# BY ORDER OF THE SECRETARY OF THE AIR FORCE



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**Acquisition** 

Logistics

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ACQUISITION AND SUSTAINMENT LIFE CYCLE MANAGEMENT

### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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SAF/IE (Mr. Kevin W. Billings)

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20-3, 1 Jun 1998; AFPD 20-5, 10 April 2001; AFPD 21-3, 10 July 2006; AFPD 21-4, 1 June 1996; AFPD 62-2, 12 April 1993; AFPD 63-1, 10 July 2003; AFPD 63-2, 19 July 1994; AFPD 63-5, 25 August 2003; AFPD 63-8, 30 September 1994; AFPD 63-9, 17 May 1993; AFPD 63-10, 1 November 1997; AFPD 63-11, 1 August 2000; AFPD 63-12, 1 February 2000; AFPD 63-

14, 6 February 2001

This Air Force Policy Directive (AFPD) provides an Air Force acquisition and sustainment integrated life cycle management (ILCM) framework for Air Force systems, subsystems, end-items, services and activities (referred to as programs throughout this document). It applies to all Air Force military and civilian personnel; members of the Air Force Reserves; members of the Air National Guard; and other individuals or organizations as required by binding agreement or obligation with the Department of the Air Force. This AFPD implements Department of Defense Directives (DoDDs) 2040.3 End Use Certificates (EUCs), 4140.1 Supply Chain Materiel Management Policy, 4151.18 Maintenance of Military Materiel, 5000.01 The Defense Acquisition System, 5000.52 Defense Acquisition, Technology, and Logistics Workforce Education, Training, and Career Development Program, 5160.5, Responsibilities for Research, Development, and Acquisition of Chemical Weapons and Chemical and Biological Defense, and 5200.39 Security, Intelligence and Counterintelligence Support to Acquisition Program Protection. If there is any conflicting guidance between this AFPD and National Security Space Acquisition Policy 03-01, or Chairman Joint Chiefs of Staff (CJCS) issuances, or Department of Defense (DoD) issuances, the latter shall take precedence. AFPD 63-1, 20-1 provides the flexibility

required for today's Air Force and must be used in conjunction with AFPD 10-6, *Capabilities Based Planning and Requirements Development*, and AFPD 99-1, *Test and Evaluation Process*. This AFPD cannot be supplemented. This dual series publication will not be modified or rescinded without the concurrence of both certifying officials. Send all recommendations for changes or comments to Assistant Secretary of the Air Force, Acquisition Management Policy (SAF/AQX), 1060 Air Force Pentagon, Washington, DC 20330-1060, through appropriate channels using AF IMT 847, *Recommendation for Change of Publication*, with a courtesy copy to Deputy Assistant Secretary of the Air Force, Logistics (SAF/IEL), 1665 Air Force Pentagon, Washington, DC 20330-1665. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <a href="https://afrims.amc.af.mil/">https://afrims.amc.af.mil/</a>.

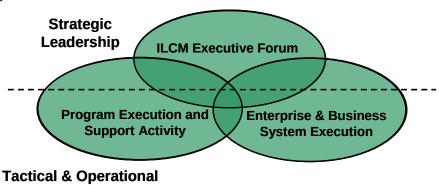
#### SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed as it supersedes 15 AFPDs. This AFPD consolidates publications to provide a life cycle integrated framework for acquisition and sustainment.

1. ILCM approach. An ILCM approach shall be applied to Air Force acquisition and sustainment activities, which shall provide for seamless governance and transparent processes to acquire and sustain programs (systems, subsystems, end-items, and services) to satisfy validated needs. ILCM shall recapitalize Air Force capabilities through maximum acquisition cycle time efficiency; and provide agile support that will optimize fielded capabilities and the supply chain, minimize the logistics footprint, and reduce total ownership cost. The ILCM framework consists of: 1) an ILCM Executive Forum; 2) program execution and support; and 3) enterprise and business system execution. The framework shall integrate across multi-dimensions, systems, portfolios, and enterprise management in order to influence and execute life cycle decisions, as illustrated in Figure 1.

Figure 1. ILCM Framework.

**Management** 



1.1. An ILCM Executive Forum shall provide a governance venue for the ILCM framework by utilizing a leadership decisional process for capability planning, technology, acquisition, test, and logistics across Headquarters Air Force (HAF) and Major Commands (MAJCOM). This Executive Forum shall provide for corporate enterprise reviews, decisions, and orchestration of multi-disciplinary agendas that balance and integrate critical performance with short-term and long-term trade-offs. The SAF/AQ shall chair all Executive Forums. The SAF/AQ may delegate the chairmanship and decision authority of the Executive Forum when appropriate and in compliance

- with existing statute and DoD policy. Statutory, functional, portfolio, and program execution authorities are unchanged.
- 1.2. For purposes of defining Service Acquisition Executive (SAE) responsibilities, this includes lifecycle acquisition of systems and services processes from pre-Milestone A to weapon system retirement. This includes research, development, test, evaluation, production and delivery of new systems, or significant modifications to existing systems. Management responsibility flows directly, without intervention, from the SAE and Milestone Decision Authority to the Program Executive Officers (PEOs) to the System Program Managers (SPMs).
- **2. ILCM Applicability.** ILCM applies to all systems, activities, and projects that support warfighter capability planning and validated needs. This includes programs identified on the non-space Acquisition Program Master List, (APML), programs on the non-space Sustainment Program Master List (SPML), identified space programs, and weapon systems designated in AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*. Oversight of the acquisition and sustainment domains of the ILCM framework shall be through the Executive Forum, which shall:
  - 2.1. Ensure acquisition and sustainment implementation satisfies statutory, executive order, DoD, and Service requirements throughout the life cycle.
  - 2.2. Establish clear program identification, assignment, planning, acquisition, test and evaluation, and sustainment management responsibilities, authority, and accountability.
  - 2.3. Ensure infrastructure requirements are streamlined to the maximum extent while optimizing operational capability.
  - 2.4. Monitor the effectiveness of the Air Force Supply Chain.
  - 2.5. Accomplish an annual ILCM Enterprise assessment relative to United States Code (USC), Title 10, depot maintenance compliance (e.g., core: 10 USC § 2464, 50-50: 10 USC § 2466 and minimum depot investment:10 USC § 2476).
  - 2.6. Ensure development and maintenance of business processes (including tools and training) with standards for transparency commensurate with best-in-class public and private sector organizations.
  - 2.7. Ensure critical processes within the ILCM enterprise that require standardized policy/guidance and repeatable and predictable results necessary for the successful execution of ILCM objectives are identified.
  - 2.8. Ensure programs are executed in response to Joint Requirements Oversight Council approved Joint Capability Integration and Development System (JCIDS) documents or in support of the Capability Based Planning (CBP) process.
  - 2.9. Ensure programs have clearly defined and non-conflicting set of priorities among cost, schedule, performance, and supportability.
  - 2.10. Ensure accurate, reliable, and timely weapon system life cycle financial data supports the planning, programming, budgeting, and execution process.
  - 2.11. Ensure development and maintenance of ILCM core skills required for the acquisition and sustainment workforce.
- **3. Acquisition and sustainment.** Acquisition and sustainment activities within the ILCM enterprise begin with initial development of the requirement, continue through development, fielding, and sustainment, and end with disposal. HAF and the MAJCOMs, along with industry and associated Government organization partners, must plan and execute together to support Air Force Roadmaps (or

equivalent documents), fulfill validated needs or approved JCIDS documents and support the CBP process. Acquisition and sustainment execution requirements include:

- 3.1. Evolutionary acquisition shall be the preferred process used for acquisition programs.
- 3.2. All Air Force acquisition and sustainment programs shall have a clear and unambiguous governance chain of authority. Attachment 2 contains Milestone Decision Authority (MDA) delegations. Acquisition management responsibility for all ACATs flow without intervention from the Service Acquisition Executive (SAE) to the Program Executive Officer (PEO) to the System Program Manager (SPM) or the Program Manager (PM). Sustainment program management responsibility flows from the Commander, Air Force Materiel Command (AFMC/CC) or Commander, Air Force Space Command (AFSPC/CC) to the appropriate subordinate commander/director to the SPM/PM/Product Group Manager (PGM) (sustainment). The SPM/PM is as defined in DoDD 5000.01 as the Program Manager.
- 3.3. Acquisition and sustainment governance chains of commands shall minimize resources, schedules, and coordination associated with individual APML or SPML program reviews. The individual mandating a review must have the authority and accountability for requested subject matter. The SPM/PM shall be responsible for execution of program reviews.
- 3.4. The MDA shall authorize entry into the acquisition system at any point, consistent with phase-specific entrance criteria and statutory/regulatory requirements.
- 3.5. All systems that are on the APML, SPML, or are AFPD 10-9 designated weapon systems shall be assigned a single SPM. All other programs on the APML or SPML that are not systems listed in AFPD 10-9 shall be assigned a single PM. SPMs and PMs shall have total life cycle management responsibility and authority to accomplish objectives as chartered. PMs for sub-systems shall support overall system objectives as required by the SPM. PGMs shall be assigned when directed in a HAF issuance or at the discretion of the AFMC/CC for specified product groups. PGMs shall have overall management responsibilities of specified product groups and support overall system/program objectives as required by an SPM/PM.
- 3.6. Mission assignment throughout the life cycle shall be accomplished to establish management responsibilities in support of approved missions to achieve designated AF ILCM enterprise objectives. AFMC/AFSPC shall establish mission assignment processes to manage resources and align the acquisition and sustainment infrastructure and levels of service that ensure the proper resources are positioned to achieve designated program outcomes.
- 3.7. Acquisition Category (ACAT) ID and ACAT IAM programs shall comply with statutes, executive orders, DoD issuances, Federal Acquisition Regulations (FAR), and Defense Federal Acquisition Regulations Supplement (DFARS). For ACAT ID and ACAT IAM programs, Air Force implementation guidance may be tailored as required for execution. All non-ACAT ID/IAM programs shall comply with statutes, executive orders, FAR, DFARS, DoD issuances, and Air Force issuances. Regardless of ACAT, where there is clear conflict between approved courses of action and where DoD policy/guidance does not allow for tailoring of process, Assistant Secretary of the Air Force (Acquisition) (SAF/AQ), Under Secretary of the Air Force (SAF/US), or Assistant Secretary of the Air Force (Installations, Environment, and Logistics) (SAF/IE) shall request waivers from the appropriate DoD office.
- 3.8. All acquisition and sustainment execution requirements, processes, procedures, documents or activities not required by statutes, executive orders, DoD directive issuances, Air Force directive issuances, or previously approved through the programmatic chain of command, which require

resources, must add appropriate value to the mission. Only those persons in the execution chain may make this subjective judgment. Organizations outside the programmatic execution chain provide support and advice to the decision makers. If the SPM/PM analysis indicates a functional requirement does not add appropriate value, the SPM/PM can require the proponent to justify the requirement and identify the resources (e.g., materiel, personnel, skills, training, and funding) for execution. The functional proponent may appeal an SPM/PM determination through the programmatic chain up to the MDA. The burden of proof lies with the proponent.

- 3.9. 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, who will obtain SECAF approval for the waiver if warranted. Where the course of action, as approved and documented through the programmatic chain of command, conflicts with other Air Force directive issuances other than AFPDs, the SPM/PM shall submit a notification via memorandum to the appropriate SAF/AQ Capability Directorate, SAF/USA or AF/A4M for action. For programs on the APML, the notification should be submitted to the applicable SAF/AQ Capability Directorate. Notifications involving space programs should be submitted through SAF/USA. For programs on the SPML, the notification should be submitted to AF/A4M. Appropriate action shall be taken by the SAF/AQ Capability Directorate, SAF/USA, or AF A4M to either provide direction to comply with policy, obtain a waiver to requirements, or to initiate changes to publications as appropriate to resolve the conflict IAW AFI 33-360. Resolution of conflicts between Air Force issuances shall be resolved by SAF/AQX, SAF/USA, AF/A4M or SAF/IEL and the appropriate HAF functional.
- 3.10. Leadership, developers, operators, and sustainers shall promote development, protection, and integration of technology throughout the life cycle that advances state of the art capabilities critical to continued superiority in air, space, and cyberspace.
- 3.11. Leadership, developers, sustainers, and other stakeholders shall review acquisition and sustainment processes for continuous improvement and revitalize to improve cost, response time, and performance assurance.
- 3.12. Leadership, developers, sustainers, and other stakeholders shall develop critical ILCM process ownership, scope, applicability, compliance measures, process deviation risk, and waivers to support process implementation. Process owners shall ensure processes are codified in official Air Force publications in accordance with AFI 33-360.
- 3.13. Requirements prioritization, as derived from the Air Force CBP and Requirements Development process addressed in AFPD 10-6, shall drive decisions and strategies. Impacts resulting from requirements prioritization actions shall be coordinated with the designated lead command and/or the functional proponent and documented in the Expectation Management Agreement.
- 3.14. Leadership, developers, operators, testers, and sustainers shall utilize expectation management practices that identify and manage expected outcomes and interfaces.
- 3.15. The Air Force shall participate in international cooperative research, development, and acquisition programs that support the best interest of the United States and fulfill valid Air Force requirements.
- 3.16. The Air Force shall apply Systems Engineering processes and practices to all analysis and technical planning activities throughout the life cycle, from the development of concepts to meet user needs to system disposal. SPM/PMs shall assure the operational safety, suitability, and

effectiveness of all systems and end items currently in or entering the operational inventory. All weapon systems, ACAT programs, and sustainment programs shall have an approved Systems Engineering Plan (SEP) that is maintained and updated for the life of the system. Managers of preacquisition efforts shall ensure that analysis and technical planning are compatible with Milestone-A/Key Decision Point (KDP)-A SEP requirements to facilitate entry into formal acquisition. A SEP is not required for acquisition of services.

- 3.17. All potential programs shall begin development of an integrated acquisition and sustainment life cycle strategy that shall be initially documented and available by the program initiation milestone review and be kept current throughout the program life cycle.
- 3.18. SPM/PMs shall have a comprehensive plan for Human Systems Integration in place that addresses all human-related domains across the life cycle. This plan must be consistently integrated into System Engineering implementation.
- 3.19. A depot source of repair (DSOR) shall be addressed in the acquisition strategy documentation and be available by the program initiation milestone review. In the absence of a DSOR decision at program initiation, a strategic source of repair (SSOR) determination shall be accomplished prior to issuing a request for proposal for activities subsequent to program inception. Utilization of an SSOR does not relieve the requirement for the DSOR, which then shall be accomplished during the System Development and Demonstration phase for non-space programs and Phase B Preliminary Design phase for space programs.
- 3.20. Programs with identified Critical Program Information (CPI), Critical Technology (CT), and Critical System Resources (CSR) shall develop, implement, and maintain a Program Protection Plan that includes an Anti-Tamper Plan annex for the life of the CPI, CT, and/or CSR.
- 3.21. Solicitations for ACAT I and II programs that include depot level maintenance support shall require consideration of public-private partnerships as part of the sustainment strategy.
- 3.22. Prior to issuance of a contract solicitation for acquisition of a system, subsystem, or end-item, the SPM/PM/PGM shall assess Air Force long-term technical data needs for the life cycle and provide for technical data rights to meet Air Force acquisition and sustainment strategies. Sufficient technical data, to support life cycle strategies, shall be acquired and maintained to produce, reprocure, maintain, repair, test, or modify weapon systems, systems, subsystems, and end-items.
- 3.23. SPM/PM/PGMs shall assess and manage risk of all kinds as a routine part of management; clearly identify risk at all levels during reviews; and use this risk information as a key element of oversight and decision making.
- 3.24. Programs and weapon systems shall assess technical readiness (e.g., technology, design, and manufacturing) as a routine part of program management. SPM/PM/PGMs shall use mature technology that has been demonstrated in an operationally relevant environment prior to Milestone-B/KDP-B approval. For Major Defense Acquisition Programs (MDAP), the MDA certifies technology maturity.
- 3.25. The Air Force shall establish and maintain an Aircraft Information Program for each weapon system that requires airworthiness certification. Manned and unmanned air vehicles shall have a crash survivable information capability.
- 3.26. In accordance with DoDD 2040.3, *End Use Certificates*, the Air Force shall execute, as necessary, any end-use certificate required by a foreign vendor, based on foreign government requirements.

- 3.27. Proliferation of system-unique support equipment/automatic test systems (ATS) shall be minimized, while ensuring the maintenance and deployment requirements of existing and developing systems are met. SPM/PM/PGMs shall use approved DoD ATS Families as the preferred choice to satisfy automatic testing support requirements.
- 3.28. Metrology and calibration activities shall be standardized throughout the Air Force. Calibration of Test, Measurement, and Diagnostic Equipment used to verify quantifiable measurements shall be traceable to either approved national measurement standards maintained by the National Institute of Standards and Technology or Air Force Metrology and Calibration approved standards.
- 3.29. For commercial derivative systems requiring Federal Aviation Administration (FAA) certification, SPM/PMs shall provide for FAA certification utilizing the sustainment strategy as identified in the DSOR decision.
- 3.30. SPM/PM/PGMs shall implement Serialized Item Management strategies and implementation plans in accordance with DoD requirements.
- 3.31. All programs shall consider corrosion implications. Programs that have corrosion implications shall develop mitigation and prevention strategies and plans. Corrosion mitigation and prevention implementation is to minimize the impact of corrosion on Air Force assets throughout their life cycle.
- 3.32. All programs shall identify and manage industrial base constraints throughout all phases of the life cycle, from requirements definition to disposal with emphasis on cost control. Industrial base constraints include, but are not limited to, critical raw materials, sources of strategic materials, diminishing manufacturing sources and material shortages, manufacturing technologies and capabilities, the supply chain, parts obsolescence, depot capacity, and industrial workforce.
- 3.33. SPM/PMs shall establish requirements addressing quality and manage the quality of their assigned product(s). All programs shall ensure that effective quality management system requirements flow down to all levels of the supply chain to ensure product quality (including design, manufacturing, performance, reliability, maintainability, and deficiency reporting) throughout the life cycle.
- 3.34. Value engineering shall be used where appropriate to ensure the most essential functions and systems, subsystems, equipment, products, and facilities meet customer's requirements and are obtained at the best value.
- 3.35. Capability and sustainment modifications shall be managed as efforts using acquisition and sustainment processes, techniques, and governance.
- 3.36. SPM/PM/PGMs shall identify and seek to reduce the total ownership costs of operating DoD systems while optimizing capability and minimizing logistics footprint.
- 3.37. Military and government civilian personnel operating and/or maintaining fielded systems, subsystems, or end-items (hardware and/or software) shall utilize and comply with applicable Government verified technical orders. When verified technical orders do not exist, SPM/PM/PGMs shall provide for interim contract support of the fielded systems, subsystems, or end-items.
- 3.38. Air Force shall provide for supply chain management operations through an Air Force Global Logistics Support Center (AFGLSC). Wholesale and retail logistics activities shall utilize the AFGLSC command and control support to satisfy operational logistics requirements. For unique

Department of Energy nuclear support items not managed through the Air Force supply system, supply chain management is provided by the Air Force Nuclear Weapons Center.

- 3.39. The Air Force shall establish and maintain an integrated Weapon System Integrity Program (WSIP) throughout its life cycle for each weapon system. Integrity programs include the Aircraft Structural Integrity Program, Avionics Integrity Program, Propulsion Systems Integrity Program, Mechanical Equipment and Subsystems Integrity Program. WSIPs shall be tailored to include only the integrity programs applicable to a weapon system.
- 3.40. Programs, systems, and activities shall be continuously assessed for potential divestiture or rerole to support Air Force recapitalization.
- 4. Prescribed and Adopted Forms.
  - **4.1. Prescribed Forms.** No forms are prescribed by this publication.
  - **4.2. Adopted Forms.** AF IMT 847, Recommendation for Change of Publication

Michael B. Donley Secretary of the Air Force

#### Attachment 1

# GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

# References

- Title 10, United States Code (USC), Sections:
- 2208. Working Capital Funds
- 2228. Military Equipment and Infrastructure: Prevention and Mitigation of Corrosion
- 2320. Rights in Technical Data
- 2321. Validation of Proprietary Data Restrictions
- 2330. Procurement of Services: Management Structure
- 2330a. Procurement of Services: Tracking of Purchases
- 2331. Procurement of Services, Contracts for Professional and Technical Services
- 2366a. Major Defense Acquisition Programs: certification required before Milestone B or Key Decision Point B approval
- 2435. Baseline Description
- 2451. Defense Supply Management
- 2460. Definition of Depot-Level Maintenance and Repair
- 2464. Core Logistics Capabilities
- 2466. Limitations on the Performance of Depot-Level Maintenance of Materiel
- 2469. Contracts to Perform Workloads Previously Performed by Depot-Level Activities of the Department of Defense: Requirement of Competition
- 2474. Centers of Industrial and Technical Excellence; Public-Private Partnerships
- 2476. Minimum Capital Investment for Certain Depots
- 2535. Defense Industrial Reserve
- 2539b. Availability of Samples, Drawings, Information, Equipment, Materials, and Certain Service
- 2563. Articles and Services of Industrial Facilities: Sale to Persons Outside the Department of Defense
- 2667. Leases: Non-Excess Property of Military Departments
- 2809. Long-Term Facilities Contracts for Certain Activities and Services
- OMB Circular A-131, Value Engineering
- DoDD 2040.3, End Use Certificates (EUCs), 14 Nov 1991
- DoDD 4140.1, Supply Chain Materiel Management Policy, 22 Apr 2004
- DoDD 4151.18, Maintenance of Military Materiel, 31 Mar 2004
- DoDD 4650.1, Policy for Management and Use of the Electromagnetic Spectrum, 8 Jun 2004
- DoDD 5000.01, The Defense Acquisition System, 12 May 2003
- DoDD 5000.04, Cost Analysis Improvement Group (CAIG), 16 Aug 2006

DoDD 5000.35, Defense Acquisition Regulation (DAR) Management, 21 Jul 2004

DoDD 5000.52, Defense Acquisition, Technology and Logistics Workforce Education, Training and Career Development Program, 12 Jan 2005

DoDD 5025.12, Standardization of Military and Associated Terminology, 30 Jun 2004

DoDD 5200.39, Security, Intelligence and Counterintelligence Support to Acquisition Program Protection, 10 Sep 1997

DoDD 5240.01, DoD Intelligence Activities, 27 Aug 2007

DoDD 5250.01, Management of Signature Support Within the Department of Defense, 31 Jan 2008

DoDI 2010.4, U.S. Participation in Certain NATO Groups Relating to Research, Development Production, and Logistics Support of Military Equipment, 12 Dec 1967

DoDI 3100.8, The Technical Cooperation Program (TTCP), 11 Sep 1973

DoDI 4151.19, Serialize Item Management (SIM) for Materiel Maintenances, 26 Dec 2006

DoDI 4151.20, Depot Maintenance Core Capabilities Determination Process, 5 Jan 2007

DoDI 4151.21, Public-Private Partnerships for Depot-Level Maintenance, 25 Apr 2007

DoDI 4151.22, Condition Based Maintenance Plus (CBM+) for Materiel Maintenance, 2 Dec 2007

DoDI 5000.02, Operation of the Defense Acquisition System, 8 Dec 2008

DoDI 5000.66, Operation of the Defense Acquisition, Technology, and Logistics Workforce Education, Training, and Career Development Program, 21 Dec 2005

DoDI 5000.67, Prevention and Mitigation of Corrosion on DoD Military Equipment and Infrastructure, 25 Jan 2008

CJCSI 3170.01, Joint Capabilities Integration and Development System, 01 May 2007

CJCSI 3312.01A, Joint Military Intelligence Requirements Certification, 23 Feb 2007

CJCSI 6212.01, Interoperability and Supportability of Information Technology and National Security Systems, 08 Mar 2006

NSS 03.01, National Security Space Acquisition Policy, 27 Dec 2004

AFPD 10-6, Capabilities Based Planning and Requirements Development, 31 May 2006

AFPD 10-9, Lead Command Designation and Responsibilities for Weapon Systems, 08 Mar 2007

AFPD 14-1, Intelligence, Surveillance, and Reconnaissance (ISR) Planning, Resources, and Operations, 02 Apr 2004

AFPD 16-1, International Affairs, 16 Aug 1993

AFPD 16-4, Accounting for Units, Installations and Aerospace Vehicles, 07 Sep 1993

AFPD 16-5, Planning, Programming and Budgeting System, 29 Jul 1994

AFPD 16-10, Modeling and Simulation, 10 Mar 2006

AFPD 21-1, Air and Space Maintenance, 25 Feb 2003

AFPD 21-2, Munitions, 20 Sep 2005

AFPD 23-1, Materiel Management Policy and Procedures, 10 Mar 2006

AFPD 23-5, Reusing and Disposing of Materiel, 26 Mar 2001

AFPD 24-2, Preparation and Movement of Air Force Materiel, 3 Sep 2003

AFPD 32-10, Installations and Facilities, 27 Mar 1995

AFPD 32-70, Environmental Quality, 20 Jul 1994

AFPD 33-1, Information Resources Management, 27 Jun 2006

AFPD 33-3, Information Management, 28 Mar 2006

AFPD 34-1, Air Force Services Combat Support Programs, 01 Nov 1997

AFPD 36-4, Air Force Civilian Training, Education and Development, 12 Feb 2004

AFPD 36-21, Utilization and Classification of Air Force Military Personnel, 01 Apr 1988

AFPD 36-22, Air Force Military Training, 22 Mar 2004

AFPD 38-2, Manpower, 02 Mar 1995

AFPD 60-1, Air Force Standardization Program, 23 Oct 2006

AFPD 61-1, Management of Science and Technology, 13 Jun 2003

AFPD 61-2, Management of Scientific and Technical Information, 07 Apr 1993

AFPD 62-4, Standards of Airworthiness for Passenger Carrying Commercial Derivative Transport Aircraft, 01 Dec 1998

AFPD 62-5, Standards of Airworthiness for Commercial Derivative Hybrid Aircraft, 08 Aug 2001

AFPD 62-6, USAF Aircraft Airworthiness Certification, 01 Oct 2000

AFPD 64-1, The Contracting System, 07 Dec 2006

AFPD 65-1, Management of Financial Services, 01 Jul 1996

AFPD 65-5, Cost and Economics, 17 May 1993

AFPD 91-2, Safety Program, 28 Sep 1993

AFPD 91-3, Occupational Safety and Health, 27 Sep 1993

AFPD 99-1, Test and Evaluation Process, 22 Jul 1993

# Abbreviations and Acronyms

**ACAT**—acquisition category

AFGLSC—Air Force Global Logistics Support Center

**AFMC**—Air Force Materiel Command

**AFSPC**—Air Force Space Command

**AFPD**—Air Force Policy Directive

**APML**—Acquisition Programs Master List

**ATS**—automatic test systems

**CBP**—Capability Based Planning

**CJCSI**—Chairman Joint Chiefs of Staff Instruction

**CPI**—Critical Program Information

**CSR**—Critical System Resources

**CT**—Critical Technology

**DAO**—Designated Acquisition Official

**DoDD**—Department of Defense Directive

**DoDI**—Department of Defense Instruction

**DFARS**—Defense Federal Acquisition Regulations Supplement

**DSOR**—depot source of repair

**FAA**—Federal Aviation Administration

**FAR**—Federal Acquisition Regulation

**HAF**—Headquarters Air Force

**KDP**—Key Decision Point

**ILCM**—integrated life cycle management

**IMT**—information management tool

**MAJCOM**—major command

**MDA**—Milestone Decision Authority

**MDAP**—Major Defense Acquisition Program

**OSS&E**—operational safety, suitability and effectiveness

**PEO**—Program Executive Officer

**PGM**—Product Group Manager

PM—program manager

**SAE**—Service Acquisition Executive

**SAF**—Secretary of the Air Force

**SECAF**—Secretary of the Air Force

**SEP**—systems engineering plan

**SPM**—system program manager

SPML—Sustainment Programs Master List

**SSOR**—strategic source of repair

**TOC**—total ownership cost

**USC**—United States Code

#### **Terms**

**Acquisition**—the conceptualization, initiation, design, development, test, 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.

**Commercial Derivative Systems**—civil aircraft procured or acquired by the military (reference FAA Order 8110.101).

**Enterprise**—the related activities performed for a common purpose including all activities, whether performed in one or more functional or organizational units.

**Human Systems Integration**—the integrated, comprehensive analysis, design and assessment of requirements, concepts and resources for system Manpower, Personnel, Training, Environment, Safety, Occupational Health, Habitability, Survivability and Human Factors Engineering.

**Integrated Life Cycle Management**—the seamless governance, transparency, and integration of all aspects of infrastructure, resource management, and business systems necessary for successful development, acquisition, fielding, and sustainment of systems, subsystems, end-items, and services to satisfy validated warfighter capability needs.

**Life cycle**—the span of time associated with a system, subsystem, or end-item that begins with the conception and initial development of the requirement, continues through development, acquisition, fielding, sustainment, until the time it is either consumed in use or disposed of as being excess to all known material requirements.

**Modification**—a modification is defined as a change to the form, fit, function, or interface (F3I) of an in-service, configuration-managed AF asset.

**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. The PGM is not a DoDD 5000.01 Program Manager (PM) of an acquisition program unless assigned separately and in accordance with guidance on assigning PMs.

**Program**—systems, subsystems, end-items, services, or activities on the Air Force APML, SPML, weapon systems designated in AFPD 10-9, or identified as Services Category activities.

**Program Executive Officer**—the individual dedicated to executive management and supervision of a portfolio of mission-related ACAT and selected programs. The PEO shall be chartered by and is accountable to the SAE.

**Program Manager**—the DoDD 5000.01 designated individual with responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. PM for sub-systems shall support overall system objectives as required by the SPM. The PM for acquisition programs shall be accountable for credible cost, schedule, performance, and materiel readiness to the MDA. The PM for sustainment programs shall be accountable for credible cost, schedule, performance, and materiel readiness to the AFMC/CC or designee. ACAT I and ACAT II PM shall be chartered by the SAE and the PEO. Delegated ACAT II and III PM shall be chartered by the PEO.

**Recapitalization**—the investment of resources to replace systems, end-items, or infrastructure to improve efficiency and/or capability to satisfy validated needs.

**Stakeholders**—individual or organizational entities (users, developers, acquirers, technologists, testers, budgeters, sustainers, and industry) that are, or will be, associated with implementing and supporting the associated system, subsystem, or end-item capability requirements.

**Supply chain management**—is the strategy for ILCM enterprise sustainment that integrates acquisition of assets, supply, maintenance, and distribution functions with the physical, financial, information, and communications networks in a results-oriented approach to satisfy material requirements.

**Sustainment**—continuing materiel support which consists of the planning, programming, and execution of a logistics support strategy for a system, subsystem, or major end-item to maintain operational capabilities from system fielding through disposal.

**Systems** Engineering—an interdisciplinary approach encompassing the entire set of scientific, technical, and management efforts needed to conceive, evolve, verify, deploy, and support an integrated and life-cycle-balanced set of system solutions that satisfy customer needs. Systems Engineering, through technical and management processes, addresses: architectures; requirements development; design; technical management; test and evaluation; verification and validation; operational safety, suitability, and effectiveness (OSS&E); environment, safety, and occupational health (system safety); and human systems integration. These fundamental elements must be accomplished on all development, acquisition, and sustainment activities to develop a relevant technical knowledge base that is matured, maintained, and transferred in a disciplined manner. Technical considerations that constitute Systems Engineering include, but are not necessarily limited to, the following: Aircraft Information Programs; Commercial Off-The-Shelf/Non-Developmental Items; Corrosion Prevention and Mitigation; Deployment; Diminishing Manufacturing Sources; Electromagnetic Compatibility and Radio Frequency Management; Information Assurance; Infrastructure and Facilities; Integrated Diagnostics; Interoperability; Intelligence Supportability; Logistics Support Elements (Product Support Elements) (including but not limited to Design Interface; Material Management; Technical Data Management (including data rights, drawings, and T.O.s); Support Equipment; Maintenance Planning and Management; Facilities; Packaging, Handling, Shipping, and Transportability; Manpower and Personnel; Training); Manufacturing and Quality Assurance; Military Flight Operations Quality Assurance; Modeling and Simulation; Modular Open Systems Approach; Parts, Materials, and Processes; Producibility; Reliability, Availability, and Maintainability; Security; Specifications and Standards; Standardization; Supportability; Survivability/Vulnerability; System Security Engineering; Technology Maturation and Transition; Technology Obsolescence; Total Ownership Cost (TOC); Training.

**System Program Manager**—in accordance with DoDD 5000.01, the 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. SPM assignments are based upon the APML, SPML, and AFPD 10-9 designated weapon systems. For systems in acquisition, the SPM is accountable for credible cost, schedule, performance, and materiel readiness to the MDA. For systems in sustainment, the SPM is accountable for credible cost, schedule, performance, and materiel readiness to the AFMC/CC, AFSPC/CC, or designee. ACAT I and ACAT II SPM will be chartered by the SAE and the PEO. Delegated ACAT II and III SPM shall be chartered by the PEO.

**Technical data**—Information, regardless of the form or method of the recording, of a scientific or technical nature, including computer software documentation. As applied in this publication, it includes information required for the design, development, production, manufacture, assembly, operation, training, testing, repair, maintenance, or modification of defense articles. Relative to software it includes information on system functional design, logic flow, algorithms, application programs, operating

systems, and support software for design, implementation, test operation, diagnosis, and repair. It does not include computer software or data incidental to contract administration or general scientific, mathematical, or engineering principles commonly taught in schools or information in the public domain.

**Total Ownership Cost**—Total ownership cost encompasses all cost associated with development, production, operations, support, and disposal of a weapon system.

**Validated Needs**—Capability objectives identified and approved by the CBP process, or requirements development within the CBP process.

**Value Engineering**—An analysis of the function of a program, project, system, product, item of equipment, building, facility, service, or supply of an executive agency, performed by qualified agency or contractor personnel, directed at improving performance, reliability, quality, safety, and life cycle costs.

# Attachment 2 MILESTONE DECISION AUTHORITY (MDA) DELEGATION<sup>1</sup>

Table A2.1. MILESTONE DECISION AUTHORITY (MDA) DELEGATION

ACAT	Designation Authority	MDA
ID	DAE	DAE
IC	DAE	SAE
IAM	ASD(NII)	ASD(NII)
IAC	ASD(NII)	SAE
II	SAE	SAE or PEO/DAO (as delegated)
III	SAE	PEO/DPEO/DAO (as delegated)

- 1. Refer to DoDI 5000.02 *Operation of the Defense Acquisition System* Table E3.T1 for ACAT descriptions.
- 2. Legend
  - a. ACAT Acquisition Category
  - b. DAE Defense Acquisition Executive
  - c. SAE Service Acquisition Executive
  - d. ASD(NII) Assistant Secretary of Defense for Networks and Information Integration
  - e. PEO Program Executive Officer
  - f. DPEO Deputy Program Executive Officer
  - g. DAO Designated Acquisition Official