

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 63-131

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Acquisition

**MODIFICATION PROGRAM
MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements Air Force Policy Directive (AFPD) 63-1/20-1, *Acquisition and Sustainment Life Cycle Management*, which mandates an Integrated Life Cycle Management (ILCM) approach for all Air Force (AF) acquisition and sustainment activities, and specifically directs, “modifications shall be managed as efforts using acquisition and sustainment processes, techniques, and governance.” This instruction implements ILCM policies and procedures for AF personnel involved in implementing modifications to in-service AF materiel, including space and non-space weapon systems, subsystems, and Items.

This publication supersedes Air Force Instruction (AFI) 63-1101, and has been re-numbered as AFI 63-131 as a result of the consolidation of AFPD 63-11, *Modification System*, into AFPD 63-1/20-1.

Modifications shall be managed using acquisition and sustainment processes, techniques, and governance as outlined in AFI 63-101, *Acquisition and Life Cycle Management*. This instruction provides additional acquisition and sustainment life cycle management instruction for modifications. This AFI is used in conjunction with: AFI 63-1201 (to be replaced by AFI 63-132, *Life Cycle Systems Engineering*), AFI 10-601, *Capabilities Based Requirements Development*, AFI 21-101, *Aircraft and Equipment Maintenance Management*, AFI 65-601V1, *Budget Guidance and Procedures*, and AFI 99-103, *Capabilities Based Test and Evaluation*.

Modification efforts involving nuclear materiel and weapons are also governed by AFI 63-103, *Joint Air Force-National Nuclear Security Administration (AF-NNSA) Nuclear Weapons Life Cycle Management*.

Statutory law, Federal, DOD or Joint Staff (JS) directives take precedence. If there is any conflicting guidance between this AFI and DOD 5000-series, CJCSI 3170.01, *Joint Capabilities Integration and Development System*, CJCSM 3170.01, *Operation Of The Joint Capabilities Integration and Development System*, the latter (DOD 5000-series or CJCSI/M 3170.01) shall take precedence. To ensure standardization, any organization supplementing this instruction must send the implementing publication to SAF/AQX for review and coordination before publishing.

This publication applies to all military and civilian Air Force personnel including major commands (MAJCOMS), direct reporting units (DRU) and field operating agencies (FOA); other individuals or organizations as required by binding agreement or obligation with the Department of the Air Force (DAF). This publication applies to Air Force Reserve Command (AFRC) Units. This publication applies to the Air National Guard (ANG). **For nuclear systems or related components ensure the appropriate nuclear regulations are applied. Nuclear components governed by joint Department of Defense-Department of Energy agreements or Air Force – National Nuclear Security Administration (AF-NNSA) are not covered by this instruction.**

Refer all questions or comments regarding this publication to SAF/AQXA at SAFAQXA.workflow@pentagon.af.mil. Provide formal publication change requests to SAF/AQXA using the AF IMT 847, *Recommendation for Change of Publication*. Ensure all records created as a result of the processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and the *Air Force Records Disposition Schedule* located at <https://www.my.af.mil/gcss-af61a/afrims/afrims>.

SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed. This version establishes ILCM guidance and governance procedures for all AF modification activities. Additional text has been added to define and/or clarify key terms associated with the AF modification process. Procedures for developing and processing modification proposals have been consolidated and included in the main body of this AFI. Authorities, limitations, and procedures for developing and processing modification proposals have been substantially changed; temporary modification validation and approval duration has been changed. Additional requirements for initiating and executing modification programs have been added, many of which incorporate recommendations contained in recent audit/inspection reports regarding the AF acquisition and sustainment enterprise processes. References to complementary AFIs have been updated and/or added throughout. The provisions of this instruction have been extended to encompass firmware and software modifications, as well as modifications to weapon systems managed under AFD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*. This instruction no longer prescribes AF Form 3525 and refers to AFI 63-1201 for guidance on managing the configuration of systems, sub systems and items, including the conduct of configuration control boards and/or related configuration management processes.

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Chapter 1

MODIFICATION MANAGEMENT FRAMEWORK

1.1. Purpose. The purpose of this instruction is to implement direction from the Secretary of the Air Force (SECAF) contained in AFPD 63-1/20-1, *Acquisition and Sustainment Life Cycle Management*. This instruction requires that modifications be managed as efforts using acquisition and sustainment processes, techniques, and governance as outlined in AFI 63-101, *Acquisition and Sustainment Life Cycle Management*.

1.1.1. This instruction provides acquisition and sustainment life cycle management instruction for modifications and must be used in conjunction with AFI 63-101. This AFI is also used in conjunction with: AFI 63-1201, *Life Cycle Systems Engineering*, AFI 10-601, *Capabilities Based Requirements Development*, AFI 21-101, *Aircraft and Equipment Maintenance Management*, AFI 65-601V1, *Budget Guidance and Procedures*, and AFI 99-103, *Capabilities Based Test and Evaluation*. Modification efforts involving nuclear materiel and weapons are also governed by AFI 63-103, *Joint Air Force-National Nuclear Security Administration (AF-NNSA) Nuclear Weapons Life Cycle Management*.

1.1.2. This instruction identifies the roles and responsibilities of stakeholders involved in modification management, the process to develop and staff a modification proposal, and the process to execute a modification once it has been approved and funded.

1.1.3. Unless specified otherwise, for the purposes of this instruction, AF materiel subject to the provisions of this AFI will be generically referred to as “Systems”, “subsystems”, and “items.”

1.1.4. Unless specified otherwise, the term “materiel command” will refer to the Air Force Materiel Command (AFMC), the Air Force Space Command (AFSPC), and other equivalent organizations throughout the DOD.

1.1.5. Unless otherwise specified, for the purpose of this document, the term Program Manager (PM) will be synonymous with the AFI 63-101 defined System Program Manager (SPM).

1.2. Applicability. This instruction applies to the management of all modification programs identified on the Acquisition Program Master List (APML) and Sustainment Program Master List (SPML), modifications to space programs and designated weapon systems cited in AFD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems* or AFI 10-901, *Lead Operating Command--Communications and Information Systems Management*

1.2.1. Unless otherwise specified, for the purpose of this document, the term program will be used to identify any modification program on the APML or SPML, or modification to space systems or designated product groups, or other specified system or subsystem activities, including Special Access Programs .

1.2.1.1. The APML documents acquisition activities designated by the MDA as an ACAT program that have entered the acquisition framework.

1.2.1.2. The SPML documents sustainment activities designated by the Commander of Air Force Materiel Command (AFMC/CC).

1.2.1.3. Modifications that are not on the APML or SPML but are identified on a Research, Development, Test and Evaluation (RDT&E) Program Budget Exhibit (R-1) and Procurement Program Budget Exhibits (P-1/P3A) are also governed by the provisions of this instruction.

1.2.2. This instruction applies to form, fit, function, or interface (F3I) modifications of an in-service AF hardware or software Configuration Item or a combination of both that satisfies an end use function and is designated for separate configuration management. The Configuration Item may be part of a weapon system, including telecommunications and information systems operated by the Air Force that involve intelligence and crypto logic functions related to national security, command and control of military forces, systems, sub systems and items that are integral to the operation of AF weapon systems that has been designated as ‘mission essential’ to conduct military or intelligence operations.

1.2.3. This instruction applies to permanent and temporary modifications that are related to both capability and sustainment requirements.

1.2.3.1. A capability modification is predominantly accomplished in order to satisfy an operational mission requirement by adding a new capability or function, enhancing technical performance, or operational suitability of the asset. Capability modifications may also include efforts designed to improve the operational availability of the item, or to reduce its ownership costs. A capability modification usually results in a change to the existing functional baseline or item performance specification for that CI.

1.2.3.2. A sustainment modification is predominantly accomplished to correct product quality deficiencies or to preserve/comply with the functional baseline or performance specification. A sustainment modification results in a change to the product baseline and may also result in a change to the existing functional baseline or item performance specification for that CI.

1.2.4. This instruction does not apply to:

1.2.4.1. Modifications of commercially available office information systems such as network servers and standard desktop computers, or to data processing equipment that is used for routine administrative support functions or business applications—except when part of a weapon system configuration baseline.

1.2.4.2. Individual engineering changes completed as part of an existing ACAT program involving developmental items or production articles that have not been formally accepted by the government via a Department of Defense Form 250 (DD 250) *Materiel Inspection and Receiving Report*.

1.2.4.3. Assets that are no longer part of an active inventory, such as aircraft in long-term storage.

1.2.4.4. Modifications of facilities or other base-level infrastructure, telecommunications equipment, or property.

1.2.4.5. Maintenance actions.

1.3. Modification. For the purposes of this instruction, a modification is defined as a change to the form, fit, function, or interface (F3I) of an in-service AF hardware or software Configuration Item.

1.3.1. A Configuration Item is a hardware, firmware, or software component, or combination thereof, that satisfies an end use function and is designated for separate configuration management.

1.3.2. Form. Form involves the physical properties and manufacturing characteristics of an asset. For hardware assets, form includes such things as size, shape, weight, and appearance, as well as materiel properties, treatments, finishes, and production tolerances. For firmware and software assets, form includes such things as computer language and the media upon which the application is hosted.

1.3.3. Fit. Fit involves the manner in which an asset physically attaches to, or integrates with an adjacent component or higher level assembly. For hardware assets, fit involves such things as mechanical and electrical attachment points and methods (i.e., connectors, mounting trays, equipment racks, etc.). For firmware and software assets, fit involves the manner in which computer code is installed into its host platform, system, or subsystem.

1.3.4. Function. Function involves the manner in which an asset operates, performs an intended action, or provides a designated capability.

1.3.5. Interface. Interface involves the common boundary where two or more assets that converge and act upon one another (i.e., communicate, transfer data, etc.). Interface may also include the physical, electronic, electrical, functional, and/or the human-system integration characteristics two or more assets must exhibit in order to create a functional system.

1.4. Deviation from Air Force Departmental Directive Issuances. Where the course of action, as approved and documented through the programmatic chain of command, conflicts with an AFPD, the SPM/PM shall submit a request for a waiver to the certifying authority for the publication as described in AFPD 63-1/20-1; where the course of action conflicts with a Departmental directive issuance other than AFPDs, follow waiver processes identified in AFI 63-101.

Chapter 2

MODIFICATION MANAGEMENT ROLES AND RESPONSIBILITIES

2.1. General Guidance. The roles and responsibilities identified in subsequent paragraphs clarify or provide additional guidance regarding the procedures, roles, and responsibilities described in Chapter 3 and Chapter 4 of this instruction. Additionally, in many cases the roles and responsibilities prescribed below augment or complement acquisition and sustainment program management roles and responsibilities prescribed in AFI 63-101 and other AF acquisition and sustainment policy issuances.

2.2. Assistant Secretary of the Air Force for Acquisition (SAF/AQ) will:

2.2.1. Designate non-space modification programs which meet ACAT criteria specified in DODI 5000.02, *Operation of the Defense Acquisition System* and APML criteria established in AFI 63-101 as formal acquisition programs.

2.2.2. Assign oversight of ACAT-designated non-space modification programs and other modification projects to an appropriate SAF/AQ Capability Director; task them to issue Program Management Directives (PMD) or PMD annexes for approved and funded non-space modification programs on the APML.

2.2.3. Approve the assignment of Acquisition Category (ACAT) designated non-space modification programs to Air Force Program Executive Officers (PEO) or Designated Acquisition Official (DAO).

2.2.4. Ensure non-space modification programs are properly defined and justified in budget materials prepared in support of the DOD Planning, Programming, Budgeting, and Execution process.

2.2.5. Coordinate on applicable budget authorization documents and issue program authorization documents for funded non-space modification programs.

2.2.6. Conduct milestone and other decision reviews, and approve documentation for non-space ACAT modification programs IAW requirements detailed in DODI 5000.02 and AFI 63-101.

2.2.7. Monitor the status of ACAT-designated non-space modification programs in execution via program reporting methods prescribed in AFI 63-101.

2.2.8. As required, review the status of non-space modification programs during acquisition executive management forums.

2.3. Under Secretary of the Air Force (SAF/US) will:

2.3.1. Identify space systems, equipment, and programs for which the provisions of this instruction apply.

2.3.2. Issue management directives and guidance as necessary for the conduct of space modification programs.

2.3.3. Approve the assignment of space modification programs to the Air Force Program Executive Officer for Space.

2.3.4. Ensure space modification programs are properly defined, funded, and justified in budget materials prepared in support of the DOD Planning, Programming, Budgeting, and Execution process.

2.3.5. Coordinate on applicable budget authorization documents and issue program authorization documents for funded space modification programs.

2.3.6. Conduct milestone and other decision reviews, and approve documentation for space ACAT I modification programs IAW requirements detailed in AFI 63-101.

2.3.7. Prescribe program reporting requirements as necessary to oversee the execution of space modification programs.

2.3.8. As required, review space modification program requirements, status, and issues during executive management forums.

2.4. Deputy Under Secretary of the Air Force, International Affairs will:

2.4.1. Ensure Foreign Military Sales and International Armaments Cooperation initiatives are appropriately coordinated, properly authorized, and consistent with U.S laws, policy, regulations, and engagement strategies governing export of defense articles, defense services, and related technical data.

2.5. Chief of Warfighting Integration and Chief Information Officer (CIO) (SAF/XC) will:

2.5.1. Provide expertise on the applicability of this publication to national security systems (NSS), defense business systems, and commercial off the shelf (COTS) systems.

2.6. Deputy Chief of Staff for Operations, Plans, and Requirements (AF/A3/5) will :

2.6.1. Process, coordinate, and approve/disapprove modification proposals which exceed dollar thresholds identified in AFI 10-601.

2.7. Deputy Chief of Staff for Logistics, Installations, and Mission Support (AF/A4/7) will :

2.7.1. Review and coordinate on applicable modification program documentation that includes product support strategies, sustainment plans, direction, and guidance.

2.8. Assistant Chief of Staff for Strategic Deterrence and Nuclear Integration (AF/A10) will:

2.8.1. Process, coordinate, and approve for the Air Force all modification proposals for nuclear weapons and components that will involve the Department of Energy or the National Nuclear Security Administration.

2.8.2. Coordinate on all modification proposals affecting the nuclear capability of Air Force procured delivery systems and other supporting infrastructure.

2.9. Commanders of Major Commands and Organizations designated as a “Lead Command” or “Lead Organization” in AFD 10-9 or AFI 10-901 will :

2.9.1. Establish standardized procedures for subordinate units to develop and validate modification proposals.

2.9.2. Designate headquarters elements and subordinate unit offices of primary responsibility (OPR) to receive process, approve/disapprove, and monitor the implementation of

modification proposals, and direct these OPRs to provide subject matter expertise to assist individuals and units with the development and processing of modification proposals.

2.9.3. Serve as final approval authority for implementation of temporary modifications.

2.9.4. Establish a standardized process for reviewing, validating, certifying, prioritizing, and implementing all modification proposals from initiation through installation. At a minimum, this process will:

2.9.4.1. Support AFMC and AFSPC execution of processes for ensuring accurate configuration management of assigned assets.

2.9.4.2. Identify organizational responsibilities and levels of authority for validating and approving modification requirements.

2.9.4.3. Provide a means to review and act upon temporary modifications as they approach their designated expiration date.

2.9.4.4. Provide guidance and procedures for removing temporary modifications and returning a host weapon system or component to its original or most current permanent configuration.

2.9.5. Coordinate modification proposals and implementation plans with all affected using commands and other organizations impacted by the modification, such as training and sustainment organizations.

2.9.6. Provide force structure-related information as necessary to verify proposed modification plans comply with statutory provisions regarding the modification of assets designated for retirement (a.k.a. Sunset Provision).

2.9.7. Forward validated modification proposals to appropriate PMs for initial technical/systems engineering evaluation, implementation program planning, and cost estimation. As requested by the PM, provide appropriate funding to support these activities.

2.9.8. In coordination with the PM, the applicable HAF capability director/Program Element Monitor (PEM), and other HAF organizations (e.g., AF/A8P), develop program plans and budget requirements for current and future year materiel modification requirements. As directed, submit Planning, Programming, Budgeting, and Execution (PPBE) related materials that describe and justify modification requirements.

2.9.9. Ensure funding for T1 Modifications on all impacted assets.

2.9.10. In coordination with the PM and other effected organizations, develop logistics support requirements, fielding strategies, and implementation plans that maximize the operational availability of assigned assets, and ensure the modification will be supportable in its intended operating environment.

2.9.11. Coordinate and provide organizational support for the installation of modification kits/components, Test & Evaluation (T&E) requirements and activities, and the validation/verification of sustainment support elements associated with modifications, such as Technical Order (TO) verification.

2.10. Commanders of Major Commands and Organizations designated as a “Using Command” in ACPD 10-9 or AFI 10-901 will :

- 2.10.1. Establish standardized procedures for subordinate units to develop and validate modification proposals.
- 2.10.2. Designate headquarters elements and subordinate unit offices of primary responsibility (OPRs) to receive process, approve/disapprove, and monitor the implementation of modification proposals.
- 2.10.3. Establish a standardized process for reviewing and validating modification proposals.
- 2.10.4. Forward validated modification proposals to the applicable lead command or organization for action.
- 2.10.5. When requested by a lead command or PM, coordinate modification proposals and implementation plans with designated organizations impacted by the modification.
- 2.10.6. When requested, assist the lead command with the development of modification program plans and budget requirements for current and future year requirements. As directed, submit PPBE-related materials that describe and justify modification requirements.
- 2.10.7. Ensure T1 modification funding is available for impacted assets.
- 2.10.8. When requested by the lead command or the PM, assist with the development of logistics support requirements, fielding strategies, and implementation plans that maximize the operational availability of assigned assets, and ensure the modification will be supportable in its intended operating environment.
- 2.10.9. When directed by the lead command or the PM, coordinate and provide organizational support for the installation of modification kits/components, T&E requirements, and the validation/verification of sustainment support elements associated with modifications, such as TO verification.
- 2.10.10. Prescribe standardized processes, methodologies, and forms for initiating, approving, and installing T2 modifications on dedicated test aircraft and/or other designated test assets.

2.11. Commander, Air Force Materiel Command (AFMC/CC) will:

- 2.11.1. Perform mission assignment on all modifications designated on the APML and SPML.
- 2.11.2. Establish criteria for adding modification programs to the SPML.
- 2.11.3. As requested, assist MAJCOMs and other organizations with the development of modification requirements and identification of potential materiel solutions.
- 2.11.4. Prescribe standardized processes, methodologies, and forms for configuration management of non-space systems and equipment modifications including the conduct of configuration control boards and/or related configuration management processes.
- 2.11.5. Prescribe standardized processes, methodologies, and forms for initiating, approving, and installing modifications on AFMC-possessed assets, including dedicated AFMC test assets and N-prefix aircraft.

2.11.6. Ensure modification programs that fall under AFMC funding authority are properly defined, funded, and justified in budget materials prepared in support of the DOD Planning, Programming, Budgeting, and Execution process.

2.11.7. Ensure governance and oversight of all modifications on the SPML.

2.11.8. Ensure all modifications on the SPML shall have a designated PM with responsibility for and authority to accomplish modification objectives.

2.11.9. Coordinate and/or issue applicable program and budget authorization documents for funded sustainment modification programs.

2.12. Commander, Air Force Space Command (AFSPC/CC) will:

2.12.1. Perform mission assignment on all modifications designated on the APML and SPML.

2.12.2. In collaboration with AFMC, establish criteria for adding space modification programs to the SPML.

2.12.3. As requested, assist MAJCOMs and other organizations with the development of modification requirements and identification of potential materiel solutions.

2.12.4. Establish a standardized process to assign resources and organizational responsibilities to appropriate centers and organizations for conducting approved and funded space modification programs.

2.12.5. Prescribe standardized processes, methodologies, and forms for configuration management of space systems and equipment modifications including the conduct of configuration control boards and/or related configuration management processes.

2.12.6. Prescribe standardized processes, methodologies, and forms for initiating, approving, and installing modifications on AFSPC-possessed assets, including dedicated space test assets.

2.12.7. Ensure modification programs that fall under AFSPC funding authority are properly defined, funded, and justified in budget materials prepared in support of the DOD Planning, Programming, Budgeting, and Execution process.

2.12.8. Collaborate with AFMC to ensure governance and oversight of all modifications on the SPML.

2.12.9. Ensure all modifications on the SPML shall have a designated PM with responsibility for and authority to accomplish modification objectives.

2.12.10. Coordinate and/or issue applicable program and budget authorization documents for funded space modification programs.

2.13. Program Executive Officers and Designated Acquisition Officials will:

2.13.1. Be responsible for management of modifications within their assigned portfolios and ensure collaboration across the ILCM framework. The PEO/DAO is responsible for, and has authority to accomplish, portfolio/program objectives for development, production, and sustainment to meet warfighters' operational needs.

2.13.2. Ensure PMs are managing modification program costs and schedules to meet all performance requirements within approved baselines, program direction, and the modification strategy.

2.14. Modification Program Managers will:

2.14.1. Be accountable for designated modification programs on all matters of program cost, schedule, and performance as defined in DoD 5000 series and AFI 63-101.

2.14.2. Track and coordinate MAJCOM modification proposals from initial receipt through modification program completion or termination.

2.14.3. As necessary, establish integrated product teams or other organizational arrangements to evaluate, manage, and implement modification proposals.

2.14.4. Conduct engineering investigations and analyses IAW AFI 63-1201 as necessary to develop, understand, and implement the technical aspects of a modification proposal, and to ensure the operational safety, suitability, and effectiveness of modified assets, as well as the feasibility of implementing the modification proposal.

2.14.5. As required, conduct a threat and intelligence supportability analysis to understand, identify, and coordinate the intelligence products, services, and data necessary to develop and field the modification.

2.14.6. Accomplish all required system safety and risk assessments IAW approved risk methodologies for commercial-derivative aircraft assets, FAA-prescribed risk management processes, and MIL-STD-882D, *DoD Standard Practice for System Safety*.

2.14.7. Ensure accurate configuration management control of all assets affected by a modification as prescribed in AFI 63-1201.

2.14.8. Coordinate weapon system/component sustainment requirements with affected MAJCOMs and DOD/AF logistics support organizations to ensure modifications are sustainable in their designated operating environment throughout their life cycle.

2.14.9. As required, coordinate system/program protection requirements with MAJCOMs and other DOD/AF organizations consistent with AFI 63-101, AFI 16-201, *Air Force Foreign Disclosure and Technology Transfer Program*, and other prescribing directives to ensure sensitive technologies and critical program information are protected against deliberate or unintended compromise or disclosure.

2.14.10. Develop modification program cost estimates/budgets that include, as a minimum, funding for: systems engineering, test and evaluation, simulator/trainer requirements, initial aircrew and/or maintenance training, trial kit installation, kit proof, common and peculiar support equipment and their calibration requirements, engineering data (to include the cost of data rights and licenses to use the data for operations, maintenance, installation and training purposes), TCTOs, technical order/manual revisions, initial spares, readiness spares package components, installation kit production, kit assembly, kit installation labor, and other logistics sustainment activities that are necessary to sustain the proposed modification.

2.14.11. Develop and implement a modification program Data Management Strategy including a description of the system data rights analysis and action plan to satisfy AF needs for all technical data including drawings and technical orders. This includes a strategy to

acquire data and data rights in anticipation of sustainment strategy including future organic depot repair capability if applicable per *Title 10 United States Code* Section 2320. Update applicable program documentation to capture the data management strategy.

2.14.12. Coordinate modification installation methods (government and contractor) with HQ AFMC to ensure compliance with statutory requirements and DOD/AF policy regarding the performance of depot-level maintenance of AF materiel (aka “50/50” provisions). Consult AFI 63-101 for additional guidance in this regard.

2.14.13. Coordinate roles and responsibilities for implementation of the modification with other affected PMs and organizations. As necessary, document these roles and responsibilities in a memorandum of agreement.

2.14.14. Coordinate materiel modification requirements and schedules with all affected organizations, including equipment and inventory management specialists with cognizance over the materiel to be modified.

2.14.15. Prepare and maintain modification program baselines and documents as described in this instruction and IAW provisions detailed in AFI 63-101. This includes but is not limited to Life Cycle Management Plan (LCMP), Systems Engineering Plan (SEP), Test and Evaluation Master Plan (TEMP), Public Private partnership (PPP), and Information Support plan (ISP) to reflect changes resulting from the modification.

2.14.16. In coordination with the lead command, develop and provide modification program strategies, plans, and documents for ACAT-designated modification programs to the applicable Milestone Decision Authority (MDA) for approval.

2.14.17. Report the status of ACAT-designated modification programs and other modification projects IAW MDA direction and AFI 63-101.

2.14.18. Annually, in consultation with the PEO, identify and propose descoping options to the Configuration Steering Board to address operational implications.

Chapter 3

MODIFICATION TYPES

3.1. Modification Types. There are two types of modifications, temporary and permanent.

3.2. Temporary Modifications. Temporary modifications change the configuration of an item to enable short-term operational mission accomplishment, or to conduct test and evaluation (T&E) of new and modified equipment. There are two kinds of temporary modifications: Temporary-1 and Temporary-2.

3.2.1. Serialized Item Management (SIM) requirements, such as Item Unique Identification (IUID) registration and marking, will be considered for Temporary modifications based on the requirements in DODI 8320.04, *Item Unique Identification (IUID) Standards for Tangible Personal Property*, DODI 4151.19, *Serialized Item Management (SIM) for Materiel Maintenance*, and the long term strategy of the modification.

3.2.2. The AF Form 1067, *Modification Proposal* is used to define and approve temporary modification proposals. The requesting activity shall fully describe the modification on AF Form 1067 to include: number of units to be modified, total duration of installed temporary modification, and description of the user's and/or system/commodity manager's plan for converting the modification into a permanent modification, or their plan for removing the modification from effected articles. In instances where the approved modification is not fully described on the AF Form 1067, the AF Form 1067 will be returned to the author for required updates and resubmission. (**Note:** This requirement replaces the 5 unit/1 year rule and T-1 waiver process from previous AFI 63-1101)

3.2.3. Temporary-1 (T-1). T-1 modifications change the configuration of an item in order to satisfy short-term operational mission requirements by adding, modifying, or removing hardware and/or software components or capabilities in a manner that provides an immediate operational benefit. T-1 modifications typically involve the use of existing off-the-shelf or non-developmental items, including stock-listed equipment and materiel.

3.2.3.1. T-1 modifications shall not be used to circumvent the requirements associated with permanent modifications, as prescribed in this instruction, or the lack of appropriate modification funding.

3.2.3.2. T-1 modifications involving non-space related systems and equipment are normally accomplished and supported locally, by a MAJCOM or base-level operational unit. T-1 modifications involving space systems and equipment are normally accomplished and supported by an AFSPC PM.

3.2.3.3. The PM shall ensure all modifications address operational safety, suitability, and effectiveness.

3.2.3.4. T-1 modifications shall be approved by the Program Manager. Requests must include clear and compelling evidence that shows why the temporary modification is needed to support mission requirements. The request shall be coordinated through the lead command (as applicable), to the AFD 10-9 designated weapon system program manager (SPM), product group manager (PGM), or designated commodity manager (CM) within AFMC (non-space assets) or AFSPC (space assets). T-1 modifications with

duration of greater than 1 year shall be supported by clear and compelling justification/rationale to exceed 1 year. All existing T-1s that were submitted under the 5-asset/1 year rule of the Jul 2001 version of AFI 63-1101, shall submit a revised AF Form 1067 in lieu of a waiver.

3.2.3.5. All approved T-1 modifications with a duration that exceeds 1 year shall be forwarded to either SAF/XCI (for designated communications and electronics (C&E) systems) or AF/A4L (for non-C&E systems and C&E end-items incorporated into non-C&E weapon systems) for information.

3.2.3.6. T-1 modifications are not authorized permanent logistics support such as peculiar support equipment and sustaining engineering support. However, minimum essential logistics support, including verified technical data or interim contractor support, essential for the temporary operation and sustainment of the modification in its designated mission environment will be provided, consistent with weapon system support concepts and/or product support strategies. The lead command shall determine these minimum essential logistics support requirements in coordination with the PM or materiel manager as applicable. Government personnel (military and civilian) shall use verified technical data in installing or maintaining a temporary modification.

3.2.3.7. T-1 modifications may be used to satisfy an urgent operational need (UON) that have been validated IAW AFI 10-601, and joint urgent operational needs (JUON) that have been validated IAW CJCSI 3470.01, *Rapid Validation and Resourcing of Joint Urgent Operational Needs (JUONS) in the Year of Execution*.

3.2.3.8. Unless otherwise specified in the currently approved AF Form 1067, all T-1 modifications will be replaced by permanent modifications or removed from the host system or component within one year of installation.

3.2.3.9. Organizations requesting to extend the installation of a T-1 modification beyond the currently approved quantity or time period will prepare and submit a new AF Form 1067 in accordance with this instruction.

3.2.3.10. T-1 modifications that are converted into permanent modifications require development and processing of a new AF Form 1067 or other equivalent modification proposal to ensure permanent life cycle management issues such as supportability are addressed. In such cases, the lead command will notify the applicable PM of their intent to convert a T-1 modification into a permanent modification, and follow the permanent modification proposal requirements defined in this instruction.

3.2.3.11. T-1 modified assets must be capable of being returned to their original or current approved permanent configuration within 48 hours or a time period specified by the lead command and documented in AF Form 1067.

3.2.3.12. T-1 modifications will be removed prior to host weapon system/component input for Programmed Depot Maintenance (PDM) unless coordinated with the PDM organization.

3.2.4. Temporary-2 (T-2). T-2 modifications are used to evaluate the technical performance, operational effectiveness, and/or the operational suitability of developmental hardware and software capabilities when not associated with a permanent modification. T-2 modifications

are also used to install and operate T&E-specific support equipment, instrumentation and data recording equipment, telemetry systems, etc. on T&E assets. T-2 modifications may be used in support of all forms of T&E activity, including developmental test and evaluation, operational test and evaluation, and MAJCOM-conducted force development evaluation activities.

3.2.4.1. The PM, the lead command, and designated test agencies will collaboratively determine the number of assets to be T-2 modified based on the scope, complexity, and length of T&E activities. They will collaboratively determine the organizational roles, responsibilities, and procedures for the configuration management of T-2 modified test assets, the installation, operation, and sustainment of T-2 modification equipment, and funding requirements/responsibilities for the T-2 equipment.

3.2.4.2. PMs, lead commands, and test organizations may create “umbrella” or “blanket” T-2 modification proposals that cover a specified period of time or series of test activities for the purpose of conducting incremental hardware and software Developmental Test & Evaluation/Qualification Test & Evaluation (DT&E/QT&E), or to identify a range of test support equipment that may be installed in support of T&E activities. In this case, the T-2 modification proposal enables PMs, lead commands, and test organizations to install and remove developmental materiel (hardware and software), or specific pieces of test support equipment on designated test assets without the need for repeated configuration management reviews and approvals. However, in such cases, PMs, lead commands, and test agencies shall collaborate as necessary to maintain accurate and up-to-date configuration control of effected test assets, and to coordinate specific materiel installation requirements and activities.

3.2.4.3. T&E organizations and lead commands shall assist the PM as necessary to ensure the operational safety, suitability, and effectiveness of T-2 modified assets that are maintained IAW AFI 63-1201, and to ensure T-2 modified assets are provided sufficient sustainment support as needed to complete directed T&E activities.

3.2.4.4. T-2 modifications will be maintained on the test asset(s) for as long as necessary to complete T&E activities specified in approved test plans, and then be removed, returning the asset to its original or current approved permanent configuration. Instrumentation data collection and other support equipment used for both current and future test data collection requirements are not normally removed after each test. Such assets will be removed when no longer required, or the instruments/test support system become obsolete.

3.2.4.5. T-2 modifications will normally be removed prior to input for PDM. T-2 modifications not removed prior to PDM should be coordinated with the PDM organization.

3.2.4.6. A T-2 modification may be used to test and evaluate a proposed permanent configuration change. Upon the conclusion of T&E activities, the lead command, in coordination with PM, shall determine if the modification will be permanently adopted. If adopted, the T-2 mod may remain in place upon completion of T&E activity while a permanent modification proposal is processed and implemented IAW the provisions of this instruction. The T-2 modified asset will be upgraded to the approved permanent configuration as part of the permanent modification program.

3.3. Permanent Modifications. Permanent (P) modifications change the configuration of an asset to effect a lasting improvement in the operational effectiveness, suitability, survivability, and/or ownership costs of a fielded weapon system, subsystem, or item. Some permanent modifications are further designated as safety modifications.

3.3.1. Permanent modifications are used to satisfy requirements approved IAW AFI 10-601. An approved permanent modification includes the inherent authority to install developmental components of the modification on test assets for the purposes of conducting engineering investigations, developmental testing, and/or other evaluation of the modification. An approved permanent mod also includes the inherent authority to perform trial kit installations and kit proofing activities in order to verify the installation procedures and sustainment elements associated with the modification prior to full-rate kit production and/or fleet-wide installation.

3.3.2. Permanent capability modifications shall only be accomplished in response to an approved AF Form 1067 or JCIDS document. However, PMs may initiate systems engineering tasks and preliminary design activities for permanent capability modifications in anticipation of an approved AF Form 1067 or JCIDS Document, but must consider the technical complexity and maturity of the stated need, along with programmatic risk, when preparing modification program strategies and plans. In such cases, the PM will limit expenditures while the requirement is undergoing coordination and approval. The modification requirement must be fully documented in an approved AF Form 1067 or JCIDS document prior to program initiation.

3.3.3. Permanent capability and sustainment modifications will normally be installed across the entire inventory of the host weapon system or product line. However, when necessary to support operational mission requirements, permanent modifications may be installed on a subset of the host weapon system or product line inventory with the approval of the lead command and the applicable PM.

3.3.4. Permanent modifications may be conducted in discrete installation segments (e.g., "Group A" and "Group B" segments) when necessary to support operational mission or deployment requirements or to cost effectively manage the host weapon system or product line inventory. In this case, the content of each modification segment must be approved by the lead command and the applicable PM.

3.3.5. Permanent capability and sustainment modifications will be provided full logistics support (e.g., spares, support equipment, technical data, and serialized item management) commensurate with the host system or component maintenance concept and product support strategy/plans. Consult AFI 63-101 for sustainment planning requirements associated with AF acquisition and sustainment programs.

3.4. Permanent-Safety (P-S). P-S modifications are permanent modifications that correct materiel or other deficiencies which could endanger the safety or health of personnel, or cause the loss of, or extensive damage to systems or equipment. P-S modifications are primarily conducted to correct materiel deficiencies which caused a Class A mishap, per the provisions of AFI 91-204, *Safety Investigations and Reports*, and as identified in an Air Force Safety Center Memorandum of Final Evaluation.

3.4.1. Whether directly associated with a Class A mishap or not, permanent modification proposals designated as P-S shall meet the following criteria:

3.4.1.1. IAW MIL-STD-882D, the underlying deficiency has been determined by the PM to be a “serious risk” (or higher) of causing injury to personnel or extensive damage to equipment, and,

3.4.1.2. The PM has performed a risk analysis to determine the proposed modification is technically feasible, operationally effective, and sustainable, and,

3.4.1.3. The Chief of Air Force Safety has approved the lead command’s request to designate the proposed modification as a safety modification.

3.4.2. P-S modifications shall be given priority for funding and implementation over all other pending modifications.

3.4.3. P-S modifications will be accomplished IAW with the provisions of this instruction. However, PMs may deviate from the provisions of this instruction when necessary to prevent loss of life or minimize risk to personnel. PMs may, in coordination with the lead command, issue interim procedures or operating restrictions, and install temporary modifications as necessary prior to implementing a P-S modification. Refer to AFI 21-101 for additional guidance in this area.

3.5. Low Cost Modification. Low cost modification policy guidance can be applied to modifications of in-service weapon system or other end item of equipment that meet the criteria of AFI 65-601V1 described below:

3.5.1. Is designed to correct minor product quality defects or other deficiencies within the scope of the item’s established functional baseline and/or system specification(s), or,

3.5.2. Is designed to correct minor reliability, maintainability, durability, or product safety deficiencies, including parts obsolescence or other supply support issues with the item, and,

3.5.3. Requires less than \$2.0M total to fully implement the modification, including all non-recurring and recurring costs, and,

3.5.4. Can be accomplished within twelve months.

3.6. Modifications to Assets Planned for Retirement (a. k.a. Sunset Provisions). IAW Title 10 U.S.C 2244a , *Equipment Scheduled For Retirement Or Disposal: Limitation On Expenditures For Modifications*, permanent modifications to any aircraft (i.e., a given tail number), weapon, or other item of equipment that the SECAF plans to retire or otherwise dispose of within five years after the date on which the modification, if carried out, would be completed, are prohibited. Exceptions to this prohibition include modifications which:

3.6.1. Cost less than \$100,000

3.6.2. Have reusable items of value installed as part of the modification that will, upon the retirement or disposal of the modified item, be removed from that item, refurbished, and installed on another piece of equipment, and the cost of this modification, including the cost of removal and refurbishment of reusable items of value, is less than \$1M, or,

3.6.3. Are designated as safety modifications, or,

3.6.4. The SECAF has determined to be in the national security interest of the United States, and has so notified the Congressional defense committees in writing.

3.7. Additional Modification Requirements. In addition to the general modification program management requirements prescribed in this instruction, modification activities involving certain types of materiel may impose additional management requirements on the using/lead command and PM.

3.7.1. Modifications in Response to Urgent Operational Needs. Materiel modifications necessary to satisfy validated UONs will be prioritized over all other modifications except safety modifications. Additionally, though UONs typically involve compressed acquisition timelines, PMs shall ensure all modification programs responding to a UON comply with the life cycle systems engineering and product sustainment guidance in Chapter 2 of this instruction and other applicable AFIs. Prior to being released to the field, modifications responding to validated UONs will be appropriately tested by a cognizant test agency, and necessary product certifications will be accomplished. For additional information on the development, processing, approval, and implementation of UONs, refer to AFI 10-601 and AFI 63-114, *Rapid Response Process*.

3.7.2. Modifications to Federal Aviation Administration (FAA) Certified Aircraft. Modifications that would cause an FAA-certified AF aircraft to lose its type or airworthiness certification are prohibited. Modifications to such aircraft will comply with AFD 62-4, *Standards of Airworthiness for Passenger Carrying Commercial Derivative Transport Aircraft*, AFD 62-5, *Standards of Airworthiness for Commercial Derivative Hybrid Aircraft*, and their implementing AFIs. Modifications which implement FAA-issued airworthiness directives and service bulletins will receive priority for funding and implementation when such modifications are necessary to preserve FAA certification and comply with Federal Aviation Regulations and standards.

3.7.3. Modifications to Weapons and Munitions. Modifications involving nuclear and non-nuclear aircraft-carried munitions or stores must include appropriate SEEK EAGLE certifications IAW AFI 63-104, *The SEEK EAGLE Program*. Modifications involving non-nuclear munitions and their associated support and training equipment must be certified IAW AFI 91-205, *NonNuclear Munitions Safety Board*. Modifications involving nuclear munitions and their associated support and training equipment must be certified IAW AFI 91-103, *Air Force Nuclear Design Safety Certification Program*. Modifications involving directed energy weapons must comply with AFI 91-401, *Directed Energy Weapons Safety*.

3.7.3.1. A SEEK EAGLE Request (SER) is used in lieu of an AF Form 1067 to establish a requirement for a new or modified aircraft stores configuration. Although this is an aircraft modification, SERs and the approval of aircraft stores configuration changes are processed IAW AFI 63-104, and are not subject to the provisions in this AFI.

3.7.4. Modifications to Radio Frequency (RF) Dependent Devices. Modifications to devices which transmit electromagnetic energy must include appropriate spectrum certifications required by Department of Defense Directive (DODD) 4650.1, *Policy for Management and Use of the Electromagnetic Spectrum*, AFI 33-118, *Electromagnetic Spectrum Management*, and Air Force Manual (AFMAN) 33-120, *Electromagnetic Spectrum Management*. Additionally, the Military Communications-Electronics Board Equipment Spectrum Guidance Permanent Working Group must coordinate the certification of modified spectrum

dependent systems for worldwide DOD use. Consult AFI 33-118 and AFMAN 33-120 for specific guidance related to the certification of RF dependent devices.

3.7.5. Modifications to non Joint Tactical Radio Systems (JTRS). In accordance with Assistant Secretary of Defense for Networks and Information Integration (ASD/NII) policy and AFI 63-101, a JTRS waiver or notification must be accomplished prior to initiating contracting activity to develop, modify, or procure non-JTRS radios.

3.7.6. Modifications to Electronic Warfare Integrated Reprogramming (EWIR) Equipment. EWIR equipment is used to make changes to operational electronic warfare hardware and software systems, threat simulators and emitters, aircrew training devices, and other related support systems. Modifications not directly impacting the form, fit, function, or interfaces to such equipment may be conducted IAW AFI 10-703, *Electronic Warfare Integrated Reprogramming*.

3.7.7. Modifications to Defense Communications System Equipment. Modifications to defense communications system equipment, such as the Defense Switching Network and defense communications satellite terminals will be initiated, approved, and conducted in coordination with the Defense Information Systems Agency (DISA), which designates DOD communications equipment as Defense Communications Systems Configuration Items (DCSCI). DISA shall participate in configuration control processes and boards for DCSCI modifications executed by the AF.

3.7.8. Modifications to Intelligence and Information Systems and Networks. DOD intelligence and information systems may have other requirements for modification programs (e.g. interoperability, certification and accreditation, spectrum management). Refer to AFI 63-101 for detailed guidance regarding the acquisition and sustainment management requirements associated with DOD/AF intelligence and information systems and networks.

3.7.9. Modifications to Support Equipment/Automatic Test Systems (SE/ATS). Modifications involving SE/ATS equipment will comply with SE/ATS guidance contained in AFI 63-101. Additionally, modifications which effect SE/ATS equipment will be coordinated with the support equipment product group manager (PGM) at the Warner Robins Air Logistics Center, who provides centralized management of Air Force SE/ATS equipment.

3.7.10. Modifications Involving Materiel Subject to Serialized Item Management (SIM). Various DOD and AF policies require AF materiel to be equipped with standardized, machine-readable markings that provide globally unique and unambiguous identification of individual assets. Modifications to AF materiel that are so marked must comply with SIM policy provisions contained in DODD 8320.03, *Unique Identification (UID) Standards for a Net-Centric Department of Defense*, DODI 8320.04, DODI 4151.19, and AFI 63-101. Modification PMs shall ensure all modification activities are conducted in compliance with Defense Federal Acquisition Regulations (DFARS) Clause 252.211-7003, *Item Identification and Valuation*, DFARS Clause 252.211-7007, *Item Unique Identification of Government Property*, and MIL-STD-130, *Identification Marking of U.S. Military Property*.

3.7.11. Modifications to AF Maintenance Training Equipment. Modifications to AF-common SE used solely for maintenance training purposes may be conducted locally, using local/unit funds. Such modifications are exempt from the procedures in this AFI. However,

organizations performing such modifications will do so consistent with the operational safety, suitability, and effectiveness requirements identified in AFI 63-1201. Locally-modified equipment that is subsequently reassigned from the training organization to another unit will be returned to its original or most-current configuration IAW published technical orders and data, prior to reassignment.

3.7.12. Modifications Involving Contract Logistics Support (CLS) Supported Materiel. The provisions of this instruction are applicable to modifications involving AF materiel sustained via CLS contracts. PMs shall ensure CLS contracts include specific work requirements, terms, conditions, and deliverables necessary to satisfy the modification and configuration management requirements prescribed in this AFI.

3.7.13. Modifications Involving Foreign Military Sales (FMS) or Security Assistance (SA) Assets. Modification activities that include FMS/SA assets shall be conducted IAW existing management arrangements between the US Government and the effected foreign government(s). In the event existing management agreements do not specifically or sufficiently address the modification of FMS/SA assets, the PM shall contact the Air Force Security Assistance Center (AFSAC) to coordinate modification activities involving such assets.

3.7.14. Modifications to Joint Assets. Modifications to assets under the management purview of a Joint Program Office (JPO) shall be conducted IAW the designated lead service's modification management process/procedures, or as established in a program memorandum of agreement (MOA). Modifications to joint-designated weapon systems and equipment will be coordinated with the JPO.

3.7.15. Modifications Involving the Missile Defense Agency (MDA). Configuration management procedures for systems and equipment developed by the MDA that have been or will be transferred to the AF will normally be established in an MOA between the AF and the MDA. If AF funds are used to implement modifications to an in-service MDA-developed system, AFI 63-131 will apply in addition to any formal modification program management and/or configuration management agreements between the AF and the MDA.

3.7.16. Modifications to Loaned Assets. Modifications to AF assets on loan to a non-Air Force agency (e.g., Defense Intelligence Agency, Security Assistance Organizations, etc.) will be initiated, approved, and conducted IAW a MOA between the AF and the using agency. Modifications to AF-common assets that are initiated by a non-AF agency will be evaluated for AF-wide application by the lead command or commodity manager with overall management responsibility for the asset.

3.7.17. Modifications pursuant to *International Armaments Cooperation Agreement*. Modifications that occur under *International Armaments Cooperation Agreement* will be conducted as described in AFI 16-110, *US Air Force Participation in International Cooperation (IAC) Programs*.

3.7.18. Joint Capability Technology Demonstrations (JCTD). JCTDs that require modification of an in-service AF asset in order to evaluate the capability or technology will be conducted IAW this instruction and the JCTD "Implementation Directive." Modifications necessary to conduct a JCTD will normally be approved and installed as T-2 modifications.

Chapter 4

MODIFICATION PROPOSAL PROCESS

4.1. Modification Proposal Overview. The modification process starts with the identification of the modification need/requirement and ends when the modification is implemented and the modification program is terminated. This chapter describes the process for developing and approving modification proposals, and for executing modification programs that implement the approved proposal.

4.1.1. A modification proposal is the document or combination of documents needed to initiate and execute the modification management process. A modification proposal consists of 4 steps: 1) defining the modification requirement, 2) validating the modification requirement, 3) determining the technical requirements and solution, and 4) certifying and approving a modification proposal.

4.2. Defining the Modification Requirement. All modifications whether a capability or sustainment modification must be driven by a validated requirement. The PM shall ensure that there is a validated requirement that has been defined and documented IAW the process and criteria outlined in AFI 10-601 prior to initiating the modification.

4.2.1. AF Form 1067. The AF Form 1067 is the document normally used to initiate a modification proposal for fielded systems and equipment. The 1067 satisfies both elements of a modification proposal by providing a means to describe the modification requirement, and a means to capture the technical aspects associated with the materiel solution that satisfies the requirement. The 1067 is also used to establish the requirement for all temporary modifications, regardless of cost. The 1067 also provides a means for the system or commodity manager with configuration control and engineering authority over the effected asset(s) to document the technical parameters associated with the modification, such as systems engineering requirements and recommendations, impacts to logistics support elements associated with the asset(s), and the type and amount of funding necessary to accomplish the modification. The 1067 provides a means for tracking modification proposals through the modification approval process, and assists in identifying Configuration Items to be effected by the modification.

4.2.2. Joint Capabilities Integration and Development System (JCIDS) Documents. For permanent modifications that are estimated to exceed 10% of ACAT II dollar thresholds, the requesting organization must complete a formal JCIDS document to establish the user's modification requirement(s). Although AFI 10-601 does not always require an AF Form 1067 to document requirements, an AF Form 1067 can be used in order to document the configuration impacts, reference the legacy requirement, and initiate a specific modification activity. Consult AFI 10-601 for detailed information on the AF requirements generation and JCIDS document preparation and approval processes.

4.2.3. Urgent Operational Need (UON). Requirements for solutions to UONs are established in accordance with the guidance in AFI 10-601 and AFI 63-114. Warfighter UONs that emerge during conflicts or other crisis situations often involve modifications to in-service weapon systems and equipment. UON capability requirements are normally established via a message that is generated by a combatant command or an AF MAJCOM,

and forwarded to Headquarters Air Force (HAF) for information. In the event a UON cannot be satisfied at the MAJCOM level, the need is forwarded to HAF in form of a Combat Capability Document (CCD). Unless there is an approved JCIDS document, an AF Form 1067 is generated and processed to summarize the modification requirement, to document the technical parameters necessary to satisfy the urgent need, and to initiate the modification management processes. For modification programs responding to an approved COCOM UON or MAJCOM CCD, the PM shall coordinate technical requirements and funding for the modification directly with the UON/CCD sponsor.

4.2.4. Other Modification Proposal Documents. Other documents, such as airworthiness directives produced by the Federal Aviation Administration (FAA) and service bulletins developed by defense industry manufacturers may also fulfill required elements of a modification proposal.

4.2.5. Documenting the Requirement

4.2.5.1. Individual personnel in operational units, sustainment organizations, or with management oversight of a system will initiate a modification proposal by completing Blocks 1 through 10 of the AF Form 1067 IAW this AFI, MAJCOM procedures, and local instructions. Modification proposals developed in response to a UON will include this statement in Block 9 of the AF Form 1067: "This modification is needed to address an Urgent Operational Need." The initiator shall then submit the 1067 to the unit focal point for organizational validation (1067 Block 11; see paragraph 4.3.1 below).

4.2.5.2. PM-Initiated Modification Proposals. The PM for a given asset may also develop an AF Form 1067 to initiate a modification proposal. In this case, the PM shall submit the AF Form 1067 to the applicable lead command for validation (AF Form 1067 Part III; see paragraph 4.3.3 below).

4.3. Validating a Modification Proposal. Validation is the process whereby units and MAJCOMs concur with a modification proposal, and verify the requirement is a valid organizational need that requires a materiel solution. Validation does not mean that an organization approves the proposed materiel solution or authorizes its implementation.

4.3.1. Organizational Validation (AF Form 1067 Block 11). A modification proposal submitted by an individual shall first be validated within the initiator's organization, using procedures established by the parent MAJCOM and/or local instructions implemented within the organization. The organization shall forward the validated AF Form 1067 to the parent MAJCOM for further review and action.

4.3.2. Using Command Validation (AF Form 1067 Part II). The initiator's parent MAJCOM headquarters shall validate the AF Form 1067 IAW established MAJCOM procedures. If the proposed modification affects an AF weapon system identified in AFD 10-9, or a communications/ information system designated in AFI 10-901, the using command shall then forward the validated AF Form 1067 to the applicable lead MAJCOM or other AFD 10-9/AFI 10-901 designated organization for further review and action.

4.3.3. Lead Command Validation (AF Form 1067 Part III). The lead MAJCOM or AFD 10-9/AFI 10-901 designated organization shall validate the proposed modification and materiel solution(s) via prescribed requirements and processes established by the command. The lead Command shall coordinate the modification proposal with all affected using

commands and supporting organizations, such as training and logistics support units. Lead commands/organizations shall forward all proposed permanent-safety modifications to the Chief of Air Force Safety for coordination and approval of the safety designation. Once validated, the lead command shall prioritize the modification proposal for funding and implementation. Modification proposals designated for funding and implementation will be forwarded to the applicable PM for initial technical evaluation, implementation program planning, and cost estimation (1067 Part IV; see paragraph 4.4 below).

4.3.4. **Modifications Involving Multiple Lead Commands.** For modifications involving multiple mission variants within a given asset design-series that are assigned to multiple lead MAJCOMs (e.g., AC/C/EC/MC/HC/WC-130, C/KC/RC/WC-135), each lead MAJCOM shall validate the modification proposal against their assigned assets, and the lead MAJCOM responsible for the largest number of assets within the given design-series will have overall responsibility for validating and approving the modification proposal. If the modification proposal is ultimately approved, each lead MAJCOM shall determine whether to implement the modification on its assigned assets.

4.4. Determining the Technical Requirements, Implementation Strategy, and Costs of a Modification Proposal (1067 Part IV).

4.4.1. **Initial Technical Evaluation.** The PM, with the assistance of the systems engineering authority for the affected Configuration Item(s), shall determine preliminary technical impacts and systems engineering-related requirements to implement the proposed modification IAW AFI 63-1201. Such evaluations will include:

4.4.1.1. Determination of the impacts to the host weapon system/ component's operational safety, suitability, and effectiveness (OSS&E) baseline, as well as any operating certifications or restrictions associated with the host weapon system/component, such as airworthiness certifications, munitions carriage/employment certifications, environmental safety and occupational health certifications, and security certifications.

4.4.1.2. This evaluation will also determine the potential impacts to, and any corollary modification requirements for training systems/devices and intelligence or information-related systems and networks that may be required to operate, maintain compatibility with, or sustain the proposed modification.

4.4.1.3. The PM shall also determine the sustainment support needs associated with the proposed modification, including system/product reliability, availability, maintainability, and supportability impacts and requirements.

4.4.1.4. The PM shall also conduct a risk analysis and safety assessment for the proposed modification, and identify any necessary risk acceptance documentation, safety certifications, or statements that must accompany the modification IAW AFI 63-101, AFI 91-202, *The US Air Force Mishap Prevention Program*, and MIL-STD-882D.

4.4.1.5. The PM shall determine if the modification will involve or produce critical program information (CPI).

4.4.1.6. The PM shall ensure this initial technical evaluation encompasses all Configuration Items and external interfaces whose functional/product baselines may be affected by the proposed modification.

4.4.1.6.1. The PM shall coordinate these initial technical and programmatic requirements with other effected system/product management entities, such as ALCs, training system program management offices, technology development organizations, etc.

4.4.1.6.2. The PM shall denote the modification category (i.e., primarily a capability modification or a sustainment modification) in Part IV of the 1067 and in applicable modification program plans.

4.4.1.7. Preliminary Implementation Strategy. In conjunction with the initial technical evaluation of a proposed modification and in coordination with the lead command, the PM shall develop a preliminary strategy to implement the modification. This strategy will address the management approach to implementing the modification and include, at a minimum, a top-level description of how the modification should be funded, developed, tested, produced, fielded, and supported, along with an estimated schedule for implementing the modification.

4.4.1.8. Cost Estimation. When requested by the lead command, the PM shall develop formal cost estimates to implement the proposed modification IAW procedures prescribed in AFPD 65-5, *Cost and Economics* as well as the AFI/AFMAN 65-500 series publications and approved AFMC/AFSPC cost estimating techniques. This estimate shall include all costs associated with the development, production, operation, and sustainment of modification throughout its expected life cycle. Any cost estimates provided by commercial vendors or other government agencies will be validated by the PM. For temporary modifications, this estimate shall include costs for host system de-modification and disposal (as applicable). Low cost modifications do not require preparation of formal, detailed cost estimates. Additional cost estimating requirements are prescribed in AFI 63-101 and AFPD 65-5, and applicable AFI/AFMAN 65-500 series publications.

4.4.1.9. Program Manager Assessment and Recommendation. The PM shall provide the completed technical evaluation, preliminary implementation strategy and schedule, and cost estimates to the lead command, along with any other specific recommendations concerning the development, production, installation, testing, and sustainment requirements associated with proposed modification. Depending on the complexity of the modification, the maturity and availability of critical technology elements of the modification, and other external factors such as the availability of funding, the PM may provide the lead command with implementation courses of action that offer alternative or evolutionary approaches to satisfy the operational requirement or stated need.

4.4.1.10. Certification of Requirements Feasibility. The PM shall attest to the feasibility of the proposed modification requirement by including the following statement in Part IV of the 1067 "The operational requirement(s) described in this modification proposal is (are) technically achievable and executable within the estimated schedule and budgeted life cycle costs identified herein." For modification proposals initiated with a JCIDS

document, PMs shall follow internal AFMC/AFSPC procedures for attesting to the feasibility of ICD/CCD/CPD requirements.

4.4.2. Certifying, Approving, and Funding a Modification Proposal (1067 Part V). The lead command shall review the PM's initial technical evaluation, implementation strategy and schedule, and cost estimates, then approve the modification for implementation, suspend, or terminate the Modification Proposal. Once the modification is fully approved (Part IV and Part V are signed by authorized individuals) and designated for implementation, the lead command and PM shall revise and coordinate a final implementation strategy with effected using commands, support/sustainment organizations and other stakeholders associated with the modification. Once all management reviews and approvals are completed, the modification proposal will be catalogued and maintained IAW applicable records management requirements. Modification proposal documents shall be maintained as needed to provide a permanent record of the user's requirement, and as needed for configuration control purposes throughout the modified asset's life cycle.

4.4.2.1. Modification Approval Thresholds: Permanent modifications projected to cost in excess of \$30M (total expenditure, FY2000 constant year dollars) must also be approved by AF/A5R. In this case, the lead MAJCOM submits the completed 1067 to AF/A5R, accompanied by a transmittal memorandum and a requirements correlation table that contains threshold and objective requirements for key system attributes and other attributes associated with the proposed modification. See AFI 10-601 for further details on modification approval thresholds.

4.4.2.2. Funding Modifications. Lead commands shall coordinate the source of funding for approved modification proposals with the PM and, as applicable, the HAF Program Element Monitor (PEM) with cognizance over the affected weapon system, component, or program element code. Funding sources for temporary and permanent modifications will be identified IAW AFI 65-601V1 and established AF budget guidance. Program and budget authority documents for modification programs will be processed IAW standard financial management processes.

4.4.2.3. Modification Funding - General Guidelines. The following paragraphs provide a top-level overview of modification funding requirements. Consult AFI 65-601V1 for detailed guidance on the authorities, processes, and requirements associated with funding modification programs.

4.4.2.3.1. Research, Development, Test, and Evaluation Funds. RDT&E funds are generally used to fund initial hardware and software development efforts up to the point where an operational baseline configuration has been designed, developed, tested, qualified, and accepted by the government. RDT&E funds are also used to increase the capability or performance of a weapon system, subsystem, or component beyond existing specifications or performance levels, and to implement new hardware and software technologies that involve exploratory development and/or prototyping activities.

4.4.2.3.2. Procurement Funds. Procurement funds are generally used to manufacture and install modification "kits" in fielded assets, as well as other hardware and software components associated with the modification. Procurement funds may also

be used to fund certain non-recurring systems engineering tasks in support of end item or kit production.

4.4.2.3.3. Operations and Maintenance Funds. O&M funds are generally used to maintain hardware and software components that have been placed in service. O&M funds are used for expense materials that are not part of a mod kit, but are determined to require replacement during inspection and modification activities. Use O&M funds when conducting engineering studies to determine if reliability/maintainability efforts should proceed to the modification production phase. O&M also fund improvements in software for which the Air Force has unlimited data rights.

4.4.2.3.4. Modification programs may involve the use of multiple appropriation types in order to implement the modification. Different appropriations may be necessary to fund separate and distinct tasks associated with the modification. For instance, RDT&E funds will often be necessary to design and test the modification, while procurement funds are often required to produce and install the modification. Modification programs will comply with Full Funding Policy detailed in AFI 65-601V1 and DoD 7000.14-R, Volume 2A, Chapter 1.

4.4.2.3.5. New Start Notifications. Any modification program or project that has not been previously justified to and approved by Congress during the appropriations process for the fiscal year involved is considered a new start. When a determination has been made that a modification proposal meets new start criteria, Congress must be notified via either a letter of notification or a completed Department of Defense Form 1415-1, *Prior Approval Reprogramming Action*. Modifications that result from FAA-issued service bulletins are also considered new starts if they are not consistent with the "Service Bulletin" budget line item materials provided to Congress. Refer to AFI 65-601V1 and DOD 7000.14-R, *Department of Defense Financial Management Regulation*, Volume 3, Chapter 6 for specific requirements, processes, and stipulations associated with new start notifications.

4.4.2.3.6. Individual modifications funded in the "Low Cost Modification" budget line item are generally not considered new starts. However, any modification proposal which exceeds the low cost modification budget threshold (\$2M for the entire modification effort) or is inconsistent with the budget justification materials provided to Congress regarding this line item is subject to new start guidelines and approvals.

Chapter 5

MODIFICATION PROGRAM MANAGEMENT

5.1. Modification Program Management Overview. Permanent and temporary modifications shall follow all statutory and regulatory requirements commensurate with the program designation (APML, SPML, or other) and the type and level of funding.

5.1.1. All AF modification activities shall be led by a PM/SPM who shall have overall management authority, and be held accountable to accomplish the development, production, and sustainment objectives for a given modification activity. The PM shall be the individual with day-to-day management responsibility for implementing an approved modification proposal, and for reporting cost, schedule, and performance information associated with the modification activity to higher authorities. All modification activities on the APML, SPML, or in continued materiel support of an AFPD 10-9 designated weapon system shall be assigned a single Program Manager (PM) or System Program Manager (SPM).

5.1.2. The PM shall coordinate planning, programming, and execution of the modification with all impacted AFPD 10-9 designated weapon systems SPM(s).

5.1.3. The PM leads in executing the modification program. Functional representatives within the program, regardless of location or whether that person supports the program on a full-time or part-time basis, should report to and take program direction through the PM. Functional staffs external to the program are not accountable for program execution; they are responsible for providing trained human resources and advice to the PM. Functional Staffs include: System Sustainment Managers, Developmental System Managers, Chief/Lead Engineers or Project Managers.

5.1.4. All temporary and permanent modifications will satisfy an approved requirement documented in a 1067 or a formal JCIDS product as described in Chapter 4 of this instruction.

5.1.5. All modifications that meet the criteria for an ACAT shall comply with DOD 5000 series, AF 63 series, and other applicable AF regulations that address ACAT execution. All other Sustainment activities that result in a modification shall execute the modification using the process detailed in the remainder of this chapter.

5.2. Document the Modification Plan. The PM is responsible for completing and coordinating sufficient documentation to address the following requirements:

5.2.1. Program Baseline. For all permanent modifications, the PM will establish baseline technical performance objectives, cost targets/controls, and schedule objectives at program initiation. For all other modification activities, PMs may use AFMC/AFSPC-prescribed forms to document the technical performance, cost, and schedule baselines for the modification program.

5.2.1.1. Prior to issuing a final request for proposal, a contract, or finalizing internal government work specifications, the PM shall establish a technical requirements baseline for the modification program. The technical requirements baseline for the modification is derived from the operational requirement(s) specified by the organization(s) that requested and approved the modification proposal.

5.2.1.2. For all T-1 modifications, a 1067 approved by the lead command provides the source for the technical requirements baseline. For modification involving an ECP, use the technical description of the engineering change(s) contained in the ECP for developing the technical requirements baseline.

5.2.2. Modification Strategy. All permanent capability and sustainment modification programs will have a documented and approved modification strategy that defines goals/objectives, organizational responsibilities, activities, timelines, and information requirements necessary to execute the program and support timely decision-making throughout the duration of the modification activity. At a minimum, this modification strategy will include:

5.2.2.1. A description of the overall modification and strategy for delivery. If an evolutionary approach is planned, include a description of the capability that will be provided in each planned increment.

5.2.2.2. The contracting approach that will be used to achieve program objectives and include pertinent top-level contract requirements, terms, conditions, and performance incentives.

5.2.2.3. Risk-based decision support requirements and risk management tools that will be employed during the program. Consult AFI 63-101 for additional information concerning risk management and risk-based decision making for AF programs.

5.2.2.4. An integrated master plan (IMP) that identifies the progression of events and activities necessary to accomplish the modification, along with critical tasks to be conducted and their completion or success criteria.

5.2.2.5. An integrated master schedule (IMS) that identifies planned start-stop dates for the events and tasks identified in the IMP, as well as any inter-relationships or dependencies between these events or tasks. The IMS will include an overall critical path for the modification program.

5.2.2.6. An intelligence assessment of the threat environment the modification will be operated in. This assessment will also identify any intelligence-related services, data, or products necessary to support the design, development, operation, and sustainment of the modification. Refer to AFI 63-101 and AFI 14-111, *Intelligence in Force Modernization*, for further guidance in this regard.

5.2.2.7. An assessment of the maturity and availability of technologies required to provide the requisite capability or satisfy the stated need. If necessary, the PM shall develop a technology development strategy to ensure necessary technologies are matured in a manner and on a schedule that supports program objectives. PMs shall not initiate detailed modification design and development activities unless the critical technology elements of the modification have been assessed at a technology readiness level of 6 or higher.

5.2.2.8. An assessment of government and/or contractor manufacturing capability and readiness to produce modification components in the timeframe required by the user.

5.2.2.9. An assessment of the reliability, availability, maintainability, and supportability requirements associated with the modification. Refer to AFI 63-101 for additional guidance in this area.

5.2.2.10. An assessment of the training and training system requirements associated with the modification. System training device peculiar modifications (e.g., image generation systems, motion systems, etc) not associated with a corresponding weapon system/equipment modification will be proposed and approved via a separate 1067. Consult AFI 36-2248, *Operation and Management of Aircrew Training Devices* and AFI 36-2251, *Management of Air Force Training Systems*, for additional guidance in this area.

5.2.2.11. The acquisition approach that will be used to achieve program objectives. At a minimum, this acquisition approach will include:

5.2.2.12. A description of the overall modification strategy. If an evolutionary approach is planned, include a description of the capability that will be provided in each planned increment.

5.2.2.13. Pertinent top-level contract requirements, terms and conditions, and performance incentives.

5.2.2.14. Risk-based decision support requirements and risk management tools that will be employed during the program. Consult AFI 63-101 for additional information concerning risk management and risk-based decision making for AF programs.

5.2.3. Systems Engineering Approach. The PM, with support of the chief/lead engineer, identifies critical systems engineering tasks and considerations necessary to define and allocate change requirements, design, develop, test, produce, and field the modification. The SE approach must consider operational safety, suitability, and effectiveness (OSS&E) human systems integration (HSI), environmental safety and occupational health (ESOH), product and system integrity, maintenance engineering/sustaining engineering, configuration management, Aircraft Information Programs, software engineering, and mission assurance.

5.2.4. Engineering Data/Technical Data. The PM shall ensure development and acquisition of engineering data is sufficient for the acquisition, maintenance, spares, and repair in support of the modification. The PM shall provide verified technical order procedures for fielding of a modification that will be organically supported. The data required for T-1 and T-2 modifications shall be developed and acquired commensurate with the modification scope, duration, and employment.

5.2.5. Product Support Requirements and Plans. All temporary and permanent modifications need to plan for sufficient logistics support to ensure the modification is sustainable for the duration of its intended life cycle.

5.2.5.1. For T-1 modifications, the lead/using MAJCOM(s) and the PM shall determine the minimum essential support necessary to accomplish, operate and maintain the modification during its limited installation lifespan.

5.2.5.2. For T-2 modifications, the lead/using MAJCOM(s), the PM, and participating test organizations will collaboratively determine modification sustainment support requirements and responsibilities. For permanent modifications, the PM shall develop a

product support strategy that identifies how the modification will be sustained over its intended life cycle, including support requirements at the organizational (field) maintenance level, intermediate (backshop) maintenance level, and the depot level, as applicable.

5.2.5.3. For all other permanent modification activities, the modification support strategy will be documented by the PM and approved by the applicable SPM, PGM, or commodity manager with cognizance over the item(s) to be modified. All temporary and permanent modification programs will be structured such that requisite logistics support elements are delivered in advance of, or concurrently with the installation of the modification.

5.2.5.4. If Interim Contractor Support (ICS) is planned, the PM shall include a plan for funding ICS and address the transition of ICS to organic or contract or a combination of contract and organic sustainment and identify the beginning and ending dates of the ICS. ICS does not negate the PM's responsibility to achieve an organic and/or a contractor support capability as early as practicable or the requirement for testing and/or demonstrating the adequacy of a system, equipment, or end-item. **Note:** In planning for Continuity of Services, the PM will consider the need for and request application of Federal Acquisition Regulation Clause 52.237-3 to secure contractor support during the transition period.

5.2.6. Test and Evaluation Requirements and Plans. All modifications will be tested as necessary to verify system/product technical performance against contract specifications and evaluate the modified asset against the approved operational requirement(s). A T&E strategy will be documented by the PM and approved by the applicable SPM, PGM, or commodity manager. Information on testing and evaluating system can be found in AFI 99-103.

5.2.7. Training Requirements and Plans. In coordination with the lead/using MAJCOM(s), PMs shall ensure personnel training requirements (e.g., training programs and courseware, training equipment and manuals, training facilities) necessary to train and qualify/certify operator and maintenance personnel on the modification are provided as an integral part of the modification program. IAW AFI 36-2248 and AFI 36-2251, the PM shall assist the lead command with the determination of training and training system requirements necessary to operate and sustain the modification. When requested by the lead command, the PM shall assist in developing a system training plan for the modification. The PM shall ensure all training systems and materials associated with the prime mission system are modified and delivered prior to, or in conjunction with the modifications to the prime mission system.

5.2.8. Expectation Management. Expectation management establishes program credibility and accountability through formal, recurring communication among stakeholders and is the cornerstone of the ILCM process. Significant reasons to actively manage expectations are 1) developers, users, and sustainers often interpret requirements differently, 2) program changes occur throughout development and are not always documented which impacts cost, schedule, performance, and risk which affect end-item deliverables, 3) different users may have different views of probability of success, and 4) expectations can drift apart over time through leadership/personnel changes. The roles and responsibilities of expectation management cut across the acquisition, sustainment, and operational user communities. Program changes or other influences that drive expectation adjustments must be made clear

to the most senior leaders who have responsibility for the success of a modification. The PM shall ensure effective expectation management of the modification across the life cycle. Additional information on documenting expectations can be found in AFPAM 63-128, *Guide to Acquisition and Sustainment Life Cycle Management [when published]*.

5.2.9. Program Protection Requirements and Plans. For all T-1 and permanent modifications, the PM shall assess and determine if the modification will involve or produce sensitive technologies or other critical program information (CPI) that must be protected. If the modification includes such technologies or CPI, the PM shall work with supporting systems engineering functions and HAF Directorate of Special Programs (SAF/AQL) as necessary to identify, develop, implement, and validate anti-tampering measures and other resources needed to protect the critical information identified with the proposed modification, and document these matters in a program protection plan. Refer to AFI 63-101 for additional information concerning program protection requirements and plans.

5.2.10. Data Rights Planning. The PM shall ensure access to technical data resulting from the modification (recorded information used to define a design and to produce, support, maintain, or operate a system) that is critical to the life cycle sustainment of a system. The PM shall ensure decisions made early in the planning process address data needs over the entire life cycle of the system. The PM shall assess long term data rights requirements and corresponding acquisition strategies prior to initiating a request for proposal.

5.3. Report and Monitor Modification Program Status. The PM shall initiate and maintain program data to include, at a minimum, cost, schedule, performance, test, logistics, contracts, finance, risk, and earned value (as applicable) and report periodically through the Integrated life Cycle Management governance chain of authority.

5.4. Field the Modification. Permanent modifications are generally installed on AF weapon systems and equipment using a Time Compliance Technical Order (TCTO) prepared IAW AFI 63-101 and TO 00-5-15, *Air Force Time Compliance Technical Order Process*. Contractor-provided field service bulletins and FAA-issued airworthiness directives and service bulletins may also prescribe specific modification installation procedures and requirements. Temporary modifications are generally installed using a technical/engineering data package that describes the system/component engineering changes and outlines the component modification instructions to be accomplished. This data package must be approved by the applicable system/component engineering authority prior to installation.

5.4.1. Modification Fielding Strategy/Plans. The PM shall coordinate modification installation requirements and timelines with the lead command and all effected organizations, including ALCs and logistics support contractors as necessary. The PM shall ensure sufficient planning is conducted in advance of modification installation activities to allow the lead and using commands sufficient time to identify, understand, and resolve any fielding issues associated with the modification. Additionally, the PM shall ensure sufficient time is provided to develop and field any infrastructure or other product support requirements that will be necessary to operate and sustain the modification once it is fielded.

5.4.2. Approval/Authority to Install Modifications. All modification installation documents shall be approved by the system/component engineering authority and the PM via formal configuration management process. Once approved, the PM shall coordinate the modification installation schedule with all effected organizations and receive approval for

installation from the lead command. Prior to trial kit installation, T&E activities, or field operation, the PM shall issue any requisite certifications that accompany the modification, such as safety of flight releases or airworthiness certifications.

5.4.2.1. Exception: Modifications to AF systems and equipment whose engineering authority is a non-Air Force executive agent shall be approved by that executive agent. If such modifications are funded by the AF, the AF PM shall also approve the modification prior to installation. The executive agent is not required to produce an installation TCTO if a comparable document is produced.

5.4.2.2. Modification Installation Methods. Temporary and permanent modifications may be installed at base level by organic unit/MAJCOM personnel that initiated the modification proposal, by PM and ALC field teams, and by contractor logistics support personnel, or a combination thereof. Modifications may also be conducted in conjunction with depot maintenance activities, at contractor facilities, or a combination thereof. Permanent modifications will normally include a trial kit installation and/or a kit-proof event that is conducted to verify the functionality of the modification, to validate installation procedures and timelines, and to verify logistics support items such as peculiar support equipment interfaces, technical manual changes, etc.

5.5. Modification Program Close-out. Proper disposal will be insured for modification kits that become excess. For configuration control and management purposes, a complete copy of the modification package will be permanently maintained IAW AFI 33-364, *Records Disposition Procedures and Responsibilities*.

5.5.1. All temporary modifications will close out when they are replaced by permanent modifications or removed from the host system or component as specified in the approved AF Form 1067.

5.5.2. When a TCTO is or will be rescinded, and there are excess kits, the Program Manager shall verify that all affected systems/items/equipment spares have been modified and ensure authority is obtained to disassemble/dispose of excess kits per AFMAN 23-110, *USAF Supply Manual, Volume 3* and

5.5.3. Technical data, which exists prior to the modification, must be retained until all affected systems/items/equipment have been modified. When the last asset has been modified, all pre-existing data must be updated by formal changes or revisions to technical data/manuals, thus ensuring the current configuration is reflected.

5.5.4. When the modification has been completed, shipping or disposition instructions for government furnished equipment/material must be provided. The MDA or SPM shall be notified when modification kit installation has been completed and the TCTO has been rescinded.

5.5.5. Unsuccessful completion of the modification must also be documented including the reason for termination and any plan to recover assets.

Chapter 6

POLICY CHANGES AND FORMS

6.1. Changes. Refer recommended changes and questions about this publication to SAF/AQXA using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through MAJCOM publications/forms managers.

6.2. Information Collection and Records.

6.2.1. No information collections are created by this publication.

6.2.2. Program records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the AF Records Disposition Schedule (RDS) located at <https://afrims.amc.af.mil>

6.3. Forms (Adopted and Prescribed).

6.3.1. Adopted Forms. AF Form 847, *Recommendation for Change of Publication*.

6.3.2. Forms Prescribed. AF Form 1067, *Modification Proposal*.

6.3.3. Forms Rescinded. AF Form 3525, *CCB Modification Requirements and Approval Document*.

DAVID M. VAN BUREN
Acting Assistant Secretary of the Air Force

(Acquisition)

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 March 2007

AFPD 62-4, *Standards of Airworthiness for Passenger Carrying Commercial Derivative Transport Aircraft*, 1 December 1998

AFPD 62-5, *Standards of Airworthiness for Commercial Derivative Hybrid Aircraft*, 8 August 2001

AFPD 63-1/20-1, *Acquisition and Sustainment Life Cycle Management*, 3 April 2009

AFPD 65-5, *Cost and Economics*, 5 August 2008

AFI 10-601, *Capabilities Based Requirements Development*, 31 July 2009

AFI 10-703, *Electronic Warfare Integrated Reprogramming*, 13 November 2007

AFI 10-901, *Lead Operating Command--Communications and Information Systems Management*, 22 March 2001

AFI 14-111, *Intelligence in Force Modernization*, 10 January 2005

AFI 16-110, *US Air Force Participation in International Armaments Cooperation (IAC) Programs*, 14 November 2003

AFI 16-201, *Air Force Foreign Disclosure and Technology Transfer Program*, 1 December 2004

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 29 June 2006

AFI 33-118, *Electromagnetic Spectrum Management*, 18 July 2005

AFI 33-360, *Publications and Forms Management*, 18 May 2006

AFI 33-364, *Records Disposition Procedures and Responsibilities*, 22 December 2006

AFI 36-2248, *Operation and Management of Aircrew Training Devices*, 1 May 1998

AFI 36-2251, *Management of Air Force Training Systems*, 20 March 2003

AFI 63-101, *Acquisition and Sustainment Life Cycle Management*, 17 April 2009

AFI 63-103, *Joint Air Force-National Nuclear Security Administration (AF-NNSA) Nuclear Weapons Life Cycle Management*, 24 September 2008

AFI 63-104, *The SEEK EAGLE Program*, 21 January 2005

AFI 63-114, *Rapid Response Process*, 12 June 2008

AFI 63-1201, *Life Cycle Systems Engineering*, 23 July 2007

AFI 65-601, Volume 1, *Budget Guidance and Procedures*, 3 March 2005

AFI 91-103, *Air Force Nuclear Safety Design Certification Program*, 17 September 2005

AFI 91-202, *The US Air Force Mishap Prevention Program*, 1 August 1998

AFI 91-204, *Safety Investigations and Reports*, 24 September 2008

AFI 91-205, *Non-Nuclear Munitions Safety Board*, 1 July 1998

AFI 91-401, *Directed Energy Weapons Safety*, 29 September 2008

AFI 99-103, *Capabilities- Based Test and Evaluation*, 26 February 2008

AFMAN 23-110, *USAF Supply Manual*, 1 April 2009

AFMAN 33-120, *Electromagnetic Spectrum Management*, 19 September 2006

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

HOI 63-1, *Headquarters Air Force Guidance for Preparing Program Management Directives*, 20 November 2003

MIL-STD-130, *Identification Marking of U.S. Military Property*, 17 December 2007

MIL-STD-882D, *DoD Standard Practice for System Safety*, 10 February 2000

T.O. 00-5-15, *Air Force Time Compliance Technical Order Process*, 27 March 2001

CJCSI 3170.01F, *Joint Capabilities Integration and Development System*, 1 May 2007

CJCSM 3170.01C, *Operation Of The Joint Capabilities Integration and Development System*, 1 May 2007

CJCSI 3470.01, *Rapid Validation and Resourcing of Joint Urgent Operational Needs (JUONS) in the Year of Execution*, 15 July 2005

CJCSI 6212.01, *Interoperability and Supportability of Information Technology and National Security Systems*, 15 December 2008

DoD Regulation 4140.1-R, *DOD Supply Chain Materiel Management*, 23 May 2003

DOD Instruction 4151.19, *Serialized Item Management (SIM) for Materiel Maintenance*, 26 December 2006

DOD Instruction 4650.1, *Policy and Procedures for Management and Use of the Electromagnetic Spectrum*, 9 January 2009

DOD Directive 5000.01, *the Defense Acquisition System*, 12 May 2003

DOD Instruction 5000.02, *Operation of the Defense Acquisition System*, 8 December 2008

DOD Regulation 7000.14-R, *Financial Management Regulation*, June 2000

DOD Directive 8320.03, *Unique Identification (UID) Standards for a Net-Centric Department of Defense*, 23 March 2007

DOD Instruction 8320.04, *Item Unique Identification (IUID) Standards for Tangible Personal Property*, 16 June 2008

Title 10 United States Code Section 2244

Title 10 United States Code Section 2320

Title 10 United States Code Section 2430

Abbreviations and Acronyms

ACAT—Acquisition Category

AF—Air Force
AFI—Air Force Instruction
AFMAN—Air Force Manual
AFMC—Air Force Materiel Command
AFPAM—Air Force Pamphlet
AFPD—Air Force Policy Directive
ALC—Air Logistics Center
APML—Acquisition Program Master List
AFSPC—Air Force Space Command
CCD—Combat Capability Document
CDD—Capability Development Document
CJCS—Chairman of the Joint Chiefs of Staff
CJCSI—Chairman of the Joint Chiefs of Staff Instruction
CLS—Contract Logistics Support
CPD—Capability Production Document
CRB—Configuration Review Board
CSAF—Chief of Staff, United States Air Force
DCSCI—Defense Communications Systems Configuration Item
DISA—Defense Information Systems Agency
DOD—Department of Defense
DODD—Department of Defense Directive
DODI—Department of Defense Instruction
EWIR—Electronic Warfare Integrated Reprogramming
EMA—Expectations Management Agreement
F3I—Form, Fit, Function, Interface
FAA—Federal Aviation Administration
FAR—Federal Acquisition Regulation
FMS—Foreign Military Sales
HAF—Headquarters Air Force
HOI—Headquarters Operating Instruction
HQ—Headquarters
IAW—In Accordance With

IMP—Integrated Master Plan
IMS—Integrated Master Schedule
ISA—International Standardization Agreements
IUID—Item Unique Identification
ILCM—Integrated Life Cycle Management
JCIDS—Joint Capabilities Integration and Development System
JCTD—Joint Capability Technology Demonstration
JPO—Joint Program Office
LCMP—Life Cycle Management Plan
MAJCOM—Major Command
MDA—Milestone Decision Authority
MOA—Memorandum of Agreement
MDAP—Major Defense Acquisition Program
MAIS—Major Automated Information System
NR—KPP—Net-Ready Key Performance Parameter
NSS—National Security Space
O&M—Operations and Maintenance
OPR—Office of Primary Responsibility
P—Permanent
PDM—Programmed Depot Maintenance
PEM—Program Element Monitor
PGM—Product Group Manager
PM—Program Manager
PMD—Program Management Directive
P-S—Permanent-Safety
RCT—Requirements Correlation Table
RDT&E—Research, Development, Test and Evaluation
RF—Radio Frequency
RRPC—Rapid Response Process Council
SA—Security Assistance
SAE—Service Acquisition Executive
SE—Support Equipment

SE/ATS—Support Equipment/Automated Test System

SECAF—Secretary of the Air Force

SPM—System Program Manager

SPML—Sustainment Program Master List

—Temporary-1

—Temporary-2

T&E—Test and Evaluation

TCTO—Time Compliance Technical Order

TO—Technical Order

UON—Urgent Operational Need

Terms

Acquisition—The conceptualization, initiation, design, development, testing, contracting, production, deployment, and disposal of a directed and funded effort that provides a new, improved, or continued materiel, weapon, information system, logistics support, or service capability in response to an approved need.

Acquisition Category (ACAT)—The United States Department of Defense divides future acquisition programs into **acquisition categories**. The differences between these categories depend on their size and programmatic differences.

Designated Acquisition Official (DAO)—the individual dedicated to executive management at Air Logistics Centers of delegated ACAT II or ACAT III programs expending investment dollars. The DAO shall be chartered by and is accountable to the SAE.

Configuration Item—A Configuration Item is a hardware, firmware, or software component, or combination thereof, that satisfies an end use function and is designated for separate configuration management. Hardware Configuration Items are typically referred to by an alphanumeric identifier, while software Configuration Items are typically assigned a computer program identification number.

Fit—Fit involves the manner in which an asset physically attaches to, or integrates with an adjacent component or higher level assembly. For hardware assets, fit involves such things as mechanical and electrical attachment points and methods (i.e., connectors, mounting trays, equipment racks, etc.). For firmware and software assets, fit involves the manner in which computer code is installed into its host platform, system, or subsystem.

Form—Form involves the physical properties and manufacturing characteristics of an asset. For hardware assets, form includes such things as size, shape, weight, and appearance, as well as materiel properties, treatments, finishes, and production tolerances. For firmware and software assets, form includes such things as computer language and the media upon which the application is hosted.

Function—Function involves the manner in which an asset operates, performs an intended action, or provides a designated capability.

Group A—Parts or components (including software) permanently or temporarily installed in a Configuration Item to support, secure, interconnect or accommodate the equipment in a Group B kit.

Group B—Parts or components (including software) that complete a modification when installed in the Configuration Item, and are normally readily removable.

Interface—Interface involves the common boundary where two or more assets converge and act upon one another (i.e., communicate, transfer data, etc.). Interface may also include the physical, functional, and/or the human-system integration characteristics two or more assets must exhibit in order to create a functional system.

Maintenance Action—a maintenance action is any routine or recurring effort, at the field or depot level that is conducted to sustain the operational availability of an in-service end item of equipment. Maintenance actions may include refurbishment and overhaul of equipment, removal and replacement of components, and the repair or remanufacturing of reparable components.

Major Defense Acquisition Program—statutory requirements described by *Title 10 United States Code* Section 2430. The dollar value of an MDAP program is estimated by the USD(AT&L) and depends on their size and programmatic differences as described in DoDI 5000.02

Major Automated Information Systems—statutory requirements described by Chapter 144A of Title 10 U.S.C. A DoD acquisition program for an Automated Information System (product or service) that is either designated as MAIS by the MDA or depend on their size and programmatic differences as described in DoDI 5000.02

Materiel Manager—Individuals and activities responsible for provisioning, cataloging, requirements determination, acquisition, distribution, maintenance, and disposal as prescribed in DoD 4140.1-R, *DoD Supply Chain Materiel Management Regulation*.

Modification—for the purposes of this instruction, a modification is defined as a change to the form, fit, function, or interface (F3I) of an in-service AF hardware or software Configuration Item

Product Group Manager—Designated individual for overall management of a specified product group; includes responsibility for cost, schedule and performance aspects along with the sustainment elements of the group's products. PGMs shall support overall system objectives as required by the SPM/PM.

System Program Manager—The AFI 63-101 defined SPM is the Air Force designated individual with responsibility for and authority to accomplish *system* objectives for development, production, and sustainment to meet the user's operational needs in accordance with DoDD 5000.01. SPM assignments are based upon the APML, SPML, and AFPD 10-9. For systems in acquisition, the SPM is accountable for credible cost, schedule, performance, and materiel readiness to the MDA. ACAT I, ACAT IA, and ACAT II SPMs shall be chartered by the SAE and the PEO. Delegated ACAT II and III SPM shall be chartered by the PEO or DAO. For systems in sustainment, the SPM is accountable for credible cost, schedule, performance, and materiel readiness to AFMC/CC, AFSPC/CC, or designee.

Attachment 2**AF FORM 1067 BLOCK DESCRIPTIONS**

PART I, REQUEST FOR ACTION. Blocks 1-10 are completed by the initiator and Block 11 is completed by the submitting organization's approval authority.

Page: Enter the appropriate number pages (total) in the submission.

Date: Enter the date of form initiation.

Block 1 Initiator Information: Enter the name, grade, office symbol, mailing address and Defense Switching Network (DSN) number of the initiating individual.

Block 2 Initiator's POC Organization Information: Enter the mailing address and DSN of the submitting organization's point of contact (POC) for AF Forms 1067 (normally the unit product improvement manager).

Block 3 Using Command HQ POC Information: Enter the office symbol, mailing address, and DSN of the initiators Using Command/agency headquarters (HQ) POC for processing AF Forms 1067.

Block 4 Title: Enter the title that best defines/describes the addressed need/requirement.

Block 5 Organization Control Number: Enter the control number assigned by the submitting organization's POC. If none, leave blank.

Block 6 Other Numbers: Use this block to enter any other identifying number as appropriate. If none, leave blank. (Note: time compliance technical order (TCTO), material improvement program (MIP), engineering change proposal (ECP) and modification (Mod) numbers are entered in block 24.)

Block 7 Affected Configured Item/Systems:

A. Enter the Mission Design Series (MDS), Type Mission Series (TMS), or the Configured End Item Identification (CEII) for other weapon systems (i.e., AN/APN-59, or Computer Program Identification Number (CPIN)), as appropriate.

1. If all series of the system are affected, cite only the Mission and Design: (i.e. F-15)

2. If all MDS's will not fit, show the one with the highest logistic support priority (LSP) in this block and list all other MDS on bond paper and attach on continuation page.

3. If the modification affects multi-systems, enter the system that has the highest LSP and list all other weapon systems or end items affected by the modification on plain bond paper and attach on continuation page.

B. Enter work unit code (WUC) of affected Configuration Item.

C. Enter national stock number (NSN) of affected Configuration Item.

D. Enter standard reporting designator code (SRD), as applicable.

E. Enter nomenclature (NOUN) of affected Configuration Item.

F. Use other to specify any additional identifier as needed.

Block 8 Purpose: State the deficiency to be corrected or the need to be satisfied by the proposal and what the expected result will/should be. For temporary modifications, identify the total number of units to be modified and the duration/date the units will be returned to their original configuration. **Block 9 Impact:** State the impact of not correcting the deficiency or satisfying the need specified in Block 8. If known by field level initiators or if form is initiated by SM personnel, include:

A. Current and projected mean time before maintenance actions (MTBMA)-Mission Essentiality Identification Code (MEIC) for all affected line replaceable units (LRU) (For engines: MEIC for all recoverable items affected by modification at highest indenture level below engine.) (MEIC is applicable to all but structural modifications.)

B. Number of mission capable (MICAP) hours, both current and projected, if applicable.

C. Current unscheduled removal rate of equipment, and projected removal rate after modification, if applicable.

D. Current or projected mission aborts (before flight aborts, in flight aborts, or total aborts - per assigned MDS sortie generation requirements).

E. If unmodified system LRUs are resulting in excessive maintenance hours and/or extravagant spares requirements, show estimated number of maintenance hours being expended (with dollar value of those hours shown in parenthesis) and/or dollar value of excess spares requirement, to include one year's demand history to reflect increased spares consumption.

NOTE: Much of this data can be found in existing automated data systems (i.e. consolidated aircraft maintenance system (CAMS)/reliability maintainability information systems (REMIS) or G081).

F. Ensure that your words support your requirement.

G. Show the numerical equivalent (how many, how much, how often). Avoid the use of such terms as: excessive, enormous, numerous, many, frequent, several, few, moderate, considerable, often, seldom, appear, - when describing either the extent of the deficiency/problem or when relaying the degree of improvement expected or the anticipated benefits to be derived from the modification.

Block 10 Constraints/Assumptions/Proposed Solutions: State proposed solutions, constraints and/or assumptions. Attach copies of sketches, drawings, diagrams, etc. If being completed by SM personnel, the following information should be included. (You are not limited to just this information.):

A. Development Status - If an ECP has been received, give date received or if an operational change proposal (OCP) is being developed, give status. If product reliability and maintainability (PRAM) related engineering has been accomplished, explain here. If no ECP/OCP required, state why. State whether flight test is required and, if required, anticipated length of time required.

B. Contracting Requirements - State whether modification will be contractually procured or organically assembled or a combination of the two. If contract will be sole source, give contractor's name.

C. Risk Factor - Identify areas of risk associated with the proposed requirement with emphasis on highest risk.

Block 11 ORGANIZATION VALIDATION: The individual designated/authorized to validate the proposal for further processing will check the appropriate block (A thru C), and completes blocks D thru F.

DATE RECEIVED: Enter the date the proposal is received by the organization valuator.

A. Proposed request approved, forward for using command validation.

B. Proposed request disapproved, forward to initiator POC.

C. Proposal returned to initiator POC for additional information.

D. Enter the date signed.

E. Type or print name, grade, title, DSN of validating official or designated representative.

F. Signature of organization validating official or designated representative.

PART II, USING COMMAND VALIDATION: Block 12 is to be completed by Using Command/Air National Guard (ANG) or equivalent agency headquarters personnel. If the Using Command/agency is the lead command, proceed to Part III, Block 13.

DATE RECEIVED: Enter the date the proposal is received from the initiating organization.

Block 12 USING COMMAND VALIDATION: The individual designated/authorized to validate the proposal for further processing will check the appropriate block (A thru C) and complete blocks D thru H.

A. Proposed request approved, forward for Using Command/agency validation.

B. Proposed request disapproved. If disapproved, rationale for this decision must be returned to the originating organization.

C. Proposal returned to initiator POC for additional information.

D. If the Using Command/agency is not the lead command for the affected weapon system/Configuration Item, check this block and forward to the appropriate lead command. See AFPD 10-9 for listing of assigned weapon system lead commands.

E. Enter Using Command/agency tracking number.

F. Enter the date signed.

G. Type or print name, grade, title, DSN of Using Command/agency CRB chairperson, or designated representative.

H. Signature of Using Command/agency CRB chairperson or designated representative.

PART III – LEAD COMMAND VALIDATION: Blocks 13 – 22 are completed by lead command Headquarters' Personnel IAW applicable policies.

DATE RECEIVED: Enter the date the proposal was received from the Using Command/agency.

Block 13 Lead Command Action Officer: Enter the name, grade, office symbol, mailing address, and DSN of the evaluating action officer.

Block 14 Thru (Optional Routing): Enter the mailing address for other Using Commands/agencies as applicable.

Block 15 Single Manager Office: Enter the office symbol, mailing address, and DSN of the SM POC for processing AF Forms 1067.

Block 16 Modification Type: Mark one of the appropriate blocks to identify the proposed type of modification (see page 1 of this document for description of modification types).

Block 17 Lead Command Control Number: Enter the tracking control number.

Block 18 Lead Command Remarks: Enter any known constraints or assumptions that must be addressed during the next level(s) of evaluation. For temporary modifications, address validation of the requirement in terms of the total number of units to be modified and the duration/date the units will be returned to their original configuration.

Block 19 Lead Command Validation Authority: The individual designated/authorized to validate the proposal will check the appropriate block.

A. Validated Request: Proposal is a valid need/requirement.

B. Disapproved Request: Proposal is not a valid need/requirement. If disapproved, rationale for this decision must be returned to the Using Command/agency or originating organization.

Block 20 Type or print name, grade, title, DSN of lead command CRB Chairperson, or designated representative.

Block 21 Signature of lead command CRB Chairperson, or designated representative.

Block 22 Enter the date signed.

PART IV, SINGLE MANAGER REVIEW AND APPROVAL. Blocks 23 - 42 are completed by the SM.

Date Received: Enter the date the proposal was received from the lead command.

Block 23 SM Action Officer Info: Enter the name, grade, office symbol, mailing address and DSN of the SM evaluating action officer.

Block 24 Center Control Numbers: Enter assigned numbers, if applicable. If none assigned, leave blank. Enter any other applicable identifier(s) as a continuation of this block on bond paper as an attachment to this document.

A. Center MIP No:

B. ECP No:

C. TCTO No:

Block 25 Total BP/EEIC: Enter the total estimated cost by appropriation budget codes. (Example: \$3.5M BP1100, \$4.5M BP2100, \$1.0M 3400, \$.5M 0350, EEIC 583, etc)

Block 26 Nr of CIS Affected: Enter the total number of configured items to be modified (i.e. black boxes, aircraft, etc.).

Block 27 Total Kits Needed: Enter the total number of kits or applicable units proposed, including spares.

Block 28 Also Affects: Check the appropriate block for each affected item (for permanent modifications only). Identify each affected supporting system on a continuation sheet (for example, when training aids are affected, provide trainer flight equipment number, maintenance trainer identifying number, and part number as applicable.). If "OTHER" is checked, identify any significant impacts not otherwise covered here and explain on a continuation sheet. When system-training devices (STDs) are affected, provide on a continuation sheet, the information needed as it relates to the mod of the applicable STDs.

Support Equipment:

Aircrew Training:

Training Devices/Visual Aids (Maint):

Tech Data:

Spares:

Software:

Other:

If STDs are not affected, include on continuation page the appropriate certification (indicate why modification to STDs is not desired or needed) and include certifying official's name, grade, and office symbol. Note: STD is an all encompassing term. It refers to mission simulators, flight simulators, aircrew or missile crew or cockpit procedures trainers, as well as maintenance training devices, visual aids, simulation devices, operational support equipment, spares, and video tapes, etc.; included in mobile maintenance training sets used to support the filed training detachments, and resident training equipment that must be maintained to reflect related weapon systems or equipment configuration. Complete staffing and coordination are required to determine if the supporting systems are affected.

Block 29 Kit or Unit cost: Enter the cost for a single kit (group A/B only).

Block 30 Total Cost: Enter the total estimated cost of the proposed solution as outlined in the BCI.

Block 31 Lead Time: Enter the estimated engineering and kit acquisition lead-time. Compute lead-time

B. by totaling initial admin and initial production estimates: (Entries to be in months)

A. Initial Admin: The number of months from initiation of the PR or kit assembly requirement to contract award date or obligation acceptance by the appropriate directorate.

B. Initial Production: The number of months from contract award date or document obligation/acceptance date through the date of completion of the kit proofing process.

Block 32 Installation: Begin and complete: Enter the dates, by FY and quarter (YYYY/QTR), for projected initiation of production installs and completion of final installations.

Block 33 Level of Accomplishment: Check the appropriate block indicating the recommended level of accomplishment (i.e., user (organizational), depot (organic or contract) or both (both is to be used if the commodity will be modified at depot level and installed into the aircraft or

major end item by the user or organizational level). If “OTHER” identify specifics in block 39 or on attached continuation sheet.

Block 34 User Work Hrs: Enter the number of estimated user man-hours needed to perform the modification on one Configuration Item.

Block 35 Depot Work Hrs: Enter the number of estimated depot man-hours needed to perform the modification on one Configuration Item.

Block 36 Total Work Hrs: Enter the number of estimated man-hours needed to accomplish the modification on all Configuration Items.

Block 37 Manufacturer: Enter the name of the manufacturer. This normally applies when an ECP is involved, since the ECP is prepared by the manufacturer. If unknown, leave blank.

Block 38 Aircraft Breakout: Indicate number of Configuration Items broken down by Commands/agencies (i.e. AMC, ACC, AETC, AFSOC, AFRC, ANG, etc.)

Block 39 Engineering review recommendation(s): Provide adequate justification appropriate with engineering evaluation decision. For proposals which have approved engineering solutions, the SM will provide enough detail for the lead command to make an assessment of the proposed solution for lead command certification. The SM or designated representative will check the appropriate block indicating approval or disapproval of the SM review. If disapproved, the SM shall provide the lead command with rationale for this decision. Note: For permanent modifications, SM approval does not constitute authorization to install the modification until funded and lead command approval to proceed (blocks 44 thru 48).

Block 40 Type or print name, grade, title, DSN of the SM or designated representative.

Block 41 Signature of the SM or designated representative.

C. Block 42 Enter the date signed.

PART V, LEAD COMMAND CERTIFICATION. Blocks 43 – 47 are to be completed by the lead command that is assigned the responsibility for the applicable affected configured item(s). The lead command CRB Chairperson or designated representative will check the appropriate block indicating “Temporary Modification Approval”, “Permanent Modification Approval”, “Disapproval”, or “MNS/ORD to be developed”. If disapproved, the lead command shall provide the Using Command/agency (if applicable) and the originating organization with the rationale for this decision.

Block 43 Type or print name, grade, and title, DSN of the lead command CRB Chairperson or designated representative.

Block 44 Signature of the lead command CRB Chairperson or designated representative.

D. Block 45 Enter the date signed.