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Acquisition

MODIFICATION PROGRAM MANAGEMENT

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(CMSgt Gregory R. Barnes)
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This instruction implements AFPD 63-1, Acquisition System and portions of Department of Defense (DoD) Directive 5000.1, DoD Instruction 5000.2, and DoD Manual 5000.2-M. It delineates responsibilities, provides procedures, and defines HQ PACAF policy for processing need and requirement documentation for tactical, cargo, helicopter and special purpose aircraft, including developing programming and funding strategy to facilitate implementation of modifications and upgrades. It does not apply to command, control, communications, computer and intelligence modifications and upgrades. It further assures coordinated staff action during all modification and upgrade management processes to include appropriate documentation requirements. Responsibilities and procedures for the development and processing of Mission Need Statements (MNS), Operational Requirements Documents (ORD), AF Form 1067 and general modification instructions are provided in Air Force Instruction 63-1101, Atch 4. This instruction does not apply to Air National Guard (ANG) or Air Force Reserve Command (AFRC) units or members.

1. General Information. Modifications covered by this Instruction include any alteration to a produced materiel item, applicable to aircraft, missiles, space systems, support equipment, trainers simulators, pods, etc., in currently fielded systems. As a minimum, an alteration changes the form, fit, or function of an item. Throughout the remainder of this Instruction, all changes are referred to as modifications since the process is the same for both modifications and upgrades. The policies, procedures, responsibilities, and guidance established are directive in nature and based on the regulations cited in **Attachment 1**.

2. Responsibilities. Operating commands are responsible for planning, programming, and documenting all modification proposals. These proposals are documented in Mission Need Statements (MNS), Operational Requirement Documents (ORD), and AF Form 1067, Modification Proposals.

2.1. HQ PACAF is directly responsible for determining how and what mobility weapon system modifications are essential to the tactical and air mobility mission. PACAF interacts daily with other agencies in determining weapons system configuration.

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2.2. LGM is the HQ PACAF POC for all aircraft and related requirements and modification issues. Other staff agencies within LG, DO, and SE, as well as various Air Logistics Centers (ALC), will provide specialized expertise and will be the Office of Primary Responsibility (OPR) for selected specialized processes.

3. Modification Process.

3.1. Modification Proposal. A modification proposal may be identified and submitted from any level. All proposals will be processed by the appropriate HQ PACAF functional manager in accordance with the procedures identified in this instruction and other governing directives. When ACC, AMC, or other command is the "lead command" for the weapon/equipment system, a copy of the modification proposal will be forwarded to HQ ACC/XRM, HQ AMC/XPQ, or appropriate office for review. This review is necessary to ensure the modification does not adversely affect the weapon system interoperability, maintainability, or mobility planning. The modification will be reviewed for possible fleet wide implementation.

3.2. PACAF Configuration Control Board (CCB): The PACAF CCB is the command coordination, certification, and approval authority for all command originated T-1, T-2, and permanent modification proposals affecting assigned or programmed weapon systems and equipment. HQ PACAF/LG or delegated representative is the CCB chairperson. Membership includes appropriate "3-Digit" level representation from each division, functional manager, and all other personnel as determined necessary by the CCB Chairperson. The CCB meets as required to evaluate submissions and process modification proposals.

3.3. Criteria for approval are need, practicality, cost, payback and expected service life of the aircraft. Modifications that change an aircraft's configuration baseline must be fully reviewed for applicability to associated weapon system training devices. The results of the CCB are forwarded to DOQQ to update the PACAF modification database. If approved, the functional manager forwards the original AF Form 1067 to the applicable ALC CCB, through lead command if necessary, for evaluation. PACAF functional managers will ensure the lead command forwards copies of AF Form 1067 to Air Education and Training Command (AETC) for maintenance training devices or appropriate ALC for aircrew training devices. If the AF Form is disapproved, the functional manager reworks the AF Form 1067 with the submitter to answer any questions posed by the CCB or returns the AF Form 1067 to the submitter justifying disapproval. PACAF CCB is assigned command responsibility in the standardization of equipment used by USAF mobility forces. An AF Form 1067 submitted to HQ PACAF by subordinate units on tactical and air mobility force equipment will be reviewed for applicability to the entire fleet.

3.4. PACAF Functional Manager. The applicable functional manager will review and process the submitted AF Form 1067 through the PACAF CCB and applicable System Program Director (SPD) or lead command as necessary.

3.5. PACAF CCB Recorder (HQ PACAF/LGM). Each functional manager acts as the recorder and maintains the modification files for their particular system. The functional manager also assigns a modification control number (data code) through HQ PACAF/LGMF, fills out the control log, and provides a copy of the AF Form 1067 proposal to CCB voting members.

3.6. PACAF CCB Command Certification. If required, the PACAF CCB reviews and certifies the modification package as received from the ALC CCB. If the PACAF CCB certifies a modification

package, it is forwarded to DOQQ for requirements processing. If disapproved for certification, the modification proposal is returned to the originating unit with an explanation for disapproval.

3.7. DOQQ Review. Recent CSAF directive streamlined the requirements process. If DOQQ determines the modification is an ACAT 1A program, an AO will be assigned to work with the unit to prepare a Mission Need Statement (MNS) and the full acquisition process will begin in accordance with AFI 10-601.

3.8. Mission Need Statement. Using the MNS format outlined in AFI 10-601, a MNS is prepared by the requesting unit in coordination with the DOQQ Action Officer (AO). At the appropriate time, the AO will brief the MNS to the Requirements Review Group (RRG) and Requirement Review Board (RRB) for approval, recommendation and prioritization.

3.9. PACAF RRG and RRB. The RRG screens the MNS and modification programs, develops prioritization recommendations, and forwards to the RRB. The RRB develops a coordinated PACAF position on the MNS, and prioritizes those modifications that address PACAF's long range plans. The RRB coordinates and integrates an Acquisition Priority List (APL) of programs, modifications and initiatives for PACAF approval.

3.10. After initial MNS approval by the RRB, the HQ PACAF/DOQQ AO, with functional manager assistance, will coordinate the draft at the division and directorate levels and with other commands when appropriate. Once comments are incorporated, PACAF/CC signs the final MNS and it is forwarded IAW AFI 10-601 to CSAF for approval.

3.11. HQ USAF Validation. If the MNS is disapproved at HQ USAF, the MNS is returned to DOQQ with justification and recommendations.

3.12. PACAF Program Review Working Group (PRWG) and Program Review Group (PRG) Program Objective Memorandum (POM) submission. For a modification to receive consideration in the PRWG and PRG, an approved need document (MNS or AF Form 1067) is required. The APL is forwarded to the PRWG and subsequently to the PRG for review and consideration in the POM. The intent is to have the modification and other initiative lists mirror each other as closely as possible to indicate a coordinated command position. POM recommendations are forwarded to the PACAF Council.

3.13. PACAF Council. The PACAF council forwards their recommendations to PACAF/CC for final approval of PACAF's input to the AF POM. The PACAF input is forwarded to HQ USAF for funding approval. If the PACAF Council does not prioritize the modification proposal at a high enough level to be considered for funding, it may be resubmitted in the next POM cycle.

3.14. HQ USAF Funding Approval. PACAF's input to the USAF POM is carried forward to the Air Staff. The Air Staff presents the issues to the Air Force Council where they compete for funding with all other MAJCOM POM submissions. SECAF is the final approval authority prior to USAF POM submission to OSD. If a program is reduced or unfunded, it may be reconsidered in the next POM cycle.

4. Processing Temporary Modifications:

4.1. Temporary (T-1) Modifications: T-1 modifications are temporary operational changes that add or remove equipment to provide new or increased capability for a special mission. They are not a substitute for permanent modifications. Equipment for T-1 modifications must be obtained from Air Force stock with no additional procurement required to replenish supply. The equipment must have the abil-

ity to be changed back to the original configuration within 48 hours. The equipment must not be maintained on the system for more than one year without a waiver approved by HQ USAF/ILM. Any T-1 modification(s) that will be required to be installed/maintained on more than five configured items requires approval prior to installation.

4.2. Temporary (T-2) Modifications: T-2 modifications are temporary modifications required to support Research, Development, Test and Evaluation (RDT&E), normally before a permanent modification as part of an approved acquisition program. T-2 modifications may also be used: on chase planes or aerial targets needed to support RDT&E programs; instrumentation modifications to aircraft, missiles or other equipment; to conduct Operational, Test and Evaluation (OT&E); and aerial targets where the target supports various test programs. T-2 modifications will not normally be done unless an approved Air Force program requires the test. T-2 modifications will not be maintained on equipment for longer than the approved test program requires. No more than five aircraft, missiles, pod support equipment, simulators or other configured items may be modified on a temporary basis without a waiver approved by HQ USAF/ILM.

4.2.1. T-2 modifications submitted as a permanent modification proposal must be reviewed to determine whether or not the T-2 modification must be removed pending approval of the permanent modification. As a general rule the T-2 modification will be removed upon completion of the test.

4.3. T-1/T-2 Modifications (General): These modifications are initiated using the AF Forms 1067 and the issuance of a command/center approved modification directive. A center completed AF Form 1067 with the modification instructions attached may be used in lieu of a modification directive. These modifications are also rescinded using a command/center rescission directive. T-1/T-2 modifications are basically command directed Time Compliance Technical Orders and as such will be monitored and controlled in the same manner, i.e., AFTO Form 95, Mechanized Reporting (AFM 66-279, Core Automated Management System [CAMS]), component accountability (AFI 21-103 Aircraft and Missile Equipment Accountability), etc. Unlike TCTOs, T-1/T-2 modifications will be removed and the Configured Item (CI) restored to original configuration prior to transfer to another command unless waived by the receiving MAJCOM. T-1/T-2 modifications remaining on aircraft/equipment during depot maintenance must be listed on the AFTO Form 103, Aircraft/Missile Condition Data.

4.3.1. T-2 modification revisions may be approved at the discretion of the Center CCB with SPD coordination. Revisions will be documented on the original AF Form 1067 in block 22.

5. Processing Permanent Modifications.

5.1. These modifications make permanent changes to correct safety or material deficiencies, improve reliability and maintainability, or to add or remove capability. All permanent modifications will be approved and processed through the lead command as well as the ALC single manager for that weapons system. Permanent modifications are permanent changes to the configuration item(s). Reasons to change configuration items are to correct safety or material deficiencies, to improve Reliability and Maintainability (R&M), to add or remove capability, or to reduce life cycle costs.

5.2. Low cost permanent modifications are submitted via the AF Form(s) 1067 and are modifications with a total estimated cost (TEC) under the AF Form 1067 threshold established in AFI 10-601. TEC includes engineering, trial installation, functional flight test, kit proof, kits, installation, support equipment, technical data, software training devices, etc.

5.2.1. Modifications which begin as low cost modifications but grow to exceed the AF Form 1067 threshold total cost established in AFI 10-601 will require all documentation prescribed in AFPD 10-6 (i.e., MNSs, ORDs, etc.).

5.3. Permanent Safety Modifications. Permanent safety modifications are permanent modifications which correct material or other deficiencies which could endanger the safety of personnel or cause loss or damage to equipment. Safety modifications have priority for funding and implementation. To qualify as a safety modification the following criteria apply:

5.3.1. The deficiency must have caused or could cause loss of life, serious injury to personnel, or loss of or extensive damage to equipment.

5.3.2. The SPD grounds or places restrictions on the aircraft or equipment, or the MAJCOM/CC restricts training or operations until the modification is complete.

5.3.3. The MAJCOM/CC agrees to make the aircraft or equipment available for all safety modification schedules.

5.3.4. If a mishap occurs, within 90 days of the original mishap and as part of the command endorsement, per AFI 91-204, the MAJCOM/CC will identify the recommended corrective action as a safety modification.

5.4. Modification Proposal Status Notifications/Requests. All status notifications/requests will contain the unit modification control number, weapon system or equipment MDS, and a short title of the modification proposal.

5.4.1. Wing/unit request for status will be forwarded to the assigned HQ PACAF staff OPR.

5.5. Modification Proposals and the Innovation Development through Employee Awareness (IDEA) program. An AF Form 1067 is considered a Separate Improvement Process (SIP) and must be approved before submission as an idea. Once approved, it will be entered into the IDEA Program Database (IPDS) as an "After-the-Fact" IDEA. If the IPDS system is not available, an AF Form 1000 may be used to submit the idea to the local Manpower office. For detailed guidance, please refer to AFI 38-401, para 3.8. and 3.10.

6. Data Codes (MAJCOM Control Number).

6.1. Data codes for PACAF T-1, T-2, and permanent modification proposals are assigned by HQ PACAF/LGMF or equivalent delegated authority.

6.2. Data codes are used to document man-hours of the modification in the same manner as TCTOs. Each modification will specify the record entries required and will indicate whether mechanized reporting (AFM 66-279 Core Automated Management System [CAMS]) is required.

6.3. Data Codes are eight digits (P204008) in length including the prefix. The "P" represents a HQ PACAF issued code, 2 represents the year 2002, 04 represents the month of issue, and 008 is a sequential number from the first of the year.

6.4. Data codes are also assigned to control and document software configuration using the TCTO file of the CAMS. An additional prefix may be used at the unit's discretion to indicate software modifications.

7. System Training Devices. When permanent modifications/enhancements are made to operational equipment, the same modifications/enhancements will be incorporated in system training devices. These modifications/enhancements will be included in the weapon system modification proposal. Modifications which are system training device specific (computer memory expansion, graphics, motion, etc) will be proposed separately.

8. Software.

8.1. Primary responsibility and authority for the overall configuration management of each system is vested in the HQ ACC Configuration Control Board (CCB). While the ACC CCB maintains cognizance over the system as a whole, most software responsibilities are delegated to a Software Configuration Control Sub-Boards (SCCSB) for management/configuration control of the system.

9. AF Form 1067, Modification Proposal Procedures.

9.1. An AF Form 1067 is used to initiate modifications (T-1/T-2/Permanent). The AF Form 1067 is a requirements document and therefore all approved permanent modification AF Forms 1067 must be sent to the appropriate lead command and ALC Single Manager/System Program Director. Temporary modification AF Forms 1067 must be processed through lead command and forwarded to HQ USAF/ILMM.

9.1.1. At wing or unit level, the Quality Assurance (QA) Product Improvement Manager (PIM) controls all AF Form 1067 processing. The PIM is the single focal point for all modification proposals.

9.1.2. Unit generated modification proposals may be disapproved by the evaluating OPR at any level of command.

9.1.3. HQ PACAF staff generated modification proposals may only be disapproved by CCB action.

9.1.4. Modification proposals presented to AFMC for an initial engineering evaluation will not state or imply HQ PACAF final approval or certification of proposed modifications.

9.1.5. Processing of AF Form 1067:

9.1.5.1. AF Form 1067 modification proposal is initiated.

9.1.5.2. HQ PACAF provides initial CCB coordination and approval, if required.

9.1.5.3. HQ PACAF OPR forwards AF Form 1067 to SPD for engineering approval after initial CCB approval, if required.

9.1.5.4. HQ PACAF OPR monitors coordination process through ALC, lead command, and HQ USAF.

9.1.6. Complete the AF Form 1067 IAW AFI 63-1101, Atch 4.

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

DoDD 5000.1, *Defense Acquisition*. Establishes the policies for defense systems designated as “major” by OSD.

DoDI 5000.2, *Defense Acquisition Management Policies and Procedures*. Describes responsibilities of the Defense Acquisition Board in reviewing milestones defined in DoDD 5000.1.

DoD 5000.2-M, *Defense Acquisition Management Policies and Reports*. Procedures and formats to be used to prepare milestone documentation, periodic in-phase status reports, and statutory certifications.

AFPD 62-4, *Standards of Air Worthiness for Passenger Carrying Commercial Derivative Transport Aircraft*. Explains Air Force policy and procedures for making sure AF transport aircraft meet civil airworthiness standards set by the Federal Aviation Administration (FAA).

AFPD 63-1, *Acquisition System*. Establishes policies for the Air Force acquisition system for providing new and improved materiel capabilities in response to validated needs and according to public law, appropriate instructions, and international agreements.

AFI 10-601, *Mission Needs and Operational Requirements Guidance and Procedures*. Implements basic Air Force policy for all mission needs and operational requirements which may result in funding systems with Air Force appropriations.

AFI 10-602, *Determining Logistics Supportability and Readiness Requirements*. Provides a framework to make sure that readiness and logistics supportability requirements are adequately defined early in the modification process.

AFI 21-101, *Aerospace Equipment Maintenance Management*. Provides guidance and direction for Air Force aircraft maintenance management.

AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*. Provides guidance and direction for managing aircraft and missile equipment throughout the Air Force.

AFI 38-401, *The Air Force Innovative Development Through Employee Awareness (Idea) Program*.

AFI 62-2, *System Survivability*. Policy and procedures for conducting Air Force survivability programs for organizations involved in developing, testing, acquiring, operating, maintaining and modifying AF systems.

AFI 63-11, *Modification System*. Applies to all Air Force systems and equipment in response to validated needs.

AFI 63-1201, *Assurance of Operational Safety, Suitability, and Effectiveness*. Defines process of establishing and preserving the safety, suitability, and effectiveness of Air Force systems and end-items over its entire operational life.

AFI 63-101, *Acquisition Systems*. Defines the AF Acquisition System responsibilities, authority, structure, and tools.

AFI 91-204, *Safety Investigations and Reports*. Provides procedures for investigating and reporting all U.S. Air Force mishaps and exchanging F-16 mishap information with European Participating Air Force (EPAF).

Abbreviations and Acronyms

ACC—Air Combat Command

AETC—Air Education and Training Command

AFMC—Air Force Material Command

ALC—Air Logistics Center

CAMS—Core Automated Management System

CCB—Configuration Control Board

CRLCMP—Computer Resource Life Cycle Management Plan

DO—Deputy of Operations Directorate

ECP—Engineering Change Proposal

IDEA—Innovation Development through Employee Awareness

LG—Logistics Directorate

MAJCOM—Major Command

MIP—Material Improvement

OPR—Office of Primary Responsibility

OT&E—Operational, Testing, and Evaluation

PACAF—Pacific Air Forces

PEM—Program Element Monitor

PIM—Product Improvement Manager

POC—Point of Contact

PRG—Program Review Group

QA—Quality Assurance

RDT&E—Research, Development, Testing, and Evaluation

SCCSB—Software Configuration Control Sub-Board

SE—Safety Directorate

SM—Single Manager

SPD—System Program Director

TEC—Total Estimated Cost

TMS—Type Mission Series

WUC—Work Unit Code

Terms

Acquisition Category (ACAT)—Categories established to facilitate decentralized decision making, execution, and compliance with statutory imposed requirements. Categories determine level of review, milestone decision authority, and applicable procedures. See DoDI 5000.2.

AF Form 1067, Modification Proposal—Form required to initiate all modifications.

AF Form 3525, CCB Modification—Requirements and approval document used by ALCs to provide technical programming information.

Configuration Control Board (CCB)—Responsible for modification command certification, controlling the configuration of equipment, ensuring compliance with the policies of this instruction, and the propriety of the proposed class of modification. Each ALC and MAJCOM has its own CCB.

Functional Manager—Provides technical expertise in the planning, engineering, directing, and controlling tasks and associated functions essential for the support and modification of designated systems.

Integrated Product Team (IPT)—Cross functional working group for a given weapons system. Among its responsibilities are to serve as a forum for communication relating to the given weapon system, to formulate long range plans for the system, and to prioritize the weapons system modification to the RRG and RRB. DOQQ will chair IPTs. Members may include 3 and 4 digit offices from LG, SE, DO, FM, SC, and other support commands as necessary.

Lead Command—The command that serves as operators interface with the Single Manager for a weapon system as defined by AFPD 10-9, not to be confused with that MAJCOM designate by HQ USAF/XOR as OPR for authoring a requirements document. Although, in most cases, the MAJCOM designated by HQ USAF/XOR to sponsor a requirement will become the “lead command” for a weapon system. (See AFPD 10-9)

Mission Need Statement (MNS)—Brief statement (no more than five typed pages) prepared by the CINCs, HQ USAF, or operating MAJCOMs to document mission needs that require a materiel solution. MNS are a formatted non-system-specific statement that contains operational capability needs, written in broad operational terms, and does not identify a program or specific solution. MNS describe required operational capabilities and constraints to be studied during the Concept Exploration and Definition Phase.

Modification—An alteration to a produced material item applicable to aircraft, missiles, support equipment, trainers, etc. As a minimum, the alteration changes the fit or function of the item.

Operational Requirements Document (ORD)—A document prepared by the respective using command that describes pertinent quantitative and qualitative performance, operation, and support parameters, characteristics, and requirements for a specific candidate weapon system describing that system necessary to fulfill the mission deficiency.

Program Review Group (PRG)—PACAF’s corporate review body that prioritizes PACAF’s funded and unfunded programs and makes recommendation to PACAF/CC, through the PACAF Council, to be used in the AF POM development cycle. The PRG is chaired by the Chief, Programs & Force Development Division (HQ PACAF/XPP), and consists of division-level representatives across the staff. It reviews and evaluates major program issues affecting PACAF’s force structure, mission support, modernization, manpower, and acquisition efforts.

Program Element Monitor (PEM)—Responsible for everything that affects a given program element (PE). Responsibilities include advocating the PE through the POM cycle, maintaining documentation on all PE matters, and providing funding information to program managers.

Program Manager (PM)—Individual in DO or LG, depending largely on dollar cost and material item involved, responsible for modification oversight to ensure user requirements are met.

Program Management Directive (PMD)—Official Air Force document used to direct acquisition or modification responsibilities to appropriate MAJCOMs, Program Executive Officer (PEO), Designated Acquisition Commander (DAC), or Technical Executive Officer (TEO) for specific system or subsystem development.

Program Review Working Group (PRWG)—Corporate action officer level panel whose charter is to review PACAF's baseline, initiative, and disconnect programs for accuracy, content, and currency as they are briefed by PMs or PEMs. PRWG is chaired by the Chief, Programs and Forces Branch (HQ PACAF/XPPF), and consists of representatives from directorates across the staff. Their recommendations are sent to the PRG review.

Requirements Review Board (RRB)—Division level representatives who constitute the corporate review body for requirements. Chaired by the Chief, Combat Forces Branch (HQ PACAF/DOQQ), the RRB reviews the needs recommendations of the RRG, develops a coordinated PACAF position on needs, and prioritizes those that properly address PACAF long range plans. Develops acquisition priority lists in conjunction with ACC, AFRES, AMC, USAFE, NGB and other appropriate MAJCOMs. Coordinates prioritized list with PRG chairperson to ensure, to the maximum extent possible, they are consistent with the existing POM position.

Requirements Review Group (RRG)—PACAF 4-digit corporate review body for requirements. The RRG screens the needs for systems, equipment, and modifications to ensure they properly address PACAF's capability shortfalls and long range plans. Makes recommendations concerning whether needs can be addressed via another process. Prioritizes needs and modifications, and forwards recommendations to the RRB for approval. Prepares weapons system modification priority lists in conjunction with ACC, AMC, AFRES, USAFE and NGB and other appropriate MAJCOMs for RRB review. The RRG is chaired by the Chief, Combat Forces Branch in HQ PACAF/DOQQ.