the work involved, the methods required for implementation and the skills and training of the personnel involved in carrying out these functions.

1.2.1. (Added) Plans. The Aircraft Division (MAB), Avionics and Instruments Division (MAI) and Commodities and Industrial Products Division (MAN) are required to have a QAP. Each Quality Branch is required to have a QASP. The QASP from the MAI and MAN quality branches may be a single plan. The MAB quality branch will develop a QASP for each weapon system (aircraft). Plans will be developed, reviewed, revised or expanded as necessary to implement requirements within 30 days from the publication date of this supplement.

1.2.2. (Added) Relation to Other Requirements. The requirements of this instruction and the division QAPs shall be satisfied, in addition to any or all other detailed requirements contained in the Statement of Work or other parts of a contract. Should any conflict arise between this instruction and an existing contract, the terms and conditions of the contract shall prevail. Consideration will be given to the requirements of this instruction prior to any new or future partnering/contracting initiatives. This publication does not alleviate or replace the applicable portions of RAFBMAN 63-501 and MAOI 63-501, *Quality Program Plan (QPP)*.

1.2.2.1. (Added) Directorate of Maintenance documented procedures, applicable publications correlated with RAFBMAN 63-501 paragraphs, and AS 9100 requirements can be found in the matrix provided in **Attachment 1**.

1.2.2.1.1. (Added) MA\_Q quality branches will update and revise the Cross Reference Matrix to include division-level instructions when that organization is involved in a contracting or partnering agreement.

1.2.2.2. (Added) The Directorate of Maintenance organizational structure for identifying the Maintenance Quality Focal Point is depicted in **Attachment 2 (Added)**.

1.2.2.3. (Added) The Directorate of Maintenance quality organization structure is depicted in **Attachment 3 (Added)**.

1.2.2.3.1. (Added) MA\_Q quality branches will include in the QAP a production division organizational structure depicting relation of the quality branch to other organizations within the division.

1.2.2.4. (Added) A documentation flow, depicting the relationship between higher-level publications, manuals and plans is provided in **Attachment 4 (Added)**.

1.3.2. AFMC Form 77, **Request for Quality Assistance (RQA)**. The purpose of this program is to provide all employees with a medium to seek solutions for a known or suspected problem on any product, process, system or procedure that may adversely impact the quality of products or services produced within MA. Procedures for use of the AFMC Form 77 are defined below. Each division QAP will include, if required, any additional responsibilities and processes to support the RQA program within the division.

1.3.2.1. (Added) Quality Assistance. The RQA process is designed to identify deficiencies in maintenance processes and to provide solutions. Each division will ensure that the AFMC Form 77 and the process by which it works are readily available to all employees. Any employee requesting quality assistance can complete an AFMC Form 77. The use of the form can be for assistance needed in developing a new process, seeking solutions for situations that could possibly cause deficiencies in products, or to improve conditions to yield a better quality product.

1.3.2.1.1. (Added) The form will not be used to resolve personal grievances, subjects covered by the Master Labor Agreement, matters under the jurisdiction of 21-series publications or items covered by other programs (component failures-use Deficiency Reporting (DR), tech data errors-use Air Force Technical Order (AFTO) Form 22, **Technical Manual (TM) Change Recommendation and Reply**, etc).

1.3.3. (Added) Quality Assistance Process. MA\_Q quality branches will identify a division representative to monitor the RQA process and act as the single POC. The representative's name will be submitted to the Quality Assurance Branch (MAPQ) for inclusion on the MAPQ quality server.

1.3.3.1. (Added) Individuals requesting quality assistance will complete an AFMC Form 77 when a suspected or known deficiency compromises the quality of a product produced by depot maintenance. The requesting individual will not fill out the form beyond the block addressing the problem/recommendation. The deficient condition must be stated in sufficient detail to aid in an investigation. The form will be forwarded to the applicable quality office responsible for assessing quality for the area, product or service. The form may be handscribed, hand delivered or e-mailed to the appropriate division quality office.

1.3.3.2. (Added) MA\_Q quality branches will input RQA data into the Quality Information Management Standard System (QIMSS) database. QIMSS assigns an RQA control number. A suspense date of not more than 25 workdays from the date the request was received will be established. Corrective actions will be documented on the form and coordinated with all activities having a primary or collateral responsibility. Deviations to meeting this 25 workday suspense must be approved by the branch quality and division production chief.

1.3.3.2.1. (Added) MA\_Q quality branches will review all data collected through RQA efforts and analyze for trends and improvement opportunities or focus areas.

1.3.3.2.2. (Added) The initiator and other applicable personnel will assist the quality branch during the evaluation process and assure corrective actions are taken when a problem is discovered.

1.3.3.2.3. (Added) MAPQ will review QIMSS RQA data monthly and evaluate data for best practice applications to be distributed to the divisions. Requests for information on approved/implemented actions, solutions or recommendations can be addressed to MAPQ.

1.3.3.2.3.1. (Added) MAPQ will review all data collected through RQA efforts and analyze for trends and improvement opportunities or focus areas.

1.4. **Depot Maintenance QA Responsibilities.** The WR-ALC overall quality program places responsibility for product quality on the senior managers and conformance to requirements upon each employee. To that end, maintenance process discipline must be held to the highest standards.

1.4.1.1. MAPQ will provide a copy of this supplement to HQ AFMC/LGQ for review prior to publication. They will also provide a copy to HQ AFMC/LGP for review when any major changes, updates or revisions are made.

1.4.3.1. WR-ALC/CC will review reports from LSET, staff assistance visits (SAV), other quality-related findings and corrective/preventive actions.

1.4.3.2. MAPQ will brief Depot Maintenance Quality Review (DMQR) data quarterly to the Commander. Other quality data (annual review, special inspections, etc.) will be briefed as required.

1.4.4.1. The Director of Maintenance has appointed MAPQ as the Maintenance Quality Focal Point.

1.4.4.2. WR-ALC/MA will review LSET, SAV, other quality-related findings and corrective/preventive actions.

1.4.4.3. MAPQ will brief Internal Quality Review (IQR) data monthly to the Director. Other quality data (annual review, special inspections, etc.) will be included in the IQR or briefed separately as required.

1.4.5. MAPQ is appointed by the MA Director as the Maintenance Quality Focal Point. MAPQ will provide quality-related policy and implementation guidance to the division quality branches and internal oversight and guidance to aircraft maintenance, avionics, industrial products, software, plant management and support divisions to ensure technical compliance with quality initiatives.

1.4.5.1. DMQR data will be briefed at Commander level quarterly. IQR data will be briefed to the Director monthly. Other quality data (annual review, special inspections, etc.) will be included in the IQR or briefed as required.

1.4.5.2. MAPQ serves as the single point of contact (POC) for HQ AFMC quality issues and policies and provides Directorate of Maintenance interpretation of quality issues and policy.

1.4.5.3. MAPQ will develop, maintain and serve as OPR for this supplement.

1.4.5.4. MAPQ will perform an annual review of this supplement for currency to ensure compliance to new or revised higher headquarters' guidance and will submit the publication to HQ AFMC/LGQ for review. A Quality Manual Requirements Checklist will be used by MAPQ when reviewing this supplement.

1.4.5.4.1. (Added) MAPQ will develop and maintain accuracy for the Quality Manual Requirements Checklist unless one is available through the LSET Checklist site. It can be found on the MAPQ server.

1.4.5.4.2. (Added) MAPQ will ensure performance of reviews and documentation of amendments, changes, or revisions to this supplement are annotated on the Record of Document Review, **Attachment 5 (Added)**.

1.4.5.5. MAPQ will review each QAP/QASP at least annually or when major changes, updates or revisions are made for compliance with requirements and furnish feedback to the applicable division within 10 working days. After accomplishment of the review and feedback information, each division will review, correct and revise the document accordingly and coordinate all changes and revisions through the MAPQ focal point prior to publication.

1.4.5.5.1. (Added) MAPQ will develop, maintain and use a QAP/QASP Requirements Checklist when reviewing the division QAP/QASP unless one is available through the LSET Checklist site. The QAP/QASP Requirements Checklist can be found on the MAPQ server.

1.4.5.5.2. (Added) The MAPQ review of the QAP/QASP for compliance will also include assessments performed by MAPQ personnel to determine if the divisions are in compliance with the requirements of the plans. Assessment data will be input into QIMSS. Review will determine if the quality processes are correctly focused based on customer-reported defects, functional check flight (FCF) and other data.

1.4.5.6. MAPQ will maintain a copy of this final, signed supplement.

1.4.5.7. MAPQ will serve as the directorate focal point for LSET/SAV inspections and is responsible for LSET/SAV pre-inspection planning, inspection mission support, post-inspection distribution, follow-up and reporting of related findings.

1.4.5.7.1. (Added) MAPQ will maintain a list of division checklist champions for all applicable LSET checklists. The checklist champion POC list will be maintained on the MAPQ server and will be reviewed and updated (if required) on a monthly basis.

1.4.5.8. MAPQ will consolidate, review, prepare and report QA metrics to WR-ALC/MA, WR-ALC/CC, HQ AFMC/LGQ and command units, as required.

1.4.5.8.1. (Added) MAPQ will act as the single POC for the Directorate Internal Quality Review (IQR) and the Center Depot Maintenance Quality Review (DMQR) Board. MAPQ will consolidate directorate quality data (including metrics), reports and indicators as required for Directorate and Center review.

1.4.5.8.2. (Added) MAPQ will perform analysis as required on quality data collected within any MA organization. Review of quality data will include customer-reported defects, FCF data, internal division quality data, special and management inspection results, etc. These type reviews may be no-notice, based on observation, interviews, checklists or other sources. Results may or may not be entered into QIMSS, depending on the type assessments performed. Analysis will be used to provide the foundation for specific recommendations for target areas for evaluation and for briefings to the MA Director and other senior management.

1.4.5.9. MAPQ will act as the focal point for performing the annual technical compliance review using applicable LSET checklists. They will conduct the review, identify and establish a team to perform the review, collect and compile the necessary documentation to report and support the outcome of the review, and schedule any necessary meetings and briefings before, during and after the review.

1.4.5.10. MAPQ will act as the primary QIMSS G015 administrator and focal point for the Directorate.

1.4.5.11. (Added) MAPQ will review, comment on and coordinate waiver requests.

1.4.5.12. (Added) MAPQ will be responsible for development, review and revision of Directorate policy as it applies to AFMCI 21-115, *Depot Maintenance Quality Assurance(QA)*; AFMCI 21-110, *Depot Maintenance Technical Data and Work Control Documents*; AFMCI 21-122, *Foreign Object (FO) and Dropped Object (DO) Prevention Program*; and AFMCI 21-107, *Tool Control and Accountability Program*.

1.4.5.13. (Added) MAPQ will act as focal point for matters related to AFMCI 63-501 and MAOI 63-501, *Quality Program Plan (QPP)*.

1.4.6.1. MA production divisions will review and take appropriate action on LSET/SAV or other external organization findings.

1.4.6.2. MA\_Q quality branches will define in the QAP the frequency and level of review for production quality data.

1.4.6.3. MA\_Q quality branches will maintain a copy of the QAP and (or) QASP signed by the production division chief for the division.

1.4.6.3.1. (Added) MA\_Q quality branches will define and document in the QAP the process for production division quarterly review of the QASP. The process will include how the review will be documented.

1.4.7. MA\_Q quality branches will act as the division quality focal point on all quality matters.

1.4.7.1. MA\_Q quality branches will assist the production division in development of the division QAP to ensure requirements of this instruction are included.

1.4.7.1.1. (Added) MA\_Q quality branches will ensure the annual QAP review is accomplished by 1 October.

1.4.7.1.1.1. (Added) MA\_Q quality branches will forward a copy of the QAP to MAPQ for review after completion of the required annual review.

1.4.7.1.1.2. (Added) After MAPQ review and feedback information, MA\_Q quality branches will review, correct and revise the document accordingly. Changes and revisions will be coordinated through the MAPQ focal point prior to publication.

1.4.7.1.1.3. (Added) MA\_Q quality branches will ensure all review and revision information is accurately and promptly documented. Documentation of amendments, changes or revisions to the QAP will be annotated on the Record of Document Review, **Attachment 5 (Added)**, which will be included in each QAP.

1.4.7.1.2. (Added) MA\_Q quality branches will coordinate with MAPQ on the development of this supplement to ensure all requirements are included or addressed in the supplement or delegated to the QAP/QASP.

1.4.7.2. MA\_Q quality branches will ensure the QASPs meet all requirements of this instruction. They will work with MA, MAPQ and other division quality focal points as required.

1.4.7.2.1. MA\_Q quality branches will ensure a quality representative reviews all Statements of Work (SOW), work specifications and quality assurance criteria for new workloads, contracts, or partnering agreements. Requirements will be included in the QAP/QASP as required.

1.4.7.3. MA\_Q quality branches will act as focal point for LSET/SAV related tasks. MA\_Q will ensure MAOI 21-5, *LSET Findings Response and Follow-up Process*, is used for LSET/SAV response formats, etc.

1.4.7.3.1. (Added) MA\_Q quality branches will maintain and furnish MAPQ a list of division checklist champions for all applicable LSET checklists. The division checklist champions list will be reviewed and updated (if required) on a monthly basis.

1.4.7.3.1.1. (Added) MAPQ will maintain a master Maintenance Ready monitor list.

1.4.7.4. MA\_Q quality branches will ensure all quality-related data is provided to MAPQ by the 10<sup>th</sup> of each month for inclusion in the monthly quality metrics reviews. All other data requested will be provided in a timely manner, meeting any established suspenses.

1.4.7.5. MA\_Q quality branches will participate in and support the annual technical compliance reviews as necessary or when requested by MAPQ.

1.4.7.6. MA\_Q quality branches will ensure WR-ALC mandatory entries are included on the AFMC Form 343, Quality Assurance Assessment. Use of any other optional blocks will be coordinated through MAPQ and defined in the QAP.

1.4.7.10. (Added) MA\_Q quality branches will implement all quality policy/guidance requirements as directed by MAPQ or higher-level authority.

1.4.7.11. (Added) MA\_Q quality branches will work with MA, MAPQ and other division quality focal points. Quality branch focal points will serve as team members (when required) on various quality issues, review and provide quality data when required, and ensure the division QAP/QASPs meet all requirements.

1.4.7.12. (Added) MA\_Q quality branches will maintain a copy of the QAP/QASP signed by the production division chief.

1.4.7.13. (Added) MA\_Q quality branches will ensure the QASP is reviewed at least quarterly, updated as necessary or when required and the reviews are documented.

1.5. **Maintenance Quality Manual.** This supplement satisfies the requirement for a Maintenance Quality Manual for the Directorate of Maintenance to implement depot maintenance production and production support quality requirements. All requirements in this instruction have been addressed.

1.5.1. MAPQ will provide a copy of this supplement to HQ AFMC/LGQ for review prior to publication. The supplement will also be provided to HQ AFMC/LGP for review when any major changes, updates or revisions are made.

1.5.1.1. MA\_Q quality branches are responsible for establishing the initial PE schedule for PAC employees. Quality organizations will perform a minimum number of PEs per month, so that the total performed equals the total of the assigned PAC certified maintenance personnel, to ensure all personnel receive a PE within the 24-month evaluation period. Adjustments will be made for new-hire and reassigned personnel. The planned number of PEs to be conducted for the month will be identified in the QAP/QASP.

1.5.1.1.1. (Added) MA\_Q quality branches will identify and document in the QAP/QASP the type (i.e., task, specific item, procedure or process) and minimum number of assessments to be conducted monthly.

1.5.1.2. MA\_Q quality branches will ensure all quality-related data is provided to MAPQ by the 10<sup>th</sup> of each month for inclusion in the monthly quality metrics reviews. All other data requested will be provided in a timely manner, meeting any established suspenses.

1.5.1.3. The organizational structure for the Directorate of Maintenance depicting the Quality Assurance organization is in **Attachment 3 (Added)**.

1.5.1.3.1. (Added) MAPQ will maintain a current listing of Directorate Quality POCs. The Quality POC list will be maintained on the MAPQ server and will be reviewed and updated, if required, on a monthly basis.

1.5.1.4. Quality training requirements are provided in paragraphs **1.8.1.** and **1.8.2.** of this instruction. The Education and Military Training Office (78 MSS/DPE) and the Human Resources Branch (MAWH) are responsible for providing formal classroom training for personnel performing quality assurance functions.

1.5.1.5. The process for control, routing and follow-up of the AFMC Form 77 is provided in **paragraph 1.3.2.**

1.5.1.6. MA\_Q quality branches will define the process for control, routing and follow-up of the AFMC Form 78 (if used) in the QAP.

1.5.1.7. MA\_Q quality branches will define the process for control, routing and follow-up of the AFMC Form 79 (if used) in the QAP.

1.5.1.8. MA\_Q quality branches will ensure any inspections to be performed not specifically addressed in this instruction are included in the QAP.

1.5.1.9. Existing nonconformities, defects or otherwise undesirable situations discovered during the performance of quality assessments will be eliminated using corrective action. The corrective action process involves validation and classification of nonconformities, assignment of root cause analysis (RCA), development and implementation of a corrective action plan, elimination of the root cause, analysis of

corrective action data, continuous improvement and timely and effective preventive actions. The focus of corrective action in the MA Directorate is to prevent the recurrence of nonconformities. MA\_Q quality branches will include in the division QAP supplemental processes/procedures for corrective/preventive action not addressed in this instruction.

1.5.1.9.1.1. (Added) Review, evaluation and analysis of adequacy and effectiveness of corrective actions taken will be determined by the quality offices.

1.5.1.9.1.2. (Added) Assessments performed to review and evaluate corrective actions taken will be documented on the AFMC Form 343 and input into the QIMSS database. Analysis data will be documented using the documentation/report format provided in **Attachment 6 (Added)**.

1.5.1.9.2. MAPQ will include in the monthly IQR, when applicable, lessons learned, best practices, benchmarking initiatives and relevant corrective/prevention action that would benefit other organizations.

1.5.1.9.3. QAPs will define the process by which corrective/preventive actions will be monitored to ensure follow-up and process changes are effective in preventing occurrences of similar nonconformances. RCA provides the proactive process to be used to identify and eliminate causes of “root cause” discrepancies or nonconformances. The corrective action process will include but not be limited to, the following:

1.5.1.9.3.1. (Added) An evaluation of the effective handling and investigation of all formally reported and internally initiated complaints and deficiency reports. These are noncompliance deficiencies reported by the receiving organizations and activities via TO 00-35D-54, the customer feedback process or MAOI 21-3, *Processing MA-Initiated Deficiency Reports and Exhibits*.

1.5.1.9.3.2. (Added) Initiated deficiency reports using TO 00-35D-54, identifying defects associated with parts, components, products or material.

1.5.1.9.3.3. (Added) Analysis of deficiency data (historical and current) to identify and determine trends in processes or work performance (will be used by the quality offices).

1.5.1.9.4. (Added) Each responsible organization will investigate the “root cause” of nonconforming products, analyze contributing factors to eliminate the causes, initiate preventive actions, apply controls to be sure corrective actions are taken and incorporate any necessary changes into procedures.

1.5.1.9.4.1. (Added) RCA is a step by step method that leads to the discovery of a fault's first or root cause. Every failure happens for a number of reasons. There is a definite progression of actions and consequences that lead to a failure. An RCA investigation traces the cause and effect trail from the end failure back to the root cause. The basic reason for investigating and reporting the causes of discrepancies is to enable the identification of corrective actions adequate to fix the immediate problem and preventive actions designed to prevent recurrence of the problem. Every root cause investigation and reporting process includes five separate and distinct phases.

1.5.1.9.4.1.1. Phase I. Data Collection. It is important to begin the data collection phase of RCA to ensure that data are not lost. The information that should be collected consists of conditions before, during and after the particular discrepancy was identified, personnel involvement (including actions taken), environmental factors and other information having relevance to the occurrence.

1.5.1.9.4.1.2. (Added) Phase II. Assessment. Any RCA method may be used that includes the following steps: Identify the problem. Determine the significance of the problem. Identify the causes (conditions or actions) immediately preceding and surrounding the problem. Identify the reasons why the causes in the

preceding step existed, working back to the root cause (the fundamental reason which, if corrected, will prevent recurrence of these and similar occurrences). This root cause is the stopping point in the assessment phase.

1.5.1.9.4.1.3. (Added) Phase III. Corrective Actions. Implementing effective corrective actions for each cause reduces the probability that a problem will recur and improves reliability and safety.

1.5.1.9.4.1.4. (Added) Phase IV. Inform. Documenting the results is part of the informal process. Also included is discussing and explaining the results of the analysis with management and personnel, including those outside of the immediate organization as a method of sharing best practice information.

1.5.1.9.4.1.5. (Added) Phase V. Follow-up. Follow-up includes determining if corrective action has been effective in resolving problems. An effectiveness review is essential to ensure that corrective actions have been implemented and are preventing recurrence. Management involvement and adequate allocation of resources are essential to successful execution of the five root cause investigation and reporting phases.

1.5.1.9.4.2. (Added) The RCA reports will be documented and maintained in the division quality office for a minimum of 1 year. Preventive action processes also can include the use of AFMC Form 77, as well as activation of problem-solving teams as a viable method of producing effective preventive actions.

1.5.1.10. This supplement provides the necessary requirements for development of division QAPs and supporting QASPs.

1.5.1.11.1. MA\_Q quality branches will develop and establish standards for QAR ratings in the QAP/QASP.

1.5.1.12. The process for documenting deficiencies, corrective/preventive action and follow-up data into QIMSS G015 is provided in **paragraph 1.9.1. (Added)**.

1.5.1.13. MA\_Q quality branches will perform analysis as required on quality data collected within the divisions. Review of quality data will include customer-reported defects, FCF data, internal quality data, Special and Management Inspection results, etc. Analysis will be used to provide the foundation for specific target areas for evaluation and briefings to the MA Director and other senior management.

1.5.1.13.1. (Added) MA\_Q quality branches will define requirements to analyze quality deficiency and acceptance inspection reports and recommend appropriate corrective/preventive action in the QAP.

1.6.1.2. MA\_Q quality branches will ensure all data collected, type of analysis done, reports to be accomplished and review level not specifically addressed in this instruction are included in the QAP.

1.6.1.3. (Added) MA\_Q quality branches will include in the QAP/QASP the organizational structure for the division depicting the Quality Assurance organization.

1.7. **Quality Assurance Surveillance Plans (QASP).** MA\_Q quality branches will develop the QASP for the production divisions. The QASP from the MAI and MAN quality branch may be a single plan. The MAB quality branch will develop a QASP for each weapon system (aircraft). Branches may include the QASP with the QAP or maintain as a separate document.

1.7.1.2. Assessment Areas. MA\_Q quality branches will break down major workloads into assessment areas. Assessment areas will be documented in the QAP or QASP. Assessment areas are inspected regularly but not necessarily monthly.

1.7.1.3. MA\_Q quality branches will determine the number of assessments to be performed monthly. The minimum number to be performed will be documented in the QAP or QASP.

1.7.1.3.1. (Added) MA\_Q quality branches will determine the type assessments to be performed monthly. The type assessments to be performed will be documented in the QAP or QASP.

1.7.1.3.2. (Added) MA\_Q quality branches will identify the methodology or rationale used to determine type and minimum number of assessments performed. The methodology or rationale used will be documented in the QAP or QASP.

1.8. **Quality Assurance Training.** All Directorate of Maintenance quality assurance personnel performing assessments of various inspection areas, products, processes or procedures will be trained to the extent necessary (defined as applicable classroom functional training) to perform those functions. As part of the overall quality training program, mandatory reading and understanding of this AFMCI and supplement and the applicable division QAP/QASP is required by all personnel assigned to the quality function.

1.8.1. Specific Training Requirements. Specific technical, weapons system and special skills qualification (SSQ) training requirements for quality personnel will be identified in the division QAP. In some cases, SSQ training will be required for quality personnel performing task evaluations (PE) or quality verification inspection (QVI) assessments. Mandatory requirements can be found in AFMCI21-108\_RAFBSUP1, Chapter 4.

1.8.1.1. (Added) Quality personnel must meet any applicable mandatory training requirements related to occupational type training, which is not specifically tied to a maintenance task but is required due to the nature of the maintenance environment. AFMCI 21-108, RAFBSUP1, Chapter 3 identifies the general recurring training requirements for the WR-ALC maintenance environment. As a minimum, quality personnel will be trained in the following, with any other area-specific training identified in the division QAP.

1.8.1.1.1. (Added) Fire Extinguisher Training, reference AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection and Health (AFOSH) Program*.

1.8.1.1.2. (Added) Foreign Object Damage (FOD) Prevention and Dropped Object Awareness, reference AFMCI 21-122, *Foreign Object Damage (FOD) Prevention and Dropped Object Awareness*.

1.8.1.1.3. (Added) Maintenance Training and Production Acceptance Certification (PAC) Program, reference AFMCI 21-108, *Maintenance Training and Production Acceptance Certification (PAC) Program*.

1.8.1.1.4. (Added) Technical Data Use and Compliance, reference AFPD 21-3, *Technical Orders*, AFMCI 21-301, *AFMC Technical Order System Implementing Policies*, AFMCI 21-110, *Depot Maintenance Technical Data and Work Control Documents (WCD)*, AFMC Manual 21-1, *AFMC Technical Order Systems Procedures*, TO 00-5-1, *Air Force Technical Order System*, and other 00-5 series technical orders and applicable directives.

1.8.1.1.5. (Added) Tool Control and Accountability, reference AFMCI 21-107, *Tool Control and Accountability Program*.

1.8.1.1.6. (Added) Work Control Documents (WCD) and Aircraft Status Forms, reference TO 00-20-5, *Aerospace Vehicle Inspection and Documentation*, AFMCI 21-110, *Depot Maintenance Technical Data and Work Control Documents*, AFMCI 21-129, *Depot Repair Enhancement Process (DREP)*, AFMCI 21-133, *Depot Maintenance Management for Aircraft Repair (AREP)*, other TOs and applicable directives.

1.8.2. Core Training Requirements. Core training requirements are mandatory and have been defined by AFMC. The division training manager, based on prior training documentation from civilian or military training records, will approve equivalent training.

1.8.2.2. Quality Control Statistics. All QA personnel (job series-1910) are required to receive formal classroom training in Quality Control Statistics, while it is optional for others.

1.8.3. Training Documentation. ETMS/PACSS input of quality personnel training requirements into the PACSS database for MAPQ personnel will be accomplished by MAWHA, and division PAC monitors will input training requirements for QA personnel assigned to the divisions.

1.9. **Data Collection.** Standardized data input. Several fields within the database have mandatory system-driven entry requirements. MAPQ has identified additional fields and specific formats for entry of that data. The completed AFMC Form 343 must leave a clear, standardized, creditable and auditable trail for analysis review.

1.9.1. (Added) QIMSS Data Entry Requirements, provides data format and mandatory entry fields and is available on the MAPQ website. These requirements will be revised by MAPQ as system changes dictate.

1.9.2. (Added) Quality Information Management Standard System (QIMSS) User Guide. The guide is accessible as a document file copied to the resident personal computer when the client-side software is installed. It is provided as a "how-to" reference that will assist the user with specific instructions on viewing, entering, editing and manipulating data in QIMSS.

1.9.3. (Added) Assessment Results. All assessment results (except annual review or MI) will be documented on an AFMC Form 343. Assessment results will be documented as required by the procedures for the type assessment being performed.

1.9.4. (Added) Forms Documentation. Clear, accurate and concise documentation is essential to good quality data collection. All quality inspection, verification, observation and audit results will be documented appropriately and in a timely manner. Quality personnel will record all relevant data as required by the assessment being performed. Defect descriptions must be written so that it is clearly understood what is being identified as a deficiency.

1.9.5. (Added) Corrective/Preventive Action. The production maintenance function is responsible for ensuring corrective action is initiated as soon as possible and input into the QIMSS database. Timely corrective/preventive action is required to ensure problems are identified and corrected. Corrective action taken must be documented on the AFMC Form 343. All AFMC Forms 343 will include the corrective action taken. Preventive action documentation is dependant upon the type of assessment being performed

1.9.6. (Added) Documented, auditable procedures must be developed within each division to ensure corrective actions initiated from accomplishment of a quality assessment which require the performance of any maintenance task are properly documented IAW AFMCI 21-110. The AFMC Form 343 is *not* a WCD and will not be used to direct accomplishment or certification of a maintenance task. All work performed on depot aircraft or products must be accomplished using an approved WCD.

1.10. **Quality Review Board.** The DMQR will be established at the executive level to include the WR-ALC/CC Commander. It will be used to summarize various quality-related data and (or) initiatives within the directorate. The MA Director/Deputy will chair the DMQR.

1.10.1. Internal Quality Review (IQR). The Internal Quality Review (IQR) Board is established at the directorate level, and includes the Director/Deputy of Maintenance, QA focal point, production divisions

and production division QA focal points, chiefs/deputies. IQR data includes detailed DMQR data, as well as other various internal and special interest quality related data. The MA Director/Deputy will chair the IQR.

1.10.2. DMQR data will be briefed at Commander level quarterly. IQR data will be briefed to the Director monthly.

1.10.2.1. (Added) The division QAP will define the meeting frequency and target audience of division-level quality reviews.

1.11. **Waiver Requests and Proposed Changes.** WR-ALC/MAPQ is the focal point for all waiver requests and proposed policy changes for this instruction as well as new/revised AFMCI 21-107, AFMCI 21-110, AFMCI 21-115 and AFMCI 21-122. Waiver requests or proposed changes to the policy requirements of these instructions will be sent to MAPQ for review and coordination prior to being forwarded to MA for signature. Deviations, including “test” or “trial” programs, are **NOT** authorized without prior MAPQ and HQ AFMC/LG written approval.

1.11.1. (Added) Procedures for Waiver Requests and Proposed Policy Changes. The request for waiver will be addressed to WR-ALC/MAPQ. A waiver request must contain the instruction title, specific paragraph reference and justification for noncompliance. An estimated completion date for meeting compliance requirements will also be included. Proposed change requests must contain the instruction title, specific paragraph reference, recommended change or action and supporting rationale. The waiver and change request must be coordinated by the applicable division chief and quality function prior to submission to MAPQ. When the quality function is a branch or section, the applicable division must coordinate the request. Once received by MAPQ, requests will be evaluated, coordinated and submitted to HQ AFMC/LGQ. If clarification or consensus is required, MAPQ will initiate action until the issue is resolved.

1.11.2. (Added) MAPQ will track the status of any MA waiver or change request applicable to this instruction. Status will be available on the MAPQ server. Waiver requests will be reviewed at least annually or as otherwise required.

1.12.2. (Added) Nonconforming products/materials identified during depot maintenance processes will be reported IAW TO 00-35D-54.

1.12.2.1. (Added) When nonconforming products/materials are identified and the prime source of repair is WR-ALC, deficiencies and exhibits will be processed IAW MAOI 21-3, *Processing MA-Initiated Deficiency Reports and Exhibits*.

1.12.2.2. (Added) Nonconforming products/materials, which are organically caused and cannot be reworked to meet technical or contract requirements, will be reported on AFMC Form 202, **Nonconforming Technical Assistance Request and Reply**, for engineering disposition for non-conforming technical problems beyond published authority. Procedures are defined in AFMCMAN 21-1, *Air Force Materiel Command Technical Order Procedures*. Nonconforming material produced in-house that cannot be made to conform to the requirements of technical data by normal manufacturing or rework operations will be identified, documented on an AFMC Form 202, removed from the maintenance activity and, when physically practical, placed in a designated holding area.

1.14. (Added) **Records and Documentation.** Data collection also includes quality-generated records and documentation. Clear, accurate and concise documentation is essential to good quality data collection. All quality inspection, verification, observation and audit results will be documented appropriately and in

a timely manner. All official hard copies of quality-generated data will be maintained on file and available for review. Quality records will be managed IAW the guidance provided in AFMAN 37-123, *Management of Records*, AFI 37-138, *Records Disposition—Procedures and Responsibilities*, and AFMAN 37-139, *Records Disposition Schedule*.

**2.1. Quality Assessment Types.** Quality assessments are used to evaluate, control and improve depot maintenance products and services. Quality assessments will consist of quality program elements (standards, instructions, contractual requirements, etc.) and product conformance (technical orders, drawings, specifications, etc.). Quality assessments can verify implementation of policies and procedures required to produce a quality product. Quality assessments are performed to ensure compliance with applicable directives and technical data instructions during the depot maintenance repair process. They accomplish this by ensuring personnel are following procedural steps in checklists, job guides and technical orders. Assessment results may require re-inspection/verification of items accepted at various stages of manufacture, repair or assembly; availability and examination of required documentation; determination of certification/qualification of personnel and compliance with process controls and related procedures. Quality assessments are not performed with the intent of initiating disciplinary action. Quality assessments are initiated by the quality organizations or management and are scheduled as deemed necessary. Assessments may be conducted on a scheduled, random or unannounced basis.

2.1.1. MA\_Q quality branches will include in the division QAP supplemental processes/procedures for performing a PE if not included in this instruction. MA\_Q quality branches will rate PEs based on the AQL/standards developed and identified in the QAP/QASP.

2.1.1.1. (Added) At the start of the PE, the QAS will brief the employee of the rating criteria, that the task itself will be rated pass or fail, and the exact steps where the task will start and end. The evaluator will inform the employee that the evaluation can be stopped or terminated at any time. If a condition is observed that endangers personnel, affects safety-of-flight or jeopardizes equipment reliability the evaluation will be stopped and the condition will be corrected immediately.

2.1.1.1.1. (Added) The evaluator will consider the task being evaluated, the location of the aircraft during the PE (if applicable), the number of personnel involved and actions taken to correct a discrepancy as well as the criticality of the discrepancy, when determining whether to continue or terminate the PE.

2.1.1.1.2. (Added) The evaluator will identify governing and relevant technical data sources. TO references to include specific paragraphs for the steps evaluated will be included on the AFMC Form 343.

2.1.1.1.3. (Added) Quality personnel will validate other types of technical data (test software, drawings, etc.) through the applicable source for currency.

2.1.1.2. Employees must meet qualification requirements, perform work IAW approved WCDs appropriate to the task, and have current and accurate technical data available and in use (if required). Also, the area must be safe to perform maintenance. Evaluation of these areas may be documented as a CI when a CI checklist has been developed and is used in conjunction with the PE.

2.1.1.2.1. (Added) Evaluation of core areas will not be grounds for a failed PE if the discrepancy identified is outside the control of the individual or team being evaluated and the discrepancy would not affect the technical reliability of the task being performed. As a minimum, the following support evaluation areas will be incorporated as part of the PE process:

2.1.1.2.1.1. (Added) Verification of the employees' PAC records to determine if the certification and qualification is appropriate for the task to be evaluated.

2.1.1.2.1.2. (Added) Validation through TO Library or other reliable source the latest change date to the TO to be used during the performance of PE, and that the most current version is available to the workforce.

2.1.1.2.1.3. (Added) Verification that the WCD reflects the current technical data requirements for the task being evaluated. Only those WCDs authorized by AFMCI 21-110 will be used for certification of work performed.

2.1.1.2.1.4. (Added) Verification that support equipment and tools are serviceable and required inspections are current.

2.1.1.2.1.5. (Added) Verification of the employee's AF Form 55, Employee Safety and Health Record, to determine if their personal protective equipment and safety qualifications are adequate for the task to be performed.

2.1.1.2.1.6. (Added) Verification of the area to determine if there are any safety concerns that must be corrected prior to beginning the PE.

2.1.1.3. Assessments will verify as a minimum that the correct technical data was used for the task to be accomplished. Proper use of technical data will be assessed, i.e. the technical data is open and followed step by step for "In Accordance With" (IAW) tasks. For "Reference TO" (REF) tasks, the TO must be readily available. Performance of the task as required by the technical data, adherence to warnings, cautions, following the proper sequence of events, etc. will be assessed.

2.1.1.3.1. (Added) Determination of whether task or portion of a task is major or minor in nature.

2.1.1.3.2. (Added) The evaluator will identify the task being performed (by work control document operation or control number). The related PAC task number (Section III) will be included on the AFMC Form 343.

2.1.1.3.3. (Added) The evaluator will verify proper use and correctness of the tools/equipment for task to be accomplished.

2.1.1.5. MA\_Q quality branches will develop a method to document and track employee PEs. The tracking process will include performing reassessment of mechanics for a failed PE. The PE tracking process will be identified in the division QAP. Production supervisors will ensure ample opportunity is provided for all employees to receive their scheduled PE. New employees or employees transferred from another maintenance area will have a PE performed within 6 months after receiving PAC certification in the newly-assigned division.

2.1.1.5.1. When a PE is performed on a team, each person involved will be identified on a separate AFMC Form 343 and evaluated to the AQL/standard applicable for that task. Each person will be given an individual QAR and pass/fail rating.

2.1.2. Quality Verification Inspections (QVI). An assessment/evaluation of a completed end item/product performed after completion of the maintenance procedure, process, product or portion thereof, and certification of the task/subtask or operation on the WCD has been stamped/dated as certified.

2.1.2.1. (Added) Each division quality office will establish and document in their QAP procedures, methods, or rationale for QVI selection and processing. This will include QAS quality inspection code "Q" clearance, corrective/preventative action, review, AQL standards, follow-up and the minimum number and frequency for each assessment area. Frequency of QVI performance will be documented in the QASP. A QVI can be performed in conjunction with a WCD CI if the WCD inspection code is "Q".

2.1.3.1. Material Control. Applicable reference: AFMCI 21-130, *Equipment Maintenance Material Control*.

2.1.3.2. Foreign Object (FO). Applicable reference: AFMCI 21-122, *Foreign Object Damage (FOD)/Dropped Object (DO) Prevention Program*.

2.1.3.3. Tool Control. The AFMC Form 343 will identify the Tool Kit Identification Number. Applicable references: AFMCI 21-107, *Tool Control and Accountability*; TO 31-1-101, *Use and Care of Hand Tools and Measuring Tools*; AFI 23-111, *Management of Government Property in Possession of the Air Force*.

2.1.3.4. Work Control Documents. The ITS or AFMC Form 173 work control document operation and (or) control numbers will be identified on the AFMC Form 343. Applicable reference: AFMCI 21-110, *Depot Maintenance Technical Data and Work Control Documents (WCD)*.

2.1.3.5. Production Acceptance Certification (PAC)/Special Skills Qualification (SSQ)/Training. Applicable reference: AFMCI 21-108, *Maintenance Training and Production Acceptance Certification (PAC) Program*.

2.1.3.6. Equipment. The WR-ALC/preventive maintenance number and serial number will be included on the AFMC Form 343 for each piece of equipment evaluated during the assessment. Applicable references: TO 00-20-1, *Aerospace Equipment Maintenance General Policies and Procedures*, and AFMCI 21-127, *Depot Maintenance Plant Management*.

2.1.3.7. Safety (Flight Line/Industrial). Applicable References: AFOSH Standard 91-66, *General Industrial Operations*; AFOSH Standard 91-100, *Aircraft Flight Line-Ground Operations and Activities*; and AFOSH Standard 91-501, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*.

2.1.3.8. Technical Data. (Engineering Drawings, AFMC Form 202, Nonconforming Technical Assistance Request, and Process Orders). The document or drawing control number will be included on the AFMC Form 343 for each piece of technical data evaluated during the assessment. Applicable references: AFMCI 21-110; AFMCMAN 21-1; AFI 21-401, *Engineering Data Storage, Distribution, and Control*; and AFI 21-403, *Acquiring Engineering Data*.

2.1.3.9. Technical Orders (formal TOs). The TO File, TO and copy numbers (if applicable) will be included on the AFMC Form 343 for each TO evaluated during the assessment. Applicable references: AFMCI 21-301, *Air Force Technical Order System Implementing Policies*; TO 00-5-1; and TO 00-5-2, *Technical Order Distribution System*.

2.1.4. The SI process is a comprehensive, well-defined, repeatable process utilizing proper data collection techniques accomplished over a 30-120 day assessment period with monthly reporting points. The SI will last a minimum of 30 days with any extended duration determined by the quality chief. Any SI accomplished will be documented as to purpose, scope, team members and methodology to include development of specialized checklists, analysis, recommendations and summary of results. **Attachment 6 (Added)**, Record of Document Review, provides the format to be used and any documentation requirements.

2.1.4.1. (Added) Assessment results will be documented on the AFMC Form 343 and the data input into QIMSS for any SI conducted.

2.1.4.2. (Added) MA\_Q will include in the QAP (if required) division processes or procedures for performing SI assessments, follow-up and reporting not included in this instruction.

2.1.5. Any MI accomplished will be documented as to purpose, scope, team members and methodology to include development of specialized checklists, analysis, recommendations and summary of results. **Attachment 6 (Added)** provides the format to be used and any documentation requirements.

2.1.5.1. (Added) An MI may be non-rated and data may be counted in QA trends, but does not require AFMC Form 343 documentation of finding results.

2.1.5.2. (Added) . As a minimum the MI will be led by MAPQ or MA\_Q quality focal points, and a written plan will include team charter, make-up and detailed process. This includes assigning a cross-functional team of subject matter experts from local quality and other related organizations, analyzing existing quality data from previous 12 to 24 months, a comprehensive trend analysis and root cause determination, mandated comprehensive corrective and preventive actions and initiation of an SI to determine effectiveness of corrective and preventive actions.

2.1.5.3. (Added) MA\_Q will include in the QAP (if required) division processes or procedures for performing MI assessments, follow-up and reporting not included in this instruction.

2.1.6.2. A TDV will automatically result in a QAR 3 rating if the technical data is not being followed.

2.1.7. Annual Technical Compliance Review. Annual Technical Compliance Reviews will be planned, coordinated and executed by MAPQ.

2.1.7.4. Annual Technical Compliance Review Scheduling. MAPQ will maintain a record that shows all activities to be inspected, date of last inspection and the month the next inspection is due.

2.1.7.7. MAPQ will prepare the Annual Review results in the report format provided in **Attachment 6 (Added)**.

**2.2. Quality Assessment Type Ratings.** HQ AFMC has established three Quality Assurance Results (QAR) ratings for assignment to each assessment. The QAR rating and AQL standards provide a standardized method of determining the value of any quality assessment.

2.2.1. Ratings. Individual deficiencies identified must be classified as major or minor based on the nature and severity of the task and of the finding; PDMSS and the applicable TO can assist in classifying the deficiencies as major and minor. Accurate classification of defects assists in assigning a QAR rating when required. Major/minor distinction will assist in determining the AQL for various assessments and processes.

**2.3. AFMC Form 343 Control and Processing.** The QIMSS database collects, indexes, files, stores and maintains applicable AFMC Forms 343 and Request for Quality Assistance (RQA) data.

2.3.1. Processing. The quality branch conducting the assessment will be responsible for documenting and entering the assessment results into the quality database, following up on responses, entering follow-up information and maintaining any supporting or relevant documentation.

2.3.1.1. Extension of Suspense Date. MA\_Q quality branches will identify and document in the QAP any requirements for extension of suspense dates.

2.3.2. Follow-up Assessments. Follow-up inspections shall be conducted on documented discrepancies to ensure corrective actions were effectively implemented. Follow-up activities are completed following implementation of the corrective action and expiration of planned completion date. Results of follow-up assessments will be recorded in QIMSS.

3.3.1. MAPQ will provide required metric data to HQ AFMC/LGQ quarterly.

3.3.2. MAPQ will furnish annual review data to HQ AFMC/LG no later than 15 Feb of each year for the previous calendar year.

**Add to Attachment 1**

**Quality Assessment-**A quality assessment is a methodical examination of a product, process, procedure or personnel performance that may include an inspection or evaluation of tooling, equipment, training, safety, certification, technical data, facilities, documentation and any other factors that may influence the quality of the product.

## Attachment 2 (Added)

## CROSS REFERENCE MATRIX

Table A2.1. Cross Reference Matrix.

Manual/AS9100 Paragraph	Governing Publications
4. Quality Management System	AFI 21-102, <i>Depot Maintenance Management</i> AFI 63-501, <i>Air Force Acquisition Quality Program</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> AFPD 63-5, <i>Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i>
4.1. General Requirements	AFI 21-102, <i>Depot Maintenance Management</i> AFI 63-501, <i>Air Force Acquisition Quality Program</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> AFPD 63-5, <i>Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i>
4.2. Documentation Requirements	AFI 21-102, <i>Depot Maintenance Management</i> AFI 63-501, <i>Air Force Acquisition Quality Program</i> AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> AFPD 63-5, <i>Quality Assurance</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i>
4.2.2. Quality Manual	AFMCI 63-501, <i>AFMC Quality Assurance</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i>

Manual/AS9100 Paragraph	Governing Publications
4.2.3. Control of Documents	<p>AFI 21-102, <i>Depot Maintenance Management</i></p> <p>AFI 21-110, <i>Engineering and Technical Services, Management and Control</i></p> <p>AFI 21-401, <i>Engineering Data Storage, Distribution, and Control</i></p> <p>AFI 21-403, <i>Acquiring Engineering Data</i></p> <p>AFI 33-360, <i>Volume 1, Air Force Content Management Program - Publications</i></p> <p>AFI 33-360, <i>Volume 2, Content Management Program – Information Management Tool (CMP-IMT)</i></p> <p>AFMCI 21-301, <i>Air Force Materiel Command Technical Order System Implementing Policies</i></p> <p>AFMCI 21-303, <i>Technical Orders</i></p> <p>AFMCMANI 21-1, <i>Air Force Materiel Command Technical Order Procedures</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>TO 00-5-1, <i>Air Force (AF) Technical Order System</i></p>
4.2.4. Control of Records	<p>AFI 37-138, <i>Records Disposition Procedures and Responsibilities</i></p> <p>AFMAN 37-139, <i>Records Disposition Schedule</i></p>
4.3. Configuration Management	<p>AFI 21-102, <i>Depot Maintenance Management</i></p> <p>AFMCI 21-303, <i>Technical Orders</i></p> <p>AFMCI 21-301, <i>Air Force Materiel Command Technical Order System Implementing Policies</i></p> <p>AFMCI 21-303, <i>Technical Orders</i></p> <p>TO 00-5-1, <i>Air Force Technical Order System</i></p> <p>AFMCMANI 21-1, <i>Air Force Materiel Command Technical Order System Procedures</i></p>
4.3.1. Distribution Control	<p>AFI 37-138, <i>Records Disposition Procedures and Responsibilities</i></p> <p>AFMAN 37-139, <i>Records Disposition Schedule</i></p>
4.3.2. Manual Review	<p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>

Manual/AS9100 Paragraph	Governing Publications
5. MANAGEMENT RESPONSIBILITY	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
5.4.1. Quality Objectives	AFMCPD 21-1, <i>Depot Maintenance Policy</i>
6. RESOURCE MANAGEMENT	AFMCI 21-105, <i>Depot Maintenance Work Measurement</i> AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
6.1. Provision of Resources	RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
6.2. Human Resources	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
6.2.2. Competence, Awareness and Training	AFMCI 21-108, <i>Maintenance Training and Production Acceptance Certification (PAC) Program</i> AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i>

Manual/AS9100 Paragraph	Governing Publications
6.4. Work Environment	<p>AFI 91-301, <i>Air Force Occupational and Environmental, Safety, Fire Protection and Health (AFOSH) Program</i></p> <p>AFI 91-202, <i>The US Air Force Mishap Prevention Program</i></p> <p>AFOSH Standard 91-501, <i>Air Force Consolidated Occupational Safety Standard</i></p> <p>AFOSH Standard 91-100, <i>Aircraft Flightline – Ground Operations and Activities</i></p> <p>AFOSH Standard 91-66, <i>General Industrial Operation</i></p> <p>AFPD 36-4, <i>Air Force Civilian Training, Education and Development</i></p> <p>AFMCPD 36-2, <i>Education and Training</i></p> <p>AFI 36-2201, VI, <i>Training, Development, Delivery, and Evaluation</i></p> <p>AFI 36-401, <i>Employee Training and Development</i></p>
7.1. Planning of Product Realization	<p>AFMCI 21-101, <i>Depot Maintenance Activation Planning (DMAP)</i></p> <p>AFI 21-102, <i>Depot Maintenance Management</i></p> <p>AFMCI 21-110, <i>Depot Maintenance Technical Data and Work Control Documents (WCD)</i></p> <p>AFMCI 21-125, <i>Management of Depot Maintenance Programs</i></p> <p>AFMCI 21-133, <i>Depot Maintenance Management for Aircraft Repair</i></p> <p>AFMCI 21-129, <i>Depot Maintenance Management, Depot Repair Enhancement Process (DREP)</i></p> <p>TO 00-20-1, <i>Aerospace Equipment Maintenance General Policies and Procedures</i></p>
7.2. Customer-Related Processes	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>

Manual/AS9100 Paragraph	Governing Publications
7.2.1. Determination of Requirements Related to the Product	TO 00-25-4, <i>Depot Maintenance of Aerospace Vehicles and Training Equipment</i>
7.2.2. Review of Requirements Related to the Product	TO 00-35D-54, <i>USAF Material Deficiency Reporting and Investigation System</i>
7.2.3. Customer Communication	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
7.3. Design and Development	DoD Directive 5000.1, <i>The Defense Acquisition System</i> AFPD 63-1, <i>Capability Based Acquisition System</i> AFI 63-101, <i>Acquisition System</i> TO 00-5-1, <i>Air Force Technical Order System</i> TO 00-5-3, <i>Technical Manual Acquisition Procedures</i> AFI 21-402, <i>Engineering Drawing System</i> AFI 21-401, <i>Engineering Data Storage, Distribution, and Control</i> AFMCI 21-401, <i>Engineering Data Storage, Distribution and Control</i>
7.3.5. Design and Development Verification	AFMCI 64-110, <i>First Article Management</i>
7.3.6. Design and Development Validation	AFPD 99-1, <i>Test And Evaluation Process</i> AFI 99-101, <i>Developmental Test and Evaluation</i> AFI 99-102, <i>Operational Test and Evaluation</i> AFMCPD 99-1 <i>Test and Evaluation (T&amp;E) Risk Management</i>

<b>Manual/AS9100 Paragraph</b>	<b>Governing Publications</b>
7.4. Purchasing	AFMAN 23-110, <i>USAF Supply Manual</i> FAR Part 7, <i>Acquisition Planning</i> FAR Part 9, <i>Contractor Qualifications</i> FAR Part 42, <i>Contract Administration</i> FAR Part 13, <i>Simplified Acquisition Procedures</i> FAR Part 34, <i>Major System Acquisition</i> FAR Part 37, <i>Service Contracting</i> FAR Part 38, <i>Federal Supply Schedule Contracting</i> FAR Part 39, <i>Acquisition of Information Resources</i> FAR Part 46, <i>Quality Assurance</i>

Manual/AS9100 Paragraph	Governing Publications
7.5. Production and Service Provision	<p>AFI 21-402, <i>Engineering Drawing System</i></p> <p>AFI 23-111, <i>Management of Government Property in Possession of the Air Force</i></p> <p>AFMCMAN 21-1, <i>Air Force Materiel Command Technical Order System Procedures</i></p> <p>AFMCI 21-107, <i>Tool Control and Accountability Program</i></p> <p>AFMCI 21-108, <i>Maintenance Training and Production Acceptance Certification (PAC) Program</i></p> <p>AFMCI 21-110, <i>Depot Maintenance Technical Data and Work Control Documents</i></p> <p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 21-120, <i>Organic Depot Field Teams</i></p> <p>AFMCI 21-127, <i>Depot Maintenance Plant Management</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>MAOI 21-1, <i>Maintenance Standardization Evaluation Program (MSEP) Ready Program</i></p> <p>MAOI 21-2, <i>Training Program</i></p> <p>MAOI 21-3, <i>Processing MA Initiated Deficiency Reports and Exhibits</i></p> <p>MAOI 21-4, <i>Qualification of Nondestructive Inspection Personnel</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p> <p>TO 00-25-107, <i>Maintenance Assistance</i></p> <p>TO 00-20-1, <i>Aerospace Equipment Maintenance General Policies and Procedures</i></p> <p>TO 00-20-14, <i>AF Metrology and Calibration Program</i></p> <p>TO 00-25-245, <i>Operations Instructions Testing and Inspection Procedures for Personnel Safety and Rescue Equipment</i></p> <p>TO 00-5-1, <i>Air Force Technical Order System</i></p> <p>TO 1-1A-15, <i>General Maintenance Instructions for Support Equipment</i></p> <p>TO 34-1-3, <i>Inspection and Maintenance of Machinery and Shop Equipment</i></p>

Manual/AS9100 Paragraph	Governing Publications
7.5.4. Customer Property	<p>AFI 21-115, <i>Product Quality Deficiency Reporting Program</i></p> <p>TO 00-35D-54, <i>USAF Material Deficiency Reporting and Investigating System</i></p> <p>AFMAN 23-220, <i>Reports of Survey for Air Force Property</i></p> <p>AFI 91-202, <i>The US Air Force Mishap Prevention Program</i></p> <p>AFI 91-204, <i>Safety Investigations and Reports</i></p>
7.5.5. Preservation of Product	<p>AFJI 24-210, <i>Packaging of Hazardous Material</i></p> <p>AFMANI 23-110, Volume 7, Part 3, <i>The Air Force Shelf Life Program</i></p> <p>AFMAN 91-201, <i>Explosives Safety Standards</i></p> <p>AFMCI 21-117, <i>Corrosion Control and Prevention Program and Marking of Aerospace Equipment</i></p> <p>AFMCI 21-122, <i>Foreign Object Damage (FOD) and Dropped Object (DO) Awareness and Prevention Program</i></p> <p>AFMCI 21-130, <i>Equipment Maintenance Material Control</i></p> <p>AFMCI 24-201, <i>AFMC Packaging and Materials Handling Policies and Procedures</i></p> <p>AFOSH Standard 48-8, <i>Controlling Exposures to Hazardous Materials</i></p> <p>AFOSH Standard 91-17, <i>Interior Spray Finishing</i></p> <p>AFOSH Standard 91-46, <i>Materials Handling and Storage Equipment</i></p> <p>TO 00-20-3, <i>Maintenance Processing of Repairable Property and Repair Cycle Asset Control System</i></p> <p>TO 00-25-234, <i>General Shop Practice Requirements for the Repair, Maintenance, and Test of Electrical Equipment (ATOS)</i></p> <p>TO 00-85A-23-1, <i>Packaging, Packing and Storage - Aluminum Alloy Sheet and Plate</i></p> <p>TO 1-1-691C, <i>Aircraft Weapon Systems Cleaning and Corrosion Control</i></p> <p>TO 1-1-8, <i>Application and Removal of Organic Coatings, Aerospace and Non-Aerospace Equipment</i></p>

Manual/AS9100 Paragraph	Governing Publications
7.6. Control of Monitoring and Measuring Devices	<p>AFI 21-113, <i>Air Force Metrology and Calibration (AFMETCAL) Program</i></p> <p>AFMCI 21-108, <i>Maintenance Training and Production Acceptance Certification (PAC) Program</i></p> <p>TO 00-20-14, <i>AF MMetrology and Calibration Program</i></p>
8. MEASUREMENT, ANALYSIS, AND IMPROVEMENT	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>
8.2. Monitoring and Measurement	<p>AFI 21-115, <i>Product Quality Deficiency Report Program</i></p> <p>AFI 21-118, <i>Improving Air and Space Equipment Reliability and Maintainability</i></p> <p>AFMCI 21-110, <i>Depot Maintenance Technical Data and Work Control Documents</i></p> <p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 64-110, <i>First Article Management</i></p> <p>Division Quality Assurance Plans (QAP)</p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>Section-level Quality Assurance Surveillance Plans (QASP)</p> <p>TO-00-35D-54, <i>USAF Material Deficiency Reporting and Investigating System</i></p> <p>MAOI 21-3, <i>Processing MA Initiated Deficiency Reports and Exhibits</i></p>
8.2.1. Customer Satisfaction	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>

Manual/AS9100 Paragraph	Governing Publications
8.2.2. Internal Audit	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>
8.2.3. Monitoring and Measurement of Processes	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>
8.2.4. Monitoring and Measurement of Product	<p>AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>AFMCI 63-501, <i>AFMC Quality Assurance</i></p> <p>MAOI 63-501, <i>Quality Program Plan (QPP)</i></p> <p>RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i></p> <p>RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i></p>
8.3. Control of Nonconforming Product	<p>AFI 21-115, <i>Product Quality Deficiency Report Program</i></p> <p>AFMCMANI 21-1, <i>Air Force Materiel Command Technical Order System Procedures</i></p> <p>TO 00-35D-54, <i>USAF Material Deficiency Reporting and Investigating System</i></p> <p>MAOI 21-3, <i>Processing MA Initiated Deficiency Reports and Exhibits</i></p> <p>TO 00-5-1, <i>Air Force Technical Order System</i></p>

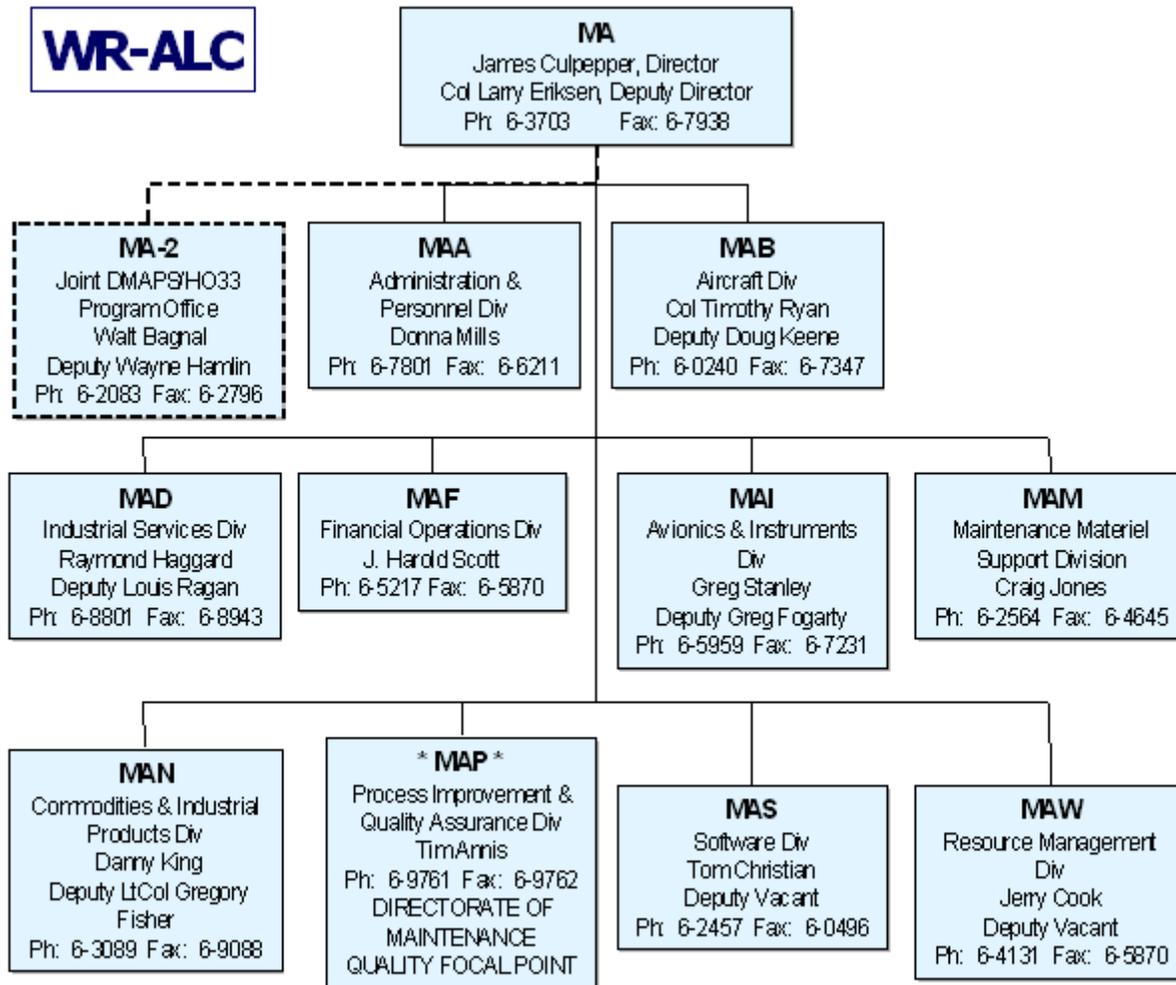
Manual/AS9100 Paragraph	Governing Publications
8.4. Analysis of Data	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
8.5. Improvement	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 21-137, <i>Depot Maintenance Process Improvement</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
8.5.1. Continual Improvement	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 21-137, <i>Depot Maintenance Process Improvement</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>
8.5.2. Corrective Action	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>

<b>Manual/AS9100 Paragraph</b>	<b>Governing Publications</b>
8.5.3. Preventive Action	AFMCI 21-115, <i>Depot Maintenance Quality Assurance (QA)</i> AFMCI 63-501, <i>AFMC Quality Assurance</i> MAOI 63-501, <i>Quality Program Plan (QPP)</i> RAFB Sup 1 to AFMCI 21-115, <i>Directorate of Maintenance Quality Assurance Manual</i> RAFBMAN 63-501, <i>Warner Robins Air Logistics Center Quality Systems Manual</i>

Attachment 3 (Added)

DIRECTORATE OF MAINTENANCE ORGANIZATION FLOW

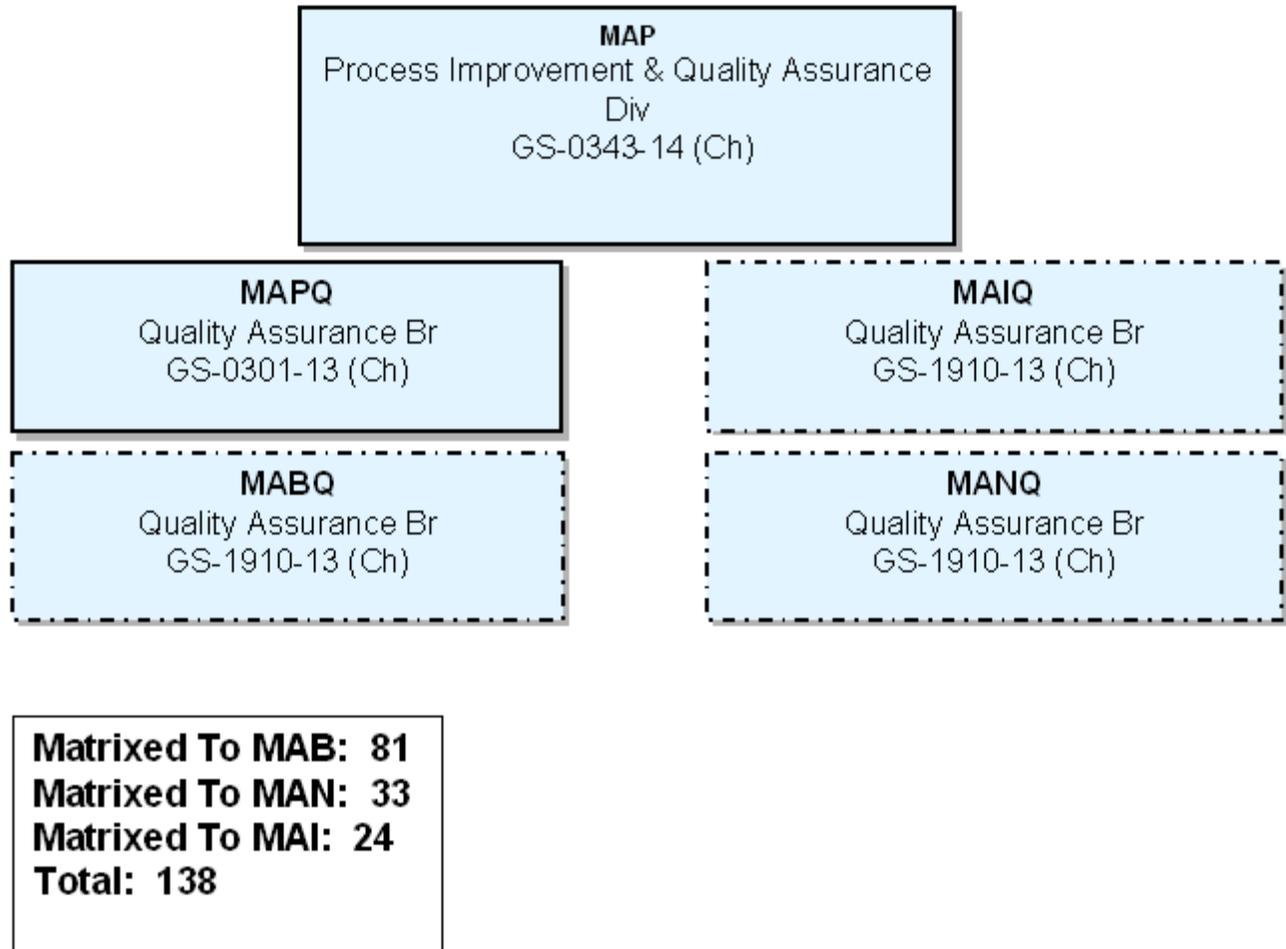
Figure A3.1. (Added) Directorate of Maintenance Organization Flow.



Attachment 4 (Added)

MA QUALITY ORGANIZATION FLOW

Figure A4.1. (Added) MA Quality Organization Flow.



## Attachment 5 (Added)

### QUALITY PROGRAM DOCUMENTATION FLOW

**AFPD 63-5, *Quality Assurance*.** This directive mandates the Air Force to establish essential quality standards and controls during all phases of a weapon system life cycle to assure Operational Safety, Suitability and Effectiveness (OSS&E) and affordability. Quality weapon systems, end items, supplies and services are those that are affordable and work as intended and at the time they are needed. Such items are essential to successful Air Force operations. This directive assigns responsibilities for defining and overseeing the standards, objectives and controls for each life cycle phase. This directive instituted the Air Force transition from MIL-Q-9858A and MIL-I-45208A quality systems to a quality management system comparable to private industry standards.

**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:

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

**RAFBMAN 63-501, *Warner Robins Air Logistics Center Quality Systems Manual*.** 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 Systems 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 paragraph format and can be followed in the same sequence. It provides an organized way of communicating how quality is managed, defines specific roles and responsibilities and defines how the organization's quality program is implemented. It requires individual organizations to develop and implement a Quality Program Plan to carry out required portions of the manual.

**Quality Program Plan (QPP) (MAOI 63-501).** The directorate QPP defines the individual organization's quality policy and management philosophy on how and what that organization's approach is to quality. It defines the management structure and identifies who is responsible for the quality of products and services produced by that organization. The QPP identifies to the individual organization those applicable portions or makes reference to all or parts of the Quality Systems Manual that apply as well as the processes that impact the quality of products and services produced.

**AFMCI 21-115, *Depot Maintenance Quality Assurance (QA)*.** This instruction provides procedures and responsibilities for depot maintenance Quality Assurance (QA) programs and applies to the center MA directorates. The overall quality program places responsibility for product quality on senior management and 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 requirement, and the prevention of product and service deficiencies.

**AFMCI 21-115\_RobinsAFBSup1, *Depot Maintenance Quality Assurance (QA)*.** This supplement establishes and implements the Quality Assurance requirements defined in AFMCI 21-115. It establishes standardized quality procedures and training criteria. It provides basic requirements for preparation of the production division's QAP. It standardizes documentation requirements, provides an organized way of communicating specific types of quality processes/procedures required and defines specific roles and responsibilities and how those quality processes are implemented. It satisfies the requirements of RAFB 63-501 for production maintenance quality assurance. It ensures the objectives of the quality management system and directorate quality program are being met.

**WR-ALC/MA Division, *Quality Assurance Plan (QAP)*.** The QAP is used to identify and implement the requirements of AFMCI 21-115 and RAFB Supplement 1 and provides a detailed, documented plan that identifies quality-related processes and procedures that are unique or specific to the divisions by identifying what shall be accomplished, by whom, when, where, and how; what materials, equipment and documents shall be used; and how data will be controlled and recorded. It identifies the types of surveillance that will be accomplished, when they will be accomplished and what will happen to the information that is gathered. The quality function is responsible for product surveillance, data collection and analysis.

**WR-ALC/MA Production Section, *Quality Assurance Surveillance Plan (QASP)*.** The QASP is a living document that details the type, number and frequency of inspections, assessments, etc. to be performed during a specified period. The QASP is reviewed monthly to determine level of frequency of assessments based on review and analysis of data collected.



**Attachment 7 (Added)****RECORD OF DOCUMENT REVIEW**

Annual Review, SI and MI reports and Root Cause Analysis (RCA) reports will be documented using the following format.

- 1. Executive Summary.** Restate conclusion(s) for each audit objective and summarize significant findings and recommendations.
- 2. Purpose.** Provide background information about the purpose/mission of the area audited. Indicate whether or not this is a follow-up on a previous audit.
- 3. Objective.** List objectives.
- 4. Scope And Methodology.** Identify activities/organizations to be evaluated, time period/duration of the evaluation period and nature and extent of compliance areas and checklists. Include the following if applicable to the assessment being performed:
  - 4.1. Team Structure/Make up**
  - 4.2. Timeline/Schedule of Events**
  - 4.3. Inspection/Assessment Process**
  - 4.4. Data collected/reviewed**
  - 4.5. Inspection Areas and Team Assignments**
  - 4.6. Checklists used/developed**
- 5. Inspection Results.** This section should be restricted to documented factual statements, which can be substantiated. Statements of opinion, assumption and conclusion, such as: "violation of regulations," "management is ineffective," and "internal control is poor," should be avoided. Each discussion of a finding area will be followed by a recommendation.
- 6. Summary/Conclusions**
  - 6.1. Proposed Recommendations for Immediate Corrective Action**
  - 6.2. Proposed Long-Term Preventive Action Recommendations**
  - 6.3. Follow-up Requirements**
- 7. Supporting Documentation (As Applicable)**
  - 7.1. Inspection Findings**
  - 7.2. Root Cause Analysis Results**
  - 7.3. Long-Term Preventive Action Plan**

ROBERT L. GEIGER, Col, USAF  
Deputy Director  
Maintenance Directorate