



**U.S. AIR FORCE**

**Product Support Tool Kit  
(PSTK)**

**15 July 2021**

**May be obtained from the following website:**

**[Product Support Tool Kit SharePoint](#)**

**Approved by: AFLCMC/LG-LZ  
15 Jul 2021**

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## INTRODUCTION

The Product Support Tool Kit (PSTK) was developed as a quick reference tool for personnel working life cycle logistics tasks throughout a weapon system's life cycle.

The tasks are presented by Department of Defense Instruction (DoDI) 5000.02 *Operation of the Defense Acquisition System*, Life Cycle Framework phases for easy reference. Each task in this checklist should be evaluated to determine if it is needed on your weapon system and ensure required tasks are completed. Just because a task is not referenced in your current milestone phase does not mean that it can be skipped.

Appendix A of this document includes checklists that provide more specifics on each task. The checklists include "how-to" information, as well as links to reference material. The material contained in this document can be found on the PSTK SharePoint Site (<https://usaf.dps.mil/sites/41289/SitePages/Home.aspx>).

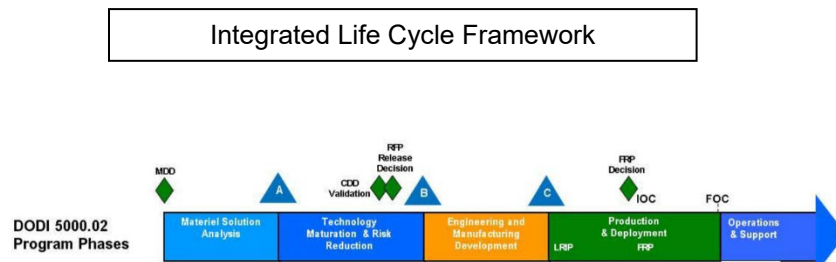
Any task within the PSTK that has an expanded checklist in the Appendix is annotated by a hyperlink. Note DoDI changes as a result of the Acquisition Pathways and 5000.02 breakout are not included in this update.

The Milestone Decision Authority (MDA) may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements. For programs that enter at points other than directly after the Material Development Decision (MDD), refer to the chapters of this guide for the phases which were skipped to ensure coverage of required tasks.

This revision includes changes in public law, policy and guidance up to the publication date of this document. Specific questions should be addressed through AFLCMC/LZS Workflow. [aflcmc.lzs@us.af.mil](mailto:aflcmc.lzs@us.af.mil)

## PRE MATERIEL DEVELOPMENT DECISION (MDD)

This phase is the preparation for the formal entry into Acquisition at MDD. It lays the groundwork within Logistics for various program documents as well as introducing planning considerations that apply to the entire life cycle. These key issues if not discussed at an early stage may result in cost, schedule, and performance issues down the road



PRE-MDD Figure 1

### Task Description

**1.1. Support Capability Portfolio Analysis.** The logistician should be a member of the Capability Development team and is responsible for participation in evaluating threats, defense strategies, Concept of Operations (CONOPS), projected costs, performance, capability gaps, product support risks, and portfolio analysis.

The logistician shall address logistics implications during this early concept development phase while potential systems engineering evaluations are being made. Specifically, budget inputs must account for early logistics and data rights support requirements.

**1.2. Support Requirements Development. Include Supportability Objectives in Initial Capabilities Document (ICD).** The logistician will work with the Major Command (MAJCOM) user to ensure the ICD contains product support requirements. Ideally, those supportability objectives identified previously should be documented in the ICD to include the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook. Design Interfaces (hardware, software and human), Transition to Operational Support, Fielding, Cost, System Accreditation, Environment, Safety, and Occupational Health (ESOH), System Metrics and Classification Guidance supporting System Health and Maintenance Data Collection, Production, Intelligence, Interoperability, Corrosion Control, Calibration, Reliability, Availability, Maintainability (RAM) (consistent with the operational support concepts and intended maintainers), and must also be considered. Human Systems Integration (HSI) (see HSI Acquisition Phase Guide) provides an integrating process to address the human considerations in the ICD. The ICD defines the capability gap in terms of the functional area, the relevant range of military operations, desired effects, and time. The ICD supports the concept decision and Milestone A. Logistics, HSI and Intelligence experts should be members of the High Performance Team (HPT) that develops the ICD. Reference Appendix A, [1.2 ICD Checklist](#). The logistician should also contact and include appropriate Air Force Sustainment Center (AFSC) logistics input for early planning efforts.

**1.3. Manage and Conduct Capability Development (CP) (ensure compliance with AFLCMC Process Directory (APD), AFLCMC Standard Process for Capability Development (CP)).** Capability Development is the responsibility of AFLCMC/XZ and directorate Capability Development staff. It is imperative these teams have a logistician during the entire process from initial gap analysis and brainstorming through initial requirements and budget. Depending on the capability discussions, the Air Force Lifecycle Management Center (AFLCMC) logistician will contact AFSC/LG-LZ and include organic sustainment input into early planning efforts.

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1.3.1. Develop an initial product support strategy. The logistician must engage the entire Capability Development team in developing the product support strategy that includes ICD requirements and preliminary planning for RAM and Cost. The logistician will seek input from all stakeholders, culminating with MAJCOM concurrence. When developing various concepts concerning data rights, ensure all stakeholders understand the imperative of receiving a product (briefings, documentation) from small technology and trade study contracts as requested by the Government. This will allow Legal to document government ownership of the data rights requirements throughout the life cycle of any application of these efforts.

1.3.2. Ensure designation of a Product Support Manager (PSM). IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC and the PEO.

1.3.3. Ensure coordination with stakeholders outside of the Capability Development (CP). The logistician must identify the stakeholders that would be affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited to, supply chain management and depot maintenance in Air Force Installation and Mission Support Center (AFIMSC), AFSC, AFLCMC, Air Force Research Laboratory (AFRL), Air Force Test Center (AFTC), and Air Force Nuclear Weapon Center (AFNWC).

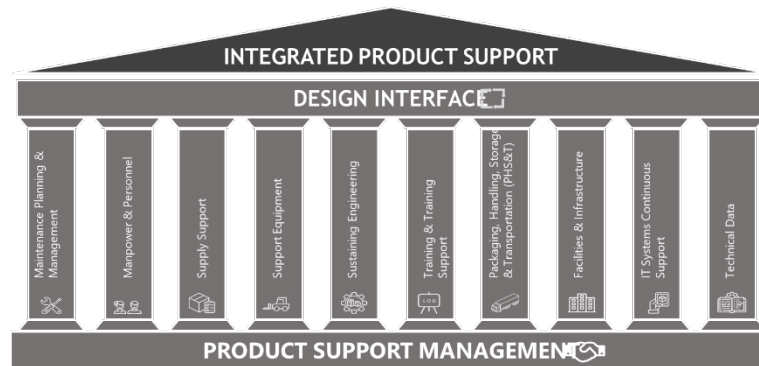
**1.4. Perform Logistics Health Assessment (LHA).** Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the Acquisition Master List (AML), and is to be performed inside the LHA App Support Assessment Model (SAM) (accessible through Project Management Resource Tools (PMRT) in the Web Applications Software Products (WASP) home page) on an annual basis in all phases of Life Cycle Management. Refer to the LHA Standard Process for more guidance on conducting an LHA.

**1.5. Provide budget and cost estimate inputs for MSA Phase.** The logistician must ensure that cost estimates and budget inputs include the full life cycle. Specifically, planning for the cost of data rights should be addressed. Technical Maturation Risk Reduction efforts must also include supportability planning and costs from the perspective of the life cycle logistician. This may require participation from the Applied Technology Council (ATC). Reference Appendix A, [1.4 Ensure Cost Estimate includes All Support Costs](#).

**1.6. Reserved.**

**1.7. Concept Exploration and Refinement – Concept Characterization and Technical documents (CCTDs).** A “concept” is a prospective materiel solution to gaps or shortfalls associated with realizing a viable operational requirement. As decision support information, a CCTD summarizes the technical planning and analyses to accomplish to date and identifies areas of further work needed to mature the concept. While a CCTD addresses operational requirements as part of its content, it primarily serves to capture evolving knowledge of a materiel solution and its constituent elements. The logistician shall be part of the systems engineering process including early planning, trade space exploration, system characterization, and CCTD development. Supportability/sustainment approach and features associated with the various material solutions must be documented in the CCTDs. The logistician shall evaluate RAM impacts from early technology evaluations and materiel solution evaluations. Analogous weapon systems RAM performance and lessons learned are first considered by the logistician and provided to the CCTD team for concept development purposes.

Consider the impact of the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook, Technical Data, Maintenance Concept and Intelligence supportability. Ensure logistics related design parameters (Design Interface) such as (RAM) Cost, Production, Testability, Human Factors, Systems Safety, Survivability and vulnerability, Hazardous Material Management, Standardization and Interoperability, Energy Management, Corrosion Control, Non-Destructive Inspection, Energy Efficiency, Noise (ambient and occupational), Alternate Fuels considerations System Engineering Process, CCTD Process and life cycle support costs are considered (list not all inclusive).



Pre-MDD Figure 2

1.7.1. Consider. Application of Modeling, Simulation, and Analysis Tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

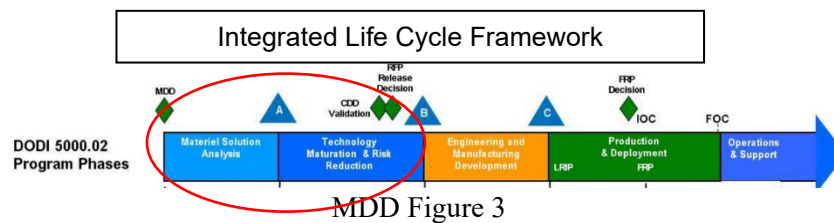
**1.8. Analysis of Alternatives (AoA) Study Guidance and Plan.** The logistician must ensure the AoA study plan identifies how product support will be accounted for and evaluated during the AoA. The logistician shall be a member within the AoA Working Group(s) addressing product support elements. Ideally, Product Support can be formed to be a specific AoA Working Group. At a minimum, the logistician should be involved with assessing Product Support for each potential materiel solution concept being evaluated within the AoA. If product support is not addressed in the AoA study plan, it will not be addressed in the AoA. Reference Appendix A, [1.7 Analysis of Alternatives Checklist](#).

**1.9. Prepare for Material Development Decision (MDD). Prepare documents for MDD.** Note: A favorable MDD does not mean a new acquisition program has been initiated. Program initiation normally begins at Milestone B. Determine if this workload should be on the Acquisition Master List. Contact SAF/AQX for information. Ensure your center workload assignment process is followed. More information can be found in the [AFLCMC New Workload Process](#).

**1.10. Review Weapon System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include Failure Mode, Effects and Criticality Analysis (FMECA), Reliability Centered Maintenance Analysis (RCM), Level of Repair Analysis (LORA), and Maintenance Task Analysis (MTA) developed as part of the Systems Engineering process. The goals of WS-SA or Product Support Analyses (PSA) (as defined in MIL-HDBK 502A) are to ensure supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing an effective and efficient Product Support Package. The WS-SA Internal Process Guide (IPG) is based on Systems Engineering reviews taking place during the acquisition phases of Materiel Solution Analysis (MSA), Technology Maturation and Risk Reduction (TMRR), Engineering Manufacturing Development (EMD), Production and Deployment (P&D), and Operations and Support (O&S) Reviews. The information contained within the WS-SA IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

## Matériel Solution analysis (MSA)

Ensure tasks from previous phase are addressed/accomplished prior to entering next acquisition phase. The purpose of this phase is to assess potential matériel solutions and to satisfy the phase-specific entrance criteria for the next program milestone designated by the MDA. Entrance into this phase depends upon an approved ICD resulting from the analysis of current mission performance and an analysis of potential concepts across the DoD Components, international systems from allies, and cooperative opportunities. Following the Matériel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements.



### Task Description

**2.1. Analyze Matériel Development Decision (MDD) for Supportability Implications.** A Matériel Development Decision (MDD) will precede the MDA authorization to enter into this phase. At the MDD review, the Joint Staff will present the Joint Requirements Oversight Council (JROC) recommendations. (Reference DoDI 5000.85). This is the formal entry into the acquisition process and is mandatory for all programs. Evaluate the impact of the decision on logistics for new or existing systems. Also evaluate the potential impact on Manpower, Personnel, Training and any unique human interface design requirements with respect to new or existing systems.

2.1.1. Manage Capability Development (CP) Effort (pre-MS A) (ensure compliance with AFLCMC). The logistician is responsible for product support inputs during the AoA, transitioning CP effort including product support knowledge to the Program Office, providing Life Cycle Cost and associated Program Office Memorandum (POM) inputs, developing the Life Cycle Sustainment Plan, and coordinating the core determination and candidate depot assignment. Reference AFLCMC Process Directory (APD) and AFLCMC Standard Process for Capability Development (CP).

2.1.2. Participate in Establishing Program Framework (Reference AFLCMC Process Directory (APD), AFLCMC Standard Process for Capability Development (CP)). This is a deliberate effort to cover all planning documents and functional integration to help prepare for program establishment. The designated program logistician shall engage with all stakeholders to ensure product support considerations are addressed in this initial planning task.

**2.2. Ensure designation of a Product Support Manager (PSM).** IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC and the PEO.

**2.3. Perform Logistics Health Assessment (LHA).** Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the AML and is to be performed inside the LHA App (SAM) (accessible through PMRT on the WASP home page) on an annual basis in all phases of Life Cycle Management. Refer to the [LHA Standard Process](#) for more guidance on conducting an LHA.

2.3.1 Ensure designation of Support Equipment Manager. Support Equipment Manager works on behalf of PSM to develop and execute the program's strategy for selection, development, acquisition, fielding, and sustainment of the program's support equipment. Support Equipment Manager will most often be a Life Cycle Logistician but could be another functional if designated by the PSM/PM. Support Equipment Managers are designated via the LHA demographics information or an appointment letter submitted to AFLCMC/LZS.



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2.3.2. Form and convene Support Equipment Working Group. The program's Support Equipment Manager forms and convenes a Support Equipment Working Group with stakeholders and subject matter experts involved in the selection, development, acquisition, fielding, and sustainment of a system's support equipment (to include automatic test systems (ATS)). The formation of a Support Equipment Working Group with the right stakeholders fulfills AFI63-101/20-101 requirement to coordinate "Support Equipment/Automatic Test System development, procurement, and modifications requirements with the Support Equipment/Automatic Test System Product Groups", as well as the requirement to coordinate "with the AF Metrology and Calibration on all calibration requirements". For more information on the formation of the Support Equipment Working Group, including which organizations to include, reference the AFLCMC Standard Process for Support Equipment Recommendation Data (SERD).

**2.4. Define Supportability Objectives. Reference Appendix A, [2.3 Define Supportability Objectives Checklist](#). The logistician shall revise the Product Support Strategy, if applicable after MDD, with MAJCOM user engagement via Product Support Integrated Process Team.**

**2.5. Include Supportability Objectives in Initial Capabilities Document (ICD).** Those supportability objectives identified previously should be documented in the ICD to include Technical Data, the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook, and Asset Marking, including Item Unique Identification (IUID). Design Interfaces (hardware, software and human), Transition to Operational Support, Cost, Fielding, System Accreditation, ESOH, System Metrics and Classification Guidance supporting System Health and Maintenance Data Collection, Production, Intelligence, Interoperability, Corrosion Control, RAM, (consistent with the operational support concepts and intended maintainers. HSI, (see HSI Acquisition Phase Guide), provides an integrating process to address the human considerations in the ICD. Technical Data includes technical publications, engineering data, and support data (Ref. FAR 52.227-14). The ICD defines the capability gap in terms of the functional area, the relevant range of military operations, desired effects, and time. The ICD supports the concept decision and Milestone A. Logistics, HSI and Intelligence experts should be members of the HPT that develops the ICD. [Reference 1.3 in the DP Process Guide](#). Reference Appendix A, [1.2 ICD Checklist](#).

**2.6. Include Product Support Capabilities in Analysis of Alternatives (AoA).** [Reference AFLCMC Process Directory \(APD\), AFLCMC Standard Process for Capability Development](#). Reference Appendix A, [1.7 Analysis of Alternatives Checklist](#).

**2.7. RESERVED.**

**2.8. Evaluate Product Support Capability in Analysis of Alternatives (AoA) for the Best Material Approaches.** The logistician must evaluate product support capability within each CCTD during the AoA process. The logistician shall be a member of the AoA Working Group(s) that is addressing product support elements. Ideally, Product Support can be formed to be a specific AoA Working Group.

**2.9. Participate in and Document the Initial Technical Review. Current organization and operations are discussed and compared to possible new ways of providing the capability.** The methodology is described and results and conclusions of the initial analysis are presented. Consider the impact of the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook, Technical Data, Maintenance Concept, Asset Marking to include Item Unique Identification (IUID) and Intelligence supportability. Ensure logistics related design parameters (Design Interface) such as RAM, Cost, Production, Testability, Human Factors, System Safety, Survivability and Vulnerability, Hazardous Material Management, Standardization and Interoperability, Energy Management, Corrosion Control, Non-Destructive Inspection, Energy Efficiency, Noise (ambient and occupational), Alternate Fuels considerations and life cycle support costs. HSI, (see HSI Acquisition Phase Guide), provides an integrating process to address the human aspect of these areas.

2.9.1 Address Environment, Safety, and Occupational Health (ESOH) considerations.  
[Reference Appendix A, 2.9.1 Address Environment, Safety and Occupational Health Checklist](#).

**2.10. Include Product Support Concepts in Preferred System Concept.** Reference Appendix A, [2.10 Product Support Capabilities in Preferred System Concept Checklist](#).



**2.11. Participate in Defining, Analyzing and Selecting Course of Action (COA).** The COA presents Headquarters Air Force (HAF) and the lead MAJCOM commander with acquisition strategy options for the selected materiel solution resulting from AoAs. The AoAs should clearly articulate performance, schedule, and cost expectations as well as initial risk assessment of the program to ensure expectations are known and agreed to up front. The COA will serve as the basis for the Acquisition Strategy, Technical Maturation Risk Reduction (TMRR), Test & Evaluation (T&E) Strategy, Life Cycle Sustainment Plan (LCSP) and Program Management / Services Management Agreement (PMA/SMA). Approval at the lead MAJCOM commander and MDA level for the selected COA will ensure agreement among leadership on program expectations, risks and performance for specified cost and schedule goals. Ensure COA addresses product support capabilities and alternatives. Logistics, HSI and Intelligence experts should be members of the HPT that develops the COA. As the acquisition strategy is developed, ensure the program objectives for Owning the Technical Baseline are understood and sufficient to help guide sustainment requirements. Reference [AFLCMC Process Directory \(APD\)](#), [AFLCMC Standard Process for Capability Development \(CD\)](#).

**2.12. Participate in developing and building the Milestone (MS)-A Test and Evaluation Master Plan (TEMP).** The MS-A TEMP will evolve into a complete TEMP due at Milestone B. Ensure the MS-A TEMP addresses product support capabilities, alternatives, and testability to include calibration. Ensure Intelligence support concept and technologies are included in the TEMP. Ensure logistics, HSI, and Intelligence experts interact with the Integrated Test Team (ITT) to address testing of product support capabilities and alternatives. Ensure HSI specific concerns and impacts are identified and addressed.

**2.13. Participate in System Engineering Plan (SEP) Development.** The purpose of the SEP is to document the systems engineering effort guiding all technical aspects of the program from the technical strategy. The SEP provides the overarching plan for bringing the hardware, software, and human sub-systems into an integrated system. The SEP address all key design considerations, including: System Engineering (SE) Tradeoff Analysis for Affordability; Corrosion Prevention and Control; ESOH; HSI; IUID; Manufacturing; Open Systems Architectures; Program Protection and Information Assurance; and Reliability and Maintainability. The SEP is developed early in the materiel solution analysis phase and updated prior to each subsequent Milestone. The logistician needs to be included on the SEP review team to ensure (RAM), Cost, RAM-C Rationale Report, , Corrosion Prevention and Control Plan (CPCP), Configuration Management (CM), Reliability and Maintainability (R&M) and other product support factors are addressed during engineering analysis and documented in the plan. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Appendix A, [2.13 SEP Checklist](#).

2.13.1 Address Human Systems Integration (HSI) Considerations. Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

2.13.2 Application of Modeling, Simulation, and Analysis Tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

2.13.3. Create and Coordinate item unique identification (IUID) implementation Plan. The IUID Implementation plan must be completed at the establishment of a program. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Chapter 8 for guidance and attachment 3 for a template.

**2.14. Conduct Capability Development (ensure compliance with AFLCMC CP process).** The logistician and PSM should be involved and monitoring technical transition progress and initiatives, always keeping in mind long-term support requirements. This may impact cost estimates, budget estimates, planning documents, HSI, ESOH, and test plans. [AFLCMC Capability Planning Process](#).

**2.15. Develop Initial Product Support Strategy in the Life Cycle Sustainment Plan (LCSP).** The logistician will further develop, with the Lead Command as well as sustainment stakeholders (AFSC, AFTC, etc.), the product support strategy, and expand the view to include all LCSP requirements. Reference [AFI 63-101/20-101](#), *Integrated Life Cycle Management*. The logistician must identify the stakeholders affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited to, supply chain management, and depot maintenance in AFSC, AFIMSC, AFLCMC, AFRL, AFTC, and AFNWC. Relationships among these USAF organizations are critical to ensure consistency of data usage. The designated Support Equipment Manager develops the support

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equipment strategy with the support of the Support Equipment Working Group. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support. Use the Next Generation CLS Contract Sustainment Support Guide (CSSG), DoD PBL Guide, and maximize use of existing Government Supply Chain for proven best practices in developing product support strategies. Reference Appendix A, [2.15 Initial Product Support Strategy in LCSP Checklist](#). However, per AFI 63-101/20-101, for Air Force programs delegated to the SAE and below, having an approved Life Cycle Management Plan (LCMP) (as of the publishing date of this instruction), the MDA may approve the continued use of the LCMP for the life of the program. Review reference to ensure all requirements are met to maintain an LCSP/LCMP. Ensure coordination with stakeholders. Reference [APD](#), Life Cycle Sustainment Plan (LCSP).

### 2.15.1 Review Requirements Documents / Initial Capability Document (ICD).

2.15.1.1. Review unique munitions acquisition activities. Reference Appendix A, [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#).

### 2.15.2. Review strategies for similar products/strategies.

2.15.3. Update the Product Support Strategy. Update the Product Support Strategy with Stakeholders, based upon the AoA and other Milestone A documents.

### 2.15.4. Conduct risk assessment for alternatives.

2.15.5. Participate in developing Cost Estimate for alternatives. Cost estimates should include all phases of the program including development, procurement, and operating & support costs. Cost estimates should be based on the best available estimating methodologies using a parametric, analogy, or bottoms-up approach. Create a work-breakdown structure to ensure your cost estimate covers all applicable costs. The Air Force Total Ownership Cost (AFTOC) database is a good starting point for cost estimates. Ensure cost estimates actually look at the comparative personnel costs of the various alternatives. This should be expanded to correctly capture the Cost Analysis Requirements Description (CARD) or other similar document and ensure the full costs are considered. The use of Logistics Composite Model (LCOM) or similar data to run Manpower Personnel and Training (MPT) analyses for various maintenance/support concepts can be very effective in driving the design rather than reacting to it.

2.15.5.1. Participate in Alternative Systems Review (ASR) (EN) output – decision, typically done after AoA and preferred materiel solution selected.

### 2.15.6. Edit and coordinate writing of Life Cycle Sustainment Plan (LCSP).

### 2.15.7. Reserved.

### 2.15.8. Approve Product Support Strategy(s) at the Acquisition Strategy Panel (ASP).

### 2.15.9. Finalize LCSP based on ASP recommendations.

**2.16. Ensure Supportability in Program Management Services Management Agreements (PMA/SMAs).** Reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**2.17. Include Supportability in the Source Selection Plan (SSP).** Reference Appendix A, [2.17 Include Supportability in the SSP Checklist](#).

**2.18. Participate in the Acquisition Strategy Review.**

**2.19. Complete Acquisition Strategy Plan (ASP) Supportability Template.** The Acquisition Strategy will guide this phase. Multiple technology development demonstrations, defined in the acquisition strategy, may be necessary before the operational user and material developer can substantiate a preferred solution is feasible, affordable, and supportable; satisfies validated capability requirements and has acceptable technical risk. Critical program information will be identified during this phase and program protection measures to prevent disclosure of critical information will be implemented.

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The ASP briefing template provides an idea of the types of information SAF/AQ, Assistant Secretary of the Air Force (Acquisition) will expect to be addressed to include Human System Integration and Environment, Safety, and Occupational Health. The template can be adjusted as necessary to meet unique program information and technical data requirements. The product support strategy, with inputs from the PSM/logistician, is part of the template to address sources of repair and supply, performance based logistics, Product Support Key Performance Parameter (KPP) compliance, etc. For guidance on ASPs see the Acquisition Excellence and Change Office (SAF/AQXC).

**2.20. Include Supportability Requirements in Request for Proposal (RFP).** Ensure the program objectives for Owning the Technical Baseline are articulated in the RFP and are sufficient for sustainment planning. Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#). (Reference [AFLCMC Process Directory \(APD\)](#), AFLCMC Standard Process for Capability Development (CP). See Product Support Contracts Requirement Tool, Appendix D.

**2.21. Develop the “Intellectual Property (IP) Strategy (IPS)” and Include Data and Data Rights in the Request for Proposal (RFP).** The logistician shall participate in the effort with all Program Office stakeholders (PM, EN, PK, FM, Legal, etc.) to develop the initial Intellectual Property (IP) Strategy (IPS). The strategy shall address the data requirements throughout the system life cycle, to include associated data rights. The Air Force shall request and verify delivery of all data and data rights entitled through contractual requirements or government funding of development of the part or system. The contractor will need to provide a matrix identifying all data rights that they assert. The burden of proof the contractor is allowed to retain rights to data is now on the contractor per Title 10 USC 2320 and 10 USC 2321. The contractor may want to offer up rights that they could otherwise retain to enhance their position during source selection. The actual rights received by the Air Force will result from negotiations. All ACAT I and ACAT II programs, regardless of planned product support strategy, shall assess the long-term technical data needs (including product definition, operations, maintenance, installation and training data) and reflect that assessment in the Intellectual Property (IP) Strategy (IPS). For the acquisition of engineering data, reference DoDI 5000.81. [While not required by regulation, this strategy is also recommended for ACAT III programs.](#) Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#).

**2.22. Review Amendment (Title 10 U.S.C. 2533a in Section 832) For Application to Your program And Ensure Compliance in All Contracting Actions.**

**2.23. Include options for Radio-frequency identification (RFID) in the Request for Proposal (RFP) (as applicable).** RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. A significant thrust in RFID use is in enterprise supply chain management, improving the efficiency of inventory tracking and management. Ensure that provisions for RFID are considered for inclusion in the RFP.

**2.24. Include Contract Requirements for Item Unique Identification (IUID) in the Request for Proposal (RFP).** IUID is the set of data for tangible assets that is globally unique and unambiguous and ensures data integrity and data quality throughout life and supports multi-faceted business applications and users. Ensure provisions for IUID marking are included in the RFP to include marking of Support Equipment/Automatic Test Systems and production tooling & templates. IUID is integral to completion of program requirements for the Military Equipment Program Valuation (MEPV) and GFP accountability.

**2.25. Include government furnished property (GFP) in Request for Proposal (RFP).** The PM/PSM/logistician and their engineering counterpart(s) should include any known GFP (includes GFE/GFM/Loans) in the RFP (AFI 23-119). Any property added to the RFP should be coordinated with the loan control officer (LCO) in AFSC to determine if property would potentially be available for loan to or requisitioned by the contractor. The Program office documents the justification analysis and ensures it addresses each element required IAW DFARS PGI 245-103-70 (Furnishing Government Property to the Contractor). If GFP will be included, ensure mandatory clauses are included in IAW FAR 45.107, DFARS 211.274-6(b), and DFARS 245.107. In addition, all property must be recorded in the appropriate GFP attachment (IAW DFARS PGI 245.103-72) and included in the contract (see [dodprocurementtoolbox.com](http://dodprocurementtoolbox.com)).

**2.26. Define Contractor Supported Weapon System (CSWS) Data Requirements.** Reference Appendix A, [2.21.4 Define CSWS Data Requirements Checklist](#).

**2.27. Address Product Support Risk Management.** A risk management approach for use in the acquisition of new systems, end-items, and equipment based upon four attributes: risk management planning, risk assessment, risk mitigation, and risk management control. When properly implemented, an effective risk management program facilitates identification of areas that require special attention and sets realistic, executable technical, schedule, and cost objectives. Risk Management is applicable to all phases and aspects of any acquisition or modernization program. The logistician needs to participate on the risk management team to ensure identification of any risk relative to the product support element, systems engineering and life cycle support costs, schedule and technical performance. The appropriate reference is AFI 63-101/20-101, Chapter 4, para 4.6.6 PS Risk Management Product Support risks need to be addressed and documented within each CCTD. These risk assessments must address adverse impacts on warfighters capabilities to operate, maintain and support the system in an effective and safe manner. Consideration must also be given to reclamation, demilitarization and disposal. Appendix A [2.22 Participate in Integrated Baseline Review \(IBR\) Checklist](#).

**2.28. Perform Continuous Supply Chain Risk Management.** Supply Chain Risk Management (SCRM) is a discipline for managing risk to identify, assess, mitigate and monitor actual or potential threats, vulnerabilities, and disruptions within the DoD's supply chain from beginning to end to ensure mission effectiveness; i.e., SCRM is initiated as soon as a program is created or a lead is assigned responsibility to manage a system or program of record, and ends as soon as the program stands down or retires. Successful SCRM maintains the integrity of products, services, people, and technologies; and ensures the undisrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. SCRM applies to all organizations and programs, including Foreign Military Sales (FMS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Item (NDI) programs.

Per AFI 63-101/20-101, *Integrated Life Cycle Management*, the PM has oversight of SCRM. Although the PM has oversight, risks can be associated with any aspect of the supply chain, and it is essential to understand that all functional areas of the program can be exposed to supply chain risk. The logistician must participate in SCRM activities (IPTs, supply chain assessments, program reviews, etc.) to ensure any risk relative to product support elements are supported and addressed in acquisition documents.

Programs should assess and mitigate risks of all kinds as a routine part of program management and should identify risks during program reviews. Potential supply chain risks include, but are not limited to; foreign influence, political and regulatory, economic, environmental, product quality and design, manufacturing and supply, transportation and distribution, financial, compliance, technology and cybersecurity, and human capital. SCRM should also be addressed to track foreign ownership of sub-tier vendors, component obsolescence, and counterfeit or suspect counterfeit parts, major/critical nonconformance, and their vulnerabilities with special emphasis on Critical Components (CC), Mission Critical Functions (MCF), and Critical Program Information (CPI). Program should contact the AFLCMC SCRM Network, [AFLCMCLG-LZ.SCRM.Network@us.af.mil](mailto:AFLCMCLG-LZ.SCRM.Network@us.af.mil), any time real/potential supply chain risks are identified; to include counterfeit detection and DMSMS.

The PM/PSM/logistician, with support from the other functional stakeholders, manages SCRM contract requirements, ensures SCRM is addressed at program reviews, conducts supply chain assessments, addresses SCRM in acquisition documents, and continuously monitors the supply chain. SCRM is required to be documented in the Program Protection Plan (section 5.3.4 or appendix G) but should also be considered in, but not limited to, the Acquisition Strategy, and Life Cycle Sustainment Plan (LCSP). Utilize the Product Support Contract Requirements Tool (PSCRT) for specific SCRM tasks and recommended contract language.

At a minimum, reference the following policy/guidance: DoDI 5000.83, *Technology and Program Protection to Maintain Technological Advantage*, DoDI 5000.85, *Major Capability Acquisition*, DoDI 5200.44, *Protection of Mission Critical Functions to Achieve Trusted Systems and Networks*, DoDM 4140.01 vol 1, *DoD Supply Chain Materiel Management Procedures*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFPAM 63-113, *Program Protection Planning for Life Cycle Management*, and *Defense Acquisition Guidebook, Chapter 9, Program Protection*. Detailed information on policy, processes, tools, and other SCRM support is available on the [AFLCMC SCRM SharePoint](#).

**2.29. Include Logistics Activities in the Integrated Master Plan/Integrated Master Schedule (IMP/IMS).**

Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**2.30. Participate in Source Selection.** The Product Support Integrator (PSI) will identify membership requirements. If no PSI is assigned, this responsibility rests with the Program Manager.



**2.31. Initiate the Depot Source of Repair (DSOR) Process.** The DSOR process is the method by which the DoD postures for depot level maintenance workloads – organic or contract (regardless of the source of funds for maintenance or repair). It applies to workloads for hardware, software, new acquisitions, and fielded systems whether the Government or private contractor manages the system or subsystem. All weapon systems, end items, support equipment, and their components that require or are planned to require depot level maintenance require a DSOR determination prior to Milestone (MS) B per AFI 63-101/20-101, *Integrated Life Cycle Management* (MS C or DSOR need date for programs entering after MS B). For fielded systems, the process will be initiated as soon as a change in posture is considered. The Program Manager (PM) must initiate DSOR planning early in the life cycle and document it in the LCSP. All programs will use the DSOR Automated Management System (DSOR II) except for Special Access Programs which use an off-line process.

The DSOR process is comprised of two phases involving several activities each tied to specific events in the acquisition life cycle. Phase I, Source of Repair Assignment (SORA), is when the Air Force determines Core determination and makes its depot maintenance Source of Repair (SOR) recommendation. Phase II, Depot Maintenance Inter-service (DMI) review, is where the DoD Services collaboratively determine the final SOR activity. (**Note:** Funds shall not be committed to facilitate a specific site for depot maintenance prior to receiving the final DSOR decision. See AFI 63-101/20-101. Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist.](#))

**2.32. Determine the core Determination and Candidate Depot Assignment.** Phase I of the DSOR process (SORA) is to determine Core determination and the Air Force Candidate Depot Assignment as outlined in task 2.24.2. This Core determination is critical and is necessary for Title 10 USC 2464 and legislative reporting compliance. Core is the organic depot capability required to assure mission support for weapon systems designated for fulfilling strategic and contingency plans. Specifically, Title 10 USC 2464 states the DoD will retain a logistic repair capability of technical competencies and resources to meet national defense situations. Workloads are used to retain the repair capability on legacy and new and emerging technologies. Core is identified by tasked system to meet Combatant Command (COCOM) requirements. Core workload should be performed in government owned facilities, with government owned equipment and repair capability performed by government personnel. The core determination analysis will be completed prior to Milestone A (per Title 10 USC 2366a) and the results of the analysis will be documented in the Core Logistics Analysis Annex to the LCSP. In addition, the candidate depot is identified by the Air Logistics Complex repair capability and is identified as a CITE (Centers of Industrial and Technical Excellence). Once Core determination is made the SORA process determines the projected workload, and finally, the AF depot source of repair candidate recommendation (final decision is accomplished via DSOR Phase II, Depot Maintenance Inter-service coordination). Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist.](#)

**2.33. Ensure Cost Estimates Include Life Cycle Support Costs.** Reference Appendix A, [1.4 Ensure Cost Estimate Includes all support Costs Checklist.](#)

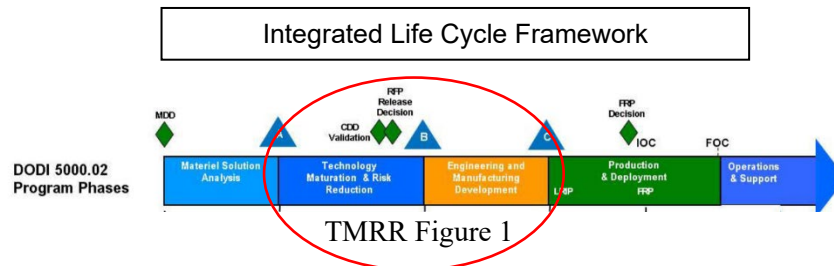
**2.34. Prepare Documentation Required for Milestone A.** Per Title 10 USC 2366A, the MDA must provide a signed certification memorandum for record prior to Milestone A approval. Reference Appendix A, [2.26 Prepare Documentation for Milestone A Checklist.](#) Note: A favorable Milestone A decision does not mean a new acquisition program has been initiated. Program initiation normally begins at Milestone B. Determine if this workload should be on the Acquisition Master List/Program Master List. Contact SAF/AQX, Acquisition Excellence and Change Office for information. (Reference [AFLCMC Process Directory \(APD\)](#), AFLCMC Standard Process for Capability Development (CP)).

**2.35. Review Weapon System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include FMECA, RCM, LORA, and MTA developed as part of the Systems Engineering process. The goals of WS-SA or PSA (as defined in MIL-HDBK 502A) are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing an effective and efficient Product Support Package. The WS-SA IPG is based on Systems Engineering reviews that take place during the acquisition phases of MSA, TMRR, EMD, P&D, and O&S Reviews. The information contained within the IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

**Exit Criteria: Milestone A Decision Memorandum**

## TECHNICAL MATURATION RISK REDUCTION

Ensure tasks from previous phase are address/accomplished prior to entering next acquisition phase. The purpose of this phase is to reduce technology risk and mature the appropriate set of technologies to be integrated into a full system, and to demonstrate Critical Technology Elements (CTEs) on prototypes. Technical Maturation Risk Reductions is a continuous technology discovery and development process reflecting close collaboration between the Science & Technology community, the user, and the system developer. It is an iterative process designed to assess the viability of technologies while simultaneously refining user requirements. Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements. Requirements across the Acquisition Pathways differ; however, documentation with rationale is highly encouraged. For efforts entering at Milestone (MS) A, ensure coverage of tasks in the previous chapter.



### Task Description

**3.1. Ensure designation of a Product Support Manager (PSM).** IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC and the PEO.

3.1.1 Ensure Adequate Logistic Resources are Considered and Assigned for the Program. Ensure a logistician is assigned and considers all 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook. IAW AFI 63-101/20-101, a PSM should be assigned (as applicable). Acquisition Sustainment Unit (ASU) Model may be used.

**3.2 Establish a Technical Order (TO) Acquisition Program.** Reference Appendix A, [3.2.1 Establishing a TO Acquisition Program Checklist](#).

3.2.1. Assign Technical Order Manager.

3.2.2. Perform Logistics Health Assessment (LHA). Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the AML, and is to be performed inside the LHA App (SAM) (accessible through PMRT in the WASP home page) on an annual basis in all phases of Life Cycle Management. Refer to the [LHA Standard Process](#) for more guidance on conducting an LHA.

3.2.3. Ensure designation of Support Equipment Manager. The Support Equipment Manager works on behalf of PSM to develop and execute the program's strategy for selection, development, acquisition, fielding, and sustainment of the program's support equipment. Support Equipment Manager will most often be a Life Cycle Logistician, but could be another functional if designated by the PSM. Support Equipment Managers are designated via the LHA or via an appointment letter submitted to AFLCMC/LZS.

**3.3. Ensure Adequate Intelligence Resources are Considered and Assigned for the Program.** Ensure an Intelligence professional is assigned and considers all Intelligence Supportability elements. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#).

**3.4. Initiate the Depot Source of Repair (DSOR) Process.** The DSOR process is the method by which the DoD postures for depot level maintenance workloads – organic or contract (regardless of the source of funds for maintenance or repair). It applies to workloads for hardware, software, new acquisitions, and fielded systems whether the Government or private contractor manages the system or subsystem. All weapon systems, end items, support equipment, and their components that require or are planned to require depot level maintenance require a DSOR determination prior to Milestone (MS) B per AFI 63-101/20-101, *Integrated Life Cycle Management* (MS C or DSOR need date for programs entering after MS B). For fielded systems, the process will be initiated as soon as a change in posture is considered. The PM must initiate DSOR planning early in the life cycle and document it in the LCSP. All programs will use the DSOR Automated Management System (DSOR II) except for Special Access Programs which use an off-line process.

The DSOR process is comprised of two phases involving several activities each tied to specific events in the acquisition life cycle. Phase I, SORA, is when the Air Force determines Core determination and makes its depot maintenance Source of Repair (SOR) recommendation. Phase II, Depot Maintenance Inter-service (DMI) review, is where the DoD Services collaboratively determine the final SOR activity. (**Note:** Funds shall not be committed to facilitate a specific site for depot maintenance prior to receiving the final DSOR decision. See AFI 63-101/20-101. Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist.](#))

3.4.1. Accomplish Source of Repair Assignment (SORA) Process. The SORA process begins the entire DSOR process. It contains enough information in order to run a core analysis, and select the appropriate AF organic candidate depot(s). It requires detailed information in order to support recommendation and rationale for the maintenance strategy this process will typically include, but is not limited to repair hours, recurring cost, and facilities information. An organic versus contract cost comparison may be accomplished.

The SORA process consists of the major areas needed to sufficiently identify and validate core determination analysis and organic candidate depot selection, to include, but not limited to, the following areas: System Capability, Functional Description of System/Sub-system, Final Application, Technology Assessment, Inventory, Cryptologic Description, Workload Description, Acquisition Category, Milestone Applicability, and Joint Service Program Information. AFMC/A4FD will provide a core determination analysis and candidate depot designation via a core/candidate depot memorandum.

The SORA process may also require more detailed information used to compare possible SORs, to include, but not limited to, the following areas: Depot Facility Requirements, Depot Support Equipment Requirements, Depot Peacetime Repair Hours Recurring Repair Cost, System Expected/Planned Life, and Planned Modification Installation Schedule. The SORA process is considered complete when the SORA is ready for coordination/signature. See AFI 63-101/20-101. Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist.](#) (**Note:** Each AFMC Center will annually collect cost data for all contract and organic depot maintenance workloads to support 50/50 reporting. If programs enter at the Engineering and Manufacturing Development phase then a DSOR (SORA Process and DMI) still needs to be conducted).

**3.5. Initiate the Product Support Business Case Analysis (PS BCA).** The PM/PSM shall perform a product support BCA to validate the product support strategy is cost effective, financially feasible, and optimizes system readiness. The product support BCA is required for ACAT I and II programs but is at the discretion of the MDA for ACAT III programs. The PM/PSM shall document the strategy decision and rationale in the LCSP. The PM/PSM shall maintain a complete history of BCAs over the course of the system life cycle to track decisions and understand how real-world operations cause program impacts. The PM/PSM revalidates the business case prior to any change in the product support strategy or every 5 years, whichever occurs first (per AFI 63-101/20-101). The Product Support BCA should follow the [DoD Product Support BCA Guidebook](#) and AFPAM 63-123. The PSM/Logistician will be actively leading this process. Reference Checklist [3.4.1, Product Support \(PS\) Business Case Analysis \(BCA\) Checklist.](#)

**3.6. Determine the Core determination and Candidate Depot Assignment.** Phase I of the DSOR process (SORA) is to determine Core determination and the Air Force Candidate Depot Assignment as outlined in task 2.24.2. This Core determination is critical and necessary for Title 10 USC 2464 and legislative reporting compliance. Core is the organic depot capability required to assure mission support for weapon systems designated for fulfilling strategic and contingency plans. Specifically, Title 10 USC 2464 states the DoD will retain a logistic repair capability of technical competencies and resources to meet national defense situations. Workloads are used to retain the repair capability on legacy and new and



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emerging technologies. Core is identified by tasked system to meet COCOM requirements. Core workload should be performed in government-owned facilities, with government-owned equipment and repair capability performed by government personnel. The core determination analysis will be completed prior to Milestone A (per Title 10 USC 2366a) and the results of the analysis will be documented in the Core Logistics Analysis Annex to the LCSP. In addition the candidate depot is identified by the Air Logistics Complex repair capability and are identified as a CITE. Once Core determination is made the SORA process determines the projected workload and finally, the AF depot source of repair candidate recommendation (final decision is accomplished via DSOR Phase II, Depot Maintenance Inter-service coordination). Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist](#).

**3.7. Establish the Depot Maintenance Activation Working Group (DMAWG) Team.** The objective of the DMAWG is to ensure a required depot maintenance capability is set up in a timely and efficient manner to achieve government-controlled capabilities for the depot repair. The DMAWG is the forum for conducting depot source of repair planning and activation to ensure funding, contracting, and delivery of data is accomplished. If support concept is total Contractor Logistics Support (CLS), a DMAWG is not required; however a Contractor Depot Activation Plan is still required. If Depot activation stands up depot repair capability at another DoD Service ensure DMISA development is included in list of activation activities. Reference AFMAN 63-122 Depot Source of Repair Planning and Activation and Appendix A, [3.6 Establish DMAWG Team Checklist](#).

**3.8. Establish Periodic product Support IPT Meetings.** The purpose is to coordinate and plan logistics management to ensure supportability of developed and fielded systems with all stakeholders (sometimes called a Product Support IPT). Logisticians should ensure they participate in other program reviews. (e.g., Program Management Reviews (PMR), Test Reviews, Configuration Reviews, System Requirements Review etc.).

**3.9. Support Award of a Technical Maturation Risk Reduction Contract, if applicable.**

**3.10. Ensure Weapon System Program Complies with Air Force Policy for No New Management Information System Development without AF/CIO, The Office of information dominance and chief information officer, approval.** This excludes Mission Critical Computer Resources (MCCR) and National Security Systems. Reference AFI 33-401 and AFI 63-101/20-101 for more information.

**3.11. Ensure Supportability in the Program Management/Services Management Agreements (PMA/SMAs).** Preference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**3.12. Initiate Sustainment Quad Chart Template for Program Executive Officer (PEO) Reviews.** The Portfolio Review is the culmination of a process that starts at the program level, continues through the PEO, and culminates in a presentation to SAF/AQ. The most detail will be provided at the PEO level, with summary data and significant issues only briefed to SAF/AQ. The Sustainment Quad chart provides a summary of sustainment/ product support planning activities to include: major players, transfer eligibility, operation and maintenance funding, overall sustainment element status, and issues. See DoD Product Support Managers (PSM) Guidebook, Fig 5, page 25 for Sustainment Quad Chart and usage Instructions.

**3.13. Participate in Operational Site Reviews.** Operational site reviews are conducted for any or all of the following purposes: (1) To determine the feasibility of a location for planned operations, (2) To validate information about the 12 Product Support Elements listed in DoD IPS Element Guidebook, terrain, host nation resources, infrastructure, personnel, compatibility, Operational environmental considerations, Energy Efficiency, ESOH, Noise (ambient and occupational), Alternate Fuels considerations, habitability, survivability (personnel and equipment), force protection etc. (list not all inclusive), (3) To gather critical information for future operations and facilitate planning for the eventual use of a location, and (4) To gather critical information for future Manpower and Personnel requirements (Manpower Estimating Requirements (MER)). Ensure Intelligence and program protection requirements are considered. Reference Appendix A, [3.10 Facilities Concept Checklist](#) and [3.10.1 Determine Manpower and Personnel Requirements Checklist](#).

3.13.1. Initiate Manpower and Personnel Requirements. The logistician must ensure that manpower and personnel considerations are appropriately documented for all program, sustainment and operational locations through contact with MAJCOMs and potential Product Support Providers. Additionally, gaining Base(s) Civil Engineers and Communication and Information Systems Officer (CSO) support for communication infrastructure, as well as other

appropriate agencies (i.e. hospital) should be considered. Reference Appendix A, [3.10.1 Determine Manpower and Personnel Requirements Checklist](#).

**3.14. Define and Implement Military Construction (MILCON) and Sustainment Restoration Modernization (SRM) Requirements.** Based upon facility requirements. Reference Appendix A, [3.11 Define and Implement MILCON Requirements Checklist](#).

**3.15. Include Supportability in Defense Contract Management Agency (DCMA) Memorandum of Agreement (MOA).** MOA is similar in concept to PMA/SMA; reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**3.16. Review the Integrated Master Plan / Integrated Master Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**3.17. Participate in Risk Management.** A risk management approach for use in the acquisition of new systems, end-items, and equipment based upon four attributes: risk management planning, risk assessment, risk mitigation, and risk management control. When properly implemented, an effective risk management program facilitates identification of areas that require special attention and sets realistic, executable technical, schedule, and cost objectives. Risk Management is applicable to all phases and aspects of any acquisition or modernization program. The logistician needs to continue to participate on the risk management team to ensure identification of any risk relative to the product support element, systems engineering and life cycle support costs, schedule and technical performance. The appropriate reference is AFI 63-101/20-101, Chapter 4, para 4.6.6 PS Risk Management. Product Support risks need to be addressed and documented within each CCTD. These risk assessments must address adverse impacts on warfighters capabilities to operate, maintain and support the system in an effective and safe manner. Consideration must also be given to reclamation, demilitarization and disposal. Reference DAFFAM 63-128 *Integrated Life Cycle Management* Chapter 12 and Appendix A [2.22 Participate in Integrated Baseline Review \(IBR\) Checklist](#).

3.17.1. Perform Continuous Supply Chain Risk Management (SCRM). SCRM is a discipline for managing risk to identify, assess, mitigate and monitor actual or potential threats, vulnerabilities, and disruptions within the DoD's supply chain from beginning to end to ensure mission effectiveness; i.e., SCRM is initiated as soon as a program is created or a lead is assigned responsibility to manage a system or program of record, and ends as soon as the program stands down or retires. Successful SCRM maintains the integrity of products, services, people, and technologies; and ensures the uninterrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. SCRM applies to all organizations and programs, including Foreign Military Sales (FMS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Item (NDI) programs.

Per AFI 63-101/20-101, *Integrated Life Cycle Management*, the PM has oversight of SCRM. Although the PM has oversight, risks can be associated with any aspect of the supply chain, and it is essential to understand that all functional areas of the program can be exposed to supply chain risk. The logistician must participate in SCRM activities (IPTs, supply chain assessments, program reviews, etc.) to ensure any risk relative to product support elements are supported and addressed in acquisition documents.

Programs should assess and mitigate risks of all kinds as a routine part of program management and should identify risks during program reviews. Potential supply chain risks include, but are not limited to; foreign influence, political and regulatory, economic, environmental, product quality and design, manufacturing and supply, transportation and distribution, financial, compliance, technology and cybersecurity, and human capital. SCRM should also be addressed to track foreign ownership of sub-tier vendors, component obsolescence, and counterfeit or suspect counterfeit parts, major/critical nonconformance, and their vulnerabilities with special emphasis on Critical Components (CC), Mission Critical Functions (MCF), and Critical Program Information (CPI). Program should contact the AFLCMC SCRM Network, [AFLCMCLG-LZ.SCRM.Network@us.af.mil](mailto:AFLCMCLG-LZ.SCRM.Network@us.af.mil), any time real/potential supply chain risks are identified; to include, counterfeit detection and DMSMS.

The PM/PSM/logistician, with support from the other functional stakeholders, manages SCRM contract requirements, ensures SCRM is addressed at program reviews, conducts supply chain assessments, addresses SCRM in acquisition documents, and continuously monitors the supply chain. SCRM is required to be documented in the Program Protection Plan (section 5.3.4 or appendix G) but should also be considered in, but not limited to,

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the Acquisition Strategy, and Life Cycle Sustainment Plan (LCSP). Utilize the Product Support Contract Requirements Tool (PSCRT) for specific SCRM tasks and recommended contract language.

At a minimum, reference the following policy/guidance: DoDI 5000.83, *Technology and Program Protection to Maintain Technological Advantage*, DoDI 5000.85, *Major Capability Acquisition*, DoDI 5200.44, *Protection of Mission Critical Functions to Achieve Trusted Systems and Networks*, DoDM 4140.01 vol 1, *DoD Supply Chain Materiel Management Procedures*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFPAM 63-113, *Program Protection Planning for Life Cycle Management*, and *Defense Acquisition Guidebook, Chapter 9, Program Protection*. Detailed information on policy, processes, tools, and other SCRM support is available on the [AFLCMC SCRM SharePoint](#).

**3.18. Participate in Contract Oversight and Review.** The logistician should be actively involved in contract management. This includes reviewing Data Item Deliverables (DIDs), schedules, contract changes, cost, and performance.

3.18.1 Evaluate contractor delivered Data. Reference Appendix A, [3.50 Evaluate Contractor Delivered Data Checklist](#).

**3.19. Advocate the Proposed Logistics Engineering Design Changes and Trade Studies (Non-Development Item (NDI)), Corrosion, Hazardous Material, Precious Metals, and BERRY Amendment (Title 10 U.S.C. 2533a in Section 832).** Trade studies are iterative studies performed to evaluate and validate concepts representing new technologies, design alternatives, design simplification, logistics alternatives and compatibility with the production process. The logistician needs to be included to ensure product support is addressed in proposed design changes and trade studies and documented. The logistician must consider the life cycle support implications of System Design that affect the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook, to include Diminishing Manufacturing Sources and Material Shortages (DMSMS), and hazardous material.

3.19.1. Participate in/verify Engineering Design Changes and Trade Studies to ensure they capture lowest total cost of ownership while achieving required performance.

3.19.2. Participate in/verify Engineering Design Changes and Trade Studies consider production and operational support as part of the study.

3.19.3. Participate in/verify Engineering Design Changes and Trade Studies include sensitivity analyses of key performance and support parameters.

3.19.4. Participate in/verify Engineering Design Changes and Trade Studies are conducted on a continuous basis to ensure performance and supportability goals are met.

3.19.5. Consider the Life Cycle Implications of Technical Orders and other Technical Data.

**3.20. Evaluate the Technology Demonstration for Supportability. The demonstration evaluation criteria will ensure product success during the demonstration of the products.** There is no formal format to use for documenting the criteria. The draft CDD includes data from key performance parameters, system threat assessment, and measures of effectiveness/performance; it will provide the basis for evaluation criteria. Ensure (RAM), Cost requirements, Interoperability, Production, IUID, Radio Frequency Identification (RFID), if applicable. System Accreditation, Life Cycle Support Cost Estimates, Budgeting, usability and / or accessibility, and the implications of the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook, to include DMSMS are considered in the evaluation and identified as KPPs in the CDD. Ensure ESOH considerations are addressed during the technology demonstration. Reference Appendix A, [2.9.1 Address Environment, Safety, and Occupational Health Checklist](#).

3.20.1. Contact Air Transportability Test Load Agency (ATTLA) for Air Transportability requirements. i.e., G-force, HAZMAT ([ATTLA@us.af.mil](mailto:ATTLA@us.af.mil)).

3.20.2. Address Human Systems Integration (HSI) Considerations. Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

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3.20.3. Address Environment, Safety, and Occupational Health (ESOH) considerations.

Reference Appendix A, [2.9.1 Address Environment, Safety, and Occupational Health Checklist](#).

**3.21. Refine the Supportability Objectives.** The PSM will review and modify as necessary. Reference Appendix A, [3.18 Refine Supportability Objective Checklist](#) and [2.3 Define Supportability Objectives Checklist](#).

**3.22. Consider Application of Modeling, Simulation, and Analysis Tools.** Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

**3.23. Review the Test and Evaluation Master Plan (TEMP) for Support Considerations.** The program's test strategy is a broader view of the risk reduction efforts across the range of test activities that will ultimately produce a valid evaluation of operational effectiveness, suitability, and survivability before full-rate production and deployment. The PSM should review the TEMP. Ensure product support capabilities and alternatives that include the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook, (RAM), Cost requirements, HSI, usability and / or accessibility, Intelligence, Interoperability, Production, Maintenance Planning, IUID, Radio Frequency Identification (RFID), if applicable, Supply Support, System Accreditation, Life Cycle Support Cost Estimates, and Budgeting are addressed. Ensure resources are planned to support the logistics / supportability portions of the test.

**3.24. Participate in the System Engineering Plan (SEP) Update.** The purpose of the SEP is to document the systems engineering planning effort guiding all technical aspects of the program. The SEP provides the overarching plan for bringing the hardware, software, and human sub-systems into an integrated system. The SEP is developed early in the materiel solution analysis phase and updated prior to each subsequent Milestone. It should incorporate the planning that is consistent with Technology Readiness Assessment and successfully execute the Technical Maturation Risk Reduction Strategy. It should be a living document, tailored to the program and should serve as a roadmap to support program management by defining comprehensive system engineering activities, addressing both government and contractor technical activities and responsibilities. Ensure HSI planning is documented in the SEP. Ensure Intelligence is integrated into systems engineering process, as applicable. The logistician needs to be included on the team to ensure (RAM), Cost, and other product support factors are addressed during engineering analysis and documented in the plan. IUID implementation plan will be included in the SEP. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Appendix A, [2.13 SEP Checklist](#).

3.24.1. Address Human Systems Integration (HSI) Considerations. Design Interface reflects the driving relationship of system design parameters to product support resource requirements. The goal of Design Interface is to ensure participation in the systems engineering process in order to impact design from inception throughout the life cycle and facilitate supportability to maximize availability, effectiveness and capability of the system at the lowest Total Ownership Cost (TOC).

3.24.1.1. Design Interface encompasses a wide range of product support analysis activities to include trade-off analysis between reliability, maintainability and features of the equipment against support system processes. Usability and accessibility of the various systems components should be considered.

3.24.1.2. Design Interface is performed iteratively, meaning it is done in each phase of acquisition and recursively meaning that as design is matured it is performed on more detailed understanding of the design, technology and operational use. The Life Cycle Logistician must be a key member in the System Engineering Integrated Product Team (IPT) and the HSI IPT if established.

3.24.2. Update and Coordinate item unique identification (IUID) implementation Plan. The IUID Implementation plan must be updated for each milestone review. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Chapter 8 for guidance and attachment 3 for a template.

**3.25. Reserved.**

**3.26. Incorporate Supportability Requirements in Draft Capability Development Document (CDD).** The CDD provides the operational performance attributes, including Key Performance Parameters (KPPs), necessary for the acquisition community to design a proposed system(s) and establish a program baseline. The CDD shall be updated or appended for each Milestone B decision and updated for Milestone C and addresses a single system-or-System of System



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only. HSI, (see HSI Acquisition Phase Guide), provides an integrating process to address the human considerations in the CDD. The logistician should work to ensure OSD-mandated Key Performance Parameters/Key System Attributes (KPPs/KSAs) and metrics (See CJCSI 3170.01L), (RAM), Cost requirements, Intelligence, Interoperability, Production, Maintenance Planning, IUID, Radio Frequency Identification (RFID), if applicable, DMSMS, System Accreditation, Energy Efficiency, ESOH, Noise (ambient and occupational), Alternate Fuels considerations, Life Cycle Support Cost Estimates, Budgeting, and the impact of the Product Support Elements referenced in DoD Integrated Product Support (IPS) Elements Guidebook, to include Calibration Issues are included as KPPs in the CDD (list not all inclusive). Reference Appendix A, [3.22 CDD Checklist](#).

**3.27. Develop Supportability Key Performance Parameters.** Reference Appendix A, [3.23 Develop Supportability KPPs Checklist](#).

**3.28. Include the supportability requirements in the system performance specification.** Based upon the results of the verification of components, functionality, and system performance, a System Performance Specification should be created. Trade-offs of achievable performance should be complete and captured in the Systems Specification. Critical and/or enabling technologies should have demonstrated adequate maturity (including Support Equipment) to achieve acceptable levels of risk. The System Performance Specification shall include requirements for (RAM), Cost, Intelligence, Interoperability, Production, HSI, Energy Efficiency, ESOH, Noise (ambient and occupational), Alternate Fuels consideration and IUID (list not all inclusive). The System Performance Specification serves as the guiding technical requirement for the system development effort.

3.28.1. Ensure consideration of Design Interface for Life Cycle Logistics. Reference Appendix A, [3.24.1 Design Interface Checklist](#) and [2.13.1 Human Systems Integration \(HSI\) Checklist](#) to support the design interfaces.

**3.29. Include the supportability requirements in the Cost Analysis Requirements Description (CARD), Program Office Estimate (POE), Component Cost Analysis (CCA), Independent Cost Estimate (ICE), and Affordability Assessment.** Reference Appendix A, [3.25 Include Supportability Requirements in the CARD, POE, CCA, ICE, Affordability Assessment Checklist](#).

3.29.1. Include Support Equipment (SE) in Life Cycle Cost Documents Including Replacement Costs.

**3.30. Include Supportability in the Acquisition Program Baseline (APB).** Reference Appendix A, [3.27 Include Supportability in the APB Checklist](#).

**3.31. Include Supportability Requirements in the Program Objective Memorandum (POM) Submission.** The POM has two parts; “Pay” and “Non-Pay”; ensure Manpower requirements are included in the “Pay” portion of the POM. Reference Appendix A, [3.28 Include Supportability Requirements in POM submission Checklist](#), [3.10.1 Determine Manpower and Personnel Requirements Checklist](#) and [3.11 Define and Implement MILCON Requirements Checklist](#).

**3.32. Refine the Product Support Strategy in the Life cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP) (as approved by the MDA).** Utilize the Next Generation CLS Contract Sustainment Support Guide (CSSG) for proven best practices in developing product support strategies. Reference Appendix A, [3.29 Refine Product Support Strategy in the LCSP/LCMP Checklist](#). Ensure coordination with stakeholders. The logistician must identify the stakeholders that would be affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited to, supply chain management and depot maintenance in AFSC, acquisition within AFIMSC, AFLCMC, AFRL, AFTC, and AFNWC. Relationships among these USAF organizations are critical to ensure consistency of data usage. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support. The designated Support Equipment Manager refines the support equipment strategy with the support of the Support Equipment Working Group.

3.32.1. Review Requirement Document / Capability Development Document (CDD).

3.32.2. Review Unique Munitions Acquisition Activities. Reference Appendix A, [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#).

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3.32.3. Review Strategies for Similar Products / Strategies.

3.32.4. Refine Alternative(s) for Product Support Strategy.

3.32.5. Update Risk Assessment for Alternative(s).

3.32.6. Update Cost Estimate for Alternative(s).

3.32.6.1. Ensure cost estimates actually look at the comparative personnel costs of the various alternatives. This should be expanded to correctly capture the Cost Analysis Requirements Description (CARD) or other similar document and ensure that the full costs are considered. The use of LCOM or similar data to run MPT analysis for various maintenance/support concepts can be very effective in driving the design rather than reacting to it.

3.32.7. Approve Product Support Strategy (Acquisition Strategy Panel (ASP)).

3.32.8. Update LCSP or Life Cycle Management Plan (LCMP) (as approved by the MDA), based on System Requirements Review (SRR) and ASP Recommendations.

**3.33. Ensure Supportability Requirements are included in Capability Development Document (CDD).** The CDD provides the operational performance attributes, including Key Performance Parameters necessary for the acquisition community to design a proposed system(s) and establish a program baseline. Reference Appendix A, [3.22 CDD Checklist](#).

**3.34. Include Supportability in the Source Selection Plan (SSP).** Reference Appendix A, [2.17 Include Supportability in the SSP Checklist](#).

**3.35. Complete Acquisition Strategy Panel (ASP) Supportability Template.** The ASP briefing template provides an idea of the types of information SAF/AQ will expect to be addressed to include Human System Integration and Environment, Safety, and Occupational Health. The template can be adjusted as necessary to meet unique program information requirements. The product support strategy is part of the template to address sources of repair and supply, performance based logistics, and product support KPPs, etc. for guidance on ASPs see AFLCMC/AQ, Acquisition Center of Excellence Office.

**3.36. Participate in the Analysis of Alternatives (AOA) Update.** Reference Appendix A, [1.7 Analysis of Alternatives Checklist](#).

**3.37. Participate in the System Requirements Review (SRR) (Demo Concepts).** Reference Appendix A, [2.35 Participate in SRR Checklist \(Demo Concepts\)](#).

**3.38. Refine Supportability Requirements in the System Performance Specification.**

**3.39. Include supportability requirements in the Request for Proposal (RFP) for the end contract.** Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#), [3.2.1 Establishing a TO Acquisition Program Checklist](#), [2.13.1 Human Systems Integration \(HSI\) Checklist](#) and [3.37 PHS&T Checklist](#). See Product Support Contracts Requirement Tool, Appendix D.

3.39.1. Develop and Acquire Supportability Data. Reference Appendix A, [3.37.1 Develop and Acquire Supportability Data Checklist](#).

3.39.2. Address Support Equipment and Automatic Test Systems (ATS) Tasks in the RFP. Include appropriate support equipment and ATS tasks for inclusion in the RFP, including support equipment within the scope for tasks and documents that cut across product support elements and program office functional (e.g., demilitarization, provisioning, engineering data, cybersecurity). Within the RFP, include support equipment related Statement of Work (SOW) language as well as applicable Contract Data Requirement List (CDRL) entries. Utilize the Product Support Contract Requirements Tool (PSCRT) for specific tasks and recommended contract language. Work with

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the Support Equipment Working Group stakeholders to develop requirements and tasks. Reference Appendix A, [3.37.2 Address Automated Test Systems \(ATS\) Acquisition Checklist](#) and [3.37.4 Calibration Support for new Acquisitions Checklist](#).

3.39.3. Develop a Technical Order Data Request for Proposal (RFP) Including the Technical Manual Contract Requirements (TMCR) Document, TM-86-01.

3.39.4. Develop Technical Order Life Cycle Management Plan (TOLCMP) and Technical Order Life Cycle Verification Plan.

3.39.5. Involve Gaining Product Support Providers (PSP), Using Command, and Safety to complete RFP for supportability requirements. One example that may be considered would be reliability and demand data for the organic supply chain provider to include commodities in requirements computations.

3.39.6. Perform Supportability Analyses To Achieve Performance-Based Logistics (DoDD 5000.01 E1.1.17) and System Engineering Analyses Which Will Minimize Total Ownership Costs While Delivering Required Mission Capability. Early consideration of HSI will assist in optimizing total system performance and minimizing total ownership cost. Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

3.39.7 Performance-Based Logistics Strategy. The PM shall identify operational capability oriented measurable product support requirements to be tracked during operations. These shall be the basis of measures of success for the product support integrator who shall be identified by organization at Milestone B. These shall be developed in a draft product support agreement which will be negotiated with the O&S Program Management/Services Management Agreement. The product support agreement shall be drafted in preparation for the Milestone B decision.

3.39.8. Develop a Diminishing Manufacturing Sources and Material Shortages (DMSMS) Program. Reference Appendix A, [3.37.13 Develop a DMSMS Program Checklist](#).

3.39.9. Develop Supply Support Strategy. Reference Appendix A, [3.37.14 Develop Supply Support Strategy Checklist](#). Ensure inclusion in the Life Cycle Sustainment Plan (LCSP) *or Life Cycle Management Plan (LCMP) (as approved by the MDA)*.

3.39.10. Address the need for CDRLs including a Facilities Requirements Plan in the Request for Proposal (RFP). Reference Appendix A, [3.37.15 CDRLs Checklist](#). See Product Support Contracts Requirement Tool, Appendix D.

3.39.11. Address Maintenance Planning.

**3.40. Include Data and Data Rights in the Request For Proposal (RFP).** The Air Force should request all of the data and data rights entitled through contractual requirements or government funding of development of the part or system. The contractor will need to provide a matrix identifying all data rights that they assert. The burden of proof that the contractor is allowed to retain rights to data is now on the contractor per Title 10 USC 2320 and 10 USC 2321. The contractor may want to offer up rights they could otherwise retain to enhance their position during source selection. The actual rights received by the Air Force will result from negotiations. All ACAT programs, regardless of planned product support approach shall assess the long-term technical data needs (including product definition, operations, maintenance, installation and training data) and reflect that assessment in the Intellectual Property (IP) Strategy (IPS). For the acquisition of engineering data, reference DoDI 5000.85. . Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#). Also see DFARS 252.211-7007 and DFARS 252.211-7003 for GFP.

**3.41. Review Berry Amendment (Title 10 U.S.C. 2533a in Section 832) for application to your program and ensure compliance in all contracting actions.**

**3.42. Ensure Requirement for Radio-Frequency Identification (RFID) is in RFP, as applicable.**



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RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. A significant thrust in RFID use is in enterprise supply chain management, improving the efficiency of inventory tracking and management. Ensure provisions for RFID are considered for inclusion in the RFP. Also see DFARS 252.211-7007 and DFARS 252.211-7003 for GFP.

**3.43. Include Contract Options for Item Unique Identification (IUID) in the Request For Proposal (RFP).** IUID is the set of data for tangible assets that is globally unique and unambiguous and ensures data integrity and data quality throughout the lifecycle, and supports multi-faceted business applications and users. Ensure provisions for IUID marking are included in the RFP to include marking of Support Equipment. IUID is integral to completion of program requirements for the MEPV. Also see DFARS 252.211-7007 and DFARS 252.211-7003 for GFP.

**3.44. Define Contractor Supported Weapon System (CSWS) Data Requirements.** Reference Appendix A, [2.21.4 Define CSWS Data Requirements Checklist](#).

**3.45. Include government furnished property (GFP) in Request for Proposal (RFP).** The Program manager/logistician and their engineering counterpart(s) should include any known GFP (includes GFE/GFM/Loans) in the RFP (AFI 23-119). Any property added to the RFP should be coordinated with the LCO in AFSC to determine if property would potentially be available for loan to or requisitioned by the contractor. The Program office documents the justification analysis and ensure it addresses each element required IAW DFARS PGI 245-103-70 (Furnishing Government Property to the Contractor). If GFP will be included, ensure the following mandatory clauses are included in the contract: FAR 52.245-9, DFARS 245-107, DFARS 252.245.7000, DFARS 252.245-7001, DFARS 252.245-7002, DFARS 252.245-7003, DFARS 252.245-7004, and DFARS 252.211-7007. In addition, all property must be recorded in the appropriate GFP attachment (IAW DFARS PGI 245.103-72) and included in the contract (see DoD procurement toolbox.com).

**3.46. Include Logistics Activities in the Integrated Master Plan/Integrated Master Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**3.47. Participate in Source Selection.** The Product Support Integrator (PSI) will identify membership requirements. If no PSI is assigned, this responsibility rests with the Program Manager.

**3.48. Support Award of Additional Technical Maturation Risk Reduction Contract as required to accomplish tasks necessary to prepare for Preliminary Design Review (PDR).** Creation of System/Technical View document may be required.

**3.49. Ensure Technical Maturation Risk reduction Program complies with Air Force Policy for no new Software System Development without AF/CIO, The office of information dominance and chief information officer, approval.** This excludes MCCR and National Security Systems. Reference AFI 17-110, Information Technology Portfolio Management and Capital Planning and Investment Control.

**3.50. Include Supportability Requirements in Defense Contract Management Agency (DCMA) Memorandum of Agreement (MOA).** Refer to para 3.15

**3.51. Review the Logistics Activities in the Integrated Master Plan / Integrated Master Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

3.51.1. Accomplish Support Equipment (SE) Guidance Conference. Reference Appendix A, [3.47.1 Accomplish SE Guidance Conference Checklist](#).

3.51.2. Participate in the Deficiency Report (DR) Process. A contractor's DR database system is not a substitute for entering DRs in the government system. Reference Appendix A, [3.47.2 Provide Logistics Support During the DR Process Checklist](#). Also, see TO 00-35D-54.

3.51.3. Participate in the Configuration Control Board (CCB). See Supersede by AFI 63-101/20-101 Chapter 9, *Modification Management* and MIL-HDBK-61A (SE) *Configuration Management Guidance*. Reference Appendix A, [3.47.3 Participate in the CCB Checklist](#) and [3.47.2 Provide Logistics Support During the DR Process Checklist](#).

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3.51.4. Accomplish Provisioning Guidance Conference. Reference Appendix A, [3.47.4 Accomplish Provisioning Guidance Conference Checklist](#).

**3.52. Establish Periodic product Support IPT Meetings.** The purpose is to coordinate and plan logistics management to ensure supportability of developed and fielded systems with all stakeholders (sometimes called a Product Support IPT). Logisticians should ensure they participate in other program reviews. (e.g., Program Management Reviews (PMR), Test Reviews, Configuration Reviews, System Requirements Review etc.).

**3.53. Advocate the Proposed Logistics Engineering Design Changes and Trade Studies (Non-Development Item (NDI)), Corrosion, Hazardous Material, Precious Metals, and BERRY Amendment** (Title 10 U.S.C. 2533a in Section 832). Trade studies are iterative studies performed to evaluate and validate concepts representing new technologies, design alternatives, design simplification, logistics alternatives and compatibility with the production process. The logistician needs to be included to ensure product support is addressed in proposed design changes and trade studies and is documented. Ensure Support Equipment life cycle consideration is included in design change/trade studies. The Systems Engineering Assessment Model (SEAM) can be utilized when considering all design changes and trade studies. Ensure logistics considerations are included in Capability Development and Early System Engineering analyses (e.g., within Concept Characterization and Technical Descriptions); consider application of modeling, simulation and analysis tools to produce robust logistics inputs. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

3.53.1. Participate in/verify Engineering Design Changes and Trade Studies to ensure they capture lowest total cost of ownership while achieving required performance.

3.53.2. Participate in/verify Engineering Design Changes and Trade Studies consider production and operational support as part of the study.

3.53.3. Participate in/verify Engineering Design Changes and Trade Studies include sensitivity analyses of key performance and support parameters.

3.53.4. Participate in/verify Engineering Design Changes and Trade Studies are conducted on a continuous basis to ensure performance and supportability goals are met.

3.53.5. Contact AFLCMC/EZPAA for Fee-For-Service Packaging Support (For Development of Specialized Containers for testing).

3.53.6. Consider the Life Cycle Implications of Technical Orders and other Technical Data (developing the initial TOLCMP and/or TM 86-01 to support the RFP).

3.53.7. Utilize AFLCMC/EZPAA Container Design Retrieval System (CDRS) management office. It maintains a computerized data record of existing specialized containers, corresponding design drawings, and information. These are used for technical analysis and container reuse applications, thus reducing acquisition costs and increasing the options available to the procurement activity.

**3.54. Update Product Support (PS) Strategy in Life Cycle Sustainment Plan / Life Cycle Management Plan (LCSP/LCMP) (as approved by the MDA).** Ensure coordination with stakeholders. Relationships among these USAF organizations are critical to ensure consistency of data usage. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support. Reference Appendix A, [2.49 Update Product Support in LCSP/LCMP Checklist](#).

3.54.1 Review Requirement Document / Capability Development Document (CDD).

3.54.2. Review Unique Munitions Acquisition Activities. Reference Appendix A, [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#).

3.54.3. Review Strategies for similar Products/Strategies.

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3.54.4. Refine Alternative for Product Support Strategy.

3.54.5. Review Risk Assessment for Alternative.

3.54.6. Review Cost Estimate for Alternative. Review Cost Estimate for Alternative to ensure full costs are considered, the estimate is consistent with the CARD or similar document, and the estimate includes comparative personnel costs for the various alternatives. The use of LCOM or similar data to run MPT analysis for various maintenance/support concepts can be very effective in driving the design rather than reacting to it.

3.54.7. Approve Product Support Strategy (System Requirements Review (SRR)).

3.54.8. Update LCSP or LCMP (as approved by the MDA). LCMP based on Acquisition Strategy Panel (ASP) Recommendations.

**3.55. Manage Technical Order Acquisition Program.** Reference Appendix A, [3.50.1 Manage TO Acquisition Program Checklist](#).

3.55.1. Contact Technical Order Guidance Conference.

3.55.2. Start Technical Order Development.

3.55.3. Conduct Technical Order In-Process Reviews (IPRs).

3.55.4. Refine Technical Order Management Plan.

3.55.5. Finalize Technical Order Life Cycle Verification Plan (TOLCVP).

3.55.6. Review Pre-Publications.

**3.56. Establish and Manage Training Systems.** Reference Appendix A, [3.50.4 Establish and Manage Training Systems Checklist](#).

**3.57. Identify and Plan Supportability Requirements for the Test and Evaluation Master Plan (TEMP).** A logistician should participate in TEMP development to ensure the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook are addressed in relationship to testing. Ensure testing for supportability is adequately planned for. Ensure Intelligence support concept and technologies are included. Reference Appendix A, [3.51 Identify and Plan Supportability Requirements for the TEMP Checklist](#).

**3.58. Participate in the System Requirements Review (SRR).** Reference Appendix A, [3.54 Participate in SRR Checklist \(Systems Functional Specification\) Checklist](#).

**3.59. Continue to Evaluate Contractor Delivered Data.** Reference Appendix A, [3.50 Evaluate Contractor Delivered Data Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#) and [3.50.4 Establish and Manage Training Systems Checklist](#).

**3.60. Support Independent Logistics Assessment (ILA) and take corrective action.** An ILA is an independent assessment used to determine the sufficiency of a program's overall product support planning and execution prior to acquisition milestones and major decisions. The ILA results shall be the basis for the program's Product Support planning and execution certification recommendation to the PEO in support of the acquisition Milestones B and C and the Full Rate Production (FRP) decisions. ILAs are mandatory for all Major Defense Acquisition Programs (MDAPs) in accordance with AFI 63-101/20-101. AFLCMC/LG-LZ has developed an Internal Process Guide "Independent Logistics Assessment (ILA)" which includes updated LA Question Sets, templates for the ILA Kickoff Briefing, and Out Briefing, and a sample outline for the ILA Final Report. Programs should contact AFLCMC/LG, Logistics Directorate, for further information on the ILA process. Additional information can be found in the DoD LA Guidebook and the [ILA IPG](#).

**3.61. Select Support Equipment via the Support Equipment Recommendation Data (SERD) Process.** In order to comply with AFI63-101/20-101 requirements for selecting support equipment that is technically sufficient, minimizes life cycle costs, and maximizes the selection of common support equipment, programs must obtain and process SERD Reports via the SERD Process. These selections most frequently happen during the EMD phase, but could happen at any point during the life cycle once support equipment requirements (typically driven by maintenance tasks) are understood. The SERD Process will result in the selection of support equipment and automatic test systems that will be used to support a system (to include depot support equipment). Programs follow the [AFLCMC Standard Process to Execute SERD Process](#), Appendix D, to ensure the SERD is reviewed by applicable stakeholders and the best support equipment selection is made for the system.

**3.62. Evaluate Prototype(s) for Supportability.** Logistician should review logistics data including Commercial Off-The-Shelf and Contractor Data Requirements List. Other data to review is level of repair analysis, maintenance task analysis, reliability centered maintenance, Energy Efficiency, HSI, ESOH, Noise (ambient and occupational), Alternate Fuels considerations, support equipment/automatic test systems, engineering data, provisioning, maintenance check flight, Reliability Prediction Data and progress toward meeting Product Support KPP/KSAs, etc. (list not all inclusive). Reference Appendix A.

**3.63. Participate in the System Functional Review (SFR).** Reference Appendix A, [3.58 Participate in SFR Checklist](#).

**3.64. Participate in the Preliminary Design Review (PDR).** Reference Appendix A, [3.59 Participate in PDR Checklist](#).

**3.65. Review Cost Estimate.** From a Supportability perspective to ensure the estimate is consistent with supportability requirements identified in the CARD. Reference Appendix A, [3.25 Include Supportability Requirements in the CARD, POE, CCA, ICE, Affordability Assessment Checklist](#).

**3.66. Prepare Documentation for Milestone Decision Authority (MDA) Review.** Per Title 10 USC 2366A, the MDA must provide a signed certification memorandum for record prior to Milestone B approval. Determine if this workload should be on the Acquisition Master List/Program Master List. Contact SAF/AQX for information. Per Title 10 USC 2437, a Replaced System Sustainment Plan must be developed. This plan is for the existing system that the system under development is intended to replace. Reference Appendix A, [3.62 Prepare Documentation for Milestone B Checklist](#).

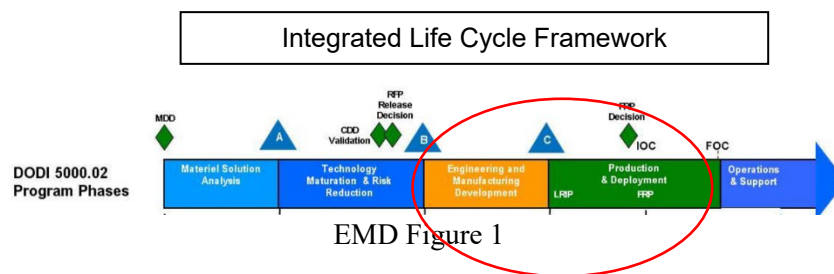
**3.67. Review Weapon System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include FMECA, RCM, LORA, and MTA developed as part of the Systems Engineering process. The goals of WS-SA or PSA (as defined in MIL-HDBK 502A) are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing an effective and efficient Product Support Package. The WS-SA IPG is based on Systems Engineering reviews that take place during the acquisition phases of MSA, TMRR, EMD, P&D, and O&S Reviews. The information contained within the IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

***Exit Criteria: Milestone B Decision Memorandum***

## ENGINEERING and MANUFACTURING DEVELOPMENT (EMD)

Ensure tasks from the previous phase are addressed/accomplished prior to entering next acquisition phase. The purpose of the Engineering and Manufacturing Development (EMD) Phase is to develop a system; complete full system integration (technology risk reduction occurs during Technical Maturation Risk Reduction); develop an affordable and executable manufacturing process; ensure operational supportability with particular attention to minimizing the logistics footprint; implement HSI; design for Production; ensure affordability; protect CPI by implementing appropriate techniques such as anti-tamper; and demonstrate system integration, interoperability, safety, and utility. The Capability Development Document (CDD), Acquisition Strategy, System Engineering Plan (SEP), and TEMP shall guide this effort. Entrance into this phase depends on technology maturity (including software), approved requirements, and full funding. Unless some other factor is overriding in its impact, the maturity of the technology shall determine the path to be followed.

The independent planning of dedicated Initial Operational Test and Evaluation (IOT&E), as required by law, and Follow-on Operational Test and Evaluation (FOT&E), if required, shall be the responsibility of the appropriate operational test agency (OTA). A Director, Operational Test and Evaluation (DOT&E)-approved Live-Fire Test and Evaluation (LFT&E) strategy shall guide LFT&E activity. The formal requirements process should address product support. Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements. For programs that enter at Milestone B, ensure coverage of tasks in the previous chapters.



### Task Description

**4.1. Stand up the Program Office with a Product Support Manager (PSM) and Logistics Personnel.** Specifically assign a PSM, Technical Order Manager, and Support Equipment Manager and coordinate with training organizations. Identify or source adequate Logistics personnel to manage the program product support activities. In addition to program office personnel, include appropriate identify needed AFSC personnel support. Example - support/Air Logistics Complexes to include other services/agencies. Notify AFMC/A4F that an Air Force program office has been established to determine if input into Centralized Access for Data Exchange (CAFDEX) is required. Reference Appendix A, [5.8.1 Utilize Centralized Asset Management \(CAM\)/Centralized Access for Data Exchange \(CAFDEX\)](#).

**4.2. Verify a Product Support Manager (PSM) and Product Support Integrator (PSI) have been identified.** IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC

**4.3. Perform Logistics Health Assessment (LHA).** Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the AML, and is to be performed inside the LHA App (SAM) (accessible through PMRT in the WASP home page) on an annual basis in all phases of Life Cycle Management. Refer to the [LHA Standard Process](#) for more guidance on conducting an LHA.

**4.4. Conduct Intelligence integration during Engineering and Manufacturing Development (EMD).** Ensure the intelligence supportability elements are addressed. Ensure consideration of the Product Support elements as referenced in DoD Integrated Product Support (IPS) Elements Guidebook. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#). Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#) for unique HSI overlaps that may influence the intelligence integration.



**4.5. Conduct Post-Preliminary Design Review (PDR) Assessment.** If a PDR has not been conducted prior to milestone B (MS B), the PM shall plan for a PDR as soon as feasible after Program Initiation. The MDA will consider the results of the PDR and the PM's assessment, and determine whether remedial action is necessary to achieve Acquisition Program Baseline (APB) objectives. The results of the MDAs Post-PDR Assessment shall be documented in an Acquisition Decision Memorandum (ADM). Reference DoDI 5000.85, [3.59 Participate in PDR Checklist](#) and [2.9.1 Address Environment, Safety, and Occupational Health Checklist](#).

**4.6. Complete the Sustainment Quad Chart Template for all Program Executive Officer (PEO) Reviews.** The Portfolio Review is the culmination of a process that starts at the program level, continues through the PEO, and culminates in a presentation to SAF/AQ. The most detail will be provided at the PEO level, with summary data and significant issues only briefed to SAF/AQ. The Sustainment Quad chart provides a summary of sustainment/ product support planning activities to include: major players, transfer eligibility, operations and maintenance funding, overall sustainment element status, and issues. See DoD Product Support Managers (PSM) Guidebook for Sustainment Quad Chart and usage Instructions.

**4.7. Ensure Supportability is included in Program Management / Services Management Agreements (PMA/SMAs).** Reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**4.8. Complete Depot Source of Repair (DSOR) Process and Depot Maintenance Inter-servicing (DMI).** If programs enter at the Engineering and Manufacturing Development phase (or later phase) then a DSOR still needs to be completed. The DSOR process consists of two phases, the Source of Repair Analysis (SORA) Process, and DMI coordination. DSOR is the method by which depot maintenance posturing decisions for both hardware and software are made. It applies to both new acquisition and fielded programs. SORA (DSOR phase I) is to determine Core determination (including workload projections) and AF repair depot candidate recommendation. DMI (DSOR phase II) is to determine if final repair depot determination (e.g. utilize an existing DoD depot repair capability, establish a DoD depot repair capability (Army, Navy, or Marines) or use contract repair). Joint Service reviews are used to evaluate DoD strategic interest, maximize the use of existing capability/capacity, and maximize the application of resource efficiency. Existing DoD depot-level maintenance/repair capabilities and workload assignments to existing sites are considered during the DMI review process. All weapon systems, end items, and their components that require, or are planned for depot level maintenance, require a DSOR analysis be completed per AFI 63-101/20-101. Funds shall not be committed to facilitate a specific site for depot maintenance prior to the finalized DSOR decision. For systems that are entering the Air Force that have already had a DMI study done (other DoD services) then a DMI does not need to be re-accomplished. Verify with HQ AFMC/A4FD if a DMI study has been done. Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist](#).

#### 4.8.1 Ensure determination of Core determination and Candidate Depot Assignment.

4.8.1.1. If programs enter at the Engineering and Manufacturing Development phase (or later phase) then the DSOR process (SORA and DMI) still needs to be conducted. Phase I of the DSOR process (SORA) is to determine Core determination and the Air Force Candidate Depot Assignment as outlined in task 2.24.2. This Core determination is critical and is necessary for Title 10 USC 2464 and legislative reporting compliance. Core is the organic depot capability required to assure mission support for weapon systems designated for fulfilling strategic and contingency plans. Specifically, Title 10 USC 2464 states the DoD will retain a logistic repair capability of technical competencies and resources to meet national defense situations. Workloads are used to retain the repair capability on legacy and new and emerging technologies. Core is identified by tasked system to meet COCOM requirements. Core workload should be performed in government owned facilities, with government owned equipment and repair capability performed by government people. The core determination analysis will be completed prior to Milestone A (per Title 10 USC 2366a) and the results of the analysis will be documented in the Core Logistics Analysis Annex to the LCSP. In addition the candidate depot is identified by the Air Logistics Complex repair capability and are identified as a CITE. Once Core determination is made the SORA process determines the projected workload, and finally, the AF depot source of repair candidate recommendation (final decision is accomplished via DSOR Phase II, Depot Maintenance Inter-service coordination). Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist](#).

### 4.8.2. Accomplish Source of Repair Assignment (SORA) Process.

4.8.2.1. The SORA process begins the entire DSOR process. It contains enough information in order to run a core analysis, and select the appropriate AF organic candidate depot(s). It requires detailed information in order to support recommendation and rationale for the maintenance strategy. This process will typically include, but is not limited to repair hours, recurring cost, and facilities information. An organic versus contract cost comparison may be accomplished.

4.8.2.2. The SORA process consists of the major areas needed to sufficiently identify and validate core determination analysis and organic candidate depot selection, to include, but not limited to, the following areas: System Capability, Functional Description of System/Sub-system, Final Application, Technology Assessment, Inventory, Cryptologic Description, Workload Description, Acquisition Category, Milestone Applicability, and Joint Service Program Information. AFMC/A4FD will provide a core determination analysis and candidate depot designation via a core/candidate depot memorandum.

4.8.2.3. The SORA process may also require more detailed information used to compare possible SORs, to include, but not limited to, the following areas: Depot Facility Requirements, Depot Support Equipment Requirements, Depot Peacetime Repair Hours Recurring Repair Cost, System Expected/Planned Life, and Planned Modification Installation Schedule. The SORA process is considered complete when the SORA is ready for coordination/signature. See AFI 63-101/20-101. Reference Appendix A, [2.24.2 Initiate the DSOR Process Checklist](#). (**Note:** Each AFMC Center will annually collect cost data for all contract and organic depot maintenance workloads to support 50/50 reporting. If programs enter at the Engineering and Manufacturing Development phase then a DSOR (SORA Process and DMI) still needs to be conducted).

4.8.3. Continue the Depot Maintenance Activation Working Group (DMAWG). Depot Sustainment Planning occurs throughout the entire DMAWG process. If additional depot capability is required, it will be addressed through the DMAWG process. Ensure plans created by DMAWG are executed. The objective of the DMAWG is to ensure a required organic depot maintenance capability is set up in a timely and efficient manner to achieve government-controlled capabilities for the depot repair. The DMAWG is the forum for conducting depot source of repair planning and activation to ensure funding, contracting, and delivery of data is accomplished, for depot maintenance at an organic depot, AF or another service. If the support concept is total Contractor Logistics Support (CLS), a DMAWG is not required; however a Contractor Depot Activation Plan is still required. If Depot activation stands up depot repair capability at another DoD Service ensure Depot Maintenance Inter-Service Support Agreement (DMISA) development is included in list of activation activities. Reference AFMAN 63-122 Depot Source of Repair Planning and Activation and Appendix A, [3.6 Establish DMAWG Team Checklist](#).

**4.9. Initiate an updated Product Support Business Case Analysis (PS BCA).** The PM/PSM shall perform a product support BCA to validate the product support strategy is cost effective, financially feasible, and optimizes system readiness. The product support BCA is required for ACAT I, IA, and II programs but is at the discretion of the MDA for ACAT III programs. The PM/PSM shall document the strategy decision and rationale in the Life Cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP) (as approved by the MDA). The PM/PSM shall maintain a complete history of BCAs over the course of the system life cycle to track decisions and understand how real-world operations cause program impacts. The PM/PSM revalidates the business case prior to any change in the product support strategy or every five years, whichever occurs first (per AFI 63-101/20-101). The Product Support BCA must follow DoD Product Support BCA Guidebook. For major weapon systems this can take 1-2 years to complete. The PSM/Logistician will be actively leading this process. Reference Appendix A, [3.4.1 Product Support \(PS\) Business Case Analysis \(BCA\) Checklist](#).

**4.10. Support Award** of the Engineering and manufacturing **Development Contract**.

**4.11. Include** Supportability in Defense Contract Management Agency (DCMA) Memorandum of Agreement (MOA). MOA is similar in concept to PMA/SMA; reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMA Checklist](#).

**4.12. Ensure Weapon System Support Program (WSSP) accomplished – Weapon System Designator Code (WSDC).** Reference Appendix A, [4.11 WSSP Checklist](#) and [6.12 DLA Interface Checklist](#).



**4.13. Ensure Facility Construction is on track.** The facilities acquisition cycle runs as a part of the acquisition life cycle. During Materiel Solution Analysis and Technical Maturation Risk Reduction: Review the users Initial Capability Document (ICD) and Capability Development Document (CDD) for any identified facility requirements. Ensure the Logistics IPT is aware of the user's ICD or CDD requirements. Ensure industry is required to identify, as part of the contractual requirements, the anticipated facility requirements to support their respective designs. Detailed facility requirements will not be available at this early stage. During Engineering and Manufacturing Development: Ensure contractual requirements levy the need for detailed facility requirements data to be submitted. Confirm site surveys are being scheduled and conducted and facility project books are developed. Ensure National Environmental Policy Act (NEPA) actions have been initiated and are on schedule. Participate in the review of facility designs as they progress. During Production and Deployment: Monitor facility construction projects paying particular attention to adherence to the construction schedule. Coordinate the availability for occupancy date of the facility with the delivery of resources for that facility; i.e., support equipment. During Operations and Support: As part of the program manager's periodic readiness assessment, ensure facilities are continuing to provide the capabilities needed for mission support. Reference Appendix A, [3.10 Facilities Concept Checklist](#), [3.10.2 Address NEPA Requirements Checklist](#) and [3.11 Define and Implement MILCON Requirements Checklist](#).

**4.14. Address National Environmental Policy Act (NEPA) requirements.** To ensure compliance with the National Environmental Policy Act (NEPA) of 1969 (Title 42 USC 4321). NEPA requires federal agencies to consider the environmental impacts of their proposed action as part of an agency's overall planning and decision making. Federal agencies are required to cooperate with federal, state, and local governments and other concerned public and private organizations and citizens during their planning. NEPA ensures that the potential physical, biological, economic and social effects on the quality of the human environment are considered. Reference Appendix A, [3.10.2 Address NEPA Requirements Checklist](#).

**4.15. Continue to evaluate contractor delivered data.** Reference APD. Reference Appendix A, [3.50 Evaluate Contractor Delivered Data Checklist](#).

**4.16. Participate in the Critical Design Review (CDR).** Reference Appendix A, [3.12 Participate in the CDR Checklist](#).

**4.17. Establish Technical Order Product Baseline.**

**4.18. Conduct Post-CDR Assessment.** The MDA shall review the Post-CDR Report and the PM's resolution/mitigation plans and determine whether additional action is necessary to satisfy EMD Phase exit criteria and to achieve the program outcomes specified in the Acquisition Program Baseline (APB). The results of the MDA's Post-CDR Assessment shall be documented in an ADM. Reference DoDI 5000.85, [3.13 Prepare the Documentation for Post-CDR Assessment Checklist](#).

**4.19. Annotate the Product Support Capabilities.** The logistician must ensure product support capabilities are annotated in all plans and documents.

**4.20. Include Supportability in Defense Contract Management Agency (DCMA) Memorandum of Agreement (MOA).** MOA is similar in concept to PMA/SMA; reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMA Checklist](#).

**4.21. Update Supportability Requirements in the Cost Analysis Requirements Description (CARD), Program Office Estimate (POE), Component Cost Analysis (CCA), Independent Cost Estimate (ICE), and Affordability Assessment.** Reference Appendix A, [3.25 Include Supportability Requirements in the CARD, POE, CCA, ICE Affordability Assessment Checklist](#).

**4.22. Update Support Equipment (SE) in Life Cycle Cost Documents Including Replacement Cost.**

**4.23. Continue Program Objective Memorandum (POM) inputs for Supportability Requirements.** Reference Appendix A, [3.28 Include supportability Requirements in POM Submission Checklist](#) and [3.10.1 Determine Manpower and Personnel Requirements Checklist](#).

**4.24. Participate in the Test Readiness Review (TRR).** Reference Appendix A, [3.17 Participate in the TRR Checklist](#).

**4.25. Ensure Support for Development Test and Evaluation (DT&E), Logistics Test and Evaluation (LT&E), Live Fire Test and Evaluation (LFT&E), Early Operational Assessments (EOAs), and Operational Assessments (OAs).**

Logistics inputs should be included in development of the TEMP. Developmental and Operational testing is conducted throughout the entire life cycle to assist in engineering design and development, and to verify that critical technical parameters have been achieved. DT&E supports the acquisition of new materiel or operational capabilities before full-rate production or fielding decisions. LT&E consists of the test methodology, criteria and tools for evaluating and analyzing product support elements as they apply to a system under test. The objective is to identify non-compliant maintainability/supportability issues and influence the design as early as possible in the acquisition cycle. LFT&E is a type of DT&E that provides timely, rigorous, and credible vulnerability or lethality tests and evaluations of “covered” systems as they progress through the Engineering and Manufacturing Development phase prior to full-rate production or major system modification that affects survivability. OAs are conducted in preparation for dedicated operational testing as described in the DoD 5000-series and typically support Milestone C or low-rate initial production (LRIP) decisions. They are progress reports and are not capable of rating a system effective or suitable. OAs provide early operational data and feedback derived from actual testing to developers, operators, and decision makers. Logisticians must ensure all Product Support KPP/KSAs and other important Product Support capabilities are included and test support personnel and other resources are identified to support the assessments. Ensure Interim Contractor Support (ICS) is comprehensive enough to cover OT&E. Intelligence professionals must be consulted to ensure threat assessment baselines are reviewed. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#). Consider application of modeling, simulation and analysis tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

**4.26. Analyze data from Development Test and Evaluation (DT&E) Early Operational Assessments (EOAs), and Operational Assessments (OAs).** Although not required, it is strongly recommended logisticians participate in Deficiency Reporting (DR) reviews; champion and track supportability related DRs to closure. Review DT&E reports from LT&E and R&M (not all inclusive list). Ensure supportability related recommendations are appropriately considered for action.

**4.27. Update Supportability in the Acquisition Program Baseline (APB).** Reference Appendix A, [3.27 Include Supportability in the APB Checklist](#).

**4.28. Update the Product Support Strategy in the LCSP or LCMP (as approved by the MDA).** Address any logistics concerns for test in the T&E portion of the LCSP. Ensure coordination with stakeholders. The logistician must identify the stakeholders that would be affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited, to supply chain management and depot maintenance in AFSC, acquisition within AFIMSC, AFLCMC, AFRL, AFTC, and AFNWC. Relationships among these USAF organizations are critical to ensure consistency of data usage. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support. The designated Support Equipment Manager updates the support equipment strategy with the support of the Support Equipment Working Group. Ensure an updated and signed LCSP for Milestone C decision. Utilize the Next Generation CLS Contract Sustainment Support Guide (CSSG) for proven best practices in developing product support strategies. Reference Appendix A, [5.32 Update the Product Support Strategy in the LCSP Checklist](#).

**4.29. Review Requirement Document/Capability Development Document (CDD).**

4.29.1. Review Unique Munitions Acquisition Activities. Reference Appendix A, [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#).

4.29.2. Review Strategies for similar Products/Strategies.

4.29.3. Refine Product Support Strategy.

4.29.4. Update Risk Assessment.

4.29.5. Review Cost Estimate. Ensure the estimate is consistent with supportability requirements identified in the CARD. Ensure cost estimates actually look at the comparative personnel costs of the various alternatives. This should be expanded to correctly capture the CARD or other similar document and ensure that the full costs are

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considered. The use of LCOM or similar data to run MPT analysis for various maintenance / support concepts can be very effective in driving the design rather than reacting to it. Reference Appendix A, [3.25 Include Supportability Requirements in the CARD, POE, CCA, ICE, Affordability Assessment Checklist](#)

4.29.6. Ensure summary of Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE) is included in LCSP / LCMP.

**4.30. Ensure Product Support Strategy is reviewed for test readiness review (TRR). Refer to Task Checklist 3.17.**

**4.31. Update LCSP / LCMP based on Acquisition Strategy Panel (ASP) Recommendations.**

**4.32. Include Supportability in the Source Selection Plan (SSP).** Reference Appendix A, [2.17 Include Supportability in the SSP Checklist](#).

**4.33. Complete Acquisition Strategy Panel (ASP) supportability template.** The ASP briefing template provides an idea of the types of information SAF/AQ, will expect to be addressed to include Human System Integration and Environment, Safety, and Occupational Health. The template can be adjusted as necessary to meet unique program information requirements. The product support strategy is part of the template to address sources of repair and supply, performance based logistics, etc. Ensure Product Support related KPPs, Depot Planning Status, GFP requirements, Budgeting Status, Transition to Operational Management, Fielding Planning and the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook are considered. Also ensure the MEPV is included for Milestone C and Full Rate Production decisions. The MEPV is not a part of the supportability template but will be addressed in ASP. ASP guidance can be found for *Pre-Award Acquisition Strategy (AS) and Request for Proposal (RFP) Development*

**4.34. Participate in the Analysis of Alternatives (AOA) Update.** Logistics SMEs should be included as participants in the AoA, as well as supporting any follow-on actions that update these analyses. Consider application of modeling, simulation and analysis tools. Reference Appendix A, [1.7 Analysis of Alternatives Checklist](#), [2.13.1 Human Systems Integration \(HSI\) Checklist](#) and [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

**4.35. Include Supportability Requirements in the Request for Proposal (RFP).** Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#) and [3.37 PHS&T Checklist](#). See Product Support Contracts Requirement Tool, Appendix D.

4.35.1. Include Packaging, Handling, Storage and Transportation (PHS&T) Requirements in the RFP. IAW AFMCI 24-201, HQ AFMC Packaging and Materials Handling Policies and Procedures, and AFMC Contracting Mandatory Procedures (MP) 5347.305 - Transportation, Packaging Instructions and Data, prior to Milestone B, contact the AFLCMC PHS&T Office, AFLCMC/LZS to review program documents to determine item(s) characteristics, fragility, and any packaging requirements for submittal in the development contract. The AFLCMC PHS&T Office shall complete and sign AFMC Form 158, *Packaging Requirements*, DD Form 1653, *Transportation Data for Solicitations* and other documentation if applicable refer to the [PHS&T SP](#).

4.35.2. RESERVED.

4.35.3. Develop a Technical Order Data Request for Proposal (RFP) including the Technical Manual Contract Requirements (TMCR) Document TM-86-01.

4.35.4. Develop Product Data Request for Proposal (RFP) including the Contract Data Requirements List (CDRL)

4.35.5. Include Data and Data Rights in the Request for Proposal (RFP).

4.35.5.1. The Air Force should request all of the data and data rights entitled through contractual requirements or government funding of development of the part or system. The contractor will need to provide a matrix identifying all data rights that they assert. The burden of proof the contractor is allowed to retain rights to data is now on the contractor per Title 10 USC 2320 and 10 USC 2321. The contractor may want to offer up rights they could otherwise retain to enhance their position during source selection.

The actual rights received by the Air Force will result from negotiations. All ACAT programs, regardless of planned product support approach shall assess the long-term technical data needs (including product definition, operations, maintenance, installation and training data) and reflect that assessment in the Intellectual Property (IP) Strategy (IPS). For the acquisition of engineering data, reference DoDI 5000.81. While not required by regulation, this strategy is also recommended for ACAT III programs. Ensure the program objectives for Owning the Technical Baseline are articulated in the Request for Proposal and are sufficient for sustainment planning. Reference [AFLCMC Process Directory \(APD\)](#). Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#).

**4.36. Review [Berry Amendment](#) (Title 10 U.S.C. 2533a in Section 832) for application to your program and ensure compliance in all contracting actions.**

**4.37. Include government furnished property (GFP) in Request for Proposal (RFP).** The Program manager/logistician and their engineering counterpart(s) should include any known GFP (includes GFE/GFM/Loans) in the RFP (AFI 23-119). Any property added to the RFP should be coordinated with the LCO in AFSC to determine if property would potentially be available for loan to or requisitioned by the contractor. The Program office documents the justification analysis and ensure it addresses each element required IAW DFARS PGI 245-103-70 (Furnishing Government Property to the Contractor). If GFP will be included, ensure the following mandatory clauses are included in the contract: FAR 52.245-9, DFARS 245-107, DFARS 252.245.7000, DFARS 252.245-7001, DFARS 252.245-7002, DFARS 252.245-7003, DFARS 252.245-7004, and DFARS 252.211-7007. In addition, all property must be recorded in the appropriate GFP attachment (IAW DFARS PGI 245.103-72) and included in the contract (see DoD procurement toolbox.com).

4.37.1. Ensure Requirement for Radio-Frequency Identification (RFID) is in REP, as applicable. RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. A significant thrust in RFID use is in enterprise supply chain management, improving the efficiency of inventory tracking and management. Ensure that provisions for RFID are considered for inclusion in the RFP.

4.37.2. Include Contract Requirements for Item Unique Identification (IUID) in the Request For Proposal (RFP). IUID is the set of data for tangible assets that is globally unique and unambiguous and ensures data integrity and data quality throughout life, and supports multi-faceted business applications and users. Ensure that provisions for IUID marking are included in the RFP to include marking of Support Equipment. IUID is integral to completion of program requirements for the MEPV.

**4.38. Define Contractor Supported Weapon System (CSWS) Data Requirements.** Reference Appendix A, [2.21.4 Define CSWS Data Requirements Checklist](#).

**4.39. Update the Supportability Inputs to the Test and Evaluation Master Plan (TEMP).** Reference Appendix A, [3.51 Identify and Plan Supportability Requirements for the TEMP Checklist](#).

**4.40 Update the supportability inputs to the Systems Engineering Plan (SEP).** The purpose of the SEP is to document the systems engineering planning effort guiding all technical aspects of the program. The SEP provides the overarching plan for bringing the hardware, software, and human sub-systems into an integrated system. It should be a living document, tailored to the program and should serve as a roadmap to support program management by defining comprehensive system engineering activities, addressing both government and contractor technical activities and responsibilities. Ensure HSI planning is documented in the SEP. The logistician needs to be included on the team to ensure (RAM), Cost, , and the 12 Product Support Elements listed in DoD Integrated Product Support (IPS) Elements Guidebook, are addressed during engineering analysis and documented in the plan. IUID implementation plan will be included in the SEP. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#) and [2.13 SEP Checklist](#).

4.40.1. Update and Coordinate item unique identification (IUID) implementation Plan. The IUID Implementation plan must be updated for each milestone review. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Chapter 8 for guidance and attachment 3 for a template.



4.40.2. Address Human Systems Integration (HSI) Considerations. Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

**4.41. Participate in Risk Management.** A risk management approach for use in the acquisition of new systems, end-items, and equipment based upon four attributes: risk management planning, risk assessment, risk mitigation, and risk management control. When properly implemented, an effective risk management program facilitates identification of areas that require special attention and sets realistic, executable technical, schedule, and cost objectives. Risk Management is applicable to all phases and aspects of any acquisition or modernization program. The logistician needs to continue to participate on the risk management team to ensure identification of any risk relative to the product support element, systems engineering and life cycle support costs, schedule and technical performance. The appropriate reference is AFI 63-101/20-101, Chapter 4, para 4.6.6 PS Risk Management. Product Support risks need to be addressed and documented within each CCTD. These risk assessments must address adverse impacts on warfighters capabilities to operate, maintain and support the system in an effective and safe manner. Consideration must also be given to reclamation, demilitarization and disposal. Reference DAFPAM 63-128 *Integrated Life Cycle Management* Chapter 12 and Appendix A, [2.22 Participate in Integrated Baseline Review \(IBR\) Checklist](#).

4.41.1. Perform Continuous Supply Chain Risk Management (SCRM). SCRM is a discipline for managing risk to identify, assess, mitigate and monitor actual or potential threats, vulnerabilities, and disruptions within the DoD's supply chain from beginning to end to ensure mission effectiveness; i.e., SCRM is initiated as soon as a program is created or a lead is assigned responsibility to manage a system or program of record, and ends as soon as the program stands down or retires. Successful SCRM maintains the integrity of products, services, people, and technologies; and ensures the uninterrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. SCRM applies to all organizations and programs, including Foreign Military Sales (FMS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Item (NDI) programs.

4.41.1.1. Per AFI 63-101/20-101, *Integrated Life Cycle Management*, the PM has oversight of SCRM. Although the PM has oversight, risks can be associated with any aspect of the supply chain, and it is essential to understand that all functional areas of the program can be exposed to supply chain risk. The logistician must participate in SCRM activities (IPTs, supply chain assessments, program reviews, etc.) to ensure any risk relative to product support elements are supported and addressed in acquisition documents.

4.41.1.2. Programs should assess and mitigate risks of all kinds as a routine part of program management and should identify risks during program reviews. Potential supply chain risks include, but are not limited to; foreign influence, political and regulatory, economic, environmental, product quality and design, manufacturing and supply, transportation and distribution, financial, compliance, technology and cybersecurity, and human capital. SCRM should also be addressed to track foreign ownership of sub-tier vendors, component obsolescence, and counterfeit or suspect counterfeit parts, major/critical nonconformance, and their vulnerabilities with special emphasis on Critical Components (CC), Mission Critical Functions (MCF), and Critical Program Information (CPI). Program should contact the AFLCMC SCRM Network, [AFLCMCLG-LZ.SCRM.Network@us.af.mil](mailto:AFLCMCLG-LZ.SCRM.Network@us.af.mil), any time real/potential supply chain risks are identified; to include, counterfeit detection and DMSMS.

4.41.1.3. The PM/PSM/logistician, with support from the other functional stakeholders, manages SCRM contract requirements, ensures SCRM is addressed at program reviews, conducts supply chain assessments, addresses SCRM in acquisition documents, and continuously monitors the supply chain. SCRM is required to be documented in the Program Protection Plan (section 5.3.4 or appendix G) but should also be considered in, but not limited to, the Acquisition Strategy, and Life Cycle Sustainment Plan (LCSP). Utilize the Product Support Contract Requirements Tool (PSCRT) for specific SCRM tasks and recommended contract language.

4.41.1.4. At a minimum, reference the following policy/guidance: DoDI 5000.83, *Technology and Program Protection to Maintain Technological Advantage*, DoDI 5000.85, *Major Capability Acquisition*, DoDI 5200.44, *Protection of Mission Critical Functions to Achieve Trusted Systems and Networks*, DoDM 4140.01 Vol. 1, *DoD Supply Chain Materiel Management Procedures*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFPAM 63-113, *Program Protection Planning for Life Cycle Management*, and

*Defense Acquisition Guidebook, Chapter 9, Program Protection.* Detailed information on policy, processes, tools, and other SCRM support is available on the [AFLCMC SCRM SharePoint](#).

4.41.2 Provide information as required to the Configuration Steering Board (CSB) for ACAT I and IA programs. See DoDI 5000.02 Para 5.b. and CSB Template.

**4.42. Ensure Supportability Requirements are in the Capability Production Document (CPD).** A CPD is a document prepared by the user, and refined from the Capability Development Document, to identify production attributes. HSI, (see HSI Acquisition Phase Guide) provides an integrating process to address the human considerations in the CPD. The logistician should ensure OSD-mandated KPP/KSAs and metrics are included. See CJCSI 5123.01HL. The logistician should work to ensure (RAM), Cost requirements; Interoperability, Production, IUID, Radio Frequency Identification (RFID) if applicable, System Accreditation, Life Cycle Support Cost Estimates and Budgeting are included as KPPs in the CPD. Ensure the Product Support Elements as referenced in DoD Integrated Product Support (IPS) Elements Guidebook, are specifically addressed. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational), and support for Alternative Fuels are addressed (list not all inclusive). Ensure intelligence concerns are addressed. The CPD supports the Milestone C decision. Reference Appendix A, [3.30 CPD Checklist](#).

**4.43. Update the Supportability Key Performance Parameters (KPPs).** Reference Appendix A, [3.23 Develop Supportability KPPs Checklist](#).

**4.44. Participate in the Functional Configuration Audit (FCA) and monitor corrective actions for supportability performance requirements.** Reference Appendix A, [3.32 Participate in the FCA Checklist](#).

**4.45. Participate in the System Verification Review (SVR) and Production Readiness Review (PRR).** Reference Appendix A, [3.33 Participate in the SVR and PRR Checklist](#).

**4.46. Include Logistics Activities in the Integrated Master Plan/Integrated Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**4.47. Participate in Source Selection.** The Product Support Integrator (PSI) will identify membership requirements. If no PSI is assigned, this responsibility rests with the Program Manager.

**4.48. Support Independent Logistics Assessment (ILA) and Take Corrective Action.** An ILA is an independent assessment to determine the sufficiency of a program's overall product support planning and implementation prior to acquisition milestones and major decisions. The ILA results shall be the basis for the program's Product Support Planning and Implementation certification recommendation in support of the acquisition Milestones B and C and the Full Rate Production (FRP) decisions. AFLCMC/LG has developed an Internal Process Guide "Independent Logistics Assessment (ILA)" which includes updated LA Question Sets, templates for the ILA Kickoff Briefing, and Out Briefing, and a sample outline for the ILA Final Report.

**4.49. Prepare Documentation Required for Milestone C.** Per Title 10 USC 2437, a Replaced System Sustainment Plan must be developed. This plan is for the existing system that the system under development is intended to replace. Determine if this workload should be on the Acquisition Master List. Contact SAF/AQX, Acquisition Integration Directorate, for information. Reference Appendix A, [4.64 Prepare documentation required for Milestone C Checklist](#).

**4.50. Accomplish the Provisioning Conference.** See AFMCMAN 20-106 *Provisioning* and Reference Appendix A, [4.65 Accomplish Spares Provisioning Conference Checklist. Include approved support equipment in the scope of provisioning deliverables and efforts when applicable.](#)

**4.51. Review Weapons System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include FMECA, RCM, LORA, and MTA developed as part of the Systems Engineering process. The goals of WS-SA or PSA (as defined in MIL-HDBK 502A) are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing

## Product Support Tool Kit (PSTK)

an effective and efficient Product Support Package. The WS-SA IPG is based on Systems Engineering reviews that take place during the acquisition phases of MSA, TMRR, EMD, P&D, and O&S Reviews. The information contained within the IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

**4.52. Select Support Equipment via the Support Equipment Recommendation Data (SERD) Process.** In order to comply with AFI63-101/20-101 requirements for selecting support equipment that is technically sufficient, minimizes life cycle costs, and maximizes the selection of common support equipment, programs must obtain and process SERD Reports via the SERD Process. These selections most frequently happen during the EMD phase, but could happen at any point during the life cycle once support equipment requirements (typically driven by maintenance tasks) are understood. The SERD Process will result in the selection of support equipment and automatic test systems that will be used to support a system (to include depot support equipment). Programs follow the [AFLCMC Standard Process to Execute SERD Process](#), Appendix D, to ensure the SERD is reviewed by applicable stakeholders and the best support equipment selection is made for the system.

**4.53. Execute Support Equipment Activation to field SERD-approved support equipment.** Once the SERD Process has been completed and specific support equipment solutions have been selected for use with a system, the selected support equipment needs to be properly fielded in a supportable way. There are many potential tasks that need to be accomplished to 'activate' the newly selected support equipment. The range of tasks that are required will vary depending on what SE solution was approved via the SERD Process (e.g., common SE vs. peculiar SE, new development SE vs. commercial SE). For a list of tasks to consider and guidance on executing each one, see the [Support Equipment Activation Worksheet](#), Appendix D.

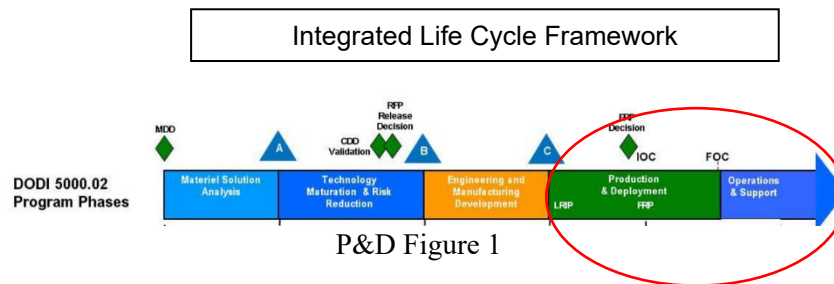
**4.54. Participate in Contract Oversight and Review.** The logistician should be actively involved in contract management. This includes reviewing DIDs, schedules, contract changes, cost, and performance.

*Exit Criteria: Milestone C Decision Memorandum*



## PRODUCTION AND DEPLOYMENT

Ensure tasks from previous phase are addressed/accomplished prior to entering next acquisition phase. The purpose of the Production and Deployment phase is to achieve an operational capability that satisfies mission needs. Operational test and evaluation shall determine the effectiveness and suitability of the system. The MDA shall make the decision to commit the Department of Defense to production at Milestone C and shall document the decision in an Acquisition Decision Memorandum (ADM). Milestone C authorizes entry into Low Rate Initial Production (LRIP) (for Major Defense Acquisition Programs (MDAPs) and major systems), into production or procurement (for non-major systems that do not require LRIP) or into limited deployment in support of operational testing for Major Automated Information System (MAIS) programs or software-intensive systems with no production components. Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements. Joint Urgent Operational Need (JUON) and Quick Reaction Capability (QRC) each have a process which allows for concurrency and relief from some requirements, however, documentation with rationale is highly encouraged. For programs that enter at Milestone C, ensure coverage of tasks in the previous chapters.



### Task Description

**5.1. Develop Initial Migration Plan.** Reference: IAW AFI 63-101/20-101, the PM documents an assessment of when the initial AFI 16-402, *Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination*, migration plan is due. Migration planning is an integral part of life cycle planning as an element of inventory management of AF assets and addresses reclamation and disposal. The Weapon System PM documents an assessment of when the initial Migration Plan is due in accordance with AFI 63/20-101. Generally, this would be when retirements of the weapon system are scheduled in the Future Years Defense Program (FYDP). The Migration Plan is developed by the PM and identifies the current and programmed force structure throughout the FYDP, the current and programmed divestiture of all aerospace vehicles throughout the FYDP (MDS changes, conversion to trainers, 309 Aerospace Maintenance and Regeneration Group (AMARG) inductions, Foreign Military Sales (FMS), Security Assistance Program (SAP), transfers to other services or DoD agencies, donations to the NMUSAF etc.), and a summary of the inventory of 309 AMARG stored aerospace vehicles detailing their current and programmed status throughout the FYDP, as applicable. As aerospace vehicles are retired, the Migration Plan is used to determine present and future requirements to support the remaining inventory.

**5.2. Support award of the Low Rate Initial Production (LRIP) Contract.**

**5.3. Ensure Weapon System Program Complies with Air Force Policy for no new Software System Development without AF/CIO Approval.** This excludes MCCR and National Security Systems. Reference AFI 17-110 *Information Technology Portfolio Management and Capital Planning and Investment Control*.

**5.4. Contact the Air Force POC at AFLCMC/EN, Engineering Directorate, for Special Considerations Regarding Production Accomplished at Government-Owned Contractor-Operated (GOCO) facilities.**

**5.5. Ensure Designation of a PSM.** IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC and the PEO.

**5.6. Perform Logistics Health Assessment (LHA).** Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the AML, and is to be performed inside the LHA App (SAM) (accessible through PMRT in the WASP home page) on an annual basis in all phases of Life Cycle Management. Refer to the [LHA Standard Process](#) for more guidance on conducting an LHA.

**5.7. Include Supportability Requirements in Defense Contract Management Agency (DCMA) Memorandum of Agreement (MOA).** MOA is similar in concept to PMA/SMA; reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**5.8. Update Intelligence integration during production and deployment.** Ensure Intelligence supportability elements are addressed. Ensure consideration of the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook, Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#). Consider HSI overlapping impacts as contained in [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

**5.9. Participate in Contract Oversight and Review.** The logistician needs to participate in the Support Equipment Guidance Conference, understand the Deficiency Report (DR) process and participate in Configuration Control Boards (CCB). The logistician should be actively involved in contract management. This includes reviewing DIDs, schedules, contract changes, cost, and performance.

5.9.1. Accomplish additional Support Equipment (SE) Guidance Conference as required. Reference Appendix A, [3.47.1 Accomplish SE Guidance Conference Checklist](#).

5.9.2. Participate in the Deficiency Report (DR) Process. Reference Appendix A, [3.47.2 Provide Logistics Support During the DR Process Checklist](#).

5.9.3. Participate in the Configuration Control Board (CCB). See Supersede by AFI 63-101/20-101 Chapter 9 and MIL-HDBK-61A (SE) *Configuration Management Guidance*. Reference Appendix A, [3.47.3 Participate in the CCB Checklist](#).

5.9.4. RESERVED.

**5.10. Complete the Program Realignment Template as required for All Program Executive Officer (PEO) Reviews.** This template outlines a collaborative seamless, repeatable process that ensures a workload transition between geographical locations. The template can be adjusted as necessary to meet unique program information requirements. Reference Appendix A, [5.6 Program Realignment Checklist](#).

**5.11. Ensure adequate resources are planned for workload reassignments.** Program realignment, to include transfer of program management responsibilities, is the process by which Air Force systems and acquisition programs are formally realigned between geographically separate locations. Management authorities and responsibilities execute through the PEO regardless of program location. The PEO shall thoroughly coordinate the transition requirements, activities, and time frames associated with realignment. The overall objective of this process is to ensure a seamless and transparent (to the user) transition of the system or program (per AFI 63-101/20-101). The PM, PSM and Product Support Integrator (PSI) should collaborate on planning activities, including estimated milestones for management transfer. These planning activities should be included in the Life Cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP) (as approved by the MDA) as early as possible to allow stakeholder resources (manpower and other infrastructure) lead time to be programmed and put in place in time to accommodate the transfer. Identify any supportability/logistics requirements for any follow-on (post-production) testing required. Ensure timely input of operational and maintenance funding requirements into Centralized Access for Data Exchange (CAFDEx). Reference Appendix A, [5.6 Program Realignment Checklist](#) and [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#).

**5.12. Ensure supportability is Included in Program Management / Services Management Agreements (PMA/SMAs).** Reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**5.13. Complete Sustainment Quad Chart Template for Program Executive Officer (PEO) Reviews.** The Portfolio Review is the culmination of a process that starts at the program level, continues through the PEO, and culminates in a presentation to SAF/AQ. The most detail will be provided at the PEO level, with summary data and significant issues only briefed to SAF/AQ. The Sustainment Quad chart provides a summary of sustainment/ product support planning activities to include: major players, transfer eligibility, operations and maintenance funding, overall sustainment element status, and issues. See DoD Product Support Managers (PSM) Guidebook, Fig 5, page 25 for Sustainment Quad Chart and usage Instructions.

**5.14. Review the Logistics Activities in the Integrated Master Plan/Integrated Master Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**5.15. Update the supportability requirements in the Cost Analysis Requirements Description (CARD), Program Office Estimate (POE), Component Cost Analysis (CCA), Independent Cost Estimate (ICE), and Affordability Assessment.** Reference Appendix A, [3.25 Include Supportability Requirements in the CARD, POE, CCA, ICE, Affordability Assessment Checklist](#).

**5.16. Continue to Evaluate Contractor Delivered Data.** Contractor Logistics Support (CLS) is a performance of maintenance and/or material management functions for a DoD system by a commercial activity. [3.50 Evaluate Contractor Delivered Data Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#), and [3.50.4 Establish and Manage Training Systems Checklist](#).

**5.17. Update the Product Support Business Case Analysis (PS BCA).** The PM/PSM shall perform a product support BCA to validate the product support strategy is cost effective, financially feasible, and optimizes system readiness. The product support BCA is required for ACAT I, IA, and II programs but is at the discretion of the MDA for ACAT III programs. The PM/PSM shall document the strategy decision and rationale in the LCSP. The PM/PSM shall maintain a complete history of BCAs over the course of the system life cycle to track decisions and understand how real-world operations cause program impacts. The PM/PSM revalidates the business case prior to any change in the product support strategy or every 5 years, whichever occurs first (per AFI 63-101/20-101). The Product Support BCA must follow DoD Product Support BCA Guidebook. For major weapon systems this can take 1-2 years to complete. The PSM/Logistician will be actively leading this process.

**5.18. Ensure Contract/agreement for Sustainment (Organic, Commercial and Partnerships).** Specifically includes contractor logistics support. The PSM must ensure appropriate management and control activities are in place to accommodate and address DMSMS issues. This could include requirements input to Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx). Reference Appendix A, [5.8.1 Utilize Centralized Asset Management \(CAM\)/Centralized Access for Data Exchange \(CAFDEx\)](#).

5.18.1. **Organic Maintenance** - Encompasses maintenance and other services performed at a Depot Maintenance Activity Group (DMAG) funded Air Force organic facility or other DoD organic facility. These organic facilities, shop equipment, support equipment, supplies, and spares are all owned by the government and all personnel are employed by the government. Reference AFMCMAN 20-102 *Maintenance Planning and Execution System*.

5.18.2. **Contract Depot Level Maintenance** - Depot level maintenance performed by a commercial organization under contract with Depot Maintenance Activity Group (DMAG). Reference AFMCMAN 20-102 *Maintenance Planning and Execution System*.

5.18.3. **Public-Private Partnerships for Depot Level Maintenance** - Public-Private Partnerships are a logistics sustainment philosophy involving a cooperative agreement between DoD and private sector entities. The purpose of public-private partnerships is to leverage the optimal capabilities of both the public and private sectors in order to enhance depot support to the warfighter. The PM in collaboration with the Enterprise Repair Manager (ERM), candidate depots, lead and using commands, and other stakeholders will develop a depot maintenance strategy that addresses both the requirement to conduct organic repair and to pursue a public-private partnership approach where feasible. Reference *Public-Private Partnerships for Depot-Level Maintenance* and AFI 63-101/20-101.

**5.19. Participate in Site Activation Task Force (SATAF).** The SATAF is concerned with planning and activating each operational site and comprised of representatives from the using/operating command, the PM, PSM, PSI, AETC, and the contractor. The SATAF provides on-site assistance and surveillance to facilitate operational testing and training, and develops a logistics support capability to include site activation plans. The senior logistician is normally delegated the responsibility to coordinate support planning for site activation. The tasks and milestones of site activation management will be detailed in Site Activation Plans and the support planning document. Ensure Intelligence and program protection requirements are considered. Reference Appendix A, [5.14 Site Activation Task Force \(SATAF\) Checklist](#).

5.19.1. Establish Site Activation Task Force (SATAF) Team for each location.

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5.19.2. Perform Operational Base Survey. Ensure National Environmental Policy Act (NEPA) milestones are met and required documentation completed. Reference Appendix A, [3.10 Facilities Concept Checklist](#) and [3.10.2 Address NEPA Requirements Checklist](#).

5.19.3. Develop Schedule and Action Items.

5.19.4. Complete Action Items and Mitigation Plan.

5.19.5. Execute Support Plan.

5.19.6. Accept Assets Delivery.

5.19.7. Conduct Site Activation Task Force (SATAF) Outbrief.

**5.20. Acquire Initial Supply Support.** Includes management actions, procedures, and techniques necessary to determine requirements to acquire, catalog, receive, store, transfer, issue, and dispose of spares, repair parts, and supplies. Allow for a 2 year POM cycle for transitioning workload to appropriate DoD Agencies. In layman's terms, this means having the right spares, repair parts, and supplies available, in the right quantities, at the right place, at the right time, at the right price. The process includes provisioning for initial support, as well as acquiring, distributing, and replenishing inventories. "Initial" refers to the attainment of the capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of spares, repair parts, and supplies necessary to operate, maintain, and support the system. Obtain packaging and transportation data as required by contract at the provisioning conference. Consider application of modeling, simulation, and analysis tools. Use readiness-based sparing tools (reference DoDM 4140.01, Volumes 2, 3, and 7) for spares requirements determination to the greatest extent possible. Ensure hazardous materials authorizations are prepared and submitted to site/installation hazardous material management office. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#) and [2.9.1 Address Environment, Safety, and Occupational Health Checklist](#). (**Note:** For contractor supported systems ensure coverage of this task. Reference Appendix A, [4.65 Accomplish Spares Provisioning Conference Checklist](#)).

5.20.1. Execute Contract Requirements.

5.20.2. Monitor Contractor Spares Progress.

5.20.3. Monitor Contractor Delivery.

5.20.4. Receive Spares.5.19.4 MONITOR Spares Utilization.

5.20.5. Address Diminishing Manufacturing Sources and Material Shortages (DMSMS) Issues.

5.20.6. Respond to Deficiency Reports (DR).

**5.21. Ensure information is provided to the prime center packaging and transportation office to complete AFMC Form 158 and DD Form 1653, to select the appropriate Federal Acquisition Regulation (FAR) clauses for Transportation.**

**5.22. Reserved.**

**5.23. Acquire Initial Training/Training Equipment.** Initial training encompasses the policy, processes, procedures, techniques, training devices, and equipment used to train civilian and military personnel to acquire, operate, and support a system. This includes individual and crew training, new equipment training, initial, formal, and on-the-job training. Though the greatest amount of training is accomplished just prior to the fielding of a system, it must be remembered in most programs, a large number of individuals must also be trained during system development to support the system test and evaluation program. "Initial" refers to the attainment of the capability to effectively employ a weapon, item of equipment,

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or system of approved specific characteristics with the appropriate number, type, and mix of trained personnel necessary to operate, maintain, and support the system. (**Note:** For contractor supported systems ensure coverage of this task).

5.23.1. Execute Contract Requirements.

5.23.2. Monitor Contractor Training Material / Equipment Progress.

5.23.3. Monitor Contractor Delivery.

5.23.4. Receive Training Material / Equipment.

**5.24. Formal Technical Orders.** Reference Appendix A, [3.50.1 Manage TO Acquisition Program Checklist](#).

5.23.1. Monitor Contractor Technical Orders / Manuals Progress.

5.23.2. Receive Technical Orders / Manuals.

5.23.3. Verify Technical Orders. Verify hazards identified in ESOH analysis have been translated to appropriate cautions, warnings and notes (to include hazardous material disposal requirements) in technical orders

5.23.4 Respond to Deficiencies.

**5.25. Deliver Initial Supply Support.** “Initial” refers to the attainment of the capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of spares, repair parts and supplies necessary to operate, maintain, and support the system. Ensure hazardous materials authorizations are prepared and submitted to site/installation hazardous material management office.

**5.26. Reserved.**

**5.27. Deliver Initial Training / Training Equipment.** “Initial” refers to the attainment of the capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained personnel necessary to operate, maintain, and support the system.

**5.28. Deliver Formal Technical Orders.** Reference Appendix A, [3.50.1 Manage TO Acquisition Program Checklist](#).

**5.29. Continue the Depot Maintenance Activation Working Group (DMAWG).** Depot Sustainment Planning occurs throughout the entire DMAWG process. If additional depot capability is required, it will be addressed through the DMAWG process. Ensure plans created by DMAWG are executed. The objective of the DMAWG is to ensure a required organic depot maintenance capability is set up in a timely and efficient manner to achieve government-controlled capabilities for the depot repair. The DMAWG is the forum for conducting depot source of repair planning and activation to ensure funding, contracting, and delivery of data is accomplished, for depot maintenance at an organic depot, AF or another service. If the support concept is total Contractor Logistics Support (CLS), a DMAWG is not required; however a Contractor Depot Activation Plan is still required. If Depot activation stands up depot repair capability at another DoD Service ensure Depot Maintenance Inter-Service Support Agreement (DMISA) development is included in list of activation activities. Reference AFMAN 63-122 Depot Source of Repair Planning and Activation and Appendix A, [3.6 Establish DMAWG Team Checklist](#).

**5.30. Continue Periodic Product Support IPT Meetings.** The purpose is to coordinate and plan logistics management to ensure supportability of developed and fielded systems with all stakeholders (sometimes called a Product Support IPT). Logisticians should ensure they participate in other program reviews. (e.g., Program Management Reviews (PMR), Test Reviews, Configuration Reviews, System Requirements Review etc.).

**5.31. Continue Program Objective Memorandum (POM) Inputs for Supportability Requirements.** Reference Appendix A, [3.28 Include Supportability Requirements in POM Submission Checklist](#) and [3.10.1 Determine Manpower and Personnel Requirements Checklist](#).



- 5.32. Update Supportability in the Acquisition Program Baseline (APB).** Reference Appendix A, [3.27 Include Supportability in the APB Checklist](#).
- 5.33. Participate in the Operational Test Readiness Review (OTRR).** Reference Appendix A, [5.27 Participate in OTRR Checklist](#).
- 5.34. Ensure support for Initial Operational Test and Evaluation (IOT&E) and Full up Live Fire Test and Evaluation (LFT&E) or non-full up, alternative live fire testing.**
- 5.35. Participate in the Initial Operational Test and Evaluation (IOT&E).**
- 5.36. Analyze data from the Initial Operational Test and Evaluation (IOT&E) and Validate Supportability.**
- 5.37. Participate in the Physical Configuration Audit (PCA).** Reference Appendix A, [5.31 Participate in PCA Checklist](#).
- 5.38. Update Product Support (PS) Strategy in the Life Cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP).** Ensure coordination with stakeholders. The logistician must identify the stakeholders that would be affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited, to supply chain management and depot maintenance in AFSC, acquisition within AFIMSC, AFLCMC, AFRL, AFTC, and AFNWC. Relationships among these USAF organizations are critical to ensure consistency of data usage. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support. The designated Support Equipment Manager updates the support equipment strategy with the support of the Support Equipment Working Group. Utilize the Next Generation CLS [Contract Sustainment Support Guide \(CSSG\)](#) for proven best practices in developing product support strategies. Reference Appendix A, [5.32 Update the Product Support Strategy in the LCSP Checklist](#).
- 5.38.1 Review Requirement Document/Capability Production Document (CPD).
- 5.38.1.1 Review Unique Munitions Acquisition Activities. Reference Appendix A, [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#).
- 5.38.2. Review Strategies for similar Products / Strategies.
- 5.38.3. Refine Product Support Strategy.
- 5.38.4. Review Risk Assessment.
- 5.38.5. Review Cost Estimate. Review Cost Estimate to ensure full costs are considered, the estimate is consistent with the CARD or similar document, and the estimate includes comparative people costs for the various alternatives. The use of LCOM or similar data to run MPT analysis for various maintenance/support concepts can be very effective in driving the design rather than reacting to it. Ensure cost estimates actually look at the comparative personnel costs. This should be expanded to correctly capture the CARD or other similar document and ensure that the full costs are considered. The use of LCOM or similar data to run MPT analysis for various maintenance/support concepts can be very effective in driving the design rather than reacting to it.
- 5.38.6. Approve Product Support Strategy (Operational Test Readiness Review (OTRR)).
- 5.38.7. Update LCSP or LCMP based on Acquisition Strategy Panel (ASP) Recommendations.
- 5.39. Reserved.**
- 5.40. Include Supportability in the Source Selection Plan.** Reference Appendix A, [2.17 Include Supportability in the SSP Checklist](#).

**5.41. Complete Acquisition Strategy Plan (ASP) Supportability Template.** The ASP briefing template provides an idea of the types of information SAF/AQ will expect to be addressed to include Human System Integration and Environment, Safety, and Occupational Health. The template can be adjusted as necessary to meet unique program information requirements. The product support strategy is part of the template to address sources of repair and supply, performance based logistics, GFP requirements, (RAM), Cost, Maintenance Planning, Product Support KPP compliance and all Product Support requirements. Ensure the MEPV is included for Full Rate Production decisions. The MEPV is not a part of the supportability template but will be addressed in the ASP. For guidance on ASPs see SAF/AQXC, Acquisition Excellence and Change Office. Services acquisition strategy templates are found on Acquisition Document Development and Management (ADDM).

**5.42. Include Supportability Requirements in the Request For Proposal (RFP).** Creation of Operational/System/Technical View document may be required. Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#) and [3.37.13 Develop a DMSMS Program Checklist](#) and [3.37 PHS&T Checklist](#). See Product Support Contracts Requirement Tool, Appendix D.

**5.43. Include Data Rights in the Request For Proposal (RFP).** The Air Force should request all of the data rights entitled through government funding of development of the part or system. The contractor will need to provide a matrix identifying all data rights they claim. The burden of proof that the contractor is allowed to retain rights to data is now on the contractor per Title 10 USC 2320 and 10 USC 2321. The contractor may want to offer up rights they could otherwise retain to enhance their position during source selection. The actual rights received by the Air Force will result from negotiations. All ACAT programs, regardless of planned sustainment approach shall assess the long-term technical data needs (including product definition, operations, maintenance, installation, and training data) and reflect that assessment in an Intellectual Property (IP) Strategy (IPS). For the acquisition of engineering, data reference DoDI 5000.81. [While not required by regulation, this strategy is also recommended for ACAT III programs.](#) Reference Appendix A, [2.20 Include Supportability Requirements in RFP Checklist](#).

5.43.1. Review Berry Amendment (Title 10 U.S.C. 2533a in Section 832) FOR Application to Your Program and Ensure Compliance in All Contracting Actions.

5.43.2. Ensure Requirement for Radio-Frequency Identification (RFID) is in REP, as applicable. RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. A significant thrust in RFID use is in enterprise supply chain management, improving the efficiency of inventory tracking and management. Ensure that provisions for RFID are considered for inclusion in the RFP.

5.43.3. Include government furnished property (GFP) in Request for Proposal (RFP). The Program manager/logistician and their engineering counterpart(s) should include any known GFP (includes GFE/GFM/Loans) in the RFP (AFI 23-119). Any property added to the RFP should be coordinated with the LCO in AFSC to determine if property would potentially be available for loan to or requisitioned by the contractor. The Program office documents the justification analysis and ensure it addresses each element required IAW DFARS PGI 245-103-70 (Furnishing Government Property to the Contractor). If GFP will be included, ensure the following mandatory clauses are included in the contract: FAR 52.245-9, DFARS 245-107, DFARS 252.245.7000, DFARS 252.245-7001, DFARS 252.245-7002, DFARS 252.245-7003, DFARS 252.245-7004, and DFARS 252.211-7007. In addition, all property must be recorded in the appropriate GFP attachment (IAW DFARS PGI 245.103-72) and included in the contract (see DoD procurement toolbox.com).

5.43.4. Include Contract requirements for Item Unique Identification (IUID) in the Request for Proposal (RFP). IUID is the set of data for tangible assets that is globally unique and unambiguous and ensures data integrity and data quality throughout life, and supports multi-faceted business applications and users. Ensure that provisions for IUID marking are included in the RFP to include marking of Support Equipment. IUID is integral to completion of program requirements for the MEPV.

5.43.5. Define Contractor Supported Weapon System (CSWS) Data Requirements. Reference Appendix A, [2.21.4 Define CSWS Data Requirements Checklist](#).

**5.44. Update supportability inputs to the Test and Evaluation Master Plan (TEMP).** Reference Appendix A, [3.51 Identify and Plan Supportability Requirements for the TEMP Checklist](#).

**5.45. Update supportability inputs to the System Engineering Plan (SEP).** The purpose of the SEP is to document the systems engineering planning effort guiding all technical aspects of the program. The SEP provides the overarching plan for bringing the hardware, software, and human sub-systems into an integrated system. It should be a living document, tailored to the program and should serve as a roadmap to support program management by defining comprehensive system engineering activities, addressing both government and contractor technical activities and responsibilities. Ensure HSI planning is documented in the SEP. Ensure Intelligence is integrated into systems engineering process, as applicable. The logistician needs to be included on the team to ensure (RAM), Cost, , and the Product Support Elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook, are addressed during engineering analysis and documented in the plan. IUID implementation plan will be included in the SEP. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#), [2.13 SEP Checklist](#)

5.45.1. Address Human Systems Integration (HSI) Considerations. Reference Appendix A, [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

5.45.2. Review item unique identification (IUID) implementation Plan annually. The IUID Implementation plan must be updated for each milestone review. See DAFPAM 63-128, *Integrated Life Cycle Management*. Reference Chapter 8 for guidance and attachment 3 for a template.

**5.46. Participate in Risk Management.** A risk management approach for use in the acquisition of new systems, end-items, and equipment based upon four attributes: risk management planning, risk assessment, risk mitigation, and risk management control. When properly implemented, an effective risk management program facilitates identification of areas that require special attention and sets realistic, executable technical, schedule, and cost objectives. Risk Management is applicable to all phases and aspects of any acquisition or modernization program. The logistician needs to continue to participate on the risk management team to ensure identification of any risk relative to the product support element, systems engineering and life cycle support costs, schedule and technical performance. The appropriate reference is AFI 63-101/20-101, Chapter 4, para 4.6.6 PS Risk Management. Product Support risks need to be addressed and documented within each CCTD. These risk assessments must address adverse impacts on warfighters capabilities to operate, maintain and support the system in an effective and safe manner. Consideration must also be given to reclamation, demilitarization and disposal. Reference DAFPAM 63-128 *Integrated Life Cycle Management* Chapter 12 and Appendix A, [2.22 Participate in Integrated Baseline Review \(IBR\) Checklist](#).

5.46.1. Perform Continuous Supply Chain Risk Management. Supply Chain Risk Management (SCRM) is a discipline for managing risk to identify, assess, mitigate and monitor actual or potential threats, vulnerabilities, and disruptions within the DoD's supply chain from beginning to end to ensure mission effectiveness; i.e., SCRM is initiated as soon as a program is created or a lead is assigned responsibility to manage a system or program of record, and ends as soon as the program stands down or retires. Successful SCRM maintains the integrity of products, services, people, and technologies; and ensures the uninterrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. SCRM applies to all organizations and programs, including Foreign Military Sales (FMS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Item (NDI) programs.

Per AFI 63-101/20-101, *Integrated Life Cycle Management*, the PM has oversight of SCRM. Although the PM has oversight, risks can be associated with any aspect of the supply chain, and it is essential to understand that all functional areas of the program can be exposed to supply chain risk. The logistician must participate in SCRM activities (IPTs, supply chain assessments, program reviews, etc.) to ensure any risk relative to product support elements are supported and addressed in acquisition documents.

Programs should assess and mitigate risks of all kinds as a routine part of program management and should identify risks during program reviews. Potential supply chain risks include, but are not limited to; foreign influence, political and regulatory, economic, environmental, product quality and design, manufacturing and supply, transportation and distribution, financial, compliance, technology and cybersecurity, and human capital. SCRM should also be addressed to track foreign ownership of sub-tier vendors, component obsolescence, and counterfeit or suspect

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counterfeit parts, major/critical nonconformance, and their vulnerabilities with special emphasis on Critical Components (CC), Mission Critical Functions (MCF), and Critical Program Information (CPI). Program should contact the AFLCMC SCRM Network, [AFLCMCLG-LZ.SCRM.Network@us.af.mil](mailto:AFLCMCLG-LZ.SCRM.Network@us.af.mil), any time real/potential supply chain risks are identified; to include, counterfeit detection and DMSMS.

The PM/PSM/logistician, with support from the other functional stakeholders, manages SCRM contract requirements, ensures SCRM is addressed at program reviews, conducts supply chain assessments, addresses SCRM in acquisition documents, and continuously monitors the supply chain. SCRM is required to be documented in the Program Protection Plan (section 5.3.4 or appendix G) but should also be considered in, but not limited to, the Acquisition Strategy, and Life Cycle Sustainment Plan (LCSP). Utilize the Product Support Contract Requirements Tool (PSCRT) for specific SCRM tasks and recommended contract language.

At a minimum, reference the following policy/guidance: DoDI 5000.83, *Technology and Program Protection to Maintain Technological Advantage*, DoDI 5000.85, *Major Capability Acquisition*, DoDI 5200.44, *Protection of Mission Critical Functions to Achieve Trusted Systems and Networks*, DoDM 4140.01 Vol 1, *DoD Supply Chain Materiel Management Procedures*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFPAM 63-113, *Program Protection Planning for Life Cycle Management*, and *Defense Acquisition Guidebook, Chapter 9, Program Protection*. Detailed information on policy, processes, tools, and other SCRM support is available on the [AFLCMC SCRM SharePoint](#).

**5.47. Provide information as required to the Configuration Steering Board (CSB) for ACAT I and IA programs.** See DoDI 5000.02 and CSB Template.

**5.48. Reserved.**

**5.49. Ensure Organic Depot Repair Capability Initiated.** Organic depot repair capability is required to be established not later than 4 years after Initial Operational Capability (IOC). If Organic Depot repair is performed by another DoD Service ensure establishment of Depot Maintenance Inter-Service Support Agreement (DMISA) as repair capability is initiated.

**5.50. Prepare the documentation for Full Rate Production (FRP).** Per Title 10 USC 2437, a Replaced System Sustainment Plan must be developed. This plan is for the existing system that the system under development is intended to replace. Reference Appendix A, [5.42 Prepare the Documentation for FRP Checklist](#).

**5.51. Participate in Foreign Military Sales (FMS) activities (if applicable).** The Secretary of Defense establishes military requirements and implements programs to transfer defense articles and services to eligible foreign countries through the Foreign Military Sales (FMS) Program, which is a part of Security Assistance. FMS cases require emphasis and special management attention to include logistics. Reference Appendix A, [5.42.1 Participate in FMS Activities Checklist](#).

**5.52. Update the Migration Plan (Continuous).**

**5.53. Participate in Source Selection.** The Product Support Integrator (PSI) will identify membership requirements. If no PSI is assigned, this responsibility rests with the Program Manager.

**5.54. Review Weapon System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include FMECA, RCM, LORA, and MTA developed as part of the Systems Engineering process. The goals of WS-SA or PSA (as defined in MIL-HDBK 502A) are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing an effective and efficient Product Support Package. The WS-SA IPG is based on Systems Engineering reviews that take place during the acquisition phases of MSA, TMRR, EMD, P&D, and O&S Reviews. The information contained within the IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

**5.55. Select Support Equipment via the Support Equipment Recommendation Data (SERD) Process.** In order to comply with AFI63-101/20-101 requirements for selecting support equipment that is technically sufficient, minimizes life cycle costs, and maximizes the selection of common support equipment, programs must obtain and process SERD Reports via the SERD Process. These selections most frequently happen during the EMD phase, but could happen at any point during the life cycle once support equipment requirements (typically driven by maintenance tasks) are understood. The SERD Process will result in the selection of support equipment and automatic test systems that will be used to support a system (to include depot support equipment). Programs follow the [AFLCMC Standard Process to Execute SERD Process](#), Appendix D, to ensure the SERD is reviewed by applicable stakeholders and the best support equipment selection is made for the system.

**5.56. Execute Support Equipment Activation to field SERD-approved support equipment.** Once the SERD Process has been completed and specific support equipment solutions have been selected for use with a system, the selected support equipment needs to be properly fielded in a supportable way. There are many potential tasks that need to be accomplished to ‘activate’ the newly selected support equipment. The range of tasks that are required will vary depending on what SE solution was approved via the SERD Process (e.g., common SE vs. peculiar SE, new development SE vs. commercial SE). For a list of tasks to consider and guidance on executing each one, see the [Support Equipment Activation Worksheet](#), Appendix D.

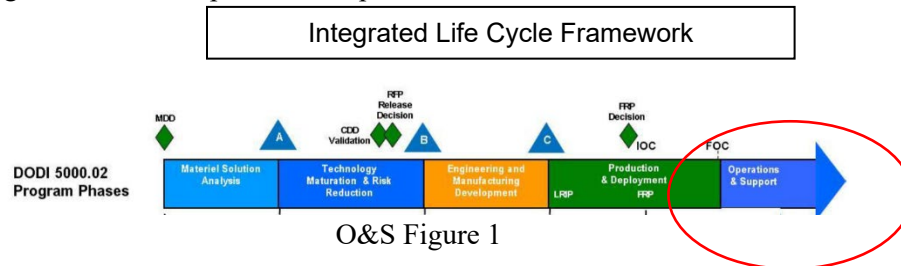
**5.57. Conduct Support Equipment Life Cycle Management.** Once support equipment has been selected and fielded, the program office (or appropriate Product Group for common support equipment) is responsible for its life cycle management as described in Appendix A, [3.37.3 Support Equipment Life Cycle Management Checklist](#).

**5.58. Update the Weapon System Support Program (WSSP) Database.** Reference Appendix A, [4.11 WSSP Checklist](#).



## OPERATIONS AND SUPPORT (O&S)

Ensure tasks from previous phases are addressed/accomplished prior to entering next acquisition phase. The objective of Operation and Support phase is the execution of a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-effective manner over its total life cycle. Planning for this phase shall begin prior to program initiation and shall be documented in the Life Cycle Sustainment Plan (LCSP). Operations and Support has two major efforts; Life Cycle Sustainment and Disposal. Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements. For programs that enter at later points in the life cycle management framework, ensure coverage of tasks in the previous chapters.



### Task Description

#### 6.1. Support Award of the Production Contract.

**6.2. Ensure Weapon System Program Complies with Air Force Policy for no new Software System Development without AF/CIO, the office of information dominance and chief information officer, approval.** This excludes MCCR and National Security Systems. Reference AFI 17-110, *Information Technology Portfolio Management and Capital Planning and Investment Control*.

**6.3. Contact the Air Force POC at AFLCMC/EN, engineering directorate, for special considerations regarding production accomplished at Government-Owned Contractor-Operated (GOCO) facilities.**

**6.4. Ensure designation of a Product Support Manager (PSM).** IAW Public Law, DoD guidance and AFI 63-101/20-101 a PSM will be designated with the proper credentials for ACAT I and II programs in the operation and sustainment (O&S) phase and all ACAT III programs, the PM and PSM may be dual-hatted if approved by AFMC and the PEO.

6.4.1 Perform Logistics Health Assessment (LHA). Although recommended for all acquisition programs, the LHA is required for all AFLCMC ACAT designated programs listed on the AML, and is to be performed inside the LHA App (SAM) (accessible through PMRT in the WASP home page) on an annual basis in all phases of Life Cycle Management. Refer to the [LHA Standard Process](#) for more guidance on conducting an LHA.

**6.5. Include the Supportability Requirements in Defense Contract Management Agency Memorandum of Agreement (DCMA MOA).** MOA is similar in concept to PMA/SMA; reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**6.6. Participate in Production Contract Oversight and Review.** The logistician needs to participate in the Support Equipment Guidance Conference, understand the Deficiency Report (DR) process and participate in Configuration Control Boards (CCB). The logistician should be actively involved in contract management. This includes reviewing DIDs, schedules, contract changes, cost, and performance.

6.6.1. Re-accomplish Support Equipment (SE) Guidance Conference as required. Reference Appendix A, [3.47.1 Accomplish SE Guidance Conference Checklist](#). If conference was accomplished during Low Rate Initial Production (LRIP) this task is an update.

6.6.2. Participate in the Deficiency Report (DR) Process. See AFI 21-115(I) *Product Quality Deficiency Report Program* and Reference Appendix A, [3.47.2 Provide Logistics Support During the DR Process Checklist](#).

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6.6.3. Participate in the Configuration Control Board (CCB). See Supersede by AFI 63-101/20-101 Chapter 9. MIL-HDBK-61A (SE) *Configuration Management Guidance*. Reference Appendix A, [3.47.3 Participate in the CCB Checklist](#).

6.6.4 Accomplish the Provisioning Conference. If conference was accomplished during Low Rate Initial Production (LRIP) this task is an update. See AFMCMAN 20-106 *Provisioning* and Reference Appendix A, [4.65 Accomplish Spares Provisioning Conference Checklist](#).

**6.7. Develop a workload realignment plan (*Transition Support Plan*).** Program realignment, to include transfer of program management responsibilities, is the process by which Air Force systems and acquisition programs are formally realigned between geographically separate locations. Management authorities and responsibilities execute through the PEO regardless of program location. The PEO shall thoroughly coordinate the transition requirements, activities, and time frames associated with realignment. The overall objective of this process is to ensure a seamless and transparent (to the user) transition of the system or program (per AFI 63-101/20-101). The PM, PSM and Product Support Integrator (PSI) should collaborate on planning activities, including estimated milestones for management transfer. These planning activities should be included in the Life Cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP) (as approved by the MDA) as early as possible to allow stakeholder resources (manpower and other infrastructure) lead time to be programmed and put in place in time to accommodate the transfer. Identify any supportability/logistics requirements for any follow-on (post-production) testing required. Ensure timely input of operational and maintenance funding requirements into Centralized Access for Data Exchange (CAFDEx). Determine and document plan to shift/share TOMA duties at time of program transition. Reference Appendix A, [5.6 Program Realignment Checklist](#) and [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#).

**6.8. Complete for Program Executive Officer (PEO) Reviews.** This template outlines a collaborative, (acquisition and sustainment), seamless, repeatable process that ensures a supportable program transition between acquisition and sustainment portfolios. The template can be adjusted as necessary to meet unique program information requirements. This template is required at the PEO review if program is within 2 years of established transfer date.

**6.9. Complete Sustainment Quad Chart Template for Program Executive Officer (PEO) Reviews.** The Portfolio Review is the culmination of a process that starts at the program level, continues through the PEO, and culminates in a presentation to SAF/AQ. The most detail will be provided at the PEO level, with summary data and significant issues only briefed to SAF/AQ. The Sustainment Quad chart provides a summary of supportability/product support planning activities to include: major players, transfer eligibility, operation and maintenance funding, overall sustainment element status, and issues. See DoD Product Support Managers (PSM) Guidebook, Fig 5, page 25 for Sustainment Quad Chart and usage Instructions.

**6.10. Ensure supportability is included in Program Management / Services Management Agreements (PMA/SMAs).** Reference Appendix A, [2.16 Ensure Supportability Included in PMA/SMAs Checklist](#).

**6.11. Review the Logistics Activities in the Integrated Master Plan/Integrated Master Schedule (IMP/IMS).** Reference Appendix A, [2.23 Include Product Support Activities in the IMP/IMS Checklist](#).

**6.12. Continue to Evaluate Contractor Delivered Data.** The logistician should review logistics data including Commercial Off-The-Shelf and Contractor Data Requirements List. Other data to review is level of repair analysis, maintenance task analysis, reliability centered maintenance, engineering data, provisioning, maintenance check flight, etc. Continue to assess Ownership of the Technical Baseline to support sustainment activities. Reference [AFLCMC Process Directory \(APD\)](#). Reference Appendix A, [3.50 Evaluate Contractor Delivered Data Checklist](#) and [3.50.1 Manage TO Acquisition Program Checklist](#) and [3.37.13 Develop a DMSMS Program Checklist](#).

**6.13. Continue Sustainment Management Planning.** Complete Sustainment Management Planning to develop an approved course of action based on balanced warfighter requirements to include updates to the Life Cycle Sustainment Plan (LCSP), Centralized Asset Management (CAM)/Program Objective Memorandum (POM), System Engineering Plan (SEP), Performance Based Agreements (PBA), Program Management/Services Management Agreements (PMA/SMA), Supply/Maintenance Forecasting, Aircraft Structural Integrity Program (ASIP), Propulsion Structural Integrity Program (PSIP), Mechanical Equipment and Sub-systems Integrity Program (MECSIP) Force Structure Maintenance Plan (FSMP) and Requirements. This task includes strategies for sustainment management execution. Utilize the Next Generation CLS

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Contract Sustainment Support Guide (CSSG) for proven best practices in developing product support strategies. Reference Appendix A, [6.10 Update Product Support Strategy for Sustainment in LCSP Checklist](#), [6.11 Sustainment Systems Engineering Checklist](#) and [2.15.1.1 Unique Munitions Acquisition Activities Checklist](#). Ensure coordination with stakeholders. The logistician must identify the stakeholders that would be affected by the planning effort (e.g., established platform modification programs that may be impacted). Stakeholders include, but are not limited to, supply chain management and depot maintenance in AFSC, acquisition within AFIMSC, AFLCMC, AFRL, AFTC, and AFNWC. Relationships among these USAF organizations are critical to ensure consistency of data usage. Data is used for planning, budgeting, maintenance, and execution of the supply chain, depot operations and MAJCOM support.

**6.14. Ensure Sustainment Systems Engineering addressed.** Reference Appendix A, [6.11 Sustainment Systems Engineering Checklist](#) and [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

**6.15. Execute Material Support for Sustainment Management.** This includes the 448<sup>th</sup> Supply Chain Management Wing, Spares, Organic Manufactured Supply Items, Support Equipment/Automatic Test Systems, CSWS, Technical Data, Government Furnished Property - Material (GFP-MAT) Weapon System Support Program (WSSP), and Defense Logistics Agency (DLA). All Government Furnished property (GFP) must be maintained in an Accountable Property System of Record (ASPR) and be Financial Improvement and Audit Readiness (FIAR) compliant. Understand the Commodity Council's role in the Supply Chain Management Strategy: They develop a sourcing strategy for commodities groups that are managed in the AFSC. Reference Appendix A, [6.12 DLA Interface Checklist](#) and [4.11 WSSP Checklist](#).

**6.16. Ensure Contract/Agreement for Sustainment (Organic, Commercial and Partnerships).** Specifically includes contractor logistics support. The PSM must ensure appropriate management and control activities are in place to accommodate and address DMSMS issues. This could include Systems Integration Service Contracts and Centralized Asset Management (CAM)/Centralized Access for Data Exchange (CAFDEx) requirements. Reference Appendix A, [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#).

6.16.1. **Organic Maintenance** - Encompasses maintenance and other services performed at a Depot Management Activity Group (DMAG) funded Air Force organic facility or other DoD facility. These organic facilities, shop equipment, support equipment, supplies, and spares are all owned by the government and all personnel are employed by the government. Reference AFMCMAN 20-102 *Maintenance Planning and Execution System*.

6.16.2. **Contract Depot Level Maintenance** - Depot level maintenance performed by a commercial organization under contract with Depot Management Activity Group (DMAG). Reference AFMCMAN 20-102 *Maintenance Planning and Execution System*.

6.16.3. **Public-Private Partnerships for Depot Level Maintenance** - Public-Private Partnerships are a logistics sustainment philosophy involving a cooperative agreement between DoD and private sector entities. The purpose of public-private partnerships is to leverage the optimal capabilities of both the public and private sectors in order to enhance depot support to the warfighter. The PM in collaboration with the Enterprise Repair Manager (ERM), candidate depots, lead and using commands, and other stakeholders will develop a depot maintenance strategy that addresses both the requirement to conduct organic repair and to pursue a public-private partnership approach where feasible. Reference *Public-Private Partnerships for Depot-Level Maintenance* and AFI 63-101/20-101.

**6.17. Acquire Full Supply Support Capability.** Includes management actions, procedures, and techniques necessary to determine requirements to acquire, catalog, receive, store, transfer, issue, and dispose of spares, repair parts, and supplies. In layman's terms, this means having the right spares, repair parts, and supplies available, in the right quantities, at the right place, at the right time, at the right price. Utilize the Supply Support Working Group (SSWG). The process includes provisioning for initial support, as well as acquiring, distributing, and replenishing inventories. "Full" refers to the attainment of the capability to effectively employ a weapon system, item of equipment, or system of approved specific characteristics, with the appropriate number, type, and mix of spares, repair parts and supplies necessary to operate, maintain, and support the system. Consider application of modeling, simulation and analysis tools Use readiness based sparing tools (reference DoDM 4140.01, Volumes 2, 3, and 7) for spares requirements determination to the greatest extent possible. If appropriate consider the impact of classified programs. Reference: AFMCMAN 20-106, *Provisioning*. Ensure hazardous materials authorizations are prepared and submitted to site/installation hazardous material management office. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#) and [2.9.1 Address](#)

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[Environment, Safety, and Occupational Health Checklist](#). (**Note:** For contractor supported systems ensure coverage of this task. Reference Appendix A, [4.65 Accomplish Spares Provisioning Conference Checklist](#)).

- 6.17.1. Execute Contract Requirements.
- 6.17.2. Monitor Contractor Spares Progress.
- 6.17.3. Monitor Contractor Delivery.
- 6.17.4. Receive Spares.
- 6.17.5. Monitor Spares Utilization.
- 6.17.6. Address Diminishing Manufacturing Sources and Material Shortages (DMSMS) Issues.
- 6.17.7. Respond to Deficiency Reports (DRs).

### **6.18. Reserved.**

**6.19. Acquire Full Training and Training Equipment Capability.** Training encompasses the policy, processes, procedures, techniques, training devices, and equipment used to train civilian and military personnel to acquire, operate and support a system. This includes individual and crew training, new equipment training, initial, formal, and on-the-job training. Though the greatest amount of training is accomplished just prior to the fielding of a system, it must be remembered in most programs, a large number of individuals must also be trained during system development to support the system test and evaluation program. “Full” refers to the attainment of the capability to effectively employ a weapon system, item of equipment, or system of approved specific characteristics, with the appropriate number, type, and mix of trained personnel necessary to operate, maintain, and support the system. (**Note:** For contractor supported systems ensure coverage of this task).

- 6.19.1. Execute Contract Requirements.
- 6.19.2. Monitor Contractor Training Material / Equipment Progress.
- 6.19.3. Monitor Contractor Delivery.
- 6.19.4. Receive Training Material / Equipment.

**6.20. Acquire Updated Technical Orders.** The TO Manager must ensure formal technical order update requirements are on contract (Technical Manual Contract Requirements (TMCR) Document) as a deliverable if required. The contractor must develop updates to the technical orders after all changes have been approved and incorporated IAW the TMCR. Reference Appendix A, [3.50.1 Manage TO Acquisition Program Checklist](#).

- 6.19.1. Execute Contract Requirements.
- 6.19.2. Monitor Contractor (Support Equipment, Depot and Remaining Field) Technical Orders / Manuals Progress.
- 6.19.3. Monitor Contractor Delivery.
- 6.19.4. Receive Technical Orders / Manuals.
- 6.19.5. Respond to Deficiencies.

**6.21. Ensure Active Relationships Are Established Between Maintenance and Supply.** Relationships amongst USAF organizational stakeholders (AFIMSC, AFSC, AFLCMC, DLA, and MAJCOMS) are critical to ensuring consistency of data usage. Data is used for planning, budgeting, maintenance, execution of the supply chain, depot operations, and



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MAJCOM support. Reference Appendix A, [6.10 Update Product Support Strategy for Sustainment in LCSP Checklist](#) and [6.18 Equipment Specialist Checklist](#).

**6.22. Deliver Full Supply Support Capability.** “Full” refers to the attainment of the capability to effectively employ a weapon system, item of equipment, or system of approved specific characteristics, with the appropriate number, type, and mix of spares, repair parts and supplies necessary to operate, maintain, and support the system. Ensure vendors deliver to DLA defense depots and Air Force installations in the prescribed packaging as required by the contract solicitation. Ensure hazardous materials authorizations are prepared and submitted to site/installation hazardous material management office.

**6.23. Reserved.**

**6.24. Deliver Training And Training Equipment Capability.** This refers to the attainment of the capability to effectively employ a weapon system, item of equipment, or system of approved specific characteristics, with the appropriate number, type, and mix of trained personnel necessary to operate, maintain, and support the system. Ensure vendors deliver to DLA defense depots and Air Force installations in the prescribed packaging as required by the contract solicitation.

**6.25. Deliver Updated Technical Orders.** Reference Appendix A, [3.50.1 Manage TO Acquisition Program Checklist](#).

**6.26. Continue to Conduct Site Activation and Fielding (SATAF), as required.** The SATAF is concerned with planning and activating each operational site and comprised of representatives from the using/operating command, the PM, item managers, support equipment specialists, AETC, and the contractor. The SATAF provides on-site assistance and surveillance to facilitate operational testing and training, and develops a logistics support capability to include site activation plans. The senior logistician is normally delegated the responsibility to coordinate support planning for site activation. The tasks and milestones of site activation management will be detailed in Site Activation Plans and the support planning document. Ensure that feedback is obtained from base level environmental staff to be used in updated planning. Reference Appendix A, [5.14 Site Activation Task Force \(SATAF\) Checklist](#) and [3.11 Define and Implement MILCON Requirements Checklist](#).

**6.27. Continue the Depot Maintenance Working Group (DMAWG).** The objective of the DMAWG is to ensure a required depot maintenance capability is set up in a timely and efficient manner to achieve government-controlled capabilities for the depot repair. The DMAWG is the forum for conducting depot source of repair planning and activation to ensure funding, contracting, and delivery of data is accomplished. If support concept is total Contractor Logistics Support (CLS), a DMAWG is not required; however a Contractor Depot Activation Plan is still required. If Depot activation stands up depot repair capability at another DoD Service ensure Depot Maintenance Inter-Service Support Agreement (DMISA) development is included in list of activation activities. See AFMCI 21-101 *Depot Maintenance Activation Planning (DMAP)* and Reference AFMAN 63-122 Depot Source of Repair Planning and Activation and Appendix A, [3.6 Establish DMAWG Team Checklist](#).

**6.28. Continue Periodic Product Support IPT Meetings.** The purpose is to coordinate and plan logistics management to ensure supportability of developed and fielded systems with all stakeholders (sometimes called a Product Support IPT). Logisticians should ensure they participate in other program reviews. (e.g., Program Management Reviews (PMR), Test Reviews, Configuration Reviews, System Requirements Review etc.).

**6.29. Update the Product Support Business Case Analysis (PS BC).** The PM/PSM shall perform a product support BCA to validate the product support strategy is cost effective, financially feasible, and optimizes system readiness. The product support BCA is required for ACAT I, IA, and II programs but is at the discretion of the MDA for ACAT III programs. The PM/PSM shall document the strategy decision and rationale in the LCSP. The PM/PSM shall maintain a complete history of BCAs over the course of the system life cycle to track decisions and understand how real-world operations cause program impacts. The PM/PSM revalidates the business case prior to any change in the product support strategy or every five years, whichever occurs first (per AFI 63-101/20-101). The Product Support BCA must follow DoD Product Support BCA Guidebook. For major weapon systems this can take 1-2 years to complete. The PSM/Logistician will be actively leading this process. Reference Appendix A, [3.4.1 Product Support \(PS\) Business Case Analysis \(BCA\)](#).

**6.30. Review and Update the Program Objective Memorandum (POM) and Budget Inputs for Supportability Requirements.** Specifically include funding for DMSMS programs and engineering projects. This should include inputs to Centralized Asset Management (CAM) / [Centralized Access for Data Exchange \(CAFDEx\)](#) requirements. Reference



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Appendix A, [3.28 Include Supportability Requirements in POM submission Checklist](#) and [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#).

**6.31. Analyze Data from the Follow-On Test and Evaluation (FOT&E) and Force Development Evaluation (FDE) to Assess Supportability.**

**6.32. Ensure the Initial Operational Capability (IOC) Supportability Assessments are completed.** IOC is usually defined as the first attainment of capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained and equipped personnel necessary to generate, maintain and support the system. These assessments should provide key opportunities to identify design interface (hardware, software, and human) issues that should be resolved to satisfy the required capabilities.

**6.33. Resolve Supportability Issues.** As supportability issues surface, the logistician must review and mitigate the issues to the benefit of the program. Consider application of modeling, simulation and analysis tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#). Utilize your DMSMS program as established. Reference Appendix A, [3.37.13 Develop a DMSMS Program Checklist](#).

**6.34. Ensure Production Shut Down.** Ensure all tasks are completed for production line shut down of the weapon system. Accountability and disposition of GFE, GFP, and United States Government assets are required (AFI 23-119). Assess technical data currency for potential update requirements. Ensure production line support equipment and resources that could have application at depots or field locations are evaluated for such use. Ensure the disposal plan has been reviewed for applicable item usage in the event the item is brought back into service. This will facilitate contract closeout once all monies are expended. Reference Appendix A, [6.31 Post Production Support Planning Checklist](#).

**6.35. Execute the approved workload realignment plan (transition support plan).** Program realignment, to include transfer of program management responsibilities, is the process by which Air Force systems and acquisition programs are formally realigned between geographically separate locations. Management authorities and responsibilities execute through the PEO regardless of program location. The PEO shall thoroughly coordinate the transition requirements, activities, and time frames associated with realignment. The overall objective of this process is to ensure a seamless and transparent (to the user) transition of the system or program (per AFI 63-101/20-101). The PM, PSM and Product Support Integrator (PSI) should collaborate on planning activities, including estimated milestones for management transfer. These planning activities should be included in the Life Cycle Sustainment Plan (LCSP) or Life Cycle Management Plan (LCMP) (as approved by the MDA) as early as possible to allow stakeholder resources (manpower and other infrastructure) lead time to be programmed and put in place in time to accommodate the transfer. Identify any supportability/logistics requirements for any follow-on (post-production) testing required. Ensure timely input of operational and maintenance funding requirements into Centralized Access for Data Exchange (CAFDEx). Reference Appendix A, [5.6 Program Realignment Checklist](#) and [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#).

**6.36. Manage Sustainment Business Activities.** The process of establishing, maintaining, and enforcing business processes (finance, contracting, supplier selection, metrics, partnership strategies) which translate to rules for conducting business and align with business strategy, goals, and objectives. Utilize the Logistics Requirements Determination Process (LRDP) to ensure utilization of Centralized Asset Management (CAM)/Centralized Access for Data Exchange (CAFDEx), FSIP, Life Cycle Systems Engineering (OSS&E, ASIP, and ENSIP). Reference AFI 63-101/20-101, AFMCI 63-1201 *Implementing OSS&E and Life Cycle Systems Engineering*, AFI 21-101 *Aircraft and Equipment Maintenance Management*. Reference Appendix A, [6.33 Manage Sustainment Business Activities Checklist](#).

6.36.1 Participate in the Deficiency Report (DR) Process. Reference Appendix A, [3.47.2 Provide Logistics Support During the DR Process Checklist](#).

6.36.2 Participate in the Configuration Control Board (CCB). See Supersede by AFI 63-101/20-101 Chapter 9 and MIL-HDBK-61A (SE) *Configuration Management Guidance*. Reference Appendix A, [3.47.3 Participate in the CCB Checklist](#).

**6.37. Manage Resources.** Managing, maintaining, and resourcing (financial, manpower/personnel, spares, support equipment, technical data, and metrics) which ensure product availability.

**6.38. Manage Information and Communication Activities.** The Air Force Policy on standardized Information Technology (IT) systems does not allow individual programs to develop unique IT systems. The logistician should participate in the identification of any IT systems required for supportability. Reference Appendix A, [6.35 Manage Information and Communication Activities Checklist](#).

**6.39. Participate in Risk Management.** A risk management approach for use in the acquisition of new systems, end-items, and equipment based upon four attributes: risk management planning, risk assessment, risk mitigation, and risk management control. When properly implemented, an effective risk management program facilitates identification of areas that require special attention and sets realistic, executable technical, schedule, and cost objectives. Risk Management is applicable to all phases and aspects of any acquisition or modernization program. The logistician needs to continue to participate on the risk management team to ensure identification of any risk relative to the product support element, systems engineering and life cycle support costs, schedule and technical performance. The appropriate reference is AFI 63-101/20-101, Chapter 4, para 4.6.6 PS Risk Management. Product Support risks need to be addressed and documented within each CCTD. These risk assessments must address adverse impacts on warfighters capabilities to operate, maintain and support the system in an effective and safe manner. Consideration must also be given to reclamation, demilitarization and disposal. Reference DAFPM 63-128 *Integrated Life Cycle Management* Chapter 12 and Appendix A, [2.22 Participate in Integrated Baseline Review \(IBR\) Checklist](#).

6.39.1 Perform Continuous Supply Chain Risk Management. Supply Chain Risk Management (SCRM) is a discipline for managing risk to identify, assess, mitigate and monitor actual or potential threats, vulnerabilities, and disruptions within the DoD's supply chain from beginning to end to ensure mission effectiveness; i.e., SCRM is initiated as soon as a program is created or a lead is assigned responsibility to manage a system or program of record, and ends as soon as the program stands down or retires. Successful SCRM maintains the integrity of products, services, people, and technologies; and ensures the undisrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. SCRM applies to all organizations and programs, including Foreign Military Sales (FMS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Item (NDI) programs.

Per AFI 63-101/20-101, *Integrated Life Cycle Management*, the PM has oversight of SCRM. Although the PM has oversight, risks can be associated with any aspect of the supply chain, and it is essential to understand that all functional areas of the program can be exposed to supply chain risk. The logistician must participate in SCRM activities (IPTs, supply chain assessments, program reviews, etc.) to ensure any risk relative to product support elements are supported and addressed in acquisition documents.

Programs should assess and mitigate risks of all kinds as a routine part of program management and should identify risks during program reviews. Potential supply chain risks include, but are not limited to; foreign influence, political and regulatory, economic, environmental, product quality and design, manufacturing and supply, transportation and distribution, financial, compliance, technology and cybersecurity, and human capital. SCRM should also be addressed to track foreign ownership of sub-tier vendors, component obsolescence, and counterfeit or suspect counterfeit parts, major/critical nonconformance, and their vulnerabilities with special emphasis on Critical Components (CC), Mission Critical Functions (MCF), and Critical Program Information (CPI). Program should contact the AFLCMC SCRM Network, [AFLCMCLG-LZ.SCRM.Network@us.af.mil](mailto:AFLCMCLG-LZ.SCRM.Network@us.af.mil), any time real/potential supply chain risks are identified; to include, counterfeit detection and DMSMS.

The PM/PSM/logistician, with support from the other functional stakeholders, manages SCRM contract requirements, ensures SCRM is addressed at program reviews, conducts supply chain assessments, addresses SCRM in acquisition documents, and continuously monitors the supply chain. SCRM is required to be documented in the Program Protection Plan (section 5.3.4 or appendix G) but should also be considered in, but not limited to, the Acquisition Strategy, and Life Cycle Sustainment Plan (LCSP). Utilize the Product Support Contract Requirements Tool (PSCRT) for specific SCRM tasks and recommended contract language.

At a minimum, reference the following policy/guidance: DoDI 5000.83, *Technology and Program Protection to Maintain Technological Advantage*, DoDI 5000.85, *Major Capability Acquisition*, DoDI 5200.44, *Protection of Mission Critical Functions to Achieve Trusted Systems and Networks*, DoDM 4140.01 vol 1, *DoD Supply Chain Materiel Management Procedures*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFPAM 63-113, *Program Protection Planning for Life Cycle Management*, and *Defense Acquisition Guidebook, Chapter 9*,

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*Program Protection.* Detailed information on policy, processes, tools, and other SCRM support is available on the [AFLCMC SCRM SharePoint](#).

6.39.2. Provide Information as Required to the Configuration Steering Board (CSB) for ACAT I and IA Programs. See DoDI 5000.02.

**6.40. Perform Strategic Program Planning.** During the O&S phase, the PM must plan for technology insertion programs, modification of subsystems and the weapon system, changes in flying hours, extension of useful life, and changes to support concepts. This planning is an iterative process and must be reviewed and updated as needed. The program manager will be responsible for planning the program with inputs from functional experts to include the POM and program/services management for sustaining a system or subsystem. Reference Appendix A, [3.28 Include Supportability Requirements in POM submission Checklist](#).

**6.41. Perform Intelligence Integration During Operation and Support Phase.** Coordinate with the intelligence office to obtain threat assessments as necessary to ensure the system remains mission effective and survivable throughout its life cycle. Reference Appendix A, [1.1 Accomplish Intelligence Integration throughout the Life Cycle Checklist](#) and [2.13.1 Human Systems Integration \(HSI\) Checklist](#) for unique HSI overlaps that may influence the intelligence integration.

**6.42. Conduct Product Support reviews.** For Sustainment Program Reviews, ensure the Sustainment Quad Charts in the PEO Portfolio Review are validated. Other potential reviews: Product Improvement Working Group (PIWG), Corrosion Prevention Advisory Board (CPAB), Software Working Group (SWG), Reliability Centered Maintenance (RCM), System Safety and Material Safety Task Group (MSTG), Acquisition Sustainment Review (ASR) and Cockpit Working Group (CWG). See DoD Product Support Managers (PSM) Guidebook, Fig 5, page 15 for Sustainment Quad Chart and usage Instructions.

6.41.1 Conduct Periodic Reviews/validations of depot source of repair (DSOR) decisions every 5 years or as required for fielded systems. The DSOR Periodic Review (PR)/validation process is used to reassess prior DSOR decisions: Critical Design Review (CDR) + 90 days, every 5 years, at FRP, at Milestone C, or when major changes occur that could potentially affect previous DSOR decisions (e.g., major changes in the length of a program's life cycle, major modifications, significant increases in cost ( $\geq 20\%$ ), quantities of fielded systems ( $\geq 20\%$ ), etc.), or per the request of any major stakeholder. For fielded systems, the DSOR Periodic Review process will be initiated as soon as the change in posture is considered. During the course of the PR, it may be determined that another DSOR is required to better posture the DoD to support a program. (**NOTE:** PRs will not be required every 5 years for fully-activated organic workload, or contract workload that is well into the O&S phase. AFMC/A4FD may direct a PR at any time if alerted to a need to reassess the workload by any major stakeholder, i.e., Candidate Depot or Program Office).

**6.43. Reserved.**

**6.44. Perform Data Management.** Data management is the process of applying policies, procedures, and tools for the identification and control of data requirements, for assuring the adequacy of data and for facilitating the timely, economical acquisition and availability of data, including digital delivery or access. In simple terms, data management is the process for the acquisition of data (access or delivery) through contractual vehicles, so that data is available for use by authorized users. The type of data to which this applies includes research and development, acquisition, and logistics/technical order (TO) information. Data managers plan for acquisition and management of defense system data during each phase of the system life cycle. Data management planning supports the defense system program acquisition, logistics support and integrated product/process team strategies; and the information processing infrastructure of the program office, supporting organizations, and field operations (i.e., data users). The logistician needs to ensure logistics data requirements including data requirements for support equipment are identified and incorporated into the appropriate contractual vehicles.

6.44.1. Manage Technical Order (TO) Sustainment. The Flight Manual Manager for a weapons system will conduct a Flight Manual Review Conference (FMRC) at least annually unless the using commands agree to delay IAW AFI 11-215 *USAF Flight Manuals Program (FMP)*. Technical Order sustainment conferences are addressed by TO 00-5-3, *AF Technical Order Life Cycle Management*. Perform post-publication reviews to evaluate and improve formal TOs after delivery to the using command. Reference Appendix A, [6.41.1 Manage TO Sustainment Checklist](#).

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**6.45. Implement Sustainment Systems Engineering.** Focusing on the operational requirements of the system, both peacetime and wartime scenarios, create a plan to use systems engineering resources to address the operational requirements. Reference Appendix A, [6.11 Sustainment Systems Engineering Checklist](#) and [2.13.1 Human Systems Integration \(HSI\) Checklist](#).

**6.46. Ensure Depot Activation Accomplished (not later than 4 Years after Initial Operating Capability (IOC)).** If Organic Depot repair is performed by another DoD Service ensure establishment of Depot Maintenance Inter-Service Support Agreement (DMISA) as Depot repair capability is activated.

**6.47. Determine Supply Requirements.** Using the appropriate system, the logistician must determine the proper mix of replenishment spare buy and repair requirements to support the users. Consider application of modeling, simulation and analysis tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

**6.48. Coordinate Supply Requirements for Defense Logistics Agency (DLA) Managed Items.** Using the appropriate systems, DLA responds to requirements generated from Air Force established supply levels (SBSS, DO35, Customer Oriented Leveling Technique (COLT), future AF enterprise supply chain capability) as well as coordinated increases and decreases which are forecasted on a monthly basis for up to 5 years. These processes are addressed in *AFI 23-101, Air Force Materiel Management* and *AFMCI 23-105, Planning for DLA-Managed Consumables (PDMC)*, and executed by 448 SCMW.

**6.49. Obtain and Renew Supply Sources.** Maintenance and supply sources must continuously be reviewed and updated as the program evolves during the O&S phase. Consider application of modeling, simulation and analysis tools. Reference Appendix A, [1.6.1 Consider application of modeling, simulation and analysis tools Checklist](#).

**6.50. Reserved.**

**6.51. Manage Software.** The support (logistics) to manage computer resources can include funding configuration control support to the appropriate Air Logistics Complexes Software Control Center (SCC), ensuring Software/System Integration Labs (SILs) with the appropriate weapon system assets are supported, ensuring the appropriate level of technical expertise and plans for developing new expertise is established, and ensuring appropriate net-centric integration between the weapon system and the Government Network Operations Center (GNOC) or local Communications Squadron. A mix of contractor and organic capability is very healthy for a weapon system as long as interfaces, schedules, and expectations between contractors are clearly defined. The logistician should also ensure planning for technology refresh and software/system updates make sense when comparing them to industry standards and maintaining levels of expertise.

**6.52. Manage Supply / Support Equipment (SE) Sustainment.** Sustainment materiel consists of replenishment spares (both consumable items and repairable spares), item repair, and other related services. It excludes item and system acquisition modification, research and development, test and evaluation, and system acquisitions. This activity is usually applicable to sustainment Purchase Requests (PRs) generated at Air Logistics Complexes, irrespective of where the contracting action will take place. Ideally, purchase action for sustainment materiel is initiated based on anticipated need rather than an immediate requirement. AFMC requirements computation systems consider PR and contracting lead times to produce buy notices in theoretically sufficient time to meet the need date. Subject to funds availability, PR initiators and supporting specialists will initiate and process PRs in a timely manner such that the customer's need date may be met. In order to minimize the inventory levels computed by the requirements systems, all involved persons will continually strive to minimize the total acquisition lead-time for all buys. Contact the Defense Logistics Agency (DLA) for DLA managed items. Ensure hazardous materials authorizations are prepared and submitted to site/installation hazardous material management office. Reference Appendix A, [3.37.3 Support Equipment Life Cycle Management Checklist](#), [3.37.13 Develop a DMSMS Program Checklist](#), and [3.37.14 Develop Supply Support Strategy Checklist](#).

**6.53. Establish Return Process.** The process initiated by the user of returned material deemed defective/unserviceable. This includes any applicable warranty process, contractor procedures, Deficiency Report (DR) exhibits, unserviceable repairable, life limited parts, condemnations, and disposal actions. Reference Appendix A, [3.47.2 Provide Logistics Support During the DR Process Checklist](#), [6.50 Management of Warranties for Contractor Logistics Support \(CLS\) Commercial Contracts](#) and [6.67 Disposal Checklist](#).



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**6.54. Disposition / Reutilization of Parts Asset (Piece Parts).** Once items fail completely, or are modified out of use, they need to be disposed of. If the item is cataloged, the determination of what is required to make the item safe (nonhazardous), and how to demilitarize is determined, and documented. If the items are not cataloged, it is the responsibility of the program office to ensure determination is made on what must be declassified, made safe, and demilitarized per Air Force and DoD directives. The owning organization must declassify and make the item safe before it can be turned over to DLA Disposition Services. The program office must program for the manpower to declassify (if appropriate) and make the item safe (include the cost of work and cost for disposal of hazardous material). DLA Disposition Services can demilitarize some assets, but the developer of the item must provide demilitarization instructions. Reference Appendix A, [6.67 Disposal Checklist](#).

**6.55. Ensure Maintenance Check Flight Activities are performed.** Once depot maintenance repairs have been completed, a maintenance check flight is required to ensure aircraft is operational. The maintenance operations center and quality assurance are responsible for scheduling the functional check flight per TO 1-1-300, Maintenance Operational Checks and Check Flights. Quality assurance will brief the crew on the purpose, previous maintenance problems and discrepancies, and documentation requirements.

**6.56. Execute Maintenance / Repair.** This is the process of performing maintenance and repair, organic and contractor, or minor modifications/upgrades to provide operational end items. Examples include back-shop work, local organic manufacturing, Programmed Depot Maintenance, maintenance, software upgrades/updates, small project/modification (non ACAT) upgrades, Technical Data, tests/verify, and kit proofing.

**6.57. Manage Organic Repair.** If the program is designated to be maintained by organic repair, ensure the capabilities are in place to support the requirements generating from the warfighter. End item flow days, material, and cost must be negotiated for each end item. The monitoring of end item production must be maintained to ensure support is being maintained at levels sufficient to support the warfighters.

**6.58. Manage Contract Repair.** If the program is designated to be maintained by contract repair, ensure the contract actions are in place to support the requirements generating from the warfighter. Contract end item flow days, material, and cost must be negotiated for each end item on the contract. End item production monitoring must be maintained to ensure support is being maintained at levels sufficient to support the users.

**6.59. Develop a Modification Program.** An alteration to a Configuration Item (CI) applicable to aircraft, missiles, support equipment, ground stations software (embedded) trainers, etc. As a minimum, the alteration changes the form, fit, function or interface of the item. There are two types of modifications: temporary and permanent, which can be made to Air Force weapon systems. A weapon system is defined as a combination of elements that function together to produce the capabilities required to fulfill a mission need, including hardware, equipment, software, users, maintainers, support personnel, and all Product Support elements, but excluding construction or other improvements to real property. Ensure a PSM is assigned for modifications meeting ACAT I and II levels. Ensure Intelligence is consulted regularly for information on emerging threats that might drive a modification. Ensure that the Systems Engineering Plan and System Specification are updated for the modification. The logistician must participate through Design Interface in the Systems Engineering process as applied to the modification. Ensure energy efficiency and alternate fuels considerations are addressed. Logisticians must address the impact of modifications to all Product Support elements as stated in DoD Integrated Product Support (IPS) Elements Guidebook. Formal major modifications should reiterate the acquisition process and return to the appropriate acquisition phase in the PSTK. Reference Appendix A, [3.10.1 Determine Manpower and Personnel Requirements Checklist](#) and [6.56 Modification Management Checklist](#).

6.59.1 MANAGE Time Compliance Technical Order (TCTO) Process. Reference Appendix A, [6.56.1 Manage TCTO Process Checklist](#).

**6.60. Acquire Modification Source.** Multiple-year contracting techniques should be used to the maximum extent possible. Multiple-year techniques permit the continuation of a contractual relationship beyond the initial year. They include, but are not limited to, multiple-year contracts and single-year contracts with priced options for follow-on years. Contract should be structured so award or option exercise fits into an appropriate schedule, taking into account whether the key awards should be tied to key milestones (in order to have leverage with the contractor), mod/kit installation schedule, prime and subcontractor's rate production capability, etc.



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**6.61. Design, Integrate, and Test the Modification.** (Note: For major modifications, return to the beginning of this guide and perform the necessary acquisition and sustainment processes).

**6.62. Perform Trial Install/Kit Proof.** Kit proofing is accomplished to verify form, fit, and function of the kit hardware and software, validate man-hour requirements, and verify Time Compliance Technical Order (TCTO) and Technical Order (TO) changes. The kit proof kit is the first production kit. Trial installation is the first install of a kit into a weapon system to validate performance of the modification. Kit proofing and modification installation will occur throughout the lifecycle of the fielded systems.

**6.63. Perform Modification System Level Test.** System level testing must be conducted to determine whether or not the installation of the modification produces negative impacts on the operation of the weapon system or other subsystems on board the weapon system.

**6.64. Initiate Modification Kit Production and Installation.** After successful Kit Proofing/Trial Installation, the contractor should be notified to begin full rate production of the kits required to complete the modification. When the kits are delivered, kit installation should be established in accordance with the install schedules developed.

**6.65. Update the Weapon System Support Program (WSSP) Database.** Reference Appendix A, [4.11 WSSP Checklist](#).

**6.66. Verify Decision on System Disposition.** Using information such as useful service life, operational tempo, etc., the logistician will work with the MAJCOMs to develop the disposition strategy for all systems.

**6.67. Verify Decision on Unit Disposition (Aircraft Tail #).** The logistician will work with the unit, the MAJCOM AVDO (Aerospace Vehicle Distribution Officer), and AF/A8, Strategic Plans & Programs, to identify by tail number all aircraft being removed from the inventory and will annotate those tail numbers in the Migration Plan.

**6.68. Determine Drawdown Strategy for Support Structure.** As aircraft are scheduled for disposal, the PM must work with the Lead MAJCOM on disposition of all weapon system support infrastructure to include spares, technical orders, training equipment, support equipment, specialized containers, facilities, supply parts, manpower and personnel, environmental cleanup etc. Care must be taken to ensure all designated assets and infrastructure are removed from bases. Coordinate with the Defense Logistics Agency (DLA) and/or AFLCMC PHS&T Office on any packaging issues.

**6.69. Update the Migration Plan (Annual).** The program manager will develop/revise a migration plan for each Mission Design Series (MDS) on an annual basis and document it in a formal Migration Plan at the end of each fiscal year. Migration planning is a dynamic process that must incorporate numerous factors that impact weapon system sustainment, contingency planning, FMS sales, etc. The Migration Plan itself is a *living document* that reflects the program manager's changing assessment of MDS/block changes, funding levels, and strategies to use storage aircraft to maximize support for the operational fleet. The annual review should include an evaluation of aircraft programmed for induction into AMARG and those in inviolate, spares support, and excess AMARG storage categories. The overall goal will be placing aircraft into programmed reclamation at the earliest possible time in order to offset spare parts buy requirements. Aircraft can be placed into programmed reclamation at the time of induction in order to maximize harvesting of serviceable parts common to operational aircraft. Identification of the specific aircraft serial numbers is required in order to affect current aircraft storage code changes. Aircraft status code changes can occur at any time a need dictates a change in status code reporting. Ensure budget requirements to execute the strategy are input into [Centralized Access for Data Exchange \(CAFDEx\)](#). Reference Appendix A [5.8.1 Utilize Centralized Asset Management \(CAM\) / Centralized Access for Data Exchange \(CAFDEx\)](#). This includes long term facilities storage requirements. Reference Logistics Requirements Determination Process (LRDP).

**6.70. Execute the Disposition Strategy.** Coordinate with DLA on maintenance and disposal actions. Reference Appendix A, [6.67 Disposal Checklist](#).

**6.71. Review Weapon System-Supportability Analysis (WS-SA) Process.** The WS-SA process is an iterative process used to influence the design of the Program and achieve affordable operational readiness using a wide range of inputs. These inputs include FMECA, RCM, LORA, and MTA developed as part of the Systems Engineering process. The goals of WS-SA or PSA (as defined in MIL-HDBK 502A) are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing

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an effective and efficient Product Support Package. The WS-SA IPG is based on Systems Engineering reviews that take place during the acquisition phases of MSA, TMRR, EMD, P&D, and O&S Reviews. The information contained within the IPG guidance documentation is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. See the [WS-SA Guide](#), Reference Appendix D.

**6.72. Select Support Equipment via the Support Equipment Recommendation Data (SERD) Process.** In order to comply with AFI63-101/20-101 requirements for selecting support equipment that is technically sufficient, minimizes life cycle costs, and maximizes the selection of common support equipment, programs must obtain and process SERD Reports via the SERD Process. These selections most frequently happen during the EMD phase, but could happen at any point during the life cycle once support equipment requirements (typically driven by maintenance tasks) are understood. The SERD Process will result in the selection of support equipment and automatic test systems that will be used to support a system (to include depot support equipment). Programs follow the [AFLCMC Standard Process to Execute SERD Process](#), Appendix D, to ensure the SERD is reviewed by applicable stakeholders and the best support equipment selection is made for the system.

**6.73. Execute Support Equipment Activation to field SERD-approved support equipment.** Once the SERD Process has been completed and specific support equipment solutions have been selected for use with a system, the selected support equipment needs to be properly fielded in a supportable way. There are many potential tasks that need to be accomplished to ‘activate’ the newly selected support equipment. The range of tasks that are required will vary depending on what SE solution was approved via the SERD Process (e.g., common SE vs. peculiar SE, new development SE vs. commercial SE). For a list of tasks to consider and guidance on executing each one, see the [Support Equipment Activation Worksheet](#), Appendix D.

**6.74. Conduct Support Equipment Life Cycle Management.** Once support equipment has been selected and fielded, the program office (or appropriate Product Group for common support equipment) is responsible for its life cycle management as described in [3.37.3 Support Equipment Life Cycle Management Checklist](#).

**Appendix A - Checklists**

- 1.2 Review Initial Capabilities Document (ICD) for supportability
- 1.4 Ensure Cost Estimate includes all Support Costs
- 1.6.1 Consider Application of Modeling, Simulation and Analysis (MS&A) Tools
- 1.7 Analysis of Alternatives (AoA) Plan
- 1.14 Develop Technical Maturation Risk Reduction to Include Product Support
- 2.3 Define Supportability Objectives
- 2.9.1 Address Environment, Safety, and Occupational Health (ESOH) risk management considerations
- 2.10 Product Support Capabilities in Preferred System Concept
- 2.13 Participate in Systems Engineering Plan (SEP) Development
- 2.13.1 Address Human Systems Integration (HSI)
- 2.15 Develop Initial Product Support Strategy in Life Cycle Sustainment Plan (LCSP)
- 2.16 Ensure Supportability Included in Program Management/Services Management Agreements (PMA/SMAs)
- 2.17 Include Supportability in the Source Selection Plan (SSP)
- 2.20 Include Supportability Requirements in Request for Proposal (RFP)
- 2.21.4 Define Contractor Supported Weapon System (CSWS) Data Requirements
- 2.22 Integrated Baseline Review (IBR)
- 2.23 Include Product Support Activities in Integrated Master Plan / Integrated Master Schedule (IMP/IMS)
- 2.24.2 Initiate the Depot Source of Repair (DSOR) Process
- 2.26 Prepare Documentation for Milestone A
- 2.35 Participate in SRR (Demonstrate Concepts)
- 2.49 Baseline Product Support Strategy in LCSP
- 3.2.1 Establish a Technical Order Acquisition Program
- 3.4.1 Product Support (PS) Business Case Analysis (BCA)
- 3.6 Establish Depot Maintenance Activation Working Group (DMAWG) Team
- 3.10 Facilities Concept
- 3.10.1 Determining Manpower and Personnel Requirements
- 3.10.2 Address National Environmental Policy Act (NEPA) requirements
- 3.11 Define and Implement Military Construction (MILCON) and Sustainment, Restoration and Modernization (SRM) Requirements
- 3.12 Participate in Critical Design Review (CDR)
- 3.13 Prepare Documentation for Post-Critical Design Review (CDR) Assessment
- 3.17 Participate in Test Readiness Review (TRR)
- 3.18 Refine Supportability Objectives
- 3.22 Review Capabilities Development Document (CDD) for supportability
- 3.23 Develop Supportability Key Performance Parameters (KPPs)
- 3.24.1 Design Interface for Life Cycle Logistics
- 3.25 Include Supportability Requirements in CARD, POE, CCA, ICA, Affordability Assessments
- 3.27 Include Supportability in the Acquisition Program Baseline (APB)
- 3.28 Include Supportability Requirements in Program Objectives Memorandum (POM) Submission
- 3.29 Refine Product Support Strategy in LCSP
- 3.30 Review Capability Production Document (CPD) for supportability
- 3.32 Participate in the Functional Configuration Audit (FCA) and monitor corrective actions for supportability performance requirements
- 3.33 Participate in System Verification Review (SVR) and Program Readiness Review (PRR)
- 3.37 Packaging, Handling, Storage and Transportation (PHS&T)
- 3.37.1 Develop and Acquire Supportability Data
- 3.37.2 Address Automated Test Systems (ATS) Acquisition
- 3.37.3 Support Equipment Life Cycle Management
- 3.37.4 Calibration Support for New Acquisitions
- 3.37.13 Develop a Diminishing Manufacturing Sources and Material Shortages (DMSMS) Program
- 3.37.14 Develop Supply Support Strategy
- 3.37.15 Contract Data Requirements List (CDRL)
- 3.47.1 Accomplish Support Equipment (SE) Guidance Conference
- 3.47.2 Provide Logistics Support During the Deficiency Reporting (DR) Process

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- 3.47.3 Participate in the Configuration Control Boards (CCB)
- 3.47.4 Accomplish Provisioning Guidance Conference
- 3.50 Evaluate Contractor Delivered Data (Including COTS and CDRLs)
- 3.50.1 Manage Technical Order Acquisition Program
- 3.50.4 Establish and Manage Training Systems
- 3.51 Identify & Plan Supportability Requirements for the TEMP
- 3.54 Participate in System Requirements Review (SRR) (System Specification)
- 3.58 Participate in System Functional Review (SFR)
- 3.59 Participate in Preliminary Design Review (PDR)
- 3.62 Prepare Documentation for Milestone B
- 4.11 DLA Weapon System Support Program (WSSP)
- 4.64 Prepare Documentation for Milestone C
- 4.65 Accomplish Spares Provisioning Conference
- 5.6 Workload Realignment
- 5.8.1 Utilize Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx)
- 5.14 Participate in Site Activation Task Force (SATAF)
- 5.27 Participate in Operational Test Readiness Review (OTRR)
- 5.31 Participate in Physical Configuration Audit (PCA)
- 5.32 Update Product Support Strategy in the Life Cycle Sustainment Plan (LCSP)
- 5.42 Prepare Documentation for Full Rate Production (FRP) Decision
- 5.42.1 Participate in Foreign Military Sales (FMS) Activities
- 6.10 Update Product Support Strategy for Sustainment in Life Cycle Sustainment Plan (LCSP)
- 6.11 Sustainment Systems Engineering
- 6.12 Execute Material Support for Sustainment Management – Defense Logistics Agency (DLA) Interface
- 6.18 Equipment Specialist
- 6.31 Post Production Support Planning
- 6.33 Manage Sustainment Business Activities
- 6.35 Manage Information and Communication Activities
- 6.41.1 Manage Technical Order (TO) Sustainment
- 6.50 Management of Warranties for Contractor Logistics Support (CLS) Commercial Contracts
- 6.56 Modification Management (AF Form 1067)
- 6.56.1 Manage Time Compliance Technical Order (TCTO) Process
- 6.67 Disposing of Weapon System, Major end items and associated components

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
1.2	Review Initial Capability Document (ICD) for supportability	Capabilities Based Analysis (CBA) Supportability Objectives Capabilities Review and Risk Assessment (CRRRA) JCIDS DOTMLPF analysis Initial Capabilities Document (ICD) if available	
<p>The ICD defines the capability gap in terms of the functional area, the relevant range of military operations, desired effects, and time. The ICD supports the concept decision and Milestone A. The ICD describes capability gaps that exist in joint war fighting functions. It establishes linkages between key characteristics and capabilities identified thru the Functional Area Analysis. Review should include all 12 Product Support elements.                      Note: An ICD Stage I (Air Force only) consists of paragraphs 1-5.</p>			
CHECKLIST SUBTASKS:			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Participate in the initial development, review and update of the entire ICD for supportability and usability inputs since these inputs are incorporated throughout. Reference the AFMC/A4 ICD Review Checklist.</li> <li>2. Review data used to support initial JCIDS analysis</li> <li>3. Understand the operational and threat environment in which capability is exercised and manner in which the capability will be employed. (For Intelligence Reference Appendix A, Checklist 1.1).</li> <li>4. Analyze operational capabilities and environmental constraints. (For Intelligence Reference Appendix A, Checklist 1.1).</li> <li>5. Review concept performance definition and verification objectives to include constraints</li> <li>6. Need to ensure supportability analysis determines cost effective support over system life cycle</li> <li>7. Ensure requirements include Technical Orders and other Technical Data, Support Equipment, Packaging, Handling, Storage and Transportation; RAM, Cost; ESOH, Production, interoperability and maintainability concepts for inclusion into specifications.</li> <li>8. Ensure HSI implications, constraints and issues are addressed and included in the ICD.</li> <li>9. Ensure DOTMLPF analysis includes logistics considerations. If these are not included ensure analysis is performed.                         <ol style="list-style-type: none"> <li>a. Evaluate existing facilities installation / capabilities for application.</li> <li>b. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded.</li> </ol> </li> </ol>	<p><a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS)  <a href="#">AFI 10-601</a>  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards  <a href="#">DoDI 5000.81</a> Urgent Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">DoD Product Support BCA Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a>  <a href="#">AFMC/A4 ICD Review Checklist</a>  <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a>  <a href="#">DoD Environment, Safety, and Occupational Health Network and Information Exchange (DENIX)</a>  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a></p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p>	



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	<b>Sample Documents:</b> <a href="#">ICD</a> <a href="#">AOA Study Plan</a>	
<b>EXIT CRITERIA:</b>		
Analysis of Alternatives guidance Updated ICD Technical Maturation Risk Reduction (TMRR) Clinger-Cohen Certification for Major Automated Information Systems (MAIS) Capability Roadmap Initial Technology Review Preferred System concept Supportability Objectives Test and Evaluation Master Plan Strategy System Engineering Plan		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
1.4	Ensure Cost Estimate includes all Support Costs	Program Established Acquisition Decision Memorandum (ADM)	
<b>DESCRIPTION:</b>			
<p>Cost estimates cover the entire life cycle of a system and need to adequately address all of the product support elements, including disposal, to ensure the total life cycle cost is understood and used for management decisions. The logistician needs to make sure all costs for acquiring; fielding, sustaining, and disposal are included. Major categories of cost are Infrastructure, Support Equipment, Technical Data, Supply Support, Manpower, Personnel, Training and Training Equipment, Data, Depot Activation costs (if organic capability to be established), any Interim Contractor Support or Contractor Logistics Support costs to include Field Service representatives / maintenance activities / inventory management, sustaining engineering costs, depot maintenance, and organizational/intermediate level maintenance.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Engage as a team member on the Cost Estimating Team (FM is normally OPR for this task) and engage as a member on the program Integrated Risk Assessment (IRA) Team.</li> <li>2. Ensure all 12 Product Support elements are addressed to include Depot Maintenance, O&amp;I Maintenance, testing costs, transportation costs including SDT), DMSMS, demilitarization and disposal, planned modifications / upgrades, Intelligence, and integration costs if applicable.</li> <li>3. Specifically include facilities / infrastructure requirements</li> <li>4. Coordinate technical data such as RAM with Engineering. Ref 1.03.1</li> <li>5. Ensure all identified costs above are used for applicable program tasks such as ECPs/CCPs, trade studies, SDT budgeting, and new work packages.</li> <li>6. Participate in yearly updates of the Program Office Estimate and IRA activities to reflect any changes in the system data that would reflect in costs changes. Ensure Intelligence requirements are updated yearly.</li> <li>7. Ensure HSI implications, constraints and issues are addressed and included.</li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p><a href="#">DoD LA Guidebook</a> The first part of the document explains the Independent Logistics Assessment (ILA) process.</p> <p><a href="#">DAFPAM 63-128 Integrated Life Cycle Management</a></p> <p><a href="#">AFMC Guide to the Defense Depot Maintenance Council Cost Comparability Handbook</a></p> <p><a href="#">AFPD 23-1</a> Materiel Management</p> <p><a href="#">DoDI 4140.01</a> DoD Supply Chain Materiel Management Policy</p> <p><a href="#">DoDI 4160.28</a> DoD Demilitarization (DEMIL) Program</p> <p><a href="#">DoDM 4160.28 Vol. 1</a> Defense Demilitarization: Program Admin</p> <p><a href="#">DoDM 4160.28 Vol 2</a> Defense Demilitarization: DEMIL Coding</p> <p><a href="#">DoDM 4160.28 Vol 3</a> Defense Demilitarization: Procedural Guidance</p> <p><a href="#">DoD DEMIL Web Page</a></p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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	<a href="#">DoD Environment, Safety, and Occupational Health Network and Information Exchange (DENIX)</a> <a href="#">Preservation and Storage of Tooling for MDAPs</a> <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">HSI Handbook Para 3</a> <a href="#">DoD Product Support BCA Guidebook</a> <a href="#">DoD Operating and Support Cost-Estimating Guide (dated Feb 2016)</a> <b>Sample Documents:</b> <a href="#">Risk Management Plan</a>	
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**EXIT CRITERIA:**

Approved Integrated Risk Assessment, POE or other cost estimate as described in AFI 63-101/20-101 Integrated Life Cycle Management  
 Documentation of the source data for the POE product support elements

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
1.6.1	Consider Application of Modeling, Simulation and Analysis (MS&A) Tools	Initial Technical Review (ITR) Alternative System Review (ASR) System Requirements Review (SRR) System Functional Review (SFR) Preliminary Design Review (PDR) Critical Design Review (CDR) Post PDR Assessment Test Readiness Review (TRR) Operational Test Readiness Review (OTRR) System Verification Review (SVR) Production Readiness Review (PRR) Full Rate Production/Deployment Review (FRPDR)

**DESCRIPTION:**

Each program is required to develop a Modeling and Simulation (M&S) strategy (unless it receives a waiver) to be included in their Acquisition Strategy which illustrates how the use of models and simulations will benefit the program. The strategy is framed around development of a Distributed Product Description (DPD) in an integrated manner across three dimensions:

1. The M&S hierarchy of campaign, mission, engagement, and engineering models
2. The contextual domain of models including requirements definition, design, cost, performance, military worth, sustainability, Test and Evaluation (T&E), and
3. The life-cycle of the system from early requirements planning stages through acquisition, evaluation, fielding, sustainment, and disposal.

Additional types of analyses include: operational combat effectiveness, survivability, virtual, vulnerability, supportability, IOT&E, and live fire test and evaluation (LFT&E). These types of analyses cover the entire life cycle of a system and need to adequately address all of the product support elements. Modeling and Simulation should include the human. MS&A can assist the logistician in accomplishing their primary goals and objectives of:

1. Influence product design for affordable system operational effectiveness
2. Design and develop the support system utilizing Performance Based Logistics
3. Acquire and concurrently deploy the supportable system
4. Maintain/improve readiness, improve affordability, and minimize logistics footprint.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
The logistician should be prepared to assist the PM in the following type tasks: 1. Identify the Key Performance Parameters (KPPs) and other measures that indicate system effectiveness and system availability a. System Availability includes Reliability, Maintainability and Supportability (RMS). Inherent within these, usability and accessibility of the equipment and software should be considered. b. Product Support Package (includes requirements for the 12 product support elements: Supply Support, Maintenance Planning and Management, Support Equipment/Automatic Test Systems, Tech Data Management / Technical Orders, Manpower and Personnel, Training, Facilities, PHS&T, Design Interface, IT Systems Continuous Support, Sustaining/Systems Engineering and Protection of Critical Program Information and Anti-Tamper Provisions)	<a href="#">DoDD 5000.59</a> <a href="#">DoD Acquisition Modeling and Simulation Master Plan AFPD 16-10</a> Modeling and Simulation, Attachment 3 - Modeling and Simulation Thrusts <a href="#">AFI 16-1001</a> Verification, Validation and Accreditation <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">AFI 16-1003</a> Air Force Standard Analysis Tool Kit (AFSAT) <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification	All

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<p>c. Logistics assessments for monthly, quarterly, annual reports (MAR, DAES, SAR)</p> <ol style="list-style-type: none"> <li>2. Identify the available models and simulations for use and reuse from the Air Force Standard Analysis Tool Kit (AFSAT) (AFI 16-1003)</li> <li>3. Advocate the use of M&amp;S to address HSI considerations in alternative solutions (particularly valuable in addressing manpower impacts)</li> <li>4. Ensure M&amp;S tools used or developed have been approved through the VV&amp;A process (AFI 16-1001)</li> <li>5. Provide support to develop and execute program M&amp;S strategy. Consider data requirements availability and pedigree.</li> <li>6. Assist in updating M&amp;S strategy prior to each milestone review</li> <li>7. Assist PMs in identifying valid resources to meet their M&amp;S requirements and coordinate these requirements with the appropriate OPR</li> <li>8. Develop a process to collect and prioritize acquisition-related M&amp;S requirements (DPDs, threat models, data and environments) from across the Air Force and identify key DPDs and other common-use M&amp;S related products developed by acquisition programs that will be retained for re-use</li> <li>9. Develop guidelines and procedures governing the release of Program Office-owned or managed DPDs consistent with current Air Force policy</li> <li>10. Provide M&amp;S requirements both logistics and Intelligence perspectives (DPDs, threat models, data and environments) not in ORD to the AFMC-designated office collecting these requirements</li> <li>11. Develop and be responsible for configuration control of current DPDs and other M&amp;S products required to support program office acquisition activities</li> <li>12. Coordinate with the AFMC MSRR Resource Coordinator and Air Force Agency for Modeling and Simulation (AFAMS) to ensure applicable information from the program's M&amp;S strategy and DPDs are linked to the AF MSRR</li> <li>13. Coordinate with the Air Force Operational Test and Evaluation Center (AFOTEC) to ensure program use of M&amp;S is consistent between the program office and the operational testers</li> </ol> <p>Note: Modeling and Simulation is valuable in addressing manpower impacts and considerations</p>	<p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards <a href="#">Defense Acquisition Guidebook</a> <a href="#">DoDI 5200.39</a>: Critical Program Information (CPI) Identification and Protection Within Research, Development, Test &amp; Evaluation</p> <p><a href="#">AFPAM 63-113</a>: Program Protection Planning for Life Cycle Management</p>	
<b>EXIT CRITERIA:</b>		
<p>Initial Technical Review (ITR) Alternative System Review (ASR) System Requirements Review (SRR) System Functional Review (SFR) Preliminary Design Review (PDR) Critical Design Review (CDR) Post –CDR Assessment Test Readiness Review (TRR) Operational Test Readiness Review (OTRR) System Verification Review (SVR) Production Readiness Review (PRR) Full Rate Production/Deployment Review (FRPDR)</p>		



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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
1.7	Analysis of Alternatives (AoA) Plan	Joint Operations Concepts Materiel Development Decision (MDD) Initial Capabilities Document (ICD) AoA Study Guidance RSR results Capabilities Based Analysis	
<b>DESCRIPTION:</b>			
The AoA plan is approved by the Milestone Decision Authority in conjunction with the Material Development Decision. AoA is an evaluation of the performance, operational effectiveness, operational suitability, and estimated costs of alternative systems to meet a mission capability. The analysis assesses the advantages and disadvantages of alternatives being considered to satisfy capabilities, including the sensitivity of each alternative to possible changes in key assumptions or variables.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1) Ensure a logistician is involved on the team that provides input to the AoA Plan 2) Interpret User Needs 3) Analyze Operational Capabilities, Capability Gaps, Energy Efficiency, Alternate Fuels considerations, Facilities/Infrastructure (Fuel Storage), Cost, Performance, the major hazards associated with each alternative, and Environmental Constraints. 4) Analyze Threat and Operational Environment (For Intelligence Reference Appendix A, Checklist 1.1) 5) Summarize results of the analysis a) Include alternative operating and system support concepts with specific consideration of performance-based options b) Consider the physical and operational maintenance environment of the proposed system c) Identify human interfaces that drive any critical operational and sustainment concepts / issues  Notes: – Data collected and analyzed during AoA can be very useful for performing a Product Support BCA. – Life cycle related data in all program deliverables must be updated during subsequent phases, especially prior to milestone decisions. – Logisticians should ensure product support is addressed. Product Support includes: Technical Data Management/Technical Orders, Training, Support Equipment / Automatic Test Systems, Packaging, Handling, Storage and Transportation, Supply Support, Facilities, IT Systems Continuous Support, Design Interface, Maintenance Planning and Management, Sustaining/Systems Engineering, Protection of Critical Program Information and Anti-Tamper Provisions and Manpower and Personnel. – A Preliminary Hazard List (PHL) should be developed for each concept solution and considered in developing the Analysis of Alternatives Note: Human interfaces include interfaces between human, hardware and software	<a href="#">CJCSI 5123.01HI</a> , Joint Capabilities Integration and Development System (JCIDS) Defines JCIDS process. Type “Supportability” in Edit, Find and Find Next to understand the support role in process. <a href="#">Defense Acquisition Guidebook</a>  <a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a> Entire document useful in building your plan <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document supports the JCIDS process <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">Office of Aerospace Studies AoA Handbook</a> <a href="#">Office of Aerospace Studies Pre-MDD Guide</a> <a href="#">DoD LA Guidebook</a>	Materiel Solution Analysis	

	<p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards  <a href="#">AFPAM 23-221</a>, Fuels Logistic Planning  <a href="#">AFI 23-201</a> Fuels Management  <a href="#">MIL-HDBK-46855A</a> Human Engineering Program Processes and Procedures Para 4.1.1.1  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">DoD Product Support BCA Guidebook</a></p> <p><a href="#">DoDI 5200.39</a>: Critical Program Information (CPI) Identification and Protection Within Research, Development, Test &amp; Evaluation</p> <p><a href="#">AFPAM 63-113</a>: Program Protection Planning for Life Cycle Management  <b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">AOA Study Plan</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>AoA Plan  Initial Capabilities Document (ICD)</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
1.14	Develop Technical Maturation Risk Reduction to Include Product Support	Supportability Objectives Initial Capabilities Document (ICD) Analysis of Alternatives (AoA)
<b>DESCRIPTION:</b>		
<p>The Technical Maturation Risk Reduction (TMRR) documents the rationale for adopting a single-step-to-full-capability strategy. The TMRR shall include a preliminary description of how the program will be divided into technology domains to include number of prototype units that may be produced and deployed during technology maturation. The TMRR will also define the support, specific performance goals, and exit criteria. Upon approval of the TMRR and selection of an initial concept, the project will enter the Technical Maturation Risk Reduction phase at MS A. The TMRR is approved by the MDA at Milestone A for all potential acquisition programs. Per DoDI 5000.02 Enclosure 4, Table 3, a TMRR is required for all acquisition programs. The purpose of this phase is to reduce technology risk and to determine the appropriate set of technologies to be integrated into a full system. It should include an assessment of the ability to interface the technology with the end users, maintainers and support personnel (human readiness for the technology)</p>		
<b>CHECKLIST SUBTASKS:</b>		
TASK	SOURCE DOCUMENTATION	PHASE
<p>The logistician should consider the following key logistics criteria:</p> <ol style="list-style-type: none"> <li>1. Forecast the physical and operational maintenance environment of the proposed system</li> <li>2. Given the forecasted environment from a logistics and Intelligence perspective, assess the functional characteristics of the proposed system, its complexity, and the obstacles and enablers to effective sustainment in that environment (Reference Appendix A, Checklist 1.1)</li> <li>3. Assess the impact of the proposed system on the maintenance capabilities planned for the period in which the system will be introduced, including facilities/infrastructure requirements</li> <li>4. Assess preliminary manpower and personnel requirements and constraints in both quantity and skill levels, and use of contractor support. Include within this assessment any unique human interface requirements to facilitate the effective use of the technology.</li> <li>5. Begin compilation of information and requirements for logistics footprint reductions, deployment requirements, and other factors affecting the in-theater operational concept</li> <li>6. Initiate the development of operating and support reliability objectives and their corresponding benefits and resource requirements; consider the performance histories of prior systems or systems of similar capability where feasible</li> <li>7. Assess the concept and technology with regard to their ability to facilitate the use of embedded diagnostics, prognostics, and similar maintenance enablers. Ref 1.03.1</li> <li>8. Ensure a description of the approach that will be used to ensure data assets will be made visible, accessible, and understandable to any potential user as early as possible is included (intellectual property (IP) strategy (IPS))</li> <li>9. Initiate the compilation and assessment of data on the projected sustainment demand, standardization of platforms, and required support equipment</li> <li>10. Appropriate Logistics costs captured in Life Cycle Cost Estimates. Develop Rough Order of Magnitude Life Cycle Cost estimates</li> </ol>	<p><a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System</p> <p><a href="#">DoD PSM Guidebook AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p><a href="#">Weapon System Acquisition Reform Act</a></p> <p><a href="#">Defense Acquisition Guidebook</a> Chapter 2.2</p> <p><a href="#">Technology Program Management Model v2</a></p> <p><a href="#">DoD Technology Readiness Assessment (TRA) Deskbook</a> Appendix F</p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards</p> <p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a></p> <p><a href="#">DoDI 5200.39</a> Critical Program Information (CPI) Identification and Protection Within Research,</p>	<p>Material Solution Analysis</p>

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<p>11. Assess the Intellectual Property (IP) Strategy (IPS) with regard to technical data required.</p> <p>Note: Requirements for content of the TMRR are found in DoDI 5000.02, 5.C (7), which specifically calls out a list of known or probable critical program information and potential countermeasures such as anti-tamper in the preferred system concept and in the critical technologies and competitive prototypes to inform program protection and design integration during the technical maturation risk reduction phase. The TMRR also must include an RAM strategy per DoDI 5000.02, 5.D. (5).</p>	<p>Development, Test &amp; Evaluation</p> <p><a href="#">HSI Acquisition Phase Guide</a></p> <p><a href="#">Product Data Acquisition Guidance</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">ICD</a></p> <p><a href="#">AOA Study Plan</a></p> <p><a href="#">Risk Management Plan</a></p>	
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**EXIT CRITERIA:**

<p>Approved Technical Maturation Risk Reduction (TMRR)</p> <p>Identification of Key Performance Parameters (KPPs) and/or Key Systems Attributes (KSAs)</p> <p>Market Research for product support capabilities</p> <p>Risk Management Plan (document initial support related risk and risk mitigation planning)</p>
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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
2.3	Define Supportability Objectives	Capabilities Based Analysis AoA Study Guidance Acquisition Decision Memorandum(s) (ADM) Joint Capabilities Document (JCD) Initial Capabilities Document (ICD) Capability Required and Operational Concept Key Performance Parameters (KPPs) Target Audience Description (TAD)

**DESCRIPTION:**

The supportability objectives checklist provides guidance to define the supportability analysis for the program. The supportability analysis is an analytical tool, conducted as part of the systems engineering process to determine the most cost-effectively support of the system over its entire life cycle. It provides the basis for related design requirements to include Technical Orders (TO) s, Support Equipment (SE), Packaging, Handling, Storage and Transportation (PHS&T), (RAM), and Cost, , Production, Interoperability and Maintenance Concept that may be included in specifications.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
<ol style="list-style-type: none"> <li>1. Ensure a logistician is involved on the team that develops the Systems Engineering Plan</li> <li>2. Interpret User Needs including HSI implications, constraints, and issues and develop strategy for addressing. For additional assistance contact your MAJCOM HSI cell or 711 HPW/HP</li> <li>3. Consider TOs, SE and PHS&amp;T, RAM, Cost,; reference task 1.03.1, Production, Facilities/Infrastructure, Interoperability, Supply Support, IUID and Maintenance Concept that may be included in specifications.</li> <li>4. Ensure consistency with Air Force Logistics Enterprise Architecture (AFLMA)</li> <li>5. Analyze Operational Capabilities and Constraints</li> <li>6. Develop Concept Performance (and Constraints) Definition and Verification Objectives</li> <li>7. Decompose Concept Functional Definition into Component Concepts and Assessment Objectives</li> <li>8. Develop Component Concepts, including commonality</li> <li>9. Ensure Intelligence supportability analysis is conducted</li> <li>10. Ensure program protection process is accomplished</li> </ol>	<p><a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System.  <a href="#">Systems Engineering Plan (SEP) Outline</a>  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">Defense Acquisition Guidebook</a> (See Chapters 2, 4, and 6)  <a href="#">DoDM 4140.01, Volume 3</a>                      DoD Supply Chain Materiel Management Procedures:                      Materiel Sourcing  <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a>                      (See Chapter 3, but peruse entire document for further information)  <a href="#">AFI 63-101/20-101</a>                      Integrated Life Cycle Management</p>	Materiel Solution Analysis



	<p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document supports the JCIDS process</p> <p><a href="#">MIL-HDBK-502</a> Product Support Analysis</p> <p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards</p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">DoDD 5200.39</a> Critical Program Information (CPI) Identification and Protection Within Research, Development, Test &amp; Evaluation</p> <p><a href="#">AFPAM 63-113</a> Program Protection Planning for Life Cycle Management - Entire document</p> <p><a href="#">Target Audience Description Guide</a></p> <p><a href="#">AFI 32-1021</a> Planning and Programming Military Construction (MILCON) Projects</p> <p><a href="#">AFI 32-1032</a> Planning and Programming Appropriated Funded Maintenance , Repair and Construction Projects</p> <p><a href="#">DoDI 8320.04</a> Item Unique Identification (IUID) Standards for Tangible Personal Property</p> <p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">SEP Document</a></p> <p><a href="#">ICD</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Systems Engineering Plan (SEP)</p>		

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
2.9.1	Address Environment, Safety, and Occupational Health (ESOH) risk management considerations	Initial Capabilities Document (ICD) Systems Engineering Plan (SEP) Analysis of Alternatives (AoA) Draft Capabilities Development Document (CDD) Draft Capabilities Production Document (CPD) Site Survey Other Program Documentation as it becomes available	
<b>DESCRIPTION:</b>			
This task includes the planning required for compliance and influencing the design process to optimize ESOH. Participate in program activities ensuring ESOH risks, such as mishap hazards, hazardous materials/waste, noise (ambient and occupational), air quality, water resources and occupational health, are identified and addressed. Identify any tradeoffs, including tradeoffs among HSI domains that may be driven by ESOH risks or vice versa.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. Materiel Solution Analysis phase:</p> <ul style="list-style-type: none"> <li>a. Provide ESOH characteristics as part of the capability definition</li> <li>b. Participate in AoA development</li> <li>c. Provide the following exit criteria:                             <ul style="list-style-type: none"> <li>i. Preliminary Hazards List (PHL) for each concept</li> <li>ii. Strategy for integrating ESOH risk management into the SEP</li> </ul> </li> <li>d. Identify potential ESOH operations and maintenance requirements, and identify emerging ESOH technologies and hazards</li> </ul> <p>2. Technology Maturation Risk Reduction Phase:</p> <ul style="list-style-type: none"> <li>a. Develop ESOH requirements and the associated performance criteria</li> <li>b. Identify ESOH constraints and performance attributes and characterize ESOH risks for AoA development</li> <li>c. Fully integrate ESOH-related planning and design considerations and entry/exit criteria for the technical reviews into the SEP.</li> <li>d. Develop Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE) to include: preliminary ESOH risks (mishap hazards and hazardous material (HAZMAT)), the strategy for integrating into SE, ESOH responsibilities method for tracking hazards and the National Environmental Policy Act/Executive Order (EO) 12114 Compliance Schedule.</li> <li>e. Incorporate ESOH hazard risk mitigation test and verification methodologies, and work towards obtaining safety release(s) and ESOH risk acceptance</li> <li>f. Initiate Safety Requirements/Criteria Analysis (SRCA), update PHL and develop Preliminary Hazard Analysis (PHA) and Threat Hazard Analysis (THA) for preferred concept. Identify system safety hazard analysis requirements for the EMD phase.</li> <li>g. Update ESOH risk mitigation technology readiness levels</li> </ul>	<p><a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System</p> <p><a href="#">DoD PSM Guidebook</a></p> <p><a href="#">Weapon System Acquisition Reform Act</a></p> <p><a href="#">DoD ESOH in Acquisition Guide</a></p> <p><a href="#">AFMAN 32-7002</a></p> <p>Environment Compliance and Pollution Prevention</p> <p><a href="#">MIL-STD 882E</a> Standard Practice for System Safety</p> <p><a href="#">DoDD 4715.1E</a></p> <p>Environment, Safety, and Occupational Health (ESOH)</p> <p><a href="#">CJCSI 5123.01HI</a> Operation of the Joint Capabilities Integration and Development System</p> <p><a href="#">AFI 32-1015</a> Integrated Installation Planning</p> <p><a href="#">DoD LA Guidebook</a></p> <p><a href="#">HSI Acquisition Phase Guide</a></p> <p><a href="#">AFI 63-101/20-101</a></p> <p>Integrated Life Cycle Management</p> <p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management</p> <p><a href="#">AFI 91-202</a>, The US Air Force Mishap Prevention Program</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production and Deployment</p> <p>Operations &amp; Support</p>	

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<ul style="list-style-type: none"><li>h. Provide preliminary ESOH requirements for system support and to include both organizational and depot maintenance</li><li>i. Follow waiver procedures in AFMAN 32-7002 if Class I ozone depleting substances are required and satisfy DFARS Subpart 223.73, <i>Minimizing the Use of Materials Containing Hexavalent Chromium</i>, if hexavalent chromium use is expected</li></ul> <p>3. Engineering and Manufacturing Development, Integrated System Design</p> <ul style="list-style-type: none"><li>a. Prepare relevant hazard analyses such as SSHAs, SHA, HHA and OSHA, and update the SRCA</li><li>b. Update ESOH criteria for component, subsystem, and system to include test and inspection requirements</li><li>c. Include ESOH updates to HSI planning (part of SEP or separate HSI plan)</li><li>d. Work with the testing community and users to identify ESOH compliance requirements that will apply to the fielded system to assess and address compliance risk and cost.</li><li>e. Begin to identify ESOH input for organic depot transition requirements</li><li>f. Begin to identify ESOH input for demilitarization and disposal planning</li><li>g. Include system ESOH-critical processes and components in inspection plan (e.g., component screening and testing)</li><li>h. Ensure system ESOH-critical design specifications are included in the requirements tracking system and detailed design specifications, as necessary</li><li>i. Assess hazard analyses, HAZMAT reports and compliance requirement risks to facilitate the development of mitigations to reduce risks to acceptable levels</li><li>j. Integrate ESOH considerations into sustainment planning documents and sustainment contract solicitation documents</li><li>k. Follow waiver procedures in AFMAN 32-7002 if ozone depleting substances are required and satisfy DFARS Subpart 223.73, <i>Minimizing the Use of Materials Containing Hexavalent Chromium</i>, if hexavalent chromium use is expected</li></ul> <p>4. Engineering and Manufacturing Development – System Capability and Manufacturing Process Demonstration phase</p> <ul style="list-style-type: none"><li>a. Verify that mitigation measures reduce ESOH hazard risk to acceptable levels</li><li>b. Review the results of hazard analyses such as the SSHA, FMECA, FMEA, Health hazard Assessment, and preliminary OSHA supportability impacts</li><li>c. Update the PESHE to include identified ESOH risks (including mishap and HAZMAT risks), the strategy for integrating into SE, ESOH responsibilities, method for tracking hazards, and NEPA/EO 12114 Compliance Schedule</li><li>d. Provide safety releases to the testing community</li><li>e. Recommend operational and maintenance ESOH training and staffing requirements</li><li>f. Follow waiver procedures in AFMAN 32-7002 Chapter 4 if ozone depleting substances are required and satisfy DFARS Subpart 223.73, <i>Minimizing the Use of Materials Containing</i></li></ul>		
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<p><i>Hexavalent Chromium</i>, if hexavalent chromium use is expected</p> <p>g. Review DT&amp;E results for ESOH implications</p> <p>5. Production and Deployment phase:</p> <p>a. Review IOT&amp;E results for the effectiveness of ESOH risk mitigation measures</p> <p>b. Ensure that the PESHE includes identified ESOH risks, the strategy for integrating into SE, ESOH responsibilities and method for tracking hazards</p> <p>c. Update ESOH strategies, requirements and risks in programmatic documents</p> <p>d. Provide ESOH updates to HSI planning (part of SEP or separate HSI plan)</p> <p>e. Finalize the hazard analyses such as the OSHA</p> <p>f. Follow waiver procedures in AFMAN 32-7002 Chapter 4 if ozone depleting substances are required and satisfy DFARS Subpart 223.73, <i>Minimizing the Use of Materials Containing Hexavalent Chromium</i>, if hexavalent chromium use is expected</p> <p>g. Ensure sustainment organizations receive copy of PESHE in support of depot and sustainment transitioning</p> <p>6. Operations and Support phase:</p> <p>a. Review FOT&amp;E results for ESOH implications</p> <p>b. Continually review for ESOH hazards including mishaps and discrepancy reports</p> <p>c. Continually review hazardous material usage for opportunities to reduce ESOH risks and costs</p> <p>i. Review industry best practices</p> <p>ii. Identify and address post production pollution prevention needs or projects</p> <p>d. Ensure that the PESHE includes identified ESOH hazard/risks, the strategy for integrating into SE, ESOH responsibilities, method for tracking hazards and NEPA/EO 12114 Compliance Schedule and changes coordinated with sustainment organizations</p> <p>e. Provide updated inputs to HSI planning (part of SEP or separate HSI plan)</p> <p>f. Provide updated inputs for demilitarization and disposal planning</p> <p>g. Sustain ESOH hazard analyses to support the fielded system and acquisition of similar systems, as applicable</p> <p>h. Follow waiver procedures in AFMAN 32-7002 Chapter 4 if ozone depleting substances are required and satisfy DFARS Subpart 223.73, <i>Minimizing the Use of Materials Containing Hexavalent Chromium</i>, if hexavalent chromium use is expected when responding to minor modifications, deficiency reports, Engineering Change Proposals, etc.</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Updated PESHE                  Updated LCSP                  Updated SEP                  Updated TEMP                  Updated CDD                  Updated CPD                  Updated Safety Analyses                  HAZMAT Management Program Report</p>		

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NEPA/EO 12114 Compliance Schedule

Updated Risk Mitigation Plan and Hazard Tracking System



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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
2.10	Product Support Capabilities in Preferred System Concept	Analysis of Alternatives Plan Best Material Approach	
<b>DESCRIPTION:</b>			
Key to this initial step of materiel solution analysis is to ensure that all drivers of the concept definition are completely captured and managed as an integrated whole, and that all of the drivers can be met by each of the concept alternatives under consideration. This defines the expectations of the overall system concept, and defines the trade space and risk associated with each of the constraints, above. Defining the trade space and risk enables the comprehensive analysis of system alternatives, and allows a rational selection of a preferred system concept. The preferred system concept should strike the best balance in providing the needed capabilities within the constraints on the program. These constraints should include Manpower, Personnel and Training considerations to deliver the workforce to operate, support and sustain the system.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure a logistician is involved on the team that provides input to the Preferred System Concept</li> <li>2. Interpret User Needs</li> <li>3. Analyze Operational Capabilities, Capability Gaps, and Environmental Constraints.</li> <li>4. Analyze Threat and Operational Environment (Reference Appendix A, Checklist 1.1)</li> <li>5. Summarize results of the analysis               <ol style="list-style-type: none"> <li>a. Include alternative operating and system support concepts with specific consideration of performance-based options</li> <li>b. Consider the physical and operational maintenance environment of the proposed system</li> <li>c. Analyze the HSI implications of the system concept (inclusive of all the HSI domains) and the associated costs. Assistance for human related issues is available from your MAJCOM HSI cell or 711 HPW/HP</li> <li>d. Analyze impacts to Maintenance Concepts</li> <li>e. Consider ESOH requirements and risks</li> <li>f. Consider facilities / infrastructure requirements</li> </ol> </li> </ol> <p>Notes:</p> <ul style="list-style-type: none"> <li>– Data collected and analyzed during AoA can be very useful for performing a Product Support BCA.</li> <li>– Life cycle related data in all program deliverables must be updated during subsequent phases, especially prior to milestone decisions.</li> </ul>	<p>Defines JCIDS process. Type “Supportability” in Edit, Find and Find Next to understand support role in the process.</p> <p><a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS)</p> <p><a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a></p> <p>Entire document useful in building your plan</p> <p><a href="#">AFI 63-101/20-101</a></p> <p>Integrated Life Cycle Management</p> <p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document supports the JCIDS process</p> <p><a href="#">System Engineering</a></p> <p>Chapter 4 Defense Acquisition Guide Book</p> <p><a href="#">Defense Acquisition Guidebook</a> (See Chapters 2 , 4, and 6</p> <p><a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System</p> <p><a href="#">DoD PSM Guidebook</a></p> <p><a href="#">DoD Product Support BCA Guidebook</a></p> <p><a href="#">Weapon System Acquisition Reform Act</a></p>	Materiel Solution Analysis	

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	<p><a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">DoD LA Guidebook</a> <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards <a href="#">HSI Acquisition Phase Guide</a></p>	
<b>EXIT CRITERIA:</b>		
Preferred System Concept		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.13</a>	Participate in System Engineering Plan (SEP) Development.	Technical Maturation Risk Reduction (TMRR) Acquisition Strategy Product Support Strategy Analysis of Alternatives Acquisition Program Baseline (APB) Initial Capability Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) Life Cycle Sustainment Plan (LCSP) Test and Evaluation Master Plan (TEMP) Draft Systems Engineering Plan (SEP)	
<b>DESCRIPTION:</b>			
The System Engineering Plan (SEP) documents the organizations, authorities, roles and responsibilities, processes, and integration used to plan, evaluate, execute, and manage the technical aspects of a program. The SEP is a living document that must be reviewed annually, and updated as required throughout the life cycle. Program managers should establish the SEP early in program formulation. A best practice is to have the SEP written by the program Systems Engineering Working-level Integration Team. The SEP is a roadmap that defines comprehensive systems engineering activities, addressing both government and contractor technical activities and responsibilities. The SEP should be consistent with and complementary to the Acquisition Strategy and the Test and Evaluation Master Plan, as appropriate. HSI planning shall be summarized in the SEP. The SEP needs to address how systems engineering will support the translation of system capability needs into an effective, suitable product that is (warfighter emphasis) sustainable at an affordable cost. The PSM should review the SEP. The MDA approves the SEP.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1) Participate on the Systems Engineering Working-level Integration Team during development of the SEP.  2) Review requirements documents to determine Logistics-related performance parameters that best represent warfighter needs.  3) Given the forecasted physical and operational maintenance environment of the proposed system, assess the functional characteristics of the proposed system, its complexity, and the obstacles and enablers to effective sustainment in that environment.  4) Ensure logistics considerations are addressed and documented in the plan to include: <ul style="list-style-type: none"> <li>• RAM, Cost, Supportability and Production</li> <li>• Product Support factors</li> <li>• Deployment footprint</li> <li>• Preliminary Manpower and Personnel requirements (quantity and skill levels, and use of contractor support)</li> <li>• Embedded diagnostics, prognostics, and similar maintenance enablers</li> <li>• Reliability &amp; Maintainability (R&amp;M) Program</li> <li>• Reliability Growth Curves (RGCs)</li> <li>• Development &amp; Sustainment of Software</li> <li>• Configuration Management</li> <li>• Corrosion Prevention and Control</li> <li>• IUID)</li> </ul>	<a href="#">DoDI 5000.81 Urgent Capability Acquisition DoD PSM Guidebook Weapon System Acquisition Reform Act Defense Acquisition Guidebook</a> Chapters 3, 4 and 6 <a href="#">AFI 63-101/20-101 Integrated Life Cycle Management Early Systems Engineering Guide Systems Engineering Plan (SEP) Outline SEP Frequently Asked Questions DoD Technology Readiness Assessment (TRA) Deskbook Appendix F Designing and Assessing Supportability in DoD Weapon Systems DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a>	Materiel Solution Analysis  Technical Maturation Risk Reduction  Engineering & Manufacturing Development  Production and Deployment  Operations & Support	

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<ul style="list-style-type: none"> <li>• Support equipment selection, development, and modification</li> </ul> <p>5) It is recommended that the HSI plan be an attachment to the SEP. Ensure the HSI process is used to generate a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), OSS&amp;E assurance, survivability, safety, and affordability. HSI employs human factors engineering to design systems that effectively utilize manpower; provide effective training; can be operated and maintained by users; and are suitable (habitable and safe with minimal environmental and occupational health hazards) and survivable (for both people and equipment).</p> <p>6) Review the SEP annually and update as required throughout the life cycle</p>	<p><a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a>  <a href="#">HSI Handbook App 1</a>  <b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">SEP</a>  <a href="#">TEMP</a>  <a href="#">LCSP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Systems Engineering Plan          Input to Acquisition Strategy          Input to Request for Proposal (RFP)          Input to Program Documentation</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">2.13.1</a>	Address Human Systems Integration (HSI)	As appropriate for acquisition phase: Capabilities Based Assessment (CBA) Concept Characterization Technical Document (CCTD) Materiel Development Decision (MDD) AoA Study Guidance Draft Maintenance Concept Initial Capability Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) Life Cycle Sustainment Plan (LCSP) Analysis of Alternatives (AoA) Systems Engineering Plan (SEP)

**DESCRIPTION:**

Human Systems Integration (HSI) is a process to ensure systems are designed and developed that effectively and affordably integrate with human capabilities and limitations. The HSI process considers human factors engineering, manpower, personnel, training, and ESOH aspects along with survivability and habitability, throughout system design, development, fielding, and sustainment. The aim of this checklist is to ensure the consideration of HSI early and throughout the acquisition process in order to maximize system capability while minimizing life cycle costs and the logistics footprint. The HSI process gives logisticians a voice in the systems engineering process.

HSI is a continuous process which is applied iteratively. The objective of the HSI process is to fully consider the human in the design and engineering of a system, in such a way as to maximize total system performance (human + hardware + software) and minimize total ownership cost. HSI provides valuable input to decisions made at the earliest stages such as CBA and AoA, and contributes to risk management throughout system lifetime, to include modifications, upgrades.

A good set of general questions to guide the HSI process is found in the HSI Requirements Pocket Guide. Consider these questions as a starting place for any HSI activity. For HSI expertise and assistance at any phase call your MAJCOM HSI cell or 711 HPW/HP.

As a logistician, you may be called upon to represent the input of maintainers and other support personnel who may have system requirements. You may also be a source of expertise for early manpower determinations and early cost estimates.

Note: See DoD Education and Training Opportunities HSI for list of available HSI training courses.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
Pre-Materiel Solution Analysis Phase: 1.HSI considerations should be included in CBA, AoA, and ICD. 2.Use experience from similar fielded systems when possible to predict HSI issues and incorporate lessons learned. Support modeling, simulation and analysis, see task 1.6.1. 3.Provide inputs to CBA by identifying human-centered deficiencies and HSI-related capability gaps, and assess approaches to solving/mitigating those deficiencies/gaps. 4.HSI analyses conducted for CBA need to be captured in ICD and AoA study guidance. 5.When writing or reviewing requirements, consider how performance parameters and attributes should include HSI input. Use the HSI Requirements Pocket Guide to help users express requirements for usability, accessibility, displays and controls suited to the user and the task, and many other human-related issues. 6.Participate in HPT (precursors to IPTs).	<a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS)  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">HSI Handbook</a>  <a href="#">HSI Guide for Contracts</a>  <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development.	Pre-Materiel Solution Analysis





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<p>1.Support IPTs to develop a comprehensive design that incorporates human centered requirements and participate in trade-off decisions.</p> <p>2.Participate in updating the manpower estimate</p> <p>3.Refine training requirements as system design matures and provide input to Training System Plan</p> <p>4.Refine design concepts for optimizing human performance, especially human interfaces with hardware and software. Consider maintainers and other support personnel in this activity. Support modeling, simulation and analysis, see task 1.6.1.</p> <p>5.Refine ESOH requirements and provide input to risk assessments. See tasks 2.9.1 ESOH and 3.10.2 NEPA.</p> <p>6.Participate in developing survivability and habitability concepts</p> <p>9.Participate in operational assessment of system’s ability to meet HSI-related requirements and roll up assessments into the program risk management process.</p> <p>7.Participate in SEP update and technical reviews (e.g., Post-PDR Assessment, CDR, TRR, SVR, and PRR). See tasks 3.04 Post-PDR, 3.28 SEP, 3.12 CDR, 3.17 TRR, 3.33 SVR/PRR.</p> <p>8.Sustain HSI throughout acquisition processes. (Important documents for update include CPD, MER LCSP, SEP, TEMP, RFI/RFP, IMP/IMS, Information Support Plan (1.1) and Risk Management Plan).</p> <p>Production and Deployment Phase</p> <p>1.Assist in assessing total system performance and cost based upon manpower numbers and personnel skill levels</p> <p>2.Finalize and implement training program</p> <p>3.Analyze any operational deficiencies in system’s ability to meet HSI-related requirements to help determine and assess corrective actions. Include these deficiencies in risk management activities</p> <p>4.Identify HSI relevant issues and constraints that can be used to provide input into modifications to the system. Participate in iterative improvement. Watch for unintended human impacts due to modification/configuration change. See tasks 3.47.2 DR and 6.56 Mod Mgmt.</p> <p>5.Provide inputs to appropriate lessons learned repositories</p> <p>6.Define and implement system safety and health risk management programs</p> <p>7.Participate in Full Rate Production (FRP) Decision review.</p> <p>8.Sustain HSI throughout acquisition processes. (Important documents for update include CPD, MER LCSP, SEP, TEMP, and IMP/IMS.)</p> <p>Operations and Support Phase</p> <p>1.Analyze any operational deficiencies in system’s ability to meet HSI-related requirements to help determine and assess corrective actions. Include these deficiencies in risk management activities.</p> <p>2.Identify HSI relevant issues and constraints that can be used to provide input into modifications to the system. Participate in iterative improvement. Watch for unintended human impacts</p>	<p><a href="#">TEMP</a> <a href="#">LCC</a></p>	<p>Engineering &amp; Manufacturing Development</p> <p>Production and Deployment</p>
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<p>due to modification/configuration change. See tasks 3.47.2 DR and 6.56 Mod Mgmt.</p> <p>3. Provide inputs to appropriate lessons learned repositories, include:</p> <ul style="list-style-type: none"> <li>• Failure analysis</li> <li>• ECP review</li> <li>• In-service reviews</li> <li>• Mishap investigations</li> <li>• Fleet feedback analysis</li> <li>• Upgrade and modification development</li> <li>• Changes in maintenance procedures</li> <li>• Changes in materials</li> <li>• Obsolescence (DMSMS) See task 3.37.13</li> <li>• Training sufficiency and feedback</li> </ul>		<p>Operations &amp; Support</p>
<p><b>EXIT CRITERIA:</b></p>		
<p>Capabilities Based Assessment (CBA)          Concept Characterization Technical Document (CCTD)          Materiel Development Decision (MDD)          AoA Study Guidance          DOTMLPF Change Requests (DCR)          IMP/IMS          RFI/RFP          Manpower Estimate Report (MER)          Inputs into ECPs, modifications, upgrades, pre-planned product improvements          Inputs into Analysis of Alternatives (AoAs)          Input into Systems Engineering Plan (SEP) (specifically HSI planning)          Input into Maintenance Concept          Inputs into Training Plans          Inputs into Test and Evaluation Master Plan (TEMP)          Input into Initial Capabilities Document (ICD)          Input into Capabilities Development Document (CDD)          Inputs into Capability Production Document (CPD)          Input into Life Cycle Sustainment Plan (LCSP)          Input into Life Cycle Cost (LCC) Estimates</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
2.15	Develop Initial Product Support Strategy in the Life Cycle Sustainment Plan (LCSP)	Joint Capabilities and Development System Analysis Initial Capabilities Document (ICD) Life Cycle Sustainment Plan (LCSP) if available Defined Supportability Objectives Analysis of Alternatives (AoA) Plan Logistics footprint reductions requirements Deployment requirements Target Audience Description (TAD)
<b>DESCRIPTION:</b>		
A Life Cycle Sustainment Plan is a comprehensive document that consolidates the weapon system life cycle acquisition management and product support strategies from materiel solution analysis through reclamation/disposal. It is a document that must be maintained to remain compliant with revised/new DoD policy and statutory requirements. It represents a corporate AF position on how to best execute and manage a specific program and requires participation from all program stakeholders in its development and update.		
<b>CHECKLIST SUBTASKS:</b>		
TASK	SOURCE DOCUMENTATION	PHASE
1. Review DAFPAM 63-128 Section 2. Use the given order to organize the information gained from the following steps. 2. Review the Joint Capabilities and Development System analysis for a. Life cycle cost: b. Logistics supportability treated as an operational performance capability that is inherent to systems design and development c. Capabilities based analysis that includes supportability as an inherent part of defining capability needs d. Supportability as a key attribute to be defined, found within the "capabilities based" approach to setting formal warfighter requirements e. Initial establishment of supportability and support-related performance criteria f. Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, and Facilities (DOTMLPF) considerations to include key logistics criteria that will help minimize logistics footprint and reduce cost. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded. g. Energy Efficiency and Alternate Fuels considerations 3. Review the ICD for: a. Product support concept and needed capabilities b. Reductions in logistics footprint and system life cycle costs (inclusive of the people, support equipment and other elements) c. Potential constraints on operating and support resource requirements d. HSI implications, constraints and issues 4. Refer to the forecast of the physical and operational maintenance environment of the proposed system. Given the	<a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">Defense Acquisition Guidebook</a> (Chapters 4 , 5, and 6) <a href="#">DoD Template for Application of TLCSM and PBL In the Weapon System Life Cycle Request for Proposal (RFP) Information Technology and Industrial Base Plans, 10 U.S.C. 2440</a> <a href="#">Technology Readiness Assessment Deskbook (TRA)</a> <a href="#">Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint 2003</a> (3.3) <a href="#">System Operational Effectiveness (SOE)</a> <a href="#">PBL: PM's Product Support Guide</a> (3.0 – 7.0) <a href="#">What is a Systems Engineering Plan</a> <a href="#">What is a Modular Open Systems Approach (MOSA)</a> <a href="#">MOSA during Materiel solution analysis</a> <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management	Materiel Solution Analysis

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<p>forecast, assess the functional characteristics of the proposed system, its complexity, and the obstacles and enablers to effective sustainment in that environment</p> <ol style="list-style-type: none"> <li>5. Begin to document ESOH strategies in the Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE) and ESOH design consideration to be addressed in the SEPLCSP</li> <li>6. Ensure the HSI process is used to support generation of a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), and affordability. Include facilities/infrastructure to encompass both operational and maintenance</li> <li>7. Influence product design with Life Cycle Logistics (LCL) for affordable System Operational Effectiveness (SOE)</li> <li>8. Include the evaluation of the Product Support Capabilities</li> <li>9. The designated Support Equipment Manager develops the support equipment strategy with the support of the Support Equipment Working Group, to include how the program will prioritize the selection of existing, common USAF / DoD support equipment over the selection of system unique, peculiar support equipment (generally via the Support Equipment Recommendation Data (SERD) Process))</li> <li>10. Review projected sustainment demand, standardization of platforms and required equipment</li> <li>11. Identify anticipated sustainment requirements to the Centralized Asset Management (CAM) office (AFMC/A4F Workflow). For AFSPC, ANG and AFRC sustainment requirements also contact the respective organization. If program is within 2-3 years of needing O&amp;M sustainment funding, ensure planning for budget input is accomplished. See Task 5.8.1</li> <li>12. Ensure Product Support elements are input into draft Systems Engineering Plan (SEP), encompassing Product Support (PS) Systems Engineering (SE) requirements and IUID</li> <li>13. Review the Request for Proposal (RFP) for Systems Engineering (SE) concepts (Limit to objectives and goals identified in the Mission Needs Statement (MNS), constraints, customer objectives/goals and other boundary objectives/goals identified in program direction). Ensure Energy Efficiency and Alternate Fuels considerations are included</li> <li>14. Review the Best Material Approach and include the preferred Product Support concept</li> <li>15. Review the Technical Maturation Risk Reduction for Product Support concepts such as             <ol style="list-style-type: none"> <li>a. Conceptual impact on national technology or industrial base</li> <li>b. Critical Technology Information Protection</li> <li>c. Energy Efficiency and Alternate Fuels considerations</li> <li>d. Technical data as initially addressed in the Intellectual Property (IP) Strategy (IPS). (The TDRS begins as a section of the Technical Maturation Risk Reduction then becomes a section of the LCSP.)</li> </ol> </li> </ol>	<p><u><a href="#">Independent Cost Estimate: Operational Manpower requirements, 10 U.S.C.2434 DoDI 5000.02</a></u> Operation of the Defense Acquisition System (Enclosures 7)</p> <p><u><a href="#">DoDI 5000.81</a></u> Urgent Capability Acquisition</p> <p><u><a href="#">DoD PSM Guidebook</a></u></p> <p><u><a href="#">DoD Product Support BCA Guidebook</a></u></p> <p><u><a href="#">Weapon System Acquisition Reform Act</a></u></p> <p><u><a href="#">DoDI 8320.04</a></u> Item Unique Identification (IUID) Standards for Tangible Personal Property</p> <p><u><a href="#">Systems Engineering Plan (SEP) Outline</a></u></p> <p><u><a href="#">DoD LA Guidebook</a></u></p> <p><u><a href="#">Target Audience Description Guide</a></u></p> <p><u><a href="#">Logistics Requirements Determination Process</a></u></p> <p><u><a href="#">Preservation and Storage of Tooling for MDAPs</a></u></p> <p><u><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></u></p> <p><u><a href="#">HSI Handbook</a></u> App 1</p> <p><u><a href="#">HSI Requirements Pocket Guide</a></u></p> <p><u><a href="#">Product Data Acquisition Guidance</a></u></p> <p><u><a href="#">Next Generation CLS Contract Sustainment Support Guide (CSSG)</a></u></p> <p><u><a href="#">Life Cycle Sustainment Plan Template</a></u></p> <p><u><a href="#">AFLCMC LCSP Standard Process and OSD Sample Outline Version 2.0 (dtd 17 Jan 2017)</a></u></p> <p><b>Sample Documents:</b></p> <p><u><a href="#">ICD</a></u></p> <p><u><a href="#">AOA Study Plan</a></u></p> <p><u><a href="#">SEP</a></u></p> <p><u><a href="#">LCSP</a></u></p> <p><u><a href="#">RFP</a></u></p>	
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<p>16. Ensure a description of the approach that will be used to ensure data assets will be made visible, accessible, and understandable to any potential user as early as possible is included (intellectual property (IP) strategy (IPS))</p> <p>17. Review Modular Open Systems Approach (MOSA) strategy summary written by the program manager for</p> <ul style="list-style-type: none"> <li>a. Life cycle supportability</li> <li>b. Financial and support functions to make trade-off decisions that affect system readiness and cost</li> <li>c. Conceptual impact on national technology or industrial base</li> <li>d. Critical Technology Information Protection</li> </ul> <p>18. Review exit criteria from the Acquisition Decision Memorandum (ADM) for Product Support issues</p> <p>19. This task is one in a series to ensure the LCSP is continually updated to address additional program information and maturity. Reference checklists 2.15, 2.49, 3.29, 5.32, and 6.10.</p> <p>20. Consider any known requirements for GFP upfront and include it in LCSP and ASP.</p>		
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**EXIT CRITERIA:**

- Evaluation of Product Support Capabilities
- Systems Engineering Plan (SEP)
- Support and Maintenance Concepts and Technologies
- Request for Proposal (RFP)
- Approved and Finalized Preferred Solution from the AoA
- Inputs to Technical Maturation Risk Reduction (TMRR)
- Cost/Manpower estimates
- Technical Maturation Risk Reduction
- Acquisition Decision Memorandum (ADM)
- Draft Capabilities Development Document (CDD)
- Updated Life Cycle Sustainment Plan (LCSP)

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.15.1.1</a>	Unique Munitions Acquisition Activities	Initial Capabilities Document (ICD) Capabilities Development Document (CDD) Capabilities Production Document (CPD) Concept of Operations (CONOPS) Joint Capabilities Document (JCD) Key Performance Parameters (KPPs)	
<b>DESCRIPTION:</b>			
The munitions activities checklist provides guidance on acquisition processes that are wholly unique to munitions development and fielding or have substantial components accomplished only for munitions programs. The preponderance of these efforts are related safety concerns (qualified and unqualified) over the energetic and potentially volatile nature of the materials and end product. Omission or noncompliance to most of these tasks by appropriate events will result in the stoppage of all related efforts until compliance, including the possibility of a waiver, is achieved.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure a logistician is cognizant of the “Safe and Arm” approval process and disseminates resulting procedures to appropriate document and training development activities</li> <li>2. Monitor SEEK EAGLE and airworthiness certification processes and ensure appropriate aircraft and maintenance TOs are generated or updated</li> <li>3. Monitor insensitive munitions testing and ensure information impacting transportation, handling and storage are included in transportation and storage planning</li> <li>4. Ensure range testing requirements (such as flight termination and telemetry requirements) are addressed early and planning for their use throughout the program’s life cycle included in all acquisition phases</li> <li>5. Maintain awareness of data requirements for the Non-Nuclear Munitions Safety Board and ensure availability of logistical data to support munitions approval process</li> <li>6. Facilitate all transportation and storage requirements development, distribution planning, storage/facilities planning, and transfer of program responsibility, ensure human system integration (HSI) aspects are considered in all aspects of planning (Performance-Oriented Packing, Interim Hazard Classification, Material Safety Data Sheet, EOD Render Safe Procedures)</li> </ol>	<p><a href="#">MIL STD 882E</a> Standard Practice For System Safety AFI 63-101 Integrated Life Cycle Management <a href="#">AFPAM 63-129</a> Air System Development and Sustaining Engineering Processes and Procedures <a href="#">AFPD 62-6</a> USAF Aircraft Airworthiness Certification <a href="#">MIL-HDBK-516C</a> Airworthiness Certification Criteria <a href="#">10 USC 2389</a> Subtitle A Part IV Chapter 141 Ensuring safety regarding insensitive munitions <a href="#">RC-319-010</a> Range Commanders Council Flight Termination Commonality Standard <a href="#">AFI 91-205</a> Non-nuclear Munitions Safety Board AFMAN 32-7002 Environment Compliance and Pollution Prevention <a href="#">MIL-STD-2105D</a> Hazard Assessment Tests For Non-Nuclear Munitions <a href="#">TO 11A-1-47</a> DoD Ammunition and Explosives Hazard Classification Procedures <a href="#">49 CFR Part 171</a> General Information, Regulations and Definitions</p>	<p>Material Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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	<a href="#">DI-SAFT-80182B</a> Technical Data For Munitions <a href="#">AFI 21-101</a> Aircraft and Equipment Maintenance Management <a href="#">AFMAN 32-3001</a> Explosive Ordinance Disposal Program	
<b>EXIT CRITERIA:</b>		
Systems Engineering Plan (SEP) SEEK EAGLE certification Technical Data package Material Safety Data Sheet Interim Hazard Classification Tactical Airworthiness Certification Criteria/Modified Airworthiness Certification Criteria (TACC/MACC)/certification		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
2.16	Ensure Supportability Included in Program Management/Services Management Agreements (PMA/SMAs)	Acquisition Decision Memorandum (ADM)	
<b>DESCRIPTION:</b>			
The PMA is a jointly developed and formally documented agreement used to proactively resolve or de-conflict potential issues to include cost, schedule, performance, and logistics expectations over the life of the program. The PMA is designed to facilitate effective communication and provide updates and support for building an understanding between the acquisition/sustainment and operational communities.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure the CONOPS, to include usage rates, etc., are included in the PMA. (Example: Availability Rates, Mean Time between Failure, etc.)</li> <li>2. Life Cycle Sustainment Plan addresses the Product Support Strategy of the system/product.</li> <li>3. Ensure Performance Based Logistics (PBL) tenets are considered.</li> <li>4. Define logistics requirements (Logistic Footprint) to include sustainment strategy – re-procurement of systems, subsystems, components, spares, and services beyond initial production. Include Government Furnished Property (GFP-MAT)</li> <li>5. Consider disciplined maintenance procedures that preserve the system and end-item operational safety, suitability, and effectiveness throughout the operational life.</li> <li>6. Establish performance metrics for assessing program success throughout the acquisition life cycle that ensure supportability criteria is included in the PMA (i.e. mean time between failure (MTBF), maintenance cycle time, footprint reduction, supply change management).</li> <li>7. Coordinate with the appropriate ALC and Defense Logistics Agency (DLA) for Packaging, Handling, Storage and Transportation and Asset Marking to include IUID requirements</li> <li>8. Ensure the user addresses / identifies facilities and site survey requirements (Ref. checklist 3.10)</li> <li>9. Ensure resources, (manpower and TDY dollars) are planned for user and others outside the program office for program execution</li> </ol>	<p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management  <a href="#">DoD LA Guidebook</a>  <a href="#">Product Data Acquisition Guidance</a>  <b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">LCSP</a>  <a href="#">PMA/SMA</a></p> <p><a href="#">DoD PBL Guidebook &amp; IPS Elements Guidebook</a></p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p>	
<b>EXIT CRITERIA:</b>			
<p>Updated Initial Capability Document (ICD)                      Updated Capability Development Document (CDD)                      Updated Life Cycle Sustainment Plan (LCSP)                      Updated Draft Capability Development Document (CDD)                      Signed Services Management Plan</p>			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.17</a>	Include Supportability in the Source Selection Plan (SSP)	Pre-Solicitation Source Selection Planning Source Selection IPT including logistics as applicable Source Selection Authority Assignment Acquisition Plan Brief Description of Requirements Acquisition Decision Memorandum (ADM) Request For Proposal (RFP) Section L and M	
<b>DESCRIPTION:</b>			
The SSP is a plan that describes how the source selection will be organized, how proposals will be evaluated and analyzed, and how sources will be selected. Sections Land M of the RFP are generally attached to the SS plan. Well thought out evaluation criteria typically including supportability are a part of sections L and M. We select a vendor with the best product support value. Supportability criteria must be well designed and utilized in the source selection process. Source selection IAW the SSP will be conducted following the release of the RFP ending with the contract award.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure integrated baseline addresses product support strategy</li> <li>2. Develop life cycle product support areas of evaluation</li> <li>3. Review supportability requirements assessing operational availability, logistics footprint, cost effectiveness and RAMS in the system engineering process</li> <li>4. Participate on the source selection team to address product support concerns</li> <li>5. Include HSI criteria as appropriate in the source selection plan and draft RFP</li> <li>6. Draft request for proposal – sections L and M for product support to include Technical Data Management/Technical Orders, Support Equipment/Automatic Test Systems, Supply Support/Provisioning Strategy, GFP list, Diminishing Manufacturing Sources and Material Shortages and Packaging, Handling, Storage Transportation and Training. Consideration must also be given to Energy Efficiency, ESOH, Noise (ambient and occupational), Alternate Fuels, reclamation, demilitarization and disposal. Ensure this plan is executed in checklist 2.20 Task 3</li> <li>7. Ensure RFP clearly states all tech data is to be delivered to the program office</li> </ol>	<a href="#">IG5315.303 Source Selection Plan Guide</a> (All) <a href="#">DFARS 215.3 Defense Acquisition Guidebook</a> (See Chapters 2, 4, 6, 8, and 11) <a href="#">HSI Guide for Contracts DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook Weapon System Acquisition Reform Act</a> <a href="#">40 CFR part 1500-1508</a> <a href="#">42 USC 4321</a> <a href="#">32 CFR 989.3(c)(3)</a> <a href="#">AFI 32-1015</a> Integrated Installation Planning <a href="#">AFFARS Mandatory Procedures 5315.3</a> <a href="#">AFFARS 5315.305(c) Supportability Requirements DoDM 4140.01, Volume 3</a> DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <a href="#">DoDI 4160.28</a> DoD Demilitarization (DEMIL) Program <a href="#">DoDM 4160.28 Vol. 1</a> Defense Demilitarization: Program Admin <a href="#">DoDM 4160.28 Vol 2</a> Defense Demilitarization: DEMIL Coding	Materiel Solution Analysis  Technical Maturation Risk Reduction  Engineering & Manufacturing Development  Production & Deployment	



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	<p><a href="#">DoDM 4160.28 Vol 3</a> Defense Demilitarization: Procedural Guidance <a href="#">DoD DEMIL Web Page</a> AFI 23-101 Air Force Materiel Management <a href="#">AFMCI 24-201 AFMC</a> <a href="#">Packaging and Materials</a> <a href="#">Handling Policies and</a> <a href="#">Procedures</a> <a href="#">AFI 24-210 IP Packaging of</a> <a href="#">Hazardous Materials</a></p> <p><b>Sample Documents:</b> <a href="#">RFP</a></p>	
<b>EXIT CRITERIA:</b>		
Complete Source Selection Plan		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
2.20	Include Supportability Requirements in Request for Proposal (RFP)	Source Selection Plan Technical/Acquisition Strategy Product Support Strategy Milestone Decision Authority	
<b>DESCRIPTION:</b>			
RFP is used in negotiated acquisitions to communicate the government’s requirements and solicit proposals.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure product support requirements are identified including Training, Technical Data Management/Technical Orders, Support Equipment/Automatic Test Systems, Packaging, Handling, Storage and Transportation, Supply Support, provisioning and cataloging requirements, Diminishing Manufacturing Sources and Material Shortages and Asset Marking to include IUID requirements and known GFP as well as request for contractor to identify additional property required. Coordinate with ALCs and Defense Logistics Agency (DLA) to ensure adequate packaging / transportation requirements are on contract (include data). Ensure Container Design Retrieval System (CDRS) testing requirements are in RFP.</li> <li>2. Determine life cycle product support activities for the program applicable to all milestones. Specifically include facilities / infrastructure and applicable requirements for high performance facilities</li> <li>3. Include HSI criteria in the RFP</li> <li>4. Develop RFP sections L and M IAW plan developed in checklist 2.17 Task 5 to include product support strategy discriminators such as operational availability, logistics footprint, and migration planning and maintenance concept.</li> <li>5. Develop and revise all sections of the draft RFP for product support where appropriate. See PSCRT <a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx</a></li> <li>6. Secure logistic experts as source selection evaluators and advisors.</li> <li>7. Evaluate contractor proposals against product support RFP requirements.</li> <li>8. Communicate product support strategy with Industry.</li> <li>9. Identify and include in RFP technical source data requirements for ACAT I and II programs per DoDI 5000.02. <u>While not required by regulation, this strategy is also recommended for ACAT III programs.</u></li> <li>10. Develop product support evaluation factors and sub-factors</li> <li>11. Ensure Government Industry Data Exchange Program (GIDEP) participation is in the contract.</li> <li>12. Ensure completion of tasks 1.21, 1.21.1, 1.21.2, and 1.21.3 which are specific requirements to be included in the RFP</li> </ol> <p>Note: For Services-Based Contracts, a Requirements Approval Document (RAD) is required for contract award. Concurrent</p>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">Defense Acquisition Guidebook</a> (Chapters 4,5, and 6) <a href="#">IG5315.204-5(c)Section M Guide Source Selection Documentation</a> <a href="#">IG5315.204-5(b) Section L Guide Source Selection Documentation</a> <a href="#">Government Industry Data Exchange Program (GIDEP) HSI Guide for Contracts</a> <a href="#">AFMCMAN 23-3</a> Cataloging and Standardization Chapter 26 <a href="#">AFI 23-101</a> Air Force Materiel Management <a href="#">AFMCMAN 20-106</a> Provisioning <a href="#">DoDI 8320.04 Item Unique Identification (IUID)</a> Standards for Tangible Personal Property <a href="#">DoDM 4140.01, Volume 3</a> DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <a href="#">Preservation and Storage of Tooling for MDAPs Berry Amendment</a> <a href="#">10 USC 2320</a> <a href="#">10 USC 2321</a> <a href="#">10 USC 2454</a> <a href="#">SAF Memorandum on coordination of Requirements Documents for release of RFP 27 Jan 2010</a> <a href="#">SAF Memorandum coordination of requirements documents for RFP Template</a></p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p>	

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<p>Development of the RFP and RAD is highly recommended to avoid potential delays in contract award. For more information on the RAD Process, see the <a href="#">AFMC Contract Support Services Requirements Approval Process Community of Practice</a></p>	<p><a href="#">Air Force Installation Energy Strategic Plan</a>  <a href="#">Product Data Acquisition Guidance</a>  <a href="#">FAR and DFARS clauses for Data Rights</a>  <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a>  <a href="#">AFI 24-210 IP Packaging of Hazardous Materials</a>  <a href="#">AFMCI24-201, AFMAN 24-204 IP, Preparing Hazardous Materials for Military Air Shipments</a>  <a href="#">AFI24-210 IP, Package of Hazardous Material, Title 32, Code of Federal Regulations, Part 49, Transportation and International Air Transport Association (IATA), Dangerous Goods Regulations</a>  <a href="#">DFAR 247.371 DD Form 1653, Transportation Data for Solicitations.</a>  <a href="#">DoDI 5000.02</a>  <b>Sample Documents:</b>  <a href="#">RFP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Released RFP</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.21.4</a>	Define Contractor Supported Weapon System (CSWS) Data Requirements	AoA Study Guidance Initial Capabilities Document (ICD) System Requirements Document (SRD)	
<b>DESCRIPTION:</b>			
This checklist provides guidance to define the data requirements for CSWS programs. These requirements are applicable regardless of the type of CSWS (AF, Joint, and Partner Nation) and are reflective of the standards included in the CSWS Alignment Template. This provides the basis for information exchange and a standard set of requirements for CSWS programs at all phases in the weapon system life cycle. Also included are a suggested set of additional requirements to be evaluated by each CSWS program.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1.Ensure the following are included as AF data requirements in the contractual documentation/information for the CSWS:</p> <ul style="list-style-type: none"> <li>• Engineering Change Request (ECR) Packages</li> <li>• Assistance Request (AR)</li> <li>• Maintenance Program*</li> <li>• BOM Structure*</li> <li>• Closed ECN with Product Data*</li> <li>• Unsolicited Contractor ECR*</li> <li>• Unsolicited Engineering Change Proposal*</li> <li>• Advanced Shipping Notification (ASN)</li> <li>• Delivery Information</li> <li>• Change in Vehicle Status</li> <li>• Conditional Parameters</li> <li>• Inventory Data</li> <li>• Fault Data</li> <li>• Operational Parameters</li> <li>• Policy and Regulation</li> <li>• Vendor Capacity Data</li> <li>• Vendor Lead Times and Sourcing Information</li> <li>• Carcass Levels</li> <li>• Project Data (Resource Availability/Utilization)</li> <li>• Repairable Returns</li> <li>• Other External Customer Forecasts</li> <li>• Transportation Lead Times</li> <li>• Business Rules for Return Processes</li> <li>• WIP Status</li> <li>• Work Order</li> </ul> <p>* Attached to AR, but listed separately for clarification</p> <p>2.Provide input to the CSWS Contractor Enabling Data Guide (below) to determine the need for elective data feeds from the AF to the contractor for the individual CSWS program.</p> <p>3.Assist in Determining if there are any additional AF data requirements beyond those listed in the above list or in the Enabling Data Guide.</p> <p>4.Ensure the applicable data requirements and exchange frequencies are included in the contractual documentation/information.</p>	<p><a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a></p> <p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development - This document supports JCIDS process</p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">AFPD 16-14</a> Security Enterprise Governance</p> <p>DLM 4000.25 Defense Logistics Management System</p> <p><a href="#">CSWS Alignment Template</a></p> <p><a href="#">CSWS Data Exchange Requirements Workbook</a></p> <p><a href="#">Contractor Enabling Data Guide</a></p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
List of data requirements for CSWS program to be included in contractual documentation/information.			

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
2.22	Integrated Baseline Review (IBR)	Contract Award Responsibility Assignment Matrix (RAM) Work Breakdown Structure (WBS) Statement of Work (SOW) Contractor Work Breakdown Structure (CWBS) Dictionary Integrated Master Schedule (IMS) Control Account Plans (CAP) Risk Management Plan Government Furnished Property (GFP) Plan IBR Plan	
<b>DESCRIPTION:</b>			
The purpose of an IBR is to establish and maintain a mutual understanding of the risks inherent in the performance measurement baseline and the contractor’s management processes during program execution. The IBR is part of integrated project management and should be seen as a continuous “process” versus a standalone event throughout the program’s life cycle. According to DoD acquisition policy, all programs must conduct an IBR if the contract requires an Earned Value Management (EVM) system. The program manager is responsible for the IBR and will require the technical staff and IPT leads to support this effort. Prior to attending an IBR all participants will attend required training, prepare for the IBR, and lead/conduct IBR baseline discussions regarding functional area of expertise.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1. In preparation for the IBR, the logistician reviews available documentation, e.g., responsibility assignment matrix, SOW, WBS, CWBS Dictionary, work authorization documents, schedules, control account plans, risk plan, GFP plan, etc. 2. The logistician also reviews the contractor developed baseline control account plans for product support. The individual will assess plans for realism at the lowest level. Normally, a program will strive to review approximately 80 percent of the contract value. Review will consist of <ul style="list-style-type: none"> <li>• Significant logistics elements</li> <li>• Product support risk areas</li> <li>• Logistics elements on the critical path</li> </ul> 3. Typical discussions will revolve around the methodology the contractor used to develop the work authorization document, schedule planning and basis of estimate that make up each control account plan. Each control account is evaluated to determine if it is a high, moderate or low risk to the program. 4. The logistician will prepare their portion of the out briefing addressing the five IBR goals: <ul style="list-style-type: none"> <li>• Technical scope is fully included and consistent</li> <li>• Scheduled key milestones identified in a logical flow</li> <li>• Contractor resources are available and adequate</li> <li>• Tasks are planned and can be measured objectively</li> <li>• Management processes support successful execution</li> </ul> 5. In some cases, the prime contractor will ask the government to participate in an IBR for their subcontractors or company’s interdivisional sites. The same process is used to discuss baseline with sub-control account managers. 6. The logistician will monitor any IBR logistics action items and track their progress at joint management reviews.	OUSD(A&S) letter, <a href="#">Revisions to DoD Earned Value Management Policy</a> , 7 Mar 05 <a href="#">Defense Acquisition Guide</a> , <a href="#">The Integrated Project Management Handbook</a> , Chapter III.A <a href="#">Program Managers Guide to Integrated Baseline Review Process</a> <a href="#">Earned Value Management Implementation Guide (EVMIG)</a> , Part 2, Section 4 <a href="#">Integrated Baseline Review DAU Risk Management Guide for DoD Acquisition</a> <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a> <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">DAFPAM 23-168</a> Integrated Life Cycle Management  <b>Sample Documents</b> <a href="#">Risk Management Plan</a>	Technical Maturation Risk Reduction  Engineering & Manufacturing Development  Production & Deployment  Operations & Support	

Product Support Took Kit (PSTK)

<b>EXIT CRITERIA:</b>		
IBR Memorandum documenting findings and action item plan		
Updated Risk Management Plan		



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.23</a>	Include Product Support Activities in Integrated Master Plan/Integrated Master Schedule (IMP/IMS)	Acquisition Decision Memorandum (ADM)	
<b>DESCRIPTION:</b>			
<p>The IMP/IMS provides a basis for effective communication, serve as baselines for program plans, status and progress: and provides a basis for resource analysis, exploration of alternatives and cost, performance and schedule tradeoff studies. They should be integrated at all levels, contain sufficient detail and capture key events (e.g., acquisition, Training, Technical Data Management/Technical Orders, Support Equipment / Automatic Test Systems (SE/ATS) and Packaging, Handling, Storage and Transportation (PHS&amp;T) logistics, Supply Support, National Environmental Policy Act (NEPA) and T&amp;E perspectives).</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Develop a schedule to assess the adequacy of the logistics-related activities and outcomes in addressing Total Life Cycle System Management responsibilities, objectives, and cost impacts. Do all logistics activities provide traceability to the contractor's Work Breakdown Structure (WBS)?</li> <li>2. Has a formal program been established and scheduled to identify actions necessary to achieve significant increases in reliability and reductions in the logistics footprint? Will they be verified in test and evaluation?</li> <li>3. Has the following LCSP coordination and approval dates been annotated, in the schedule:               <ol style="list-style-type: none"> <li>a. Local organizations – Competition Advocate, Procuring Contract office, Judge Advocate, Small Business, and appropriate ALC or Logistics Office.</li> <li>b. ACAT I and II – SAF/AQX, SAF/AQC, SAF/GCQ and AF/A4L coordinated and signed (at a minimum). SAF/ACE and SAF/FMBI will review and coordinate for policy compliance.                   <ol style="list-style-type: none"> <li>1.) Sustainment command representative to minimum LCSP signature requirements.</li> <li>2.) PS BCA Planning/Schedule.</li> </ol> </li> <li>c. ACAT III – will follow similar process at the local level. PEO is final approval authority.</li> </ol> </li> <li>4. Has it been identified and scheduled, to address all comments, to the LCSP, that need to be reviewed and deliberated by the IPT prior to forwarding to the MDA for approval?</li> <li>5. Does the development schedule of the Life Cycle Sustainment Plan (LCSP) include all offices/stakeholders?</li> <li>6. Have supportability/logistics considerations been addressed to include the 12 Product Support Elements including DMSMS, reclamation, demilitarization and disposal.               <ol style="list-style-type: none"> <li>a. Initial Capabilities Document/Capability Development document</li> <li>b. Acquisition Strategy</li> <li>c. Technical Maturation Risk Reduction</li> <li>d. Acquisition Program Baseline</li> <li>e. Test &amp; Evaluation Strategy</li> <li>f. Test &amp; Evaluation Master Plan</li> <li>g. NEPA and facilities / MILCON design and construction timelines</li> </ol> </li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">Acquisition Decision Memorandum (ADM)</a> <a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">Defense Acquisition Guidebook</a> (Chapters 4.5.2 and 11.3.1.4.2) <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">AFI 36-2251</a> Management of Air Force Training Systems <a href="#">IMP/IMS Preparation and Use Guide</a> <a href="#">USAF Project Managers Guide for design and construction</a> <a href="#">42 USC 4321</a> <a href="#">40 CFR 1500</a> <a href="#">32 CFR 989.3(c)(3)</a> <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a> <b>DFAR 247.371 DD Form 1653, Transportation Data for Solicitations</b></p> <p><b>HQ AFMC PK Mandatory Procedures</b> Mandatory Procedure (MP) 5347.305, Transportation, Packaging Instructions and Data</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

<p>7. Has the Pre-Initial Operational Capability Supportability Review and Analysis been scheduled?</p> <p>8. Has the Air Force logistics data systems, maintenance, supply support, Technical Data, SE, PHS&amp;T, and logistics training directives been scheduled to support the assurance of operational safety, suitability, and effectiveness for the Air Force systems and end item?</p> <p>9. Has a schedule been developed for Post Deployment Reviews, periodic assessments of system support strategies vs. expected levels of performance and support?</p> <p>10. To increase weapon system availability while reducing life cycle cost and the logistics footprint has the logistics manager scheduled periodic assessments, and where necessary, improvements of the product support strategy?</p> <p>11. Ensure that all logistics tasks are linked to and supportive of overall program milestones/key events.</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Life-Cycle Management (LCM) Tools          Professional Logistics Workforce identified          Total Life Cycle Systems Management (TLCSM)          Performance Based Agreement          Performance Based Agreement for Organic Supply Support          Designing and Assessing Supportability in Weapon Systems          Product Support: PM Guide to buying performance</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.24.2</a>	Initiate the Depot Source of Repair (DSOR)	Technical Maturation Risk Reduction (TMRR) Initial Capabilities Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) Cost Analysis Requirements Document (CARD) Analysis of Alternatives (AOA) Systems Engineering Plan (SEP) Test and Evaluation Master Plan (TEMP) Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
All Air Force depot level maintenance posturing decisions are made through the Depot Source of Repair (DSOR) process. Per public law 10 USC § 2366a the DSOR process begins pre-milestone A with a core determination followed by a DSOR decision post milestone A, and lower level DSOR decisions as weapon system information becomes available. Sub-processes include a Source of Repair Assignment (SORA) and a Depot Maintenance Interservice (DMI). The SORA determines the best long-term depot maintenance source of repair (SOR) for Air Force workloads while giving full consideration to the requirements of public law, Air Force policy, and which maximize weapon system sustainment to the warfighter with minimum use of scarce USAF resources The DMI process determines the final SOR location with consideration to all DoD Services. The logistician will use the Depot Source of Repair Automated Management System (DSOR-II) tool to complete and track the DSOR process. A Weapon System may require multiple DSORs depending on complexity.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1. Logician decides if DSOR required using AFI 63-101/20-101 a. Identify and define requirements b. Initiate Template A in DSOR II requesting core and candidate depot c. Provide SORA Phase data using appropriate template format 1) <u>Template A</u> – New Acquisition/Modification Follow-On/New Work 2) <u>Template B</u> – Workload Shift 3) <u>Template C</u> – Modification Installs 4) Legacy Template – Workload postured prior to 1999 d. Decide if Commercial Statement is required. If no, proceed to HQ AFMC/A4FD with request. If yes, seek Commercial Statement documentation (requires PK/JAG signature) and provide this with request to HQ AFMC/A4FD. e. The logistician will track status through DSORII Tool throughout the remainder of the DSOR Process.  2. Once HQ AFMC provides Candidate Depot and Core Assessment the logistician will establish DSOR Team to - complete the SORA a. Members may include OEM, candidate depot, sustainment manager and other key stakeholders as appropriate b. Team stays formed throughout acquisition to activation (changes into Depot Maintenance Activation Working Group (DMAWG))	<a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">DAFAPM 63-128</a> Integrated Life Cycle Management <a href="#">DSOR II Automated Management System (AMS)</a> <a href="#">DoD LA Guidebook</a> <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">DoD Product Support BCA Guidebook</a> <a href="#">10 USC 2366a</a> <a href="#">AFMAN 63-122 Depot Source of Repair Planning and Activation</a> <a href="#">DoDI 4151.24 Depot Source of Repair Determination Process</a> <b>Sample Documents:</b> <a href="#">ICD</a> <a href="#">CARD</a> <a href="#">AOA Study Plan</a> <a href="#">SEP</a> <a href="#">TEMP</a> <a href="#">LCSP</a>	Material Solution Analysis  Engineering & Manufacturing Development  Production & Deployment  Operations & Support	

Product Support Took Kit (PSTK)

<p>3. DSOR Team evaluates workload</p> <ul style="list-style-type: none"> <li>a. Determine system support impacts</li> <li>b. Understanding of depot repair requirements</li> <li>c. Determine if and what additional data is required</li> <li>d. Validate/correct candidate depot assignments</li> <li>e. Is candidate depot “interested” in your depot workload?</li> <li>f. Will costing effort be required?</li> <li>g. Is data available from actual system?</li> <li>h. Is data available from “like” systems?</li> <li>i. Gather SORA Template data as appropriate</li> <li>j. Define depot maintenance and acquisition strategy</li> <li>k. Assess depot facilities / infrastructure impacts</li> <li>l. Develop Partnering strategy with stakeholders/ depots</li> </ul> <p>4. Conduct Organic vs. Contract cost comparison using the Cost Analysis Tool (CAT) in DSOR II for non-core depot workloads</p> <ul style="list-style-type: none"> <li>a. Validate organic / contractor estimates</li> <li>b. Partnering may be an option</li> </ul> <p>5. Draft SORA Template to include recommendation / cost estimate</p> <ul style="list-style-type: none"> <li>a. Coordinate with all stakeholders and obtain consensus with SOR recommendation</li> <li>b. Ensure appropriate template is filled in DSOR-II</li> <li>c. Transmit Template A to HQ AFMC/A4FD</li> <li>d. HQ AFMC/A4FD staffs SORA for AFMC/A4 approval (includes 10 USC 2466 assessment)</li> <li>e. HQ AFMC/A4FD returns approved SORA to Program Office.</li> </ul> <p>6. Initiate Depot Maintenance Interservice (DMI) 30 days after receipt of approved SORA</p> <ul style="list-style-type: none"> <li>a. Complete DMI Template</li> <li>b. Prepare cover letter and submit to HQ AFMC/A4FD</li> </ul> <p>7. HQ AFMC/A4FD conducts DMI review and returns final DSOR Decision Memo to Program Office.</p> <p>8. Develop a Depot Maintenance Implementation Plan and submit to HQ AFMC/A4FD</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Completed SORA Process (Task 1)  Candidate Depot / Core Assessment Request (Task 1)  DSOR Team (Task 2)  Update to LCSP (Task 3)  Completed CAT(Task 4)  Signed SORA(Task 5)  DMI Decision Memo (Task 6)  Depot Maintenance Implementation Plan (Task 7)</p>		

Product Support Took Kit (PSTK)

Approved Integrated Risk Assessment, POE or other cost estimate as described in AFI 63-101/20-101 Documentation of the source data for the POE product support elements		
<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>
<a href="#">2.26</a>	Prepare Documentation for Milestone A	Determination that MSD for MS A is required
<b>DESCRIPTION:</b>		
<p>There are two types of decision points: milestone decisions and decision reviews. Each decision point results in a decision to initiate, continue, advance, or terminate a project or program work effort or phase. The review associated with each decision point typically addresses program progress and risk, affordability, program trade-offs, acquisition strategy updates, and the development of exit criteria for the next phase or effort. The Milestone Decision Authority approves the program structure, including the type and number of decision points, as part of the acquisition strategy. Per 10 USC 2366A the MDA must provide a signed certification memorandum for record prior to Milestone A approval. Milestone A authorizes entry into the major acquisition process phase for Technical Maturation Risk Reduction. The purpose of this phase is to reduce technology risk and to determine the appropriate set of technologies to be integrated into a full system.</p>		
<b>CHECKLIST SUBTASKS:</b>		
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>
Review and make inputs to applicable documents required by statute or regulation before milestone decision	<a href="#">Milestone A Documentation</a> <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System Enc. 4 page 34 <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">10 USC 2366</a>	Technical Maturation Risk Reduction
<b>EXIT CRITERIA:</b>		
<p>Milestone decision approved                      All proper supporting documentation put in the official files</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">2.35</a>	Participate in SRR (Demonstrate Concepts)	Acquisition Decision Memorandum (ADM) Initial Capabilities Document (ICD) Draft Capability Development Document (CDD) Analysis of Alternatives (AoA) Test and Evaluation Master Plan (TEMP) System Engineering Plan (SEP) Support and Maintenance concept and Technologies Technical Maturation Risk Reduction (TMRR) Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
A formal, system-level review conducted to ensure that system requirements have been completely and properly identified and that a mutual understanding between the government and contractor exists.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>Coordinate with lead engineer regarding supportability requirements</li> <li>Review applicable documentation against product support strategy such as system maintenance concept, significant system design criteria (reliability, maintainability, logistics requirements, layout drawings, conceptual design drawings, selected supplier components data, support equipment, etc.) <ul style="list-style-type: none"> <li>Define baseline operational scenarios for system alternatives</li> <li>Participate in market research for supportability attributes of potential commercial products</li> <li>Identify and estimate achievable values of logistics and R&amp;M parameters</li> <li>Establish system readiness objectives and tentative thresholds</li> </ul> </li> <li>Ensure Intelligence requirements and deficiencies are addressed</li> <li>Ensure that the operational and system views are inclusive of the people that will operate, maintain and sustain the system</li> <li>Ensure HSI implications, constraints and issues are adequately addressed in the requirements and supportive of attaining the proper interfaces to support the operational concepts</li> <li>Ensure product support requirements satisfy the ICD or draft CDD</li> <li>Identify support cost drivers and targets for improvement</li> <li>Ensure alternatives to reduce mishap hazards and hazardous materials are considered</li> </ol>	<a href="#">Systems Engineering Fundamentals</a> AFI 63-101/20-101 <a href="#">System Requirements Review Procedures</a> MIL-HDBK-502 Product Support Analysis <a href="#">DoD LA Guidebook</a> <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards <a href="#">AFMAN 32-7002</a> Environment Compliance and Pollution Preventions <a href="#">HSI Handbook</a> <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> <b>Sample Documents:</b> <a href="#">AOA Study Plan</a> <a href="#">ICD</a> <a href="#">SEP</a> <a href="#">LCSP</a>	Materiel Solution Analysis  Technical Maturation Risk Reduction	
<b>EXIT CRITERIA:</b>			
Updated Initial Capabilities Document (ICD) Updated Draft Capability Development Document (CDD) Updated Analysis of Alternatives (AoA) Updated Test and Evaluation Master Plan (TEMP) Updated System Engineering Plan (SEP) Updated Product Support Strategy			



Product Support Took Kit (PSTK)

Updated Technical Maturation Risk Reduction (TMRR)

Updated Life Cycle Sustainment Plan (LCSP)

SRR Minutes

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
2.49	Baseline Product Support Strategy in LCSP	Capabilities Development Document (CDD) System Performance Specification Validated Systems Support and Maintenance Objective and Requirements Systems Engineering Plan (SEP) Test and Evaluation Master Plan (TEMP) Integrated Baseline Review (IBR) Acquisition Strategy (AS) Acquisition Program Baseline (APB) Affordability Assessment Industrial Capabilities, Cooperative Opportunities Core Logistics Analysis/Source of Repair Analysis, and Competition Analysis for Depot-Level Maintenance >\$3M Life Cycle Sustainment Plan (LCSP) if available Minutes from the System Functional Review (SFR) and Critical Design Review (CDR) Updated Cost Analysis Requirements Description (CARD)

**DESCRIPTION:**

A Life Cycle Sustainment Plan (LCSP) is a comprehensive document that consolidates the weapon system life cycle acquisition management and product support strategies from materiel solution analysis through reclamation/disposal. It is a document that must be maintained to remain compliant with revised/new DoD policy and statutory requirements. It represents a corporate AF position on how to best execute and manage a specific program and requires participation from all program stakeholders in its development and update.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Review the CDD for duration of support, sustainment planning, and any overarching changes in DOTMLPF. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded 2. Review the Systems Engineering Plan for product support strategy 3. Ensure the HSI process is used to support generation of a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), and affordability. 4. Review the product support strategy for: a. Improvements on how the program addresses the support and fielding requirements necessary to meet readiness and performance objectives, lower total ownership cost, reduce risks, and avoid harm to the environment and human health (2.3.12) b. Contracting approach for product support throughout the system life-cycle (see DAU Guidebook for more detail) 5. Total Life Cycle Systems Management (TLCSM) concepts found in the product support strategy for:	<a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">Integrated Defense Acquisition Technology and Logistics Life Cycle Mgmt Framework ("Wall Chart")</a> <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">Cost as an Independent Variable (CAIV)</a> <a href="#">Configuration Mgmt</a> <a href="#">Configuration Mgmt 2</a> <a href="#">Data Management</a> <a href="#">Data Management in Engineering</a> <a href="#">Develop Performance Outcomes</a>	Engineering & Manufacturing Development

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<p>a. Supportability, life cycle costs, performance, and schedule comparable in making program decisions</p> <p>b. Planning for operations and support and the estimation of total ownership costs</p> <p>c. System effectiveness and any improvements to life cycle product affordability</p> <p>6. Identify anticipated sustainment requirements to the Centralized Asset Management (CAM) office (AFMC/A4F Workflow). For AFSPC, ANG and AFRC sustainment requirements also contact the respective organization. If program is within 2-3 years of needing O&amp;M sustainment funding, ensure planning for budget input is accomplished. See Task 5.8.1</p> <p>7. Review Product Business Case Analysis (PS-BCA) to validate the product support strategy is cost effective, financially feasible, optimizes system readiness and manages risk, IAW 10 U.S.C. §2337, Life cycle Management and Product Support</p> <p>8. Ensure support concepts satisfy user specified requirements for sustaining support performance at the lowest possible life cycle cost for each capability to be delivered to the user including:</p> <p>a. Review applicable operational effectiveness analyses to ensure support concepts meet warfighter-specified levels of combat and peacetime performance</p> <p>b. Logistics support that sustains both short and long-term readiness</p> <p>c. Minimal total life cycle cost to own and operate (i.e., minimal total ownership cost)</p> <p>d. Maintenance concepts that optimize readiness while drawing upon both organic and industry sources</p> <p>e. Data management and configuration management that facilitates cost-effective product support throughout the system life cycle</p> <p>f. Support Equipment (peculiar and common); the designated Support Equipment Manager updates the support equipment strategy with the support of the Support Equipment Working Group, to include how the program will prioritize the selection of existing, common USAF / DoD support equipment over the selection of system unique, peculiar support equipment (generally via the Support Equipment Recommendation Data (SERD) Process)</p> <p>g. Ensure Energy Efficiency and Alternate Fuels are considerations. Review Air Force installation energy strategic plan along with the that specific installation's plan</p> <p>9. Include performance outcomes and corresponding metrics for operational availability, operational reliability, Cost per Unit Usage, Logistics Footprint, and Logistics Response Time</p> <p>10. Given the operational environment and combatant commander availability requirements, define the logistics reliability targets and the corresponding sustainment infrastructure</p> <p>11. Review maintainability for comprehensive identification of both projected maintenance strategy, including diagnostics, prognostics, maintenance duration targets, and similar measures</p> <p>12. Review the Total System Product Support Package for product support concepts that are based on reliability and</p>	<p><a href="#">DoDD 5000.01</a> The Defense Acquisition System E1.1.17 - Performance-Based Logistics</p> <p><a href="#">MOSA and Interoperability PBL: A PM's Product Support Guide</a> (All)</p> <p><a href="#">Product Support Product Support Plan for Information Technology Guide</a> (SWGDO32)</p> <p><a href="#">10 USC 2440 Technology Readiness Assessment Deskbook (TRA)</a> (2.3)</p> <p><a href="#">Product Support Package AFI 99-103</a> Capabilities Based Test and Evaluation</p> <p><a href="#">DoD LA Guidebook Air Force Installation Energy Strategic Plan AFMAN 32-1084</a> Facility Requirements</p> <p><a href="#">Logistics Requirements Determination Process Centralized Asset Management (CAM)</a></p> <p><a href="#">42 USC 4321</a></p> <p><a href="#">40 CFR 1500</a></p> <p><a href="#">32 CFR 989.3(c)(3)</a></p> <p><a href="#">DoDI 5000.81</a> Urgent Capability Acquisition</p> <p><a href="#">DoD PSM Guidebook DoD Product Support BCA Guidebook Weapon System Acquisition Reform Act Preservation and Storage of Tooling for MDAPs HSI Handbook HSI Requirements Pocket Guide Product Data Acquisition Guidance Centralized Asset Management (CAM) Document Library in the United States Air Force Enterprise Information Service AFLCMC LCSP Standard Process and OSD Sample Outline Version 2.0 (dtd 17 Jan 2017)</a></p> <p><b>Sample Documents:</b> <a href="#">LCSP</a></p>	
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Product Support Took Kit (PSTK)

<p>maintainability of the system including manpower and personnel, and Training Systems / Computer based training.</p> <p>13. Review the collection, analysis, and evaluation of system performance and maintenance performance data to determine the need for and prescribe changes to the system configuration, maintenance support structure, and maintenance resource requirements.</p> <p>14. Review identification of potential organic depot-level sources of maintenance alternative and refine logistics support considerations correspondent with the acquisition strategy (when employed).</p> <p>15. Ensure National Environmental Policy Act (NEPA), facilities SRM and MILCON funding requirements are addressed lead time away as applicable.</p> <p>16. This task is one in a series to ensure the LCSP is continually updated to address additional program information and maturity. Reference checklists 2.15, 2.49, 3.29, 5.32, and 6.10.</p>	<p><a href="#">SEP</a> <a href="#">CARD</a> <a href="#">TEMP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Product Support Strategy Product Support Plan Life Cycle Sustainment Plan Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE) Signed LCSP for Milestone A decision</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.2.1</a>	Establishing a Technical Order Acquisition Program	Initial Capabilities Document (ICD) Draft Capability Development Document (CDD) Acquisition Strategy Maintenance Strategy Product Support Strategy	
<b>DESCRIPTION:</b>			
Technical order requirements must be planned and placed on contract to ensure completion and delivery concurrent with the equipment or hardware. The organization or individual assigned TO acquisition responsibility is called the Technical Order Manager. This checklist gives instruction on how to initiate a technical order acquisition program from development of the strategy to initial contract award.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. Establish Technical Order (TO) acquisition program by appointing an experienced technical order manager(s), provide training as needed, and establishing a TO Integrated Program Team. The initial TO requirements will come from the initial acquisition planning meeting.</p> <p>2. Determine TO program strategy, objectives and requirements by convening a Technical TO Planning and Requirements Conference. The TO program strategy must address the full life cycle of TOs for acquisition, sustainment, management, distribution, and use.</p> <p>3. Develop TO contract requirements that clearly specify technical order requirements, including for delivery. Use latest version of Technical Manual Contract Requirements (TMCR) Document TM 86-01, to place TOs on contract.</p> <p>4. For further information concerning establishment of a TO program, contact AFLCMC/LZPT AF TO Management Support (AFTOMS) office.</p>	<p><a href="#">Establish Technical Order Acquisition Program</a> <a href="#">TO 00-5-1</a> AF Technical Order System <a href="#">TO 00-5-3</a> Air Force Technical Order Life Cycle Management <a href="#">TO 00-5-18</a> USAF Technical Order Numbering System <a href="#">Enhanced Technical Information Management System (ETIMS)</a> ETIMS is the prescribed method of accessing the 00-5 series of TOs. Users request access to the applicable TO's through ETIMS which is an AF Portal program. <a href="#">Develop TO strategy</a> <a href="#">TM 86-01, Technical Order Contract Requirements</a> <a href="#">TO Delivery Requirements</a> <a href="#">AFI63-101_20-101, Integrated Life Cycle Management</a></p> <p><a href="#">AFMCI21-301 (New publication is in the final stages of review and this reference will be renamed AFMCI63-301)</a></p> <p>*NOTE: HQ AFMC is designated the executive agent for the AF TO System, IAW AFI 63- 101/20-101 <b>Sample Document</b> <a href="#">TMCR</a> <a href="#">TOLCMP</a> <a href="#">TOLCVP</a></p>	<p>Technical Maturation Risk Reduction</p>	

Product Support Took Kit (PSTK)

**EXIT CRITERIA:**

Development of Technical Manual Contract Requirements (TMCR) Document, TM-86-01

Development of Technical Order Life Cycle Management Plan (TOLCMP)

Development of Technical Order Life Cycle Verification Plan (TOLCVP)



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.4.1	Product Support (PS) Business Case Analysis (BCA)	Milestone B Scheduled (initial PS BCA) Change in product support strategy Passage of 5 years since initial PS BCA Baseline Product Support Strategy	
<b>DESCRIPTION:</b>			
<p>The PS BCA is a structured methodology and document that aids decision making by identifying and comparing alternatives by examining the mission <b>and</b> business impacts (both financial and non-financial), risks, and sensitivities. BCAs may be somewhat different from other decision support analyses through their emphasis of the enterprise wide perspective of stakeholders and decision makers and assessment of the holistic effects impacted by the decision. The PS BCA concludes with a recommendation and associated specific actions and an implementation plan to achieve stated organizational objectives and desired outcomes. One principle application of the PS BCA guidebook is to assist the PSM in identifying the product support strategy that achieves the optimal balance between Warfighter capabilities and affordability.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. Preparation</p> <p>1a) PM appoint team lead (typically PSM)</p> <p>1b) For AFLCMC programs, contact AFLCMC/LG to schedule kick-off meeting AFLCMC/LG_LZ Workflow (Logistics) &lt;AFLCMCAQL.Workflow@us.af.mil&gt;. For AFSPC programs, contact AFSPC A4/7 for further guidance.</p> <p>1c) Begin to gather data from all available resources</p> <p>1d) Identify PS BCA team members</p> <p>1e) Conduct PS BCA Kickoff (to include AFLCMC/LG) and validate problem statement</p> <p>1f) Approve problem statement; develop draft alternatives; and develop draft methods and assumptions.</p> <p>Note: Be sure to use established governance structure (see DoD PS-BCA Guidebook and AFLCMC PS BCA Standard Process for additional detail).</p> <p>2. Execution</p> <p>2a) Draft alternatives, methodology criteria, scope, methods, tools and rationale</p> <p>2b) Document data sources and tools</p> <p>2c) Collect data</p> <p>2d) Analyze data (formulate estimate)</p> <p>2e) Draft PS BCA briefing and final report</p> <p>3. Conclusion</p> <p>3a) Distribute PS BCA for validation</p> <p>3b) Adjudicate edits</p> <p>3c) Obtain final validation</p> <p>3d) Brief results to senior management</p> <p>3e) Document in the LCSP and attach final PS BCA report as a mandatory annex</p> <p>3f) Document lessons learned, best practices and resources</p> <p>3g) Implement PS BCA recommendations</p> <p>Note: Steps will not likely be accomplished sequentially. A strong, well-defined problem statement and early implementation/use of the governance structure will greatly reduce re-work and schedule creep.</p>	<p><a href="#">AFI 63-101/20-101</a> Acquisition and Sustainment Life Cycle Management, 7 March 2013.</p> <p><a href="#">DoD Product Support Business Case Analysis Guidebook</a>, April 2011</p> <p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">FY2010 NDAA Sec. 805, Public Law 111-84</a>, Life Cycle Management and Product Support</p> <p><a href="#">USD(A&amp;S) Policy Memo</a>, Strengthened Sustainment Governance for Acquisition Program Reviews, 5 April 10, <a href="#">Air Force Manual 65-510 Business Case Analysis Procedures</a>, 22 September 2008</p> <p><a href="#">AFI 65-509 Business Case Analysis</a> 19 September 2008</p> <p><a href="#">The DoD Reliability, Availability and Maintainability Cost (RAM-C) Rationale Report Manual</a>, June 1, 2009</p> <p><a href="#">DoD 4151.22 M</a>, Reliability Centered Maintenance, 30 June 2011</p> <p><a href="#">DoDI 4151.22</a>, Condition-Based Maintenance Plus, 16 Oct 2012</p> <p><a href="#">AFLCMC Standard Processes</a></p>	<p>Technical Maturation Risk Reduction Phase</p> <p>Engineering &amp; Manufacturing Phase</p> <p>Production &amp; Deployment Phase</p> <p>Operation &amp; Support Phase</p>	

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	AFPAM 63-123, Product Support BCA	
<b>EXIT CRITERIA:</b>		
<ul style="list-style-type: none"><li>- Finalized and approved PS BCA, modified LCSP, placed in official program files as required</li><li>- AFLCMC metrics reported (see AFLCMC PS BCA Standard Process)</li></ul>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.6	Establish Depot Maintenance Activation Working Group (DMAWG) Team	Identification of new acquisitions with depot repair capabilities Initial SORA identifying organic with a mission assignment	
<b>DESCRIPTION:</b>			
The objective of the DMAWG is to ensure a required depot maintenance capability is set up in a timely and efficient manner to achieve government-controlled capabilities for the depot repair. The DMAWG is the forum for conducting depot source of repair planning and activation to ensure funding, contracting, and delivery of data is accomplished. If support concept is total Contractor Logistics Support (CLS), a DMAWG is not required; however a Contractor Depot Activation Plan is still required.			
<b>CHECKLIST SUBTASKS:</b>			
TASK :	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. A logistics support plan which defines contractor support and government activities is developed. Be sure to include all 12 Life-Cycle Sustainment</li> <li>2. PSM and AFSC/LG representative serve as the DMAWG co-chairs</li> <li>3. DMAWG co-chairs establishes group members with assigned depot and other applicable partners</li> <li>4. Develop a DMAWG charter</li> <li>5. Review and ensure depot support requirements are adequately described</li> <li>6. Identify participating DMAWG organizations (Maintenance Activation Planning Team)</li> <li>7. Develop, coordinate and maintain depot activation plans</li> <li>8. Determine depot activation requirements (facilities, communications requirements, training, SE/ATS, PHS&amp;T, ESOH, manpower and personnel)</li> <li>9. Assist in developing funding requirements for depot support</li> <li>10. Maintain depot activation schedules</li> <li>11. Conduct DMAWGs and coordinate activation activities. If Depot activation stands up depot repair capability at another DoD Service ensure DMISA development is included in list of activation activities</li> <li>12. Ensure contractor has capability to support interim logistics support until transfer to organic repair</li> </ol>	<p>DoDI 5000.89 Major Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a>                      AFMAN 32-7002 Environment Compliance and Pollution Prevention Defense  <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management  <a href="#">AFI 21-102</a> Depot Maintenance Management  <a href="#">AFMCI 21-101</a> Depot Maintenance Activation Planning (DMAP) (Chapter. 1)  <a href="#">AFI 17-140 Cyberspace Architecting</a>  <a href="#">DoD LA Guidebook</a>  <a href="#">DAFMAN 32-1084</a> Facility Requirements  <a href="#">Organic Modification Checklist (AFSC.LZB.Workflow@us.af.mil)</a>  <a href="#">AFMAN 63-122 Depot Source of Repair Planning and Activation</a>  <a href="#">DoDI 4151.24 Depot Source of Repair Determination Process</a></p>	<p>Engineering &amp; Manufacturing Development</p> <p>Production and Deployment</p>	
<b>EXIT CRITERIA:</b>			
<p>First Article Test Complete                      Organic Capability Letter issued                      DMISA established (for inter-Service workload)                      All identified activations have taken place</p>			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.10</a>	Facilities Concept	Milestone A Approval Initial Capabilities Development	
<b>DESCRIPTION:</b>			
<p>Identifying and tracking facilities begins early during the operational site reviews when a mission bed down, realignment, transfer, conversion, activation/inactivation, or operational change begins with a site survey tasking for a particular program. The tasking is assessed and assigned to a MAJCOM Installations and Units Action Officer. The action officer reviews the tasking with the program manager and discusses an implementation strategy, to include possibilities of a site survey, a MAJCOM programming plan (PPLAN), environmental concerns and issues, and possible Site Activation Task Force meetings. The action officer acts as the focal point for the PPLAN process and serves as the site survey team chief. A site survey is defined as an authorized visit to survey real property, i.e., facilities/infrastructure and land, to determine its feasibility for unit or mission bed down. The following are some general guidelines for preparing for a site survey. The timelines can vary depending on the urgency of the action and the proposed effective date. The logistician should review and make input to any supportability documents required by statute or regulation before Milestone Decision can be sought and rendered. Facilities summaries are especially relevant because of the long lead-time normally required for establishing or modifying facilities. These summaries shall identify all facilities/infrastructure requirements needed to support the program including communications, test equipment, training aids, building size and any other special considerations especially the habitability and ESOH issues to facilitate safe and effective operations, consistent with the operational and sustainment concepts. The logistician, in conjunction with Civil Engineering, should perform analyses (to include HSI) to define necessary facilities/infrastructure or improvements, review and make input to key documents required by statute or regulation before Milestone Decision can be sought and rendered.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Provide inputs to MAJCOM in determining proposed bed down date, aircraft delivery schedule, aircraft numbers (PAA/BAI), manpower and personnel impacts, mission unique requirements, and impacts on base operating support.</li> <li>2. Coordinate on site survey objectives, proposed actions, and facilities/infrastructure requirements with MAJCOM. Provide bed down recommendations based on potential bed down sites and facility options.</li> <li>3. All basing actions require following the strategic basing process identified in AFI 10-503. The process includes the submission of a Basing Action Request (BAR) for approval of site surveys locations and completion of the mandatory Environmental Impact analysis Process (EIAP).</li> <li>4. Participate in site survey, as required. <ul style="list-style-type: none"> <li>– Attend site survey team in-brief to Wing Commander, staff, and base-level functional managers on the purpose of the visit.</li> <li>– The site survey team will be briefed on potential bed down sites and facility options.</li> <li>– In most cases, the team is taken on a tour of applicable base facilities.</li> <li>– The team will breakout into working groups and the logistician will support the logistics activity; attend integration meetings; participate in out brief preparation, and assist in the development of site survey report.</li> <li>– At the conclusion of the site survey the Site Survey Team Chief will send out an e-mail advising everyone that the final site survey report is available (usually posted on a website).</li> </ul> </li> </ol>	<p><a href="#">AFI 10-503</a> Strategic Basing  <a href="#">MIL-HDBK-502</a> Product Support Analysis  <a href="#">MIL-STD-3007F</a> Unified Facilities Criteria and Unified Facilities Guide Specifications  <a href="#">DAFMAN 32-1084</a> Standard Facility Requirements  <a href="#">AFPD 10-5</a> Basing  <a href="#">AFI63-101/20-101</a> Integrated Life Cycle Management  <a href="#">AFI 10-501</a> Program Action Directives (PAD) and Programming Plans (PPLAN)  <a href="#">AFI 32-1021</a> Planning and Programming Military Construction (MILCON) Projects  <a href="#">AFI 32-1023</a> Designing and Constructing Military Construction (MILCON) Projects  <a href="#">AFI 32-1032</a> Planning and Programming, Appropriated Funded Maintenance, Repair, and Construction Projects</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p>	

<p>5. In some cases, MAJCOM may request support to develop and publish their PPLAN for bed down action. The PPLAN describes the program, outlines the milestones, and identifies the associated tasks. It also forms the basis for a future Site Action Task Force. See Task 5.14 SATAF.</p> <p>6. In coordination with base Civil Engineering the logistician shall address integrated site survey activities to include:</p> <ul style="list-style-type: none"> <li>– Begin analysis comparing existing allocated space at test, depot, training and operational locations to determine specific facilities requirements to support the system.</li> <li>– Verify maintenance and storage facilities options (contractor or organic, another Service, etc.)</li> <li>– Determine if existing facilities/infrastructure can be used and if new or modified support facilities are required.</li> <li>– Ensure Energy Efficiency, and Alternate Fuels considerations are addressed</li> <li>– Verify environmental compliance, pollution prevention and recovery or disposal considerations in the facilities consideration.</li> <li>– Determine habitability and occupational health related issues that must be accommodated to facilitate safe, effective operations.</li> <li>– Determine communication requirements including access and connectivity.</li> <li>– Ensure that the National Environmental Policy Act (NEPA) process is started.</li> </ul> <p>7. For program requirements the logistician should consider the following facilities/infrastructure questions and incorporate into the POM process as required. Ref. Task 3.11 MILCON/Sustainment, Restoration and Modernization.</p> <ul style="list-style-type: none"> <li>– Do the facilities meet peacetime and wartime objectives? Are deployed facilities required? Review applicable operational effectiveness analyses for basing considerations</li> <li>– Do you have organic depot cost estimates to support depot repair?</li> <li>– Do you have contractor depot cost estimates to support depot repair?</li> <li>– Is there special facility requirements needed for system software sustainability?</li> <li>– What is the status of facilities design planning?</li> <li>– What risks have been identified and what are the mitigation plans?</li> <li>– Have environmental compliance, pollution prevention and recovery or disposal considerations been updated from materiel solution analysis for the facility?</li> <li>– Are there any unique habitability or occupational health issues to be considered to support the system(s)?</li> <li>– Verify NEPA process being used reference Checklist 3.10.2</li> <li>– If the deployment of a weapon system is an overseas location it may require the host nation acquire land and provide infrastructure support (power, water, communications, etc.) and/or facility support (construction of facilities to support installation of the system).</li> <li>– Identify communications requirements and perform an RF site survey to fully understand the behavior of radio waves</li> </ul>	<p>AFI 32-1015 Integrated Installation Planning <a href="#">DoD IPS Element Guidebook</a>  <a href="#">42 USC 4321</a>  <a href="#">40 CFR 1500</a>  <a href="#">32 CFR 989.3(c)(3)</a>  DoDI 5000.81 Urgent Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">AFI 32-9004</a> Disposal of Real Property  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">DoD LA Guidebook</a>  <b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">POM</a>  <a href="#">Site Survey</a></p>	
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<p>within a facility before installing wireless network access points</p> <p>8. Ensure additional requirements for equipment for facility operations are identified and programmed by the appropriate user (special equipment, communications Equipment, Office furniture, etc.)</p> <p>Note: Facilities – vertical structures that house people and or equipment, i.e. Buildings.</p> <p>Note: Infrastructure (for Civil Engineering) includes support elements such as, water, electrical distribution, communications, sewage, storm lines , natural gas lines, fuel storage, pavements, runways, etc.</p>		
<b>EXIT CRITERIA:</b>		
<p>Site Survey Report PPLAN POM Inputs All proper supporting documentation put in the official files</p>		



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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
3.10.1	Determining Manpower and Personnel Requirements	Target Audience Description (TAD) Draft Maintenance Concept Cost Analysis Requirements Description (CARD) Initial Capability Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) Life Cycle Sustainment Plan (LCSP) Analysis of Alternatives AoAs Systems Engineering Plan (SEP)

**DESCRIPTION:**

The logistician must ensure through contact with the MAJCOM, Product Centers and Air Logistics Complexes that manpower and personnel considerations are appropriately documented. HSI subject matter experts can assist in this effort. (MAJCOM HSI cell)

**Personnel:** Refers to the specific knowledge skills and abilities of the individual.

**Manpower:** A critical resource that supports an approved program. It is not a program by itself and should not be manipulated separately from the program it supports.

**Manpower Requirement:** A statement of manpower needed to accomplish a job, workload, mission, or program. There are two types of manpower requirements: funded and unfunded. Funded manpower requirements are those that have been validated and allocated. Unfunded requirements are validated manpower needs but deferred because of budgetary constraints.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Participate in requirements discussions related to operators, maintainers or support personnel; interpret the User’s needs and requirements (including Manpower and personnel implications, constraints, and issues) and develop strategy for addressing. 2. Participate in activities that address Manpower, personnel, training, human factors engineering, Environment, Safety, Occupational Health, habitability, Intelligence, supportability or any other Product Support element or related areas (such as maintenance concept, organizational structure, knowledge, skills and abilities, or cognitive requirements) and provide guidance on accommodating Manpower into the design, or identify the effects the design will have on the operator or maintainer. Manpower high drivers include:	<a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS) <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document support JCIDS process <a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">Systems Engineering Plan (SEP) Outline</a>	Materiel Solution Analysis  Technical Maturation Risk Reduction  Engineering & Manufacturing Development

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<ul style="list-style-type: none"> <li>• Tasks that require high frequency man- hour/manpower</li> <li>• Tasks that are labor intensive</li> <li>• Tasks that require multiple persons to perform</li> <li>• Weapon system designs and organizational designs that increase manpower requirements</li> </ul> <p>3. Assure Manpower and personnel requirements are clearly reflected in the system functional baseline and that they are feasible and testable/verifiable.</p> <p>4. Assure reliability, maintainability; design analysis, Engineering Change Proposals (ECPs) and trade studies reflect any impact on Manpower and personnel issues.</p> <p>5. Assure Manpower and personnel considerations are included in acquisition documentation.</p> <p>6. The Manpower Estimate Report (MER). DODI 5000.2 eliminates the requirement to develop and coordinate a stand-alone Manpower Estimate and the Manpower Estimate Report (MER) documents.</p> <p>7. Manpower and personnel issues and concerns:</p> <ul style="list-style-type: none"> <li>• Is there a legacy system to use as a manpower and personnel baseline?</li> <li>• Do the manpower levels need to be constrained to the same level as the predecessor system?</li> <li>• Will the manpower mix (military, civilian, contractors) be the most efficient and cost effective?</li> <li>• Is there a mandate to optimize or reduce manpower authorizations?</li> <li>• Have manpower authorizations been justified and/or modified to meet mission need?</li> <li>• Will an increase in end-strength be required?</li> <li>• What are the end-strength offsets?</li> <li>• Approximately how many authorizations will it take to operate, maintain, train and support the full capability? (<i>Full capability includes all operational and maintenance (local and remote) components.</i>)</li> <li>• What manpower estimate was used for the affordability assessment?</li> <li>• How does the manpower estimate compare to current requirement and authorizations?</li> <li>• How much could manpower grow before it would impact the affordability decision?</li> <li>• If the manpower estimate is greater than authorizations, what is the resource sponsor's position regarding funding?</li> <li>• Once manpower and personnel requirements are identified, ensure the program inputs them to the POM.</li> </ul>	<p><a href="#">Defense Acquisition Guidebook</a> (See Chapters 3,4, 5, and 6)</p> <p><a href="#">10 USC 2434 Independent Cost Estimates; Operational Manpower Requirements AFI 38-201</a> Determining Manpower Requirements See Para 11.2.3, Attachment 8, Table A8.1.</p> <p><a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System</p> <p><a href="#">DoD PSM Guidebook</a></p> <p><a href="#">DoD Product Support BCA Guidebook</a></p> <p><a href="#">Weapon System Acquisition Reform Act</a></p> <p><a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a> See Chapter 3, but scan entire document for further information</p> <p><a href="#">Target Audience Description Guide</a></p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards</p> <p><a href="#">AFI 38-204</a> Programming USAF Manpower</p> <p><a href="#">HSI Acq Phase Guide</a></p> <p><a href="#">HSI Requirements Pocket Guide</a></p> <p><a href="#">HSI Handbook</a></p> <p><a href="#">DoDI 7041.04</a> Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support</p> <p><b>Sample Documents:</b></p> <p><a href="#">ICD</a></p> <p><a href="#">CARD</a></p> <p><a href="#">AOA Study Plan</a></p> <p><a href="#">SEP</a></p> <p><a href="#">LCSP</a></p> <p><a href="#">TEMP</a></p> <p><a href="#">LCC</a></p> <p><a href="#">POM</a></p>	<p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>
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	<a href="#">DoD Integrated Product Support Implementation LC Roadmap</a>	
<b>EXIT CRITERIA:</b>		
<p>Inputs into Analysis of Alternatives (AoAs) Input into Systems Engineering Plan (SEP) Input into Maintenance Concept Inputs into Training Plans Inputs into Test and Evaluation Master Plan (TEMP) Input into Initial Capabilities Document (ICD) Input into Capabilities Development Document (CDD) Inputs into Production Capability Document (PCD) Input into Life Cycle Sustainment Plan (LCSP) Input into Manpower Estimate Report (MER) Input into Life Cycle Cost (LCC) Estimates Input to the Program Objective Memorandum (POM) Participate in SACOM Interview</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.10.2	Address National Environmental Policy Act (NEPA) requirements	Initial Capabilities Document (ICD) LCSP (REPLACED ))Systems Engineering Plan (SEP) Analysis of Alternatives (AoA) Draft Capabilities Development Document (CDD) Draft Capabilities Production Document (CPD) Site Survey Other Program Documentation as it becomes available	
<b>DESCRIPTION:</b>			
<p>The process to ensure compliance with the National Environmental Policy Act (NEPA) of 1969 (42 USC 4321). NEPA requires environmental impact assessments for agency actions to examine all viable alternatives for environmental impacts and to identify potential mitigation efforts. This task includes the planning required for compliance and influencing the design process to fulfill NEPA requirements. Ensure that design impacts are included in the HSI planning. Typically, assessment to comply with the requirements NEPA or Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions, must be completed for testing and basing activities. The proponents for those actions, test and using command organizations must initiate AF Environmental Impact Analysis Process documents. The Program Office is responsible for supporting these analyses, documenting the schedule for completing those analyses and integrating environmental hazard risks into the systems engineering process.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Participate in program activities ensuring the NEPA requirements are addressed, such as hazardous materials/waste, AICUZ, air quality, water resources, safety and occupational health, biological resources, cultural resources, geology and soils, and socioeconomic.</li> <li>2. Determine planned programmatic activities/events that affect the environment, examples include, but are not limited to: Prototype development, testing, bed down, depot activation and additional base activations.               <ol style="list-style-type: none"> <li>a. Determine locations and dates that events will occur and, when the proponent for those activities, initiate AF IMT 813 to begin NEPA process.</li> <li>b. Coordinate completion of AF IMT 813 with environmental office where events are taking place</li> <li>c. Support follow-on environmental assessments.</li> <li>d. Ensure a copy of the AF IMT 813 is maintained in program office files.</li> <li>e. Document NEPA compliance schedule in PESHE (an acquisition program ESOH strategy and ESOH risk repository document required by DoDI 5000.02)</li> </ol> </li> <li>3. Integrate significant findings from NEPA analyses and identified mitigations into program engineering and budgeting processes.</li> </ol>	<p><a href="#">32 CFR 989.3(c)(3)</a>  <a href="#">42 USC 4321</a>  <a href="#">40 CFR 1500</a>            DoDI 5000.81 Urgent Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">AF IMT 813</a>            AFI 32-1015 Integrated Installation Planning  <a href="#">DoD LA Guidebook</a>    <a href="#">AFI 32-7001 Environmental Management</a>    <a href="#">AFI 32-1015</a> Integrated Installation Planning  <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">HSI Acquisition Phase Guide</a></p>	<p>Technical Maturation Risk Reduction Engineering &amp; Manufacturing Development  Production and Deployment  Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
AF IMT 813 NEPA/EO 12114 Compliance Schedule Updated AoA Updated LCSP (REPLACED TEMP) Updated CDD Updated SEP Updated CPD			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.11	Define and Implement Military Construction (MILCON) and Sustainment, Restoration and Modernization (SRM) Requirements	Concept of Operations (CONOPS) Initial Capabilities Document (ICD) Capability Development Document (CDD) Program Management / Services Management Agreement (PMA/SMA) Site Survey	
<b>DESCRIPTION:</b>			
This checklist is intended to define, review and implement requirements for any new or modified facilities and associated facilities equipment for purposes of supporting the MILCON and SRM processes. MILCON is 3300 funding. SRM is O&M. ***Considerations for National Environmental Policy Act (NEPA) lead time must be included in the facilities MILCON and minor construction schedule. Reference Task 3.10.2			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Determination of facility requirements begins with site survey. Participants should include, but are not limited to Program Office, Lead Command, Using Command, and base-level user</li> <li>2. Following the site survey, the base-level user submits AF Form 332, Environmental Assessment, Economic Assessment, communications requirements etc. Final package is forwarded to the Using or Lead Command on DD Form 1391. Ensure depot facilities are included</li> <li>3. The logistician should contact the using command, lead command, and depot to ensure the facilities process is on track, including CSO requirements</li> <li>4. Program Office provides POM inputs to Using or Lead Command. For MILCON, using or Lead Command identifies and POMs funding to support fielding of the system through HQ AF</li> </ol> <p>Note: For minor construction projects (less than \$750K) coordinate with Using or Lead Command to ensure facilities are available to support bed down of the system. If minor construction project of 750K or less, O&amp;M dollars are used. Check to see who is responsible for SRM funding (base or program office). Consider a facilities requirement plan as a CDRL from the prime contractor</p>	<a href="#">AFI 10-503</a> Strategic Basing <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">AFI 32-1023</a> Designing and Constructing Military Construction (MILCON) Projects <a href="#">AFI 32-1032</a> Planning and Programming, Appropriated Funded Maintenance, Repair, and Construction Projects <a href="#">AFI 32-1015</a> Integrated Installation Planning DoD IPS Element Guidebook <a href="#">AFI 33-150</a> , Management of Cyberspace Support Activities <a href="#">AFI 32-1021</a> Planning and Programming Military Construction (MILCON) Projects <a href="#">AF Form 332</a> <a href="#">AF Form 813</a> <a href="#">DD Form 1391</a> <a href="#">AF Form 3215</a> <a href="#">Preservation and Storage of Tooling for MDAPs</a>  <b>Sample Documents:</b> <a href="#">ICD</a> <a href="#">POM</a> <a href="#">PMA/SMA</a>	Engineering & Manufacturing Development  Production & Deployment	
<b>EXIT CRITERIA:</b>			
Funding provided to accomplish MILCON project construction Inputs to Program Objective Memorandum (POM) for minor construction			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.12	Participate in Critical Design Review (CDR)	Capability Development Document (CDD) Life Cycle Sustainment Plan (LCSP) System Engineering Plan System Performance Specification System Allocated Baseline Updated Cost Analysis Requirements Description Life Cycle Cost Analysis Reliability Analysis Technical Design documentation (engineering drawings, preliminary technical orders; commercial manuals; preliminary materials, parts, and processes; analyses; reports; trade studies; logistics support analysis data; etc. Updated threat assessment baseline from Intelligence Test and Evaluation Management Plan Updated Manpower Estimates Updated HSI plan System Engineering Plan (SEP) Successful completion of all PDR action items Applicable CDRLs	
<b>DESCRIPTION:</b>			
The CDR is a multi-disciplined technical review to ensure that the system under review can proceed into system fabrication, demonstration, and test; and can meet the stated performance requirements within cost (program budget), schedule (program schedule), risk, and other system constraints. For complex systems, the program manager may conduct a CDR for each subsystem or configuration item. These individual reviews would lead to an overall system CDR.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1. Maintenance Planning includes plans/concept for initial, transition and steady state organizational and depot level O&M support, warranties, CORE and SORAP status. 2. Review status of unresolved maintenance and maintenance data problems since PDR. 3. Has a process been implemented to assess achieved RAM, cost performance by collection and analysis of user data? 4. Has a Failure Reporting Analysis and Corrective Action System (FRACAS) been established and failures analyzed and trended for ILS visibility? 5. Review the updated life cycle cost estimate to ensure adequate hardware, software, and personnel support is allocated. Ensure these are contained in the updated CARD and MER 6. Review updated list of required support equipment and verify compatibility of proposed support equipment with the system maintenance concept 7. Verify maximum consideration of GFP-MAT, SE and common parts (standard item with NSN should be first preference). Review GFP-MAT provisioning planning to ensure timely receipt or required items. Ensure SERD procedures in place. 8. Review calibration and reliability predictions for SE.	<a href="#">DoD Systems Engineering Fundamentals</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">System Engineering Critical Design Review Comprehensive CDR Checklist</a> <a href="#">Logistics Considerations AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> <a href="#">AFMCI 20-105 Diminishing Manufacturing Sources and Material Shortages (DMSMS)</a> <a href="#">DoDI 4140.01</a> DoD Supply Chain Materiel Management Policy <a href="#">DoDM 4140.01, Volume 2,</a> DoD Supply Chain Materiel	Engineering & Manufacturing Development	



<p>9. Review spares planning to insure full understanding of scope of requirements to include provisioning requirements, GFP usage, and support during test and initial deployment</p> <p>10. Have accepted sparing analysis and modeling tools been utilized and are the assumptions consistent with the supportability analysis and the prescribed maintenance concept?</p> <p>11. Has a DMSMS program been established and documented consistent with DoD policy.</p> <p>12. Ensure energy efficiency and alternate fuels are considered</p> <p>13. Review technical manuals and technical data package availability to include support equipment and COTS manuals. Ensure data rights issues are addressed.</p> <p>14. Review status of the Technical Manual Publications Plan to include availability of technical manuals for certification (validation) and verification during DT&amp;E testing</p> <p>15. Review plans for Work Unit Coding of the equipment</p> <p>16. Determine if design meets contracts requirements governing size and weight to permit economical handling, loading, securing, transporting, and disassembly for shipment. Identify potential outsized and overweight items.</p> <p>17. Where applicable, have Unique Identification requirements been incorporated?</p> <p>18. Identify system/items defined as being hazardous and mitigate the risks to acceptable levels.</p> <p>19. Has a program to eliminate ESOH hazards or manage the risk where the hazard cannot be avoided been established?</p> <p>20. Has a Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE) been updated to summarize identified ESOH hazards and the associated risks and National Environmental Policy Act (NEPA) compliance schedule?</p> <p>21. Ensure the design comprehensively addressed the operators, maintainers and support personnel to optimize total system performance, reduce life cycle costs and mitigate program risks.</p> <p>22. Review Transportability Analysis to determine that transportation conditions have been evaluated. Identify any equipment to be test loaded for air transportability of material in military aircraft.</p> <p>23. Have potential PHS&amp;T related problems been identified and are risk mitigation plans in place?</p> <p>24. Has a Training Plan been approved? Does the plan address how courses and related materials and devices will be developed for training at each required level of maintenance?</p> <p>25. Has the Manpower Estimate Report been updated? (ACAT1 only)?</p> <p>26. Is there a total breakout of number of personnel and Air Force Specialty Codes that are projected to support the system?</p> <p>27. Does the Product Support Plan include analysis conducted to determine facility requirements? Are there a Facilities Requirements Document and a schedule to conduct Site Surveys? Reference Checklist 3.10.</p> <p>28. Ensure logistics decisions and risk identified and are incorporated into the minutes</p>	<p>Management Procedures: Demand and supply Planning</p> <p><a href="#">DoDM 4140.01, Volume 3</a>, Supply Chain Materiel management Procedures: materiel Sourcing <a href="#">AFI 21-118</a> Improving Air and Space Equipment Reliability and Maintainability <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management <a href="#">DoD LA Guidebook</a> DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD</a> <a href="#">PSM Guidebook</a> <a href="#">Weapon System Acquisition</a> <a href="#">Reform Act</a> <a href="#">AFMAN 32-7002</a> Environmental Compliance and Pollution Prevention <a href="#">40 CFR 1500</a> <a href="#">32 CFR 989.3(c)(3)</a> <a href="#">42 USC 4321</a> <a href="#">DoD Reliability,</a> <a href="#">Availability, Maintainability</a> <a href="#">and Cost Rationale Report</a> <a href="#">(RAM-C) Manual</a> <a href="#">HSI Requirements Pocket</a> <a href="#">Guide</a> <a href="#">HSI Acquisition Phase Guide</a></p> <p><b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">TEMP</a> <a href="#">SEP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		

## Product Support Took Kit (PSTK)

An established system product baseline  
The status of the technical effort and design indicates OT success (operationally suitable and effective)  
The detailed design, as disclosed, will satisfy the CDD/CPD/ORD  
The program schedule is executable within the anticipated cost and technical risks  
An updated risk assessment for Engineering and Manufacturing Development  
An updated Cost Analysis Requirements Description (CARD) (or CARD-like document) based on the system product baseline  
Updated requirements for operations, maintenance, and training needs are complete and unambiguously stated in the system or subsystem specifications  
Updated requirements for RM&A are complete and unambiguously stated in the system or subsystem specifications  
Updated Life Cycle Sustainment Plan (LCSP)  
An updated Test and Evaluation Master Plan (TEMP)  
An updated System Engineering Plan (SEP)  
CDR Minutes  
Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE)

Product Support Took Kit (PSTK)

<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>	
<a href="#">3.13</a>	Prepare Documentation for Post-Critical Design Review (CDR) Assessment	Outputs from Critical Design Review	
<b>DESCRIPTION:</b>			
<p>The Post-CDR Assessment provides an opportunity for mid-phase assessment of design maturity. It is not as large as a Milestone Decision Review (does not require as much documentation as specified by 5000.02) but it is not a technical review either. They are usually MDA-led management oversight reviews intended to provide an assessment (cost, schedule, supportability, and performance) of a program's readiness to progress further through the acquisition life cycle. MDA can determine the form and content of the review consistent with entrance/exit criteria for the Systems Integration and Systems Demonstration phases.</p>			
<b>CHECKLIST SUBTASKS:</b>			
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>	
<ol style="list-style-type: none"> <li>1. Review the number of subsystem and system design reviews for successfully completing product support initiatives.</li> <li>2. Review percentage of drawings completed</li> <li>3. Review planned corrective actions for product support deficiencies</li> <li>4. Assess the Environment, Safety, and Occupational health risks</li> <li>5. Review the completed failure modes and effects analysis</li> <li>6. Assess key product support system characteristics (include support equipment) and processes</li> <li>7. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational) and Alternate Fuels are considered.</li> <li>8. Ensure all HSI issues to include integration risks are addressed.</li> <li>9. Review estimate of system reliability based on demonstrated reliability rates; etc.</li> <li>10. Ensure logistics decisions and risk identified and are incorporated into the minutes</li> </ol> <p>Note: There is no guidebook or list of mandatory criteria.</p>	<p>DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">DoD LA Guidebook</a>                      AFI 32-1015 Integrated Installation Planning  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">HSI Acquisition Phase Guide</a></p>	Engineering & Manufacturing Development	
<b>EXIT CRITERIA:</b>			
Completion of Post-CDR Assessment Post-CDR Assessment Minutes			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.17</a>	Participate in Test Readiness Review (TRR)	Test Plan Test and Evaluation Master Plan (TEMP) Initial Capabilities Document (ICD) (Draft) Capability Development Document (CDD) (Draft) System Engineering Plan (SEP) Support and Maintenance Concept and Technologies	
<b>DESCRIPTION:</b>			
A review of the test plan, including safety and facilities, to determine readiness to begin testing.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Identify any Product Support (PS) KPP/KSAs within the test plan and ensure they are fully tested, analyzed, and assessed to meet acceptance criteria.</li> <li>2. Identify opportunities to assess operational safety, suitability and effectiveness of the PS strategy and CONOPs.</li> <li>3. Review PS readiness assessments, as possible.</li> <li>4. Review system logistics footprint assessments, as possible.</li> <li>5. Review PS facility and infrastructure requirements assessments, as possible.</li> <li>6. Review maintenance procedures assessments, as possible, to include technical manual development and data availability.</li> <li>7. Review support equipment suitability (to include calibration requirements) and compatibility with system maintenance concept assessments, as possible.</li> <li>8. Review on-equipment vs. off-equipment maintenance tasks assessments, as possible.</li> <li>9. Review system size and weight, permitting economical handling, loading, securing, transporting, and disassembling for shipment, to include handling hazardous materials assessments, as possible.</li> <li>10. Ensure test plan includes adequate funding for PS testing requirements, to include fee for service support and contracted logistics/maintenance support. Scope and plan the necessary resources to support the test program. (including test participants)</li> <li>11. Ensure test plan includes adequate testing for all HSI relevant requirements.</li> <li>12. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational) and Alternate Fuels are considered.</li> <li>13. Assess status of Training Systems to ensure supportability requirements have been met</li> <li>14. Ensure Intelligence interests are addressed. Reference Appendix A, Checklist 1.1</li> </ol>	<p> <a href="#">Defense Acquisition Guidebook</a> Chapter 9  <a href="#">AFPD 99-1</a> Test and Evaluation Process  <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a> Paragraphs: 2.3.4, 4.5.3, 4.5.3.4  <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation  <a href="#">DoD LA Guidebook</a>  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards DoDI 5000.81 Urgent Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">AFI 32-1015</a> Integrated Installation Planning  <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> </p> <p> <b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">TEMP</a>  <a href="#">SEP</a> </p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
Approved Readiness to Conduct Test Updated/Approved Test Plan			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.18</a>	Refine Supportability Objectives	Capability Development Document (CDD) Key Performance Parameters (KPPs) Developed Product Support Capabilities Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
<p>The objective of most support system design activities is to identify support considerations (e.g., constraints) which may influence selection. The logistician should address all supportability analysis needed to analyze, define, and verify the supportability thresholds and objectives for a system and to assess the risks in accomplishing them. Early in the process, the issue of tradeoffs must be raised during the analysis of proposed concepts. Careful use of tradeoff studies will guide the logisticians in finding the optimal design—one which balances design objectives with supportability requirements. The supportability analysis is an analytical tool, conducted as part of the systems engineering process to determine the most cost-effectively support for the system over its entire life cycle. It provides the basis for related design requirements that may be included in specifications.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1.Ensure a logistician is involved on the team that develops the Systems Engineering Plan</li> <li>2. Analyze Operational Capabilities and Environmental Constraints</li> <li>3.Ensure consistency with Air Force Logistics Enterprise Architecture (AFLMA)</li> <li>4.Refine Concept Performance (and Constraints) Definition and Verification Objectives</li> <li>5.Review ICD and draft CDD</li> <li>6.Review Test Strategy as listed in the TEMP</li> <li>7.Review Support and Maintenance Concepts for all 12 Product Support Elements. Specifically for Support Equipment, minimize peculiar support equipment.</li> <li>8.Review and update IUID requirements</li> <li>9.Decompose Concept Functional Definition into Component Concepts and Assessment Objectives</li> <li>10.Refine Component Concepts</li> <li>11.Refine Intelligence supportability analysis. Reference Appendix A, Checklist 1.1</li> <li>12.Refine program protection planning process</li> <li>13.Address ESOH considerations</li> <li>14.Ensure HSI implications, constraints and issues are addressed and included</li> </ol>	<p><a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS) <a href="#">Systems Engineering Plan (SEP) Outline</a>  <a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a> Entire document provides a general understanding on JCIDS. <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document supports the JCIDS process <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">DoD LA Guidebook</a> <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards <a href="#">DoDI 8320.04</a> Item Unique Identification</p>	<p>Technical Maturation Risk Reduction</p>	

Product Support Took Kit (PSTK)

	<p>(IUID) Standards for Tangible Personal Property <a href="#">HSI Acquisition Phase Guide</a> <a href="#">HSI Handbook</a></p> <p><b>Sample Documents:</b> <a href="#">SEP</a></p>	
<b>EXIT CRITERIA:</b>		
<p>Updated Systems Engineering Plan (SEP) Updated System Support and Maintenance Concepts Updated Acquisition Plan Updated Life Cycle Sustainment Plan</p>		



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.22	Review Capability Development Document (CDD) for supportability	Capabilities Based Analysis (CBA) AoA Results Supportability Objectives Capabilities Review and Risk Assessment (CRRA) JCIDS DOTMLPF analysis Approved ICD	
<b>DESCRIPTION:</b>			
The CDD is the sponsor's primary means of defining authoritative, measurable, and testable capabilities needed by the warfighter to support the EMD phase of an acquisition program. CDD captures the information necessary to deliver an affordable and supportable capability using mature technology within the acquisition strategy. CDD must include a description of the DOTMLPF and policy impacts and constraints. The CDD will be validated and approved before Milestone B.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1. Participate in the initial development, review and update of the entire CDD for supportability and usability inputs since these inputs are incorporated throughout. Reference the AFMC/A4 CDD Review Checklist. 2. Review data used to support initial JCIDS analysis 3. Understand the operational and threat environment in which capability is exercised and manner in which the capability will be employed. (For Intelligence Reference Appendix A, Checklist 1.1) 4. Analyze operational capabilities and environmental constraints. (For Intelligence Reference Appendix A, Checklist 1.1) 5. Ensure hazardous materials, ESOH and Noise (ambient and occupational) constraints are addressed. 6. Review concept performance definition and verification objectives to include constraints 7. Need to ensure supportability analysis determines cost effective support over system life cycle 8. Ensure requirements include Technical Orders and other Technical Data, Support Equipment, Packaging, Handling, Storage and Transportation; RAM, Cost;, IUID, Production, interoperability and maintainability concepts for inclusion into specifications 9. Ensure HSI implications, constraints and issues are addressed and included in the CDD. 10. Ensure DOTMLPF analysis includes logistics considerations. a. Evaluate existing facilities/infrastructure and installation / capabilities for application. Ensure National Environmental Policy Act (NEPA) milestones and requirements are updated. See Checklist 3.10.2 for NEPA requirements b. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded.	<a href="#">CJCSI 5123.01HI</a> Operation of the Joint Capabilities Integration and Development System <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards AFI 32-1015 Integrated Installation Planning <a href="#">AFMAN 32-7002</a> Hazardous Material Management <a href="#">DoD Environment, Safety, and Occupational Health Network and Information Exchange (DENIX)AFMC/A4 CDD Review Checklist</a> <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a> <a href="#">HSI Requirements Pocket Guide</a> <b>Sample Documents:</b> <a href="#">AOA Study Plan</a> <a href="#">ICD</a> <a href="#">TEMP</a> <a href="#">SEP</a>	Materiel Solution Analysis  Technical Maturation Risk Reduction	

## Product Support Took Kit (PSTK)

### **EXIT CRITERIA:**

Acquisition Program Baseline (APB) for Milestone B

Analysis of Alternatives Report

Technical Maturation Risk Reduction (TMRR)

Clinger-Cohen Certification (updated for Milestone B for Major Automated Information Systems) (MAIS)

Acquisition Strategy

Manpower Estimates

Supportability Objectives

Test and Evaluation Master Plan (TEMP)

System Engineering Plan

Update to CDD

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.23</a>	Develop Supportability Key Performance Parameters (KPPs)	Initial Capabilities Document (ICD) Draft Capability Development Document (CDD) Draft Capability Production Document (CPD) Acquisition Program Baseline (APB) Test and Evaluation Master Plan (TEMP) System Engineering Plan (SEP)	
<b>DESCRIPTION:</b>			
Key Performance Parameters (KPPs): Those attributes or characteristics of a system that are considered critical or essential to the development of an effective military capability and those attributes that make a significant contribution to the key characteristics as defined in the Joint Operations Concepts (JOpsC). KPPs are validated by the Joint Requirements Oversight Council (JROC) for JROC interest items, and by the DoD component for Joint Integration or Independent documents. Capability development and capability production documents are included verbatim in the APB.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Coordinate with requirements authority regarding supportability requirements</li> <li>2. Ensure KPPs address system supportability issues such as maintenance man-hours per flying hour and deployment footprint. (I.e. consideration of Support Equipment). Mandatory KPP/KSAs are required (see references). Include usability and other HSI relevant issues in these considerations.</li> <li>3. Are support related performance and acceptance criteria developed to be demonstrated during planned testing?</li> <li>4. Ensure Supportability KPPs linked through the capabilities defined in the ICD to the key characteristics from the JOpsC.</li> <li>5. Ensure Supportability KPPs in the CDD and CPD are inserted verbatim into the APB</li> <li>6. Ensure KPP requirements are designated as such in the SRD, System Specification and all applicable lower level specifications.</li> </ol>	<p><a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System (Para 6.c.2)</p> <p><a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">CJCSI 3170-01I</a> Joint Capabilities Integration and Development System (JCIDS) (enclosure A and B)</p> <p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management Chapter 6- <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a> <a href="#">Systems Engineering Plan (SEP) Outline</a></p> <p><a href="#">DoD LA Guidebook</a> <a href="#">HSI Requirements Pocket Guide</a></p> <p><b>Sample Documents:</b> <a href="#">ICD</a> <a href="#">TEMP</a> <a href="#">SEP</a></p>	Technical Maturation Risk Reduction	
<b>EXIT CRITERIA:</b>			
Input into Draft Capability Development Document (CDD) Input into Draft Capability Production Document (CPD)			

## Product Support Took Kit (PSTK)

Input into Acquisition Program Baseline (APB)  
Input into Test and Evaluation Master Plan (TEMP)  
Input into System Engineering Plan (SEP)

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.24.1</a>	Design Interface for Life Cycle Logistics	CRRA Initial Capability Document Capability Development Document Capability Production Document Systems Engineering Plan Life Cycle Sustainment Plan	
<p>Design interface, is part of the supportability analysis and systems engineering process, relating logistics, design parameters to equipment readiness and support resources requirements. The objective of design interface using Performance Based Logistics (PBL) (DoD 5000.1 E1.17) is to minimize total ownership costs while delivering operational capability. An object of design interface is to perform trade-offs between reliability, maintainability features of the equipment against support system processes. Usability and accessibility of the various systems components should be considered. The PBL minimization forms the object of system engineering analysis with a minimization requirement and the subject to delivering operational capability. Note, that Design Interface is performed iteratively, meaning it is done in each phase of acquisition and recursively meaning that as design is matured it is performed on more detailed understanding of the design, technology and operational use. The Life Cycle Logistician must be a key member in the System Engineering Integrated Product Team (IPT) and the HSI IPT if established.</p>			
CHECKLIST SUBTASKS:			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>Strong participation for Supportability, Sustainment and Product Support in the Program System Engineering Integrated Product Team (SE IPT). Advocate minimum TOC in the SE IPT.</li> <li>Supportability Concepts: Team with user, supply chain manager and supporting depot to develop detailed understanding of the maintenance and support concept including all operational limitations and issues. Develop system specification which addresses reliability, maintainability, support equipment, testability (interface with calibration and test equipment specs), deploy ability, mobility, and manpower and personnel estimates. Prepare the Functional Baseline.</li> <li>Supportability Analysis: Interface with the reliability and maintainability program. Perform top down allocation of equipment reliability and maintainability performance requirements while modeling the impact of design decisions on the support processes required for maintaining and sustaining the equipment in its operational use. Maintain records of decisions and analyses supporting justification for design decisions and participate in developing the allocated baseline as well as design test and evaluation for reliability and maintainability performance. Participate in reliability and maintainability test and evaluation and prepare to demonstrate system level logistics capabilities to support the verification processes within system engineering IPT. Develop item development specifications which address reliability, maintainability, support equipment, testability (interface with calibration and test equipment specs); deploy ability, mobility, and manpower estimates. Monitor reliability and maintainability demonstration process as well as reliability improvement activities. Prepare the Allocated Baseline.</li> </ol>	<a href="#">Defense Acquisition Guidebook</a> Chapter 5.2 <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">DoDM 4140.01, Volume 3</a> DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <a href="#">SAE GEIA-STD-0007</a> Logistics Product Data <a href="#">AFI 32-1015</a> Integrated Installation Planning <a href="#">AFMAN 32-7002</a> Environment Compliance and Pollution Prevention <a href="#">DoD Environment, Safety, and Occupational Health Network and Information Exchange (DENIX)</a> <a href="#">DoD IPS Element Guidebook</a> <a href="#">DoD PBL Guidebook</a> <a href="#">HSI Requirements Pocket Guide</a> <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a>	Materiel Solution Analysis  Technical Maturation Risk Reduction  Engineering & Manufacturing Development  Operations & Support	

Product Support Took Kit (PSTK)

<p>Coordinate with the program manager’s modeling and simulation process for allocating reliability and maintainability and minimizing total ownership costs.</p> <p>4. Interact with specialty engineering that impact product support:</p> <ul style="list-style-type: none"> <li>• Reliability</li> <li>• Maintainability, accessibility</li> <li>• Testability,</li> <li>• Deploy ability/Transportability/Packaging</li> <li>• Human Machine Interfaces and usability</li> <li>• Interoperability</li> <li>• Calibration and Metrology</li> <li>• Support Equipment</li> <li>• Standardization</li> <li>• Energy and POL</li> <li>• DMSMS</li> <li>• ESOH</li> <li>• System Safety</li> <li>• Noise including Air Installation Compatibility Use Zone</li> <li>• Facilities/infrastructure</li> </ul> <p>5. Ensure HSI implications, constraints, and issues are addressed and included in an integrated manner to include the maintainer and support personnel in the overall system design.</p> <p>Supportability Resources: Once the equipment’s inherent reliability and maintainability is determined the support resources developed in the trade studies need to be refined, identified, specified and acquired. The results of identifying supportability resources include support equipment recommendation data, provisioning data, etc. acquired in the next process.</p> <p>Supportability Data: Coordinate on engineering data, item development specifications, and maintenance task descriptions, lists of maintenance task assets, facilities requirements, manpower needs and related supportability data requirements. Participate in functional configuration audits and assure that physical configuration audit supports the documentation of supportability requirements.</p>	<p><a href="#">DFAR 247.371 DD Form 1653, Transportation Data for Solicitations.</a></p> <p><b>HQ AFMC PK Mandatory Procedures</b> Mandatory Procedure (MP) 5347.305, Transportation, Packaging Instructions and Data</p> <p><b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">TEMP</a>  <a href="#">SEP</a>  <a href="#">LCSP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Systems Engineering Plan          Life Cycle Sustainment Plan          System Specification          Allocated Baselines          Functional Configuration Audit          Inputs to TEMP updates</p>		



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.25</a>	Include Supportability Requirements in the CARD, POE, CCA, ICE, Affordability Assessments	Program Established Acquisition Decision Memorandum (ADM)	
<b>DESCRIPTION:</b>			
<p>The acronyms above stand for Cost Analysis Requirements Document (CARD), Program Office Estimate (POE), Component Cost Analysis (CCA), and Independent Cost Estimate (ICE). Affordability assessments are done at Air Force level only. Cost estimates cover the entire life cycle of a system and need to adequately address all of the Product Support elements, including disposal, to ensure the total life cycle cost is understood and used for management decisions. The logistician needs to make sure that all of the costs for acquiring; fielding, sustaining, and disposal are included. Major categories of cost are support equipment, technical data, supply support, training and training equipment, depot activation costs (if organic capability to be established), any Interim Contractor Support or Contractor Logistics Support costs to include field service representatives/maintenance activities/inventory management, sustaining engineering costs, depot maintenance, manpower and personnel, Intelligence infrastructure, and organizational/intermediate level maintenance.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>Engage as a team member on the Cost Estimating Team (for CARD, POE, CCA, ICE, (FM is normally OPR for this task), and engage as a member on the program Integrated Risk Assessment (IRA) Team.</li> <li>Ensure all 12 Product Support Elements are addressed including Depot Maintenance, O&amp;I Maintenance, testing costs, disposal costs, transportation costs (including Second Destination Transportation), Diminishing Manufacturing Sources and Material Shortages, Facilities/infrastructure, planned modifications / upgrades, HSI, Intelligence, and integration costs if applicable. Specifically address Energy Efficiency and Alternate Fuels considerations. Include any costs for demilitarization, declassification and disposal.</li> <li>Coordinate technical data such as RAM with Engineering.</li> <li>Ensure consistent use of data for other applicable program tasks such as engineering change proposals/contractor change proposals, trade studies, SDT budgeting, and new work packages. Ensure trade studies address: manpower, personnel, training, survivability, habitability, Environment, Safety, Occupational Health, and human factors engineering. Do not let the human aspects get overshadowed by technology needs. Be explicit regarding the consequences – monetary and life cycle – of planned trade-offs so that good decisions can be made. Work with the user on all trade-off decisions.</li> <li>Participate in yearly (or as required) updates of the CARD, POE, CCA, ICE, and IRA activities to reflect any changes in the system data that would reflect in costs changes.</li> <li>During Engineering and Manufacturing Development and Production and Deployment Phases, participate in the annual Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx) requirements build if within 2-3 years of system sustainment utilizing O&amp;M funding. See Task 5.8.1</li> </ol>	<p><a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management  <a href="#">Defense Acquisition Guidebook</a> (See Chapters 2,4, and 6  <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System (See Enclosure 7)  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">AFMC Guide to the Defense Depot Maintenance Council</a>  <a href="#">Cost Comparability Handbook</a>  <a href="#">AFPD 23-1</a> Materiel Management  <a href="#">DoDI 4160.28</a> DoD Demilitarization (DEMIL) Program  <a href="#">DoDM 4160-28 Vol. 1</a> Defense Demilitarization: Program Admin  <a href="#">DoDM 4160-28 Vol 2</a> Defense Demilitarization: DEMIL Coding  <a href="#">DoDM 4160-28 Vol 3</a> Defense Demilitarization: Procedural Guidance  <a href="#">DoD DEMIL Web Page</a>  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

	<p>Standards <a href="#">DoDM 4140.01, Volume 3</a> DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <a href="#">Centralized Asset Management (CAM)</a> <a href="#">Document Library in the United States Air Force Enterprise Information Service</a> <a href="#">Centralized Access For Data Exchange (CAFDEx)</a> <a href="#">CAFDEx Access Instructions</a> <a href="#">Logistics Requirements Determination Process</a> <a href="#">Preservation and Storage of Tooling for MDAPs</a> <a href="#">HSI Handbook</a> <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a> <a href="#">DoD Operating &amp; Support Cost-Estimating Guide (dated Feb 2016)</a>  <b>Sample Documents:</b>  <a href="#">CARD</a></p>	
<b>EXIT CRITERIA:</b>		
<p>Approved IRA, POE, ICE, CCA, other cost estimates that includes product support as described in AFI 63-101/20-101  Source data documentation for appropriate estimate product support elements</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.27</a>	Include Supportability in the Acquisition Program Baseline (APB)	Initial Capabilities Plan (ICD) Draft Capability Development Document (CDD) Support and Maintenance concept and Technologies In EMD Phase: Capability Production Document Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
<p>The Acquisition Program Baseline (APB) defines the cost, schedule, benefits, and performance baselines for the acquisition program, should begin during the time the design requirement of the customer are created. It is the mutual agreement between the provider organization, and the user organization concerning the capability and benefits the program will provide and the cost and schedule authorized for the program. The APB also establishes performance metrics for assessing program success and advancing it through the acquisition life cycle. For Baseline Development and Fielding and Operations activities, SDIPTs will develop APBs that specify the end state goals for cost, schedule and performance goals for the overall program. APBs shall document the results of the planning process. All APBs to be executed will be approved by the MDA. Planning APBs for out years will be submitted to the MDA but do not require approval. The overall program APB will specify the minimum performance parameters, including KPPs that define the core capability.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION		PHASE
<ol style="list-style-type: none"> <li>1. Review Sustainment KPP/KSAs</li> <li>2. Provide input to the Program Management / Services Management Agreement (PMA/SMA)</li> <li>3. Coordinate with applicable MAJCOM office for requirements (e.g., DR)</li> <li>4. Review Cost Estimates and work with cost estimating team to calculate Logistics Support portions of Total Ownership Cost (TOC) of the program, (i.e. all costs associated with the research, development, procurement, operation, logistical support, and disposal of an individual weapon system or piece of equipment over its total life cycle; and associated common support items).</li> <li>5. Ensure the contractor, as a contract deliverable, demonstrates by testing that they have achieved certain supportability/sustainability targets.</li> </ol>	<p><a href="#">Defense Acquisition Guidebook DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System (JCIDS) <a href="#">DoD LA Guidebook</a> <b>Sample Documents:</b> <a href="#">ICD</a> <a href="#">LCSP</a></p>		<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p>
<b>EXIT CRITERIA:</b>			
<p>Updated Initial Capability Document (ICD) Updated CDD Updated Life Cycle Mgmt Plan (LCSP) Updated Draft Capability Development Document (CDD) Updates to APB</p>			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.28	Include Supportability Requirements in the Program Objectives Memorandum (POM) Submission	Acquisition Strategy Strategic Planning Guidance Joint Programming Guidance Analysis of Alternatives (AoA) Plan Supportability Concept and Requirements Source of Repair Assignments Depot Maintenance Plan Product Support Plan	
<b>DESCRIPTION:</b>			
The POM is a major document in the Planning, Programming, Budgeting and Execution (PPBE) process, and the basis for the component budget estimates. The POM is the principal programming document that details how a component proposes to respond to assignments I the Strategic Planning Guidance (SPG) and Joint Programming Guidance (JPG) and satisfy its assigned functions over the Future Years Defense Program (FYDP).			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Logistician should coordinate with the Program Manager (PM) and Financial Manager (FM) for POM inputs</li> <li>2. Analyze Acquisition Strategy</li> <li>3. Interpret Program Supportability needs</li> <li>4. Develop budget estimates in coordination with PM and FM</li> <li>5. Resources to conduct HSI activities and ensure user participation shall be identified and allocated as part of the program cost. Specifically include TDY costs for expertise needed outside the program office.</li> <li>6. For Materiel Solution Analysis and Technical Maturation Risk Reduction phases Identify anticipated sustainment requirements to the Centralized Asset Management (CAM) office (AFMC/A4F Workflow). For USSF, ANG and AFRC sustainment requirements also contact the respective organization.</li> <li>7. For Engineering and Manufacturing Development, Production and Deployment, and Operations and Support phases participate in the annual Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx) requirements build if within 2-3 years of system sustainment utilizing O&amp;M funding. See Task 5.8.1</li> </ol> <p><b>Note:</b> Items to consider for logistics POM input: Support Equipment (peculiar and common), Packaging, Handling, Storage and Transportation and Asset Marking to include IUID, Specialized engineered containers (design and testing cost), Technical Data, Initial and Replenishment Spares, Diminishing Manufacturing Sources and Material Shortages, Training systems and Training Equipment, Energy Efficiency, Alternate Fuels considerations, Sustaining Engineering, Support for testing programs, CLS/ICS, Second Destination Transportation, IT Systems Continuous Support and facilities etc.). Include any costs for demilitarization, declassification and disposal. Funding for facilities is through MILCON, done separately from the POM process (Ref checklist 3.11)</p>	<p><a href="#">PPBE Process</a> Paragraph 1.2  <a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a>            Entire document provides an overview on life cycle costs. In particular, Chapter 3.  <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management  <a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document should be used to support capabilities based support requirements.  <a href="#">MIL-HDBK-502</a> Product Support Analysis  <a href="#">Centralized Asset Management (CAM) Document Library in the United States Air Force Enterprise Information Service</a>  <a href="#">Centralized Access For Data Exchange (CAFDEx)</a>  <a href="#">CAFDEx Access Instructions</a>  <a href="#">Logistics Requirements Determination Process</a>  <a href="#">Preservation and Storage of Tooling for MDAPs</a>  <a href="#">HSI Handbook</a>  <a href="#">Product Data Acquisition Guidance</a></p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

	<a href="#">DoDM 4140.01, Volume 3</a> DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <b>Sample Documents:</b> <a href="#">AOA Study Plan</a>	
<b>EXIT CRITERIA:</b>		
Budget Estimates		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">3.29</a>	Refine Product Support Strategy in LCSP	Draft Capabilities Development Document (CDD) Preferred System Concept Acquisition Decision Memorandum (ADM) Support and Maintenance Concepts and Technologies Analysis of Alternatives (AoA) Market Analysis System Engineering Plan (SEP) Technical Maturation Risk Reduction (TMRR) Cost/Manpower Estimates Life Cycle Sustainment Plan (LCSP) if available

**DESCRIPTION:**

A Life Cycle Sustainment Plan (LCSP) is a comprehensive document that consolidates the weapon system life cycle acquisition management and product support strategies from materiel solution analysis through reclamation/disposal. It is a document that must be maintained to remain compliant with revised/new DoD policy and statutory requirements. It represents a corporate AF position on how to best execute and manage a specific program and requires participation from all program stakeholders in its development and update.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
<ol style="list-style-type: none"> <li>1.Ensures points from checklist 2.15 are updated</li> <li>2.Ensure guidance in DAFPAM 63-128 for LCSP format is followed.</li> <li>3.Review the CDD for:               <ol style="list-style-type: none"> <li>a. System Maintenance/Support Profiles and Use Case Scenarios (Support Capability Packages)</li> <li>b. Reliability and Maintenance Rates</li> <li>c. Support Environment and Locations for Support</li> <li>d. Support and Maintenance Effectiveness</li> <li>e. Logistics/supportability input to Key Performance Parameters (KPPs)</li> <li>f. Planning for Peculiar and Common Support Equipment (SE)</li> <li>g. Planning for Technical Data</li> <li>h. Planning for Training</li> <li>i. Sections 14 Other DOTMLPF and Policy considerations and 15 Other System Attributes</li> </ol> </li> <li>4. Continue to influence product design with Life Cycle Logistics (LCL) for Affordable System Operational Effectiveness (SOE) showing dependency and interplay between system performance, availability, process efficiency, and system life cycle cost</li> <li>5. Review preliminary manpower, personnel and training requirements and constraints in both quantity and skill levels</li> <li>6. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded.</li> <li>7. Review information and requirements for logistics footprint reductions, (include SE) deployment requirements, other factors affecting the in-theater operational concept</li> <li>8. Review the operating and support reliability objectives and their corresponding benefits and resource requirements</li> </ol>	<a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">Defense Acquisition Guidebook</a> <a href="#">Integrated Defense Acquisition Technology and Logistics Life Cycle Mgmt Framework ("Wall Chart")</a> <a href="#">10 USC 2469</a> <a href="#">10 USC 2466</a> <a href="#">Acquisition Program Baseline (APB) (bottom)</a> <a href="#">Affordable System Operational Effectiveness Configuration Mgmt Configuration Mgmt 2</a> <a href="#">Core Logistics Capability Core Logistics Capabilities (10 U.S.C. 2464)</a> <a href="#">Cost as an Independent Variable (CAIV)</a> <a href="#">Data Management</a> <a href="#">Data Management in Engineering</a> <a href="#">Demilitarization and Disposal</a> <a href="#">Environment, Safety, and Occupational Health (ESOH)</a> <a href="#">Environment, Safety, and Occupational Health (ESOH) ESOH</a> <a href="#">Human Systems Integration (HSI)</a>	Technical Maturation Risk Reduction



Product Support Took Kit (PSTK)

<p>9. Review the assessment of the concept and technology regarding use of embedded diagnostics, prognostics, and similar maintenance enablers</p> <p>10. Review data on the projected sustainment demand, standardization of platforms, and required support equipment</p> <p>11. Identify anticipated direct AF sustainment requirements to the Centralized Asset Management (CAM) office (AFMC/A4F Workflow). For AFSPC, ANG and AFRC sustainment requirements contact the respective organization. If program is within 2-3 years of needing O&amp;M sustainment funding, ensure planning for budget input is accomplished. See Task 5.8.1</p> <p>12. Review updated AoA for product support strategy, including alternative operating and system support concepts</p> <p>13. Ensure the HSI process is used to support generation of a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), and affordability.</p> <p>14. Include the design and development of the support system utilizing Performance Based Logistics (PBL). Include discussion of PBL methodology for implementation and strategy. Review "PBL: A PM's Product Support Guide" for checklists on key product support issues</p> <p>15. Review the Rough Order of Magnitude (ROM) Life Cycle Cost Estimates (LCCE) for product support elements</p> <p>16. Review initial identification of support-related risk and risk mitigation planning for product support</p> <p>17. Review requirements for providing sustainment during technology-oriented demonstrations</p> <p>18. Review the product support strategy found in the Acquisition Strategy for:</p> <ul style="list-style-type: none"> <li>a. Life cycle sustainment and continuous improvement of product affordability, reliability, and supportability, while sustaining readiness</li> <li>b. Supportability planning, analyses, and trade-offs used to determine the optimum support concept and identify the strategies for continuous affordability improvements</li> <li>c. Interoperability (including MOSA strategy for supply, interoperability, maintainability, and follow-on logistics planning for sustainment)</li> </ul> <p>19. Review the Technology Readiness Assessment found in the Acquisition Strategy for product support elements</p> <p>20. Review the Total System Product Support Package for product support concepts that are based on reliability and maintainability of the system</p> <p>21. Review the Market Analysis for product support capabilities for achieving support objectives through design and elements of support currently provided by legacy systems and the measures to evaluate support effectiveness</p> <p>22. Review the Test and Evaluation Master Plan for supportability and appropriate logistics considerations</p> <p>23. Refer DAFPAM 63-128 for the appropriate PS elements</p> <p>24. The designated Support Equipment Manager updates the support equipment strategy with the support of the Support</p>	<p><a href="#">Human Systems Integration (HSI)</a></p> <p><a href="#">Industrial Capability</a></p> <p><a href="#">Supply Chain Management</a></p> <p><a href="#">Interoperability</a></p> <p><a href="#">Life Cycle Assessment</a></p> <p><a href="#">Life Cycle Costs</a></p> <p><a href="#">Logistics Footprint Minimization</a></p> <p><a href="#">Market Analysis</a></p> <p><a href="#">MOSA and Interoperability</a></p> <p><a href="#">PBL: A PM's Product Support Guide (All) PBL</a></p> <p><a href="#">Product Support</a></p> <p><a href="#">Product Support Plan for Information Technology Guide (SWGDO32)</a></p> <p><a href="#">10 USC 2440</a></p> <p><a href="#">Technology Readiness Assessment Deskbook (TRA)</a></p> <p><a href="#">Test and Evaluation Master Plan (TEMP)</a></p> <p><a href="#">Product Support Package AFI 63-101/20-101</a></p> <p><a href="#">Integrated Life Cycle Management</a></p> <p><a href="#">AFI 99-103 Capabilities Based Test and Evaluation</a></p> <p><a href="#">DoD LA Guidebook</a></p> <p><a href="#">Air Force Installation Energy Strategic Plan</a></p> <p><a href="#">Centralized Asset Management</a></p> <p><a href="#">Logistics Requirements Determination Process</a></p> <p><a href="#">42 USC 4321</a></p> <p><a href="#">40 CFR 1500</a></p> <p><a href="#">32 CFR 989.3(c)(3)</a></p> <p><a href="#">HSI Handbook</a></p> <p><a href="#">HSI Requirements Pocket Guide</a></p> <p><a href="#">Preservation and Storage of Tooling for MDAPs</a></p> <p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">DoD Product Support BCA Guidebook</a></p> <p><a href="#">Next Generation CLS</a></p> <p><a href="#">Contract Sustainment Support Guide (CSSG)</a></p>	
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Product Support Took Kit (PSTK)

<p>Equipment Working Group, to include how the program will continue to prioritize the selection of existing, common USAF / DoD support equipment over the selection of system unique, peculiar support equipment (generally via the Support Equipment Recommendation Data (SERD) Process))</p> <p>25. Review the Work Breakdown Structure for deliverable work products and of life cycle logistics considerations</p> <p>26. Review contracts that perform workloads previously performed by depot-level activities of the DoD, review the Competition Analysis for Depot-Level Maintenance &gt;\$3M (refer to 10 U.S.C. 2469)</p> <p>27. HQ AFMC certified the source of repair/core determination and 50/50, include approach to developing organic depot repair capability for workloads identified as core (refer to U.S.C. 2466)</p> <p>28. Ensure National Environmental Policy Act (NEPA), facilities SRM and MILCON funding requirements are addressed lead time away as applicable.</p> <p>29. Review Cost as an Independent Variable for cost estimate. Include any funding shortfalls and discuss current and planned cost reduction initiatives</p> <p>30. Review the Acquisition Decision Memorandum for product support exit criteria Review Air Force installation energy strategic plan along with the that specific installation's plan</p> <p>32. This task is one in a series to ensure the LCSP is continually updated to address additional Information and maturity. Reference checklists 2.15, 2.49, 3.29, 5.32, and 6.10.</p>	<p><a href="#">Centralized Asset Management (CAM) Document Library in the United States Air Force Enterprise Information Service</a></p> <p><a href="#">AFPAM 63-113: Program Protection Planning for Life Cycle Management AFLCMC LCSP Standard Process and OSD Sample Outline Version 2.0 (dtd 17 Jan 2017)</a></p> <p><b>Sample Documents:</b>  <a href="#">AOA Study Plan</a>  <a href="#">ICD</a>  <a href="#">SEP</a>  <a href="#">TEMP</a>  <a href="#">Program Protection Plan (PPP)</a>  <a href="#">TRA</a></p>	
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**EXIT CRITERIA:**

- Updated Life Cycle Sustainment Plan
- Updated Capabilities Development Document (CDD)
- Updated System Performance Specification
- Updated Test and Evaluation Master Plan (TEMP)
- Validated System Support and Maintenance Objectives and Requirements
- Updated Systems Engineering Plan (SEP)
- Updated Information Support Plan (ISP)
- Updated Program Protection Plan (PPP)
- Updated Public Private Partnership (PPP)
- Technology Readiness Assessment (TRA)
- Inputs to Integrated Baseline Review (IBR)
- Inputs to Acquisition Strategy, Acquisition Program Baseline (APB)
- Inputs to Affordability Assessment
- Inputs to Cost/Manpower Estimate, Independent Cost Estimate and Manpower Estimate
- Inputs to Analysis of Alternatives (AoA)
- Inputs to Technical Maturation Risk Reduction (TMRR)
- Inputs to Industrial Capabilities, Cooperative Opportunities
- Core Logistics Analysis/ Source of Repair Analysis, and Competition Analysis for Depot-Level Maintenance >\$3M
- Signed LCSP for Milestone B decision

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.30</a>	Review Capability Production Document (CPD) for supportability	Capabilities Based Analysis (CBA) Supportability Objectives CRRA JCIDS DOTMLPF analysis ICD / CDD	
<b>DESCRIPTION:</b>			
The CPD is the sponsor's primary means of providing authoritative, testable capabilities for the Production and Deployment phase of an acquisition program. A CPD is finalized after Post-CDR Assessment and is validated and approved before the Milestone C acquisition decision. The CPD captures the information necessary to support production, testing, and development of an affordable and supportable acquisition strategy. CPD provides the operational performance attributes necessary for the acquisition community to produce a specific system. The CPD refines threshold and objective values for performance attributes and KPPs that were validated in the CDD.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Participate in the initial development, review and update of the entire CPD for supportability inputs since these inputs are incorporated throughout. Reference the AFMC/A4 CPD Review Checklist.</li> <li>2. Review data used to support initial JCIDS analysis</li> <li>3. Understand the operational and threat environment in which capability is exercised and manner in which the capability will be employed. (For Intelligence Reference Appendix A, Checklist 1.1)</li> <li>4. Analyze operational capabilities and environmental constraints. (For Intelligence Reference Appendix A, Checklist 1.1)</li> <li>5. Review concept performance definition and verification objectives to include constraints</li> <li>6. Need to ensure supportability analysis determines cost effective support over system life cycle</li> <li>7. Ensure requirements include Technical Orders and other Technical Data, Support Equipment, Packaging, Handling, Storage and Transportation; supply support, RAM, Cost; production, interoperability and maintainability concepts for inclusion into specifications</li> <li>8. Ensure HSI implications, constraints and issues are addressed and included in the CPD.</li> <li>9. Ensure ESOH considerations and facets such as mishap hazards, noise hazard, hazardous materials and the associated constraints are addressed.</li> <li>10. Ensure DOTMLPF analysis includes logistics considerations. If these are not included ensure analysis is performed.               <ol style="list-style-type: none"> <li>a. Evaluate existing facilities/infrastructure and installation / capabilities for application. Ensure National Environmental Policy Act (NEPA) milestones and requirements are updated. See task 3.10.2</li> <li>b. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded.</li> </ol> </li> </ol>	<p><a href="#">CJCSI 5123.01HI</a> Operation of the Joint Capabilities Integration and Development System</p> <p><a href="#">AFMC/A4 CPD Review Checklist</a></p> <p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development</p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p>DAFMAN 14-401</p> <p>Intelligence Analysis and Targeting Tradecraft/Data Standards DoDI 5000.81</p> <p>Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a></p> <p><a href="#">Weapon System Acquisition Reform Act</a></p> <p><a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a></p> <p><a href="#">42 USC 4321</a></p> <p><a href="#">40 CFR 1500</a></p> <p><a href="#">32 CFR 989.3(c)(3)</a></p> <p>AFI 32-1015 Integrated Installation Planning <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">HSI Requirements Pocket Guide</a></p> <p><a href="#">Product Data Acquisition Guidance</a></p>	Engineering & Manufacturing Development	

Product Support Took Kit (PSTK)

	<p><a href="#">DoDI 4140.1</a> DoD Supply Chain Materiel Management Policy</p> <p><a href="#">AFMCI 24-201</a> AFMC Package and Material Handling Policies and Procedures</p> <p><b>Sample Documents:</b></p> <p><a href="#">ICD</a></p> <p><a href="#">TEMP</a></p> <p><a href="#">AOA Study Plan</a></p>	
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**EXIT CRITERIA:**

- Acquisition Program Baseline (APB) for Milestone C
- Analysis of Alternatives Report
- Clinger-Cohen Certification (updated for Milestone C) for Major Automated Information Systems (MAIS)
- Acquisition Strategy (updated for Milestone C)
- Supportability Objectives
- Test and Evaluation Master Plan (TEMP) updated for Milestone C
- System Engineering Plan
- Capability Roadmap
- Manpower estimate

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.32	Participate in the Functional Configuration Audit (FCA) and monitor corrective actions for supportability performance requirements	Development testing reports System Specification Design-to/subsystem specs (Tier II) Program supportability objectives (CDD, KPPs, LCSP, CDRLs)	
<b>DESCRIPTION:</b>			
The FCA verifies that all requirements established in the specifications, associated test plans, and related documents have been verified via analysis, inspection demonstration or test and that the item has passed the tests or corrective actions has been initiated. The FCA forms the basis of the allocated baseline. It determines if the system produced is capable of meeting the technical performance requirements established in the specification. Reviews must be planned, managed, and followed up to be effective as an analysis and control tool. This may be done in conjunction with System Verification Review (SVR).			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Invite Air Logistics Complex (ALC) and or sustainment logistician</li> <li>2. Obtain a good understanding of supportability requirement in the functional baseline.</li> <li>3. Understand all the verification methodology for those supportability requirements.               <ol style="list-style-type: none"> <li>a. Verify</li> <li>b. Test</li> <li>c. Demonstration</li> <li>d. Analysis</li> </ol> </li> <li>4. Ensure supportability and HSI requirements, to include ESOH, have been verified and discrepancies have been documented.</li> <li>5. Follow-up to ensure action items are completed</li> </ol>	<a href="#">System Engineering Fundamentals Guide</a> <a href="#">Defense Acquisition Guide</a> <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> <a href="#">Guide for FCA-PCA</a> <a href="#">AFI 63-101/20-101</a> Life Cycle Systems Engineering <a href="#">ISO 15288</a> (for fee service) DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">HSI Acquisition Phase Guide</a>	Engineering & Manufacturing Development	
<b>EXIT CRITERIA:</b>			
All supportability requirements have been verified in the FCA and SVR All supportability requirements have been allocated in the design – to/subsystem specifications which become the allocation baseline. FCA and SVR minutes Document Action Items			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.33	Participate in System Verification Review (SVR) and Program Readiness Review (PRR)	Test Readiness Review completed Life Cycle Sustainment Plan Test and Evaluation Master Plan Configuration Management Plan DT&E, LFT&E and Operational Assessments Capability Development Document (CDD) Product and Development Specifications Engineering drawings, Work instructions, Process specifications, Tool drawings, Detailed manufacturing assembly and test processes and Manufacturing test data sheets Contractor version of baseline data package	
<b>DESCRIPTION:</b>			
SVR is a formal review conducted to verify that the actual item (which represents the production configuration) complies with the performance specification. PRR is a formal examination of a program to determine if the design is ready for production, production engineering, problems have been resolved, and the producer has accomplished adequate planning for the production phase.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1.Participate on the integrated product team 2.Review desired product support performance attributes 3.Review engineering change proposals or modification requests 4.Ensure designed-in RAM levels are not degraded	<a href="#">Defense Acquisition Guidebook ANSI/EIA 649A</a> For Fee Service <a href="#">MIL-HDBK-61A</a> Configuration Management Guidance AFMC/A4 Data Strategy (and future AF Logistics Data Management Strategy)” <a href="#">Guide for FCA-PCA AFLCMC/EN Guide: Technical Reviews/Audits for Aeronautical Weapon Systems Acquisition</a> <a href="#">ISO 15288</a> (for fee service) <a href="#">SAE GEIA-STD-0007</a> Logistics Product Data <a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">DoD LA Guidebook</a>  <b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">TEMP</a> <a href="#">AOA Study Plan</a> <a href="#">TRA</a> <a href="#">SEP</a>	Engineering & Manufacturing Development	
<b>EXIT CRITERIA:</b>			
Updated Configuration Management Plan SVR, PRR and/or FCA Minutes			



## Product Support Took Kit (PSTK)

Updated System Engineering Plan (SEP)  
Updated Technology Readiness Assessment (TRA)  
Updated Test and Evaluation Master Plan (TEMP)  
Updated Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE)  
Capability Production Document (CPD)  
Updated Analysis of Alternative (AoA)  
Document Action Items

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37</a>	Package, Handling, Storage and Transportation (PHS&T)	Draft Maintenance Concept Cost Analysis Requirements Description (CARD) Initial Capability Document (ICD) Capability Development Document (CDD) Capability Production Document (PCD) Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
<p>PHS&amp;T includes the resources and procedures to ensure that all equipment and support items are preserved, packaged, packed, marked, handled, transported, and stored properly for short- and long-term requirements. It includes material-handling equipment and packaging, handling and storage requirements, and pre-positioning of material and parts. It also includes environmental considerations, equipment preservation, packaging level requirements and storage requirements (for example, sensitive, proprietary, and controlled items). This element includes planning and programming the details associated with movement of the system in its shipping configuration to the ultimate destination via transportation modes and networks available and authorized for use. It further encompasses establishment of critical engineering design parameters and constraints (e.g., width, length, height, component and system rating, and weight) that must be considered during system development. Customs requirements, air shipping requirements, rail shipping requirements, container considerations, special movement precautions, mobility, security classification, In-transit Visibility and transportation asset impact of the shipping mode or the contract shipper must also be carefully assessed.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Interpret User Needs and implications for TOs, SE PHS&amp;T, RAM, Cost, Production, Interoperability, Supply Support and Maintenance Concept that may be included in specifications.</li> <li>2. Participate in IPTs that address PHS&amp;T considerations, such as: <ul style="list-style-type: none"> <li>• System constraints (such as design specifications, item configuration, ESOH risks and impacts, and safety precautions for hazardous material.</li> <li>• Special security requirements.</li> <li>• Geographic and environmental restrictions.</li> <li>• Special handling equipment and procedures.</li> <li>• Impact on spare or repair parts storage requirements.</li> <li>• Emerging PHS&amp;T technologies, methods, or procedures and resource-intensive PHS&amp;T procedures.</li> </ul> </li> <li>3. Ensure packaging requirements are met or addressed. (AFMCI 24-201).</li> <li>4. Ensure the DoD’s computerized Container Design Retrieval System database has been searched to preclude the design of new specialized containers when suitable containers already exist.</li> <li>5. Ensure military packaging, MIL-STD-2073, has been considered for: <ul style="list-style-type: none"> <li>• Items that analysis has shown cannot be protected and preserved in a cost-effective manner using commercial packaging.</li> <li>• Items where analysis has shown that military packaging is the optimal packaging solution.</li> <li>• Items delivered during wartime for deployment with operational units.</li> <li>• Items requiring reusable containers.</li> </ul> </li> <li>6. Ensure packaging intended for international use has been approved by the Department of Transportation.</li> </ol>	<p><a href="#">CJCSI 5123.01HI</a> Joint Capabilities Integration and Development System</p> <p><a href="#">AFI 10-601</a> Operational Capabilities Requirement Development. This document support JCIDS process</p> <p><a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management</p> <p><a href="#">Defense Acquisition Guidebook</a> (See Chapters 3, 4, and 5</p> <p><a href="#">AFMCI 24-201</a> AFMC Package and Material Handling Policies and Procedures (Whole Document)</p> <p><a href="#">Packaging, Handling, Storage and Transportation (PHS&amp;T) (dps.mil)</a><a href="#">AF Shipping Container Management SharePoint</a></p> <p><a href="#">Designing and Assessing Supportability in DoD Weapon Systems (A Guide to Increased Reliability and Reduced Logistics Footprint)</a></p> <p>See Chapter 3, but scan</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

<p>7. Ensure storage requirements are incorporated into technical publications.</p> <p>8. Ensure transportation issues are addressed, to include:</p> <ul style="list-style-type: none"> <li>• DD Form 1653: Transportation for Solicitation</li> <li>• Oversized/overweight items.</li> <li>• Items requiring special transportation modes</li> <li>• Items that are classified</li> <li>• Import/export requirements for any off-shore procurements</li> </ul> <p>9. Ensure shelf-life requirements have been identified</p> <p>10. Ensure time delivery requirements from the contractors have been identified.</p> <p>11. Evaluate the need for carriers to provide near real-time shipment tracking and to provide customer access to their tracking system.</p> <p>12. Ensure validation testing has been conducted on special packaging</p> <p>13. Ensure hazardous material packaging has been tested to UN packaging standards in accordance with the requirements listed in the International Air Transport Association Dangerous Goods Regulations and the Code of Federal Regulations (CFR) 29, 40, 49. Items that do not meet that standard must be coordinated with the prime AFSC PHS&amp;T packaging office that manages the item so a CAA or COE can be written for transportation requirements.</p> <p>14. Coordinate with DLA Distribution for PHS&amp;T and Asset Marking to include IUID Requirements (Reference Task 1.15)</p> <p>15. Ensure commercial packaging conforms to commercial standard ASTM D3951.</p> <p>16. Ensure newly designed, specialized containers are added to the Container Design Retrieval System (CDRS) database.</p> <p>17. Ensure packaging requirements are addressed on AFMC Form 158.</p> <p>18. See Product Support Contracts Requirement Tool, Appendix D.</p>	<p>entire document for further information</p> <p><a href="#">MIL-STD-2073-E1</a> Military Packaging</p> <p><a href="#">DoD LA Guidebook</a></p> <p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">DAFPAM 63-128</a></p> <p>Integrated Life Cycle Management</p> <p><a href="#">MIL-HDBK-1791</a></p> <p><a href="#">Transportability CoP</a></p> <p><a href="#">DTR 4500.9-R Defense Transportation Regulation</a></p> <p><a href="#">Dangerous Goods Regulation</a> Whole Document</p> <p><a href="#">Code of Federal Regulations</a> Titles 29, 40, 49</p> <p><a href="#">AFI 24-210_IP</a> Packaging of Hazardous Materials</p> <p><a href="#">AFMAN 24-204_IP</a> Preparing Hazardous Materials for Military Air Shipments</p> <p><a href="#">DoDI 4140.01</a> DoD Supply Chain Materiel Management Policy</p> <p><a href="#">Air Force Packaging Technology and Engineering Facility</a></p> <p><a href="#">Container Design Retrieval System (CDRS)</a></p> <p><a href="#">Special Packaging Instructions Retrieval and Exchange System (SPIRES)</a></p> <p><a href="#">Preservation and Storage of Tooling for MDAPs</a></p> <p><a href="#">ASTM D3951</a></p> <p><a href="#">HQ AFMC PK Mandatory Procedures 5347.305, Transportation, Packaging Instructions and Data</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">AOA Study Plan</a></p> <p><a href="#">ICD</a></p> <p><a href="#">CARD</a></p> <p><a href="#">LCSP</a></p> <p><a href="#">SEP</a></p>
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<p><b>EXIT CRITERIA:</b></p> <p>Inputs into Analysis of Alternatives (AoAs)</p> <p>Inputs to PHS&amp;T requirements</p> <p>Input into Systems Engineering Plan (SEP)</p> <p>Input into Initial Capabilities Document (ICD)</p>
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## Product Support Took Kit (PSTK)

Inputs to Capabilities Development Document (CDD)

Inputs into Production Capability Document (PCD)

Input/Updates to Life Cycle Sustainment Plan (LCSP)



Product Support Took Kit (PSTK)

<ol style="list-style-type: none"> <li>14. Tailor DI-SESS-81758A to deliver Support Equipment recommendations</li> <li>15. Acquire training plans</li> <li>16. Develop maintenance plans using tailored DI-ALSS-81529</li> <li>17. Establish integrated digital environment and use interactive workflow to review and manage supportability data</li> <li>18. Plan transition of supportability data to the supporting ALC</li> <li>19. Ensure data on hazardous materials both in the weapon system, required for repair, and operations are requested.</li> <li>20. Determine the capabilities and resources required for software sustainment and identify the required software documentation.”</li> <li>21. Refer to checklist 3.50.</li> </ol>	<p><a href="#">MIL-STD-882E</a>, , Standard Practice for System Safety See paragraph 6.2, for a list of DIDs that may be applicable to a system safety effort</p> <p><a href="#">HSI Guide for Contracts</a> (contains HSI relevant DIDs)</p> <p><a href="#">Product Data Acquisition Guidance</a></p>	
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**EXIT CRITERIA:**

Milestone decision approved  
 Data and information reports for populating product PLM  
 Source data for Contractor Logistics Supportability Data Checklist 3.50  
 Technical Reports delivered which reflect results of maintenance task analysis and Reliability Centered Maintenance provide information for selection of Source Maintenance and Recovery (SMR) codes, Spares, support equipment, Technical Manuals, and so forth  
 Individual Repairable Item Data delivered to support Level of Repair decisions  
 Technical Reports delivered that detail maintenance plans for all repairable items  
 Technical Reports delivered which provide source data for Technical Maintenance Data and Technical Orders  
 Provisioning Technical Data supports supply support  
 LMI Data Input to Support Equipment Recommendation Data  
 Technical Reports delivered support Manpower and personnel Estimates and Training Planning  
 All proper supporting documentation put in the official files  
 LMI validated at Physical Configuration Audit (PCA) review all support data and assured the data matches the physical system



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37.2</a>	Address Automated Test Systems (ATS) Acquisition	Identification of a potential requirement for ATS to be used with a system	
<b>DESCRIPTION:</b>			
<p>This checklist enables the Program Manager to make an ATS selection for each requirement that fits within the total DoD investment strategy context, i.e., the costs incurred are to be leveraged to the maximum extent possible within a Service and/or across the joint Services spectrum. The Automated Test Systems Acquisition Checklist provides guidance for defining, developing and implementing ATS solutions for logistics support of Air Force weapon systems. This checklist aids in ensuring that ATS requirements are satisfied while minimizing duplication of existing capability and total ownership costs for all weapon systems.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Upon identification of the potential for ATS requirements, engage the ATS Product Group to coordinate the development of the program’s ATS strategy and requirements. Execute ATS selection in accordance with AFLCMC Standard Process for ATS Selection Analysis</li> <li>2. Identify the weapons system support/test requirements               <ol style="list-style-type: none"> <li>a. Test Requirements</li> <li>b. Maintenance Requirements (LSA/LSAR)</li> <li>c. Operational Requirements</li> </ol> </li> <li>3. Define the various support/test alternatives               <ol style="list-style-type: none"> <li>a. DoD ATS Family</li> <li>b. Commercial Tester</li> <li>c. Existing Service ATS</li> <li>d. Other DoD Inventory ATS</li> <li>e. Combination of above</li> <li>f. New Development ATS</li> </ol> </li> <li>4. Analyze the alternatives               <ol style="list-style-type: none"> <li>a. Parametric Analysis (UUT test requirements vs. ATS capabilities)</li> <li>b. Operational Assessment</li> <li>c. Cost Benefit Analysis</li> <li>d. ATS Support Requirements                   <ol style="list-style-type: none"> <li>i. Special Tools and Support Equipment</li> <li>ii. Calibration Requirements (AFMETCAL)</li> </ol> </li> <li>e. Consider ESOH impacts</li> <li>f. Consider HSI implications</li> </ol> </li> <li>5. Select and field the appropriate ATS support alternative</li> <li>6. See Product Support Contract Requirements Tool (PSCRT), Appendix D.</li> </ol>	<p><a href="#">DoDD 5000.01</a> The Defense Acquisition System  <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System Ref. 8c(1)(c)2c  <a href="#">DoD PSM Guidebook</a>  <a href="#">DoD Product Support BCA Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management  <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">DoD ATS Executive Directorate Home Page</a>  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">2009 ATS Master Plan</a>  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">DoD ATS Selection Guide (2009)</a>  <a href="#">Joint ATS MOA (July 2004)</a>  <a href="#">AFLCMC Standard Process for SERDs</a>  <a href="#">AFLCMC Standard Process for ATS Selection Analysis</a>  <a href="#">Support Equipment Resources</a> (including SERD Process examples and resources)  <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation            AFMAN 32-7002 Environment Compliance and Pollution Prevention  <b>Sample Documents:</b>  <a href="#">SERD</a></p>	<p>Materiel Solution Analysis            Technical Maturation Risk Reduction            Engineering &amp; Manufacturing Development              Production and Deployment</p>	
<b>EXIT CRITERIA:</b>			
<p>ATS Acquisition Strategy            ATS selected and fielded</p>			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37.3</a>	Support Equipment Life Cycle Management	Capability Development Document Supportability Key Performance Parameters System Performance Specification Acquisition Strategy Plan complete Approved SERDs and fielded support equipment	
<b>DESCRIPTION:</b>			
<p>Definition: Support Equipment (SE) and its associated logistics support, is all equipment (mobile or fixed) required to support operations and/or maintenance of a materiel system. This includes associated multiuse support items, ground-handling and maintenance equipment, tools, metrology and calibration equipment, and manual/Automatic Test Equipment/System (ATE/ATS).</p> <p>This checklist enables the Program Manager / Support Equipment Manager to execute life cycle management of support equipment after it has been fielded.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. For those support equipment items being used to support a system, identify which items are managed by the weapon system program office (generally peculiar support equipment) and which are managed by the Support Equipment &amp; Vehicles (SE&amp;V) Product Group (PG) or the ATS PG (generally common support equipment / ATS). For those support equipment items being managed by the weapon system program office, execute life cycle management tasks to ensure the continued health and availability of support equipment to include, at a minimum, the following tasks:</p> <ul style="list-style-type: none"> <li>a. Identify additional requirements through the requirements determination process.</li> <li>b. Develop acquisition program for required replacements and to fill new shortages. Address all PS elements during planning stages to ensure supportability of newly acquired SE.</li> <li>c. Accomplish required SE modifications by budgeting CCB process</li> <li>d. Respond to Recommended Change (RC) requests safety issues or changes by accomplishing required TO update.</li> <li>e. Perform required repair actions as dictated through the CAM process. See task 5.8.1</li> <li>f. POM inputs: input support equipment requirements to the POM process as necessary with inputs from SEWG, to include assigned Item Managers from AFSC Supply Chain Management Squadrons. See AFMAN65-604 and DAFMAN65-605V1 for information on support equipment funding types and responsibilities. See Product Support Contract Requirements Tool, Appendix D.</li> <li>g. Coordinate Calibration requirements with AFMETCAL (checklist 3.37.4)</li> <li>h. Update Technical Order-Plan for TO updates when field submits changes via the Recommended Change (RC) process and changes are approved or new instruments are included in systems. When a new configurations is procured, the TO must be updated.</li> </ul>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management Defense Property Accountability System (DPAS) <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">AFMAN 32-7002</a> Environment Compliance and Pollution Prevention <a href="#">HSI Requirements Pocket Guide</a></p> <p><b>Sample Documents:</b></p>	<p>Production and Deployment</p> <p>Operations and Support</p>	

Product Support Took Kit (PSTK)

<ul style="list-style-type: none"> <li>i. Ensure inclusion of approved, PO-managed support equipment in PO's DMSMS strategy (as defined by the program's DMSMS Plan (DMP) and executed by the program's DMSMS Management Team); reference AFMCI20-105</li> <li>j. Perform analysis to determine whether it is appropriate to refurbish, replenish, or replace support equipment that faces obsolescence issues or rising life cycle costs</li> <li>k. Work with assigned Item Managers to gather and validate support equipment requirements in DPAS</li> <li>l. Work with assigned Item Managers and MAJCOM users of support equipment to prioritize support equipment requirements during sustainment</li> <li>m. Execute disposal and demilitarization of SE IAW the program's disposal and demilitarization plans and DLA's Disposition Services when appropriate</li> <li>n. Consider ESOH risks and impacts</li> <li>o. Consider HSI implications. See HSI Requirements Pocket Guide pages 6-16</li> </ul>		
<b>EXIT CRITERIA:</b>		
Final disposition of support equipment		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.37.4	Calibration Support for New Acquisitions	Initiation of all new acquisitions	
<b>DESCRIPTION:</b>			
<p>Definition: Calibration is a comparison between equipment items, one of which is a measurement standard of known accuracy, to detect, correlate, adjust and report any variation in the accuracy of the other item(s). This checklist reminds the program manager (PM) to consider calibration requirements when initiating a new acquisition. The Air Force Metrology and Calibration (AFMETCAL) Product Group (PG) (AFLCMC/WNM) will assist the PM in a comprehensive review of the weapon system and related support equipment calibration requirements. A comprehensive evaluation of calibration requirements will address verification of system performance parameters from initial acceptance through life cycle maintenance. The USAF has extensive organic calibration capabilities in equipment standards, laboratories (PMELs), and procedures. Life cycle calibration costs for program or system can be minimized by consulting with the AFMETCAL PG.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Include AFMETCAL when defining supportability requirements.               <ol style="list-style-type: none"> <li>a. Legal Liability concerning calibration</li> </ol> </li> <li>2. Submit a data call to AFMETCAL, send to <a href="mailto:afmetcal.datacall@us.af.mil">afmetcal.datacall@us.af.mil</a> for CDRL requirements. Include CDRL requirements in the contract.               <ol style="list-style-type: none"> <li>a. Calibration Measurement Requirements Summary (CMRS)</li> <li>b. Requirement for SERDs</li> <li>c. Calibration procedures and related technical data</li> </ol> </li> <li>3. Include AFMETCAL in the Support Equipment Working Group.               <ol style="list-style-type: none"> <li>a. Participate in ILS meetings</li> <li>b. Participate in PDR, CDR, Validation/Verification</li> <li>c. Review CMRS data</li> <li>d. Review SERD data</li> <li>e. AFMETCAL provides input to PM on calibration support concept based on system's accuracy requirements and available calibration standards</li> </ol> </li> <li>4. Public Private Partnerships (PPP)               <ol style="list-style-type: none"> <li>a. Include AFMETCAL when preparing Partnering Agreement (PA)"</li> <li>b. Include AFMETCAL when preparing Statement of Work</li> <li>c. Include AFMETCAL when preparing Implementation Agreement (IA)</li> </ol> </li> <li>5. AFMETCAL will Review Technical Data               <ol style="list-style-type: none"> <li>a. System KPPs</li> <li>b. System CMRS Send to <a href="mailto:afmetcal.cmrs@us.af.mil">afmetcal.cmrs@us.af.mil</a></li> <li>c. SE commercial technical data</li> <li>d. SERD data Send to <a href="mailto:afmetcal.serd@us.af.mil">afmetcal.serd@us.af.mil</a></li> </ol> </li> <li>7. AFMETCAL will evaluate calibration support alternatives               <ol style="list-style-type: none"> <li>a. Vendor Support (CLS)</li> <li>b. User Calibration</li> <li>c. Automated Calibration (PATEC Concept)</li> <li>d. PMEL Supported</li> <li>e. Regional / AFPSL supported</li> <li>f. Hazardous Material usage</li> </ol> </li> <li>7. AFMETCAL will establish and maintain calibration support concept</li> </ol>	<p>DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a>  <a href="#">MIL-STD-1839D</a> Calibration and Measurement Requirements  <a href="#">DI-QCIC 80278C</a> Calibration Measurement Requirements Summary (CMRS)  <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">AFMAN 21-113</a> Air Force Metrology and Calibration Program  <a href="#">TO 00-20-14</a> Air Force Metrology and Calibration Program  <a href="#">AFI 32-7002</a> Environmental and Pollution Prevention  <a href="#">TO 33K-1-100</a> -1/-2 Calibration Measurement Summaries - See your TODO to order</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

a. Publish calibration authority in TO 33K-1-100 / Weapon System Calibration Measurement Summary (CMS) TOs b. Publish 33K series calibration TOs c. Assist in Test Program Sets (TPS) development d. Provide life cycle calibration support		
<b>EXIT CRITERIA:</b>		
Assist with acceptance testing of deliverables when appropriate. Establishment of a calibration support concept Implementation of calibration support		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37.13</a>	Develop a Diminishing Manufacturing Sources and Material Shortages (DMSMS) Program	Systems Engineering Plan (SEP) Acquisition Strategy Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
<p>DMSMS is the loss or impending loss of manufacturers of items or suppliers of items or raw material DMSMS is caused when manufacturers of item or raw material suppliers discontinue production.</p> <p>The objective is to reduce the impact of DMSMS by identifying and resolving DMSMS issues to ensure the continued availability of items and essential materials needed to support current and, when possible, planned defense requirements, by distributing notices, migrating legacy architectures toward an Open Systems Architecture, and providing DMSMS tools for the single manager. This checklist provides guidance for defining, developing, implementing and sustaining DMSMS solutions for logistics support of Air Force weapon systems. This checklist aids in ensuring that DMSMS program requirements are satisfied while minimizing proliferation and total ownership costs for all weapon systems.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure understanding of the Program data acquisition strategy. To establish a DMSMS program, engineering design data must be available down to piece/part level.</li> <li>2. Ensure the Program Manager addresses the need for a DMSMS program at the appropriate level. The Program Manager will identify a DMSMS program manager within the program.</li> <li>3. Develop DMSMS program plan down to piece/part level. Ensure you coordinate with the logistician, engineer, DLA rep, OEM, financial manager, contracting officer and support contractors.</li> <li>4. Review and update the DMSMS program plan annually or as required.</li> <li>5. Ensure DMSMS issues are addressed in the: <ul style="list-style-type: none"> <li>• Acquisition Strategy</li> <li>• Life Cycle Sustainment Plan (LCSP)</li> <li>• Systems Engineering Plan (SEP)</li> <li>• All design reviews (PDR, CDR, SVV, etc.)</li> <li>• Applicable software functionality</li> <li>• Provisioning Conference</li> <li>• Program Objective Memorandum and Budgetary cycles</li> <li>• Program Cost Estimates</li> <li>• Weapon System Support Program (WSSP)</li> </ul> </li> <li>6. Accomplish appropriate DMSMS training; courses include: <ul style="list-style-type: none"> <li>• DAU CLL-201</li> <li>• DAU CLL-202</li> <li>• DAU CLL-203</li> <li>• DAU CLL-204</li> </ul> </li> <li>7. The DMSMS program manager will review technology product life cycle phase used in the design for obsolescence. This will include at minimum a review of the developers preferred parts list.</li> <li>8. Execute the DMSMS program plan. This will include the use of Government Industry Data Exchange Program (GIDEP) and predictive tool(s)</li> <li>9. Maintain awareness of emerging contaminants from the DoD Environment, Safety, and Occupational Health Network and Information Exchange).</li> </ol>	<p><a href="#">DMSMS Guide Book SD-22 DoDM 4140.01, Volume 3</a> DoD Supply Materiel Management Procedures: Materiel Sourcing</p> <p><a href="#">AFMCI 20-105</a> Diminishing Manufacturing Sources and Material Shortages</p> <p><a href="#">AFI 21-118</a> Improving Air and Space Equipment Reliability and Maintainability Chapter 2</p> <p><a href="#">AFMCI 63-1201</a> Implementing Operational Safety, Suitability and Effectiveness (OSS&amp;E) and Life Cycle Systems Engineering</p> <p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p>Defense Acquisition University AFI 23-101 Air Force Materiel Management</p> <p><a href="#">DoD Environment, Safety, and Occupational Health Network and Information Exchange (DENIX)</a></p> <p><b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">SEP</a> <a href="#">POM</a> <a href="#">RFP</a></p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	



Product Support Took Kit (PSTK)

<p>10. When entering the Production and Deployment phase, ensure that the appropriate contract language requires the developer to implement DMSMS best practices.</p> <p>11. When entering the Operations and Support phase the maintenance and operational concepts will drive DMSMS program implementation. The DMSMS program manager will establish a multi-functional team for an organic maintenance program. Ensure all Performance-Based Logistics (PBL) or Contractor Logistics Support (CLS) contracts contain language requiring an active DMSMS program.</p> <p>12. The program manager must be aware of all potential changes in maintenance and support concepts I.E. CLS to Organic, for DMSMS implications.</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>DMSMS program plan                  Updates to SEP                  Updates to LCSP                  Program Objective Memorandum and Budgetary inputs                  Program Cost estimate inputs                  Inputs to Request for Proposal (RFP) section L&amp;M and Contract Data Requirements List (CDRL) for technical data</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37.14</a>	Develop Supply Support Strategy	Approved CONOPS Contract Awards Initial Capabilities Document (ICD) Capability Development Document (CDD) Configuration Control Board (CCB) established	
<b>DESCRIPTION:</b>			
Supply Support consists of all management actions, procedures, and techniques necessary to determine requirements to acquire, catalog, receive, store, transfer, issue and dispose of spares, repair parts, and supplies. This means having the right spares, repair parts, and supplies available, in the right quantities, at the right place, at the right time, at the right price. The process includes provisioning for initial support, as well as acquiring, distributing, and replenishing inventories			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Understand the product support strategy, maintenance concept and CONOPS                             <ol style="list-style-type: none"> <li>a. Performance-Based Logistics (PBL)</li> <li>b. Public-Private Partnership (PPP)</li> <li>c. Contractor Logistics Support (CLS)</li> <li>d. Organic Standard Base Supply System (SBSS)</li> <li>e. Interim Contractor Support (ICS)</li> <li>f. Interoperability considerations</li> </ol> </li> <li>2. Include the supply support technical requirements in the Statement of Objectives (SOO) / Request for Proposal (RFP). Ensure data rights are included in the RFP.</li> <li>3. Review the Depot Source of Repair (DSOR) and Source of Repair Assignment (SORA) Process decision for possible impacts to supply support.</li> <li>4. Establish inventory control points</li> <li>5. Ensure supply cost requirements are input to the cost estimate, Program Objective Memorandum (POM), Centralized Asset Management (CAM) and budgeting annually or as required.                             <ol style="list-style-type: none"> <li>a. Initial and replenishment spares</li> <li>b. Spares for support and training equipment</li> <li>c. Readiness Spares Package (RSP)</li> <li>d. Depot Level Repair (DLR) and Depot Purchased Equipment Maintenance (DPEM)</li> <li>e. Spares to support planned test programs</li> <li>f. Spares requirements for classified non-reporting bases</li> <li>g. Reclamation</li> </ol> </li> <li>6. Ensure Total Asset Visibility (TAV) is addressed (RFID, IUID, Serialized Item Management).</li> <li>7. Participate in the Provisioning Guidance Conferences and Spares Provisioning Conferences. Ref provisioning checklist</li> <li>8. Participate in Weapon System Support Program (WSSP) if weapon system uses Defense Logistics Agency (DLA) parts.</li> <li>9. Assign and maintain Standard Reporting Designators (SRD)</li> <li>10. Acquire initial, replenishment and pre-operational supply support.                             <ol style="list-style-type: none"> <li>a. Establish stock levels as required</li> </ol> </li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">PBL Guide</a>  <a href="#">DoDI 8320.04</a> Item Unique Identification (IUID) Standards for Tangible Personal Property    <a href="#">DoDM 4140.01</a> Volumes 1-3, 5, 6, 8-11 DLM 4000.25, Defense Logistics Management System                      Federal Logistics Information System (FLIS) Technical Procedures                      AFI 23-101 Air Force Materiel Management                      AFI 23-101, Air Force Materiel Management, AFMC Supplement  <a href="#">TO 00-25-195</a> AFTO Source, Maintenance, and Recoverability Coding of AF Weapons, Systems and Equipment  <a href="#">AFPD 23-1</a> Materiel Management  <a href="#">AFMAN 23-120</a> AF Spares Requirements Review Board                      AFMAN 23-230 Maintaining Air Force DoD Activity Address Codes (DoDAAC)                      DAFPAM 63-128 Integrated Life Cycle Management  <a href="#">AFMCMAN 20-106</a> Provisioning  <a href="#">AFMCI 23-111</a> Reclamation of Air Force Property                      10 USC 2454  <a href="#">10 USC 2464</a>  <a href="#">10 USC 2466</a>                      AFI 23-101 Air Force Materiel Management  <a href="#">AFMCMAN 23-3</a> Cataloging and Standardization</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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<ul style="list-style-type: none"> <li>b.Ensure Packaging, Handling, Storage and Transportation (PHS&amp;T) has been addressed</li> <li>c. Use Military Interdepartmental Purchase Request (MIPR)</li> <li>d.Ensure DLA and AF cataloging requirements are included in the RFP</li> <li>11. Manage supply sustainment             <ul style="list-style-type: none"> <li>a. Ensure as a minimum 2-years prior to FY for transition that the SRRB templates have been submitted (Consolidated Sustainment Activity Group-Supply [CSAG-S]).</li> <li>b.Ensure as a minimum 2-years prior to FY for transition that appropriate templates have been completed and submitted (GSD).</li> <li>c. Ensure quarterly computations for buy and repair actions are occurring. For organic supply support this will occur after acceptance into the Working Capital Fund (WCF).</li> <li>d.Establish Requirements Data Exchange List (RDEL) requirements to Primary Inventory Control Activity (PICA)</li> </ul> </li> <li>12. Plan for and execute demilitarization and disposal of assets</li> <li>13. Participate in Configuration Control Boards (CCB) and take appropriate supply support actions as required</li> <li>14. Establish Military Standard Requisitioning and Issue Procedures (MILSTRIP) authority as required</li> <li>15. Consider hazardous material risks and other ESOH considerations during PHS&amp;T and disposal of spares</li> </ul>	<p><a href="#">AFMCMAN 20-106</a> Provisioning  <a href="#">AFMAN 32-7002</a> Environmental Compliance and Pollution Prevention  <a href="#">MIL-HDBK-245D</a> Preparation of Statement of Work (SOW)  <a href="#">Statement of Objectives (SOO) Information Guide</a>  <a href="#">United States Department of Defense Suppliers' Passive RFID Information Guide</a>  <b>Sample Documents:</b>  <a href="#">LCSP</a>  <a href="#">POM</a>  <a href="#">ICD</a></p>	
<b>EXIT CRITERIA:</b>		
<p>Provide input for LCSP update            Inputs to POM, budget, CAM and cost estimates            All tasks identified in the AFMC Form 718 completed            Data in WSSP workbench updated            Source of Repair Assignment Process (SORAP) as required</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.37.15</a>	Contract Data Requirements List (CDRL)	Initial Capability Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) Acquisition Strategy Life Cycle Sustainment Plan (LCSP) System Engineering Plan (SEP) Statement of Work (SOW)	
<b>DESCRIPTION:</b>			
<p>The purpose of the Contractor Data Requirements List (CDRL) is to control the generation of data requirements to ensure effectiveness and economy in support of systems and equipment. Contractor data includes all administrative, management, financial, scientific, engineering, and logistics information and documentation listed in DD Form 1423 for delivery or deferred delivery to the Air Force. Data Item Descriptions (DID) define the data required of a contractor and specifically defines the data content, preparation instructions, format, and intended use.</p> <p>The CDRL provides the standard format for identifying potential data requirements in a solicitation and deliverable data requirements in a contract. The CDRL gives delivery instructions for the data and instructions for tailoring out unnecessary DID requirements. The CDRL, when made part of the solicitation, shall include every known and anticipated data requirement. The offers are asked to provide a price estimate for each technical data requirement. The CDRL corresponds to the DD Form 1423, DD Form 1423-1 and DD Form 1423-2 in Section J of the RFP.</p> <p>A data call is the formal procedure used by the data manager to acquire data requirements for a given program. A Data Requirements Review Board (DRRB) will review and recommend approval or disapproval of data requirements. This board is normally comprised of functional representatives having significant data requirements.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Participate with cross-functional team in the development of the technical data acquisition strategy.                             <ol style="list-style-type: none"> <li>a. Contact the designated appropriate logistics organizations regarding data calls activities</li> <li>b. Ensure all aspects of the program, including the operational and maintenance concepts, acquisition strategy, etc. are made known to the appropriate logistics organizations</li> </ol> </li> <li>2. Respond to the data requirements call issued by the Program Manager, Data Manager or other responsible official by identifying the minimum essential data requirements for logistics.                             <ol style="list-style-type: none"> <li>a. Identify all logistics data activities that require data. See Product Support Contracts Requirement Tool, Appendix D.</li> <li>b. Screen incoming data requests from logistics functional areas to make sure their data requirements have been tasked by the SOW and consolidate any duplicate or overlapping data requests</li> <li>c. Make sure data requests are contained in ASSIST</li> <li>d. Contact data requesters and ask about the possibility of delaying/deferring data delivery, using contractors' format and discuss their justification for the data</li> </ol> </li> <li>3. Provide input to the DRRB or equivalent; be prepared to defend each logistics data request.</li> <li>4. Validate approved DIDs are included in the contract</li> <li>5. Notify appropriate logistics organizations of any changes in the program (requirements, schedules, budgets, etc.) in order to assess the impact on data needs</li> <li>6. Consider a CDRL for facilities requirement plan</li> </ol>	<p><a href="#">DoD 5010.12-M</a>, Procedures for the Acquisition and Management of Technical Data</p> <p><a href="#">MIL-STD-963C</a>, Data Item Descriptions (DIDs)</p> <p><a href="#">Acquisition Streamlining and Standardization Information System Tool</a> ASSIST Quick Search - Enter "DI" in the [Document ID] block and click [Submit] button, to generate a list of over 1100 DIDs</p> <p><a href="#">DoDI 7750.07</a> DoD Forms Management Program</p> <p><a href="#">TM-86-01</a>, Technical Manual Contract Requirements</p> <p><a href="#">Data Management Info Sheet</a></p> <p><a href="#">OC-ALC Data Management Presentation</a></p> <p><a href="#">AF FORM 585</a></p> <p><a href="#">DD Form 1423</a></p> <p><a href="#">DD Form 1423-1</a></p> <p><a href="#">DD Form 1423-2</a></p> <p><a href="#">Product Data Acquisition Guidance</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">LCSP</a></p> <p><a href="#">SEP</a></p> <p><a href="#">ICD</a></p> <p><a href="#">RFP</a></p>	<p>Matériel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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7. For follow-on contracts, notify appropriate organizations what data has already been acquired; data manager should have a complete data list delivered during previous phases.		
<b>EXIT CRITERIA:</b>		
Data Requirements for Request For Proposal (RFP) Finalized CDRL		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.47.1</a>	Accomplish Support Equipment (SE) Guidance Conference	Contract award (any phase) that includes support equipment-related work	
<b>DESCRIPTION:</b>			
<p>An SE Guidance Conference is accomplished to ensure: the contractor appropriately relates SE to government contractual requirements; the system concept of operations (CONOPS) and maintenance concept are understood; and DoD guidance and policy for SE acquisition is understood and complied with. Moreover, the information shared and the dialogue established between the contractor and all government SE players during a SE Guidance Conference can enhance the contractor’s responsiveness, efficiency, and success in executing program SE tasks. Whether a SE Guidance Conference takes place independently or is merged with other contract guidance conferences for the program is dependent on program strategy and the scope of SE-related work taking place on the contract.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. After contract award, schedule and participate in the Support Equipment Guidance Conference. See AFLCMC Standard Process for SERDs for more detail on SE Guidance Conferences.</p>	<p><a href="#">AFLCMC Standard Process for SERDs</a>  <a href="#">Support Equipment Resources</a>                      (including SERD Process examples and resources)</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
<p>Clear understanding of Support Equipment process (government and prime contractor) schedules and milestones to support Test Program, RAA, IOC, FOC, for all levels of maintenance                      Inputs to Support Equipment Plan (if standalone Plan is developed)                      Inputs/updates to LCSP                      Contractual inputs/changes, as required to address SE acquisition                      Minutes of SE Guidance Conference                      Establish specific SE points of contact for contractor and government                      Tailor Support Equipment Recommendation Data (SERD), if required</p>			



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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.47.2	Provide Logistics Support During the Deficiency Reporting (DR) Process	Test Readiness Certification Contract Identification of Deficiency	
<b>DESCRIPTION:</b>			
<p>A Deficiency Report (DR), has broader application than quality - is the DoD-wide process to record, submit and transmit deficiency data on materiel which poses (or is expected to pose) a mission impact. "Materiel" includes software and hardware products from Air Force Materiel Command. DRs are submitted on the SF 368 or equivalent format, and typically through the Joint Deficiency Reporting System (JDRS)."</p> <p><u>Category I Deficiency</u> - Category I deficiencies are those which may cause death, severe injury, or severe occupational illness; may cause loss or major damage to a weapon system; critically restricts the combat readiness capabilities of the using organization; cause or can cause a production line stoppage.</p> <p><u>Category II Deficiency</u> - Category II deficiencies that impede or constrain successful mission accomplishment but do not meet Category I criteria). They may also be conditions that improve a system's operational effectiveness or suitability. Other categories of deficiencies are contained in TO 00-35D-54.</p> <p>This checklist is not all inclusive for the DR process during various phases of an acquisition and sustainment program but is meant to focus upon DR tasks a logistics manager would be involved in.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. During organization stand up: <ul style="list-style-type: none"> <li>- Take the appropriate framework of courses from the Deficiency Reporting, Investigation and Resolution (DRI&amp;R) Training Program SharePoint</li> <li>- Through HQ AFMC/A4F create your JDRS unit and obtain a DoD Address Accession Code (DODAAC)</li> <li>- Obtain a JDRS account through <a href="https://jdrs.mil">https://jdrs.mil</a></li> </ul> </li> <li>2. Understand TO 00-35D-54 and the local DR process</li> <li>3. Become a participating member of the review team.</li> <li>4. Review proposed DR for supportability and human related considerations and impacts.</li> <li>5. Initiate actions to ensure supportability considerations are implemented as required. (See 3.47.3 CCB Checklist if required)</li> <li>6. Follow local exhibit management, storage and processing procedures.</li> <li>7. Make appropriate changes to system documentation i.e.; <ul style="list-style-type: none"> <li>• Technical Orders</li> <li>• Spares</li> <li>• Support Equipment</li> <li>• Calibration</li> </ul> </li> <li>8. If Intelligence sensitive program ensure Intelligence is involved</li> </ol>	<p><a href="#">TO 00-35D-54</a> USAF Deficiency Reporting, Investigation, and Resolution</p> <p><a href="#">MIL-HDBK-61A</a> Configuration Management Guidance</p> <p><a href="#">AFI 63-101/20-101</a> Life Cycle Systems Engineering</p> <p><a href="#">ANSI/EIA 649A</a> For Fee Service <a href="#">Joint Deficiency Reporting System (JDRS)</a></p> <p><a href="#">DRI&amp;R Training Program SharePoint</a></p> <p><a href="#">SF 368</a> Deficiency Report</p> <p><a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification</p> <p><a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
<p>DR Disposition</p> <p>Identify supportability trends</p>			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.47.3</a>	Participate in the Configuration Control Boards (CCB)	Identification of Deficiency Design Change(s) (Hardware/Software/Firmware/Interface) Technology Insertion	
<b>DESCRIPTION:</b>			
<p>The purpose of CCB is to assist in planning for and implementing effective DoD configuration management activities and practices during all life cycle phases of defense systems and configuration items. It supports acquisition based on performance specifications, and the use of industry standards and methods to the greatest practicable extent. Activities and practices include:</p> <ul style="list-style-type: none"> <li>Configuration Identification</li> <li>Configuration Control</li> <li>Configuration Status Accounting</li> <li>Configuration Verification and Audit</li> <li>Data Management</li> </ul>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Understand MIL-HDBK-61A, local and contractor CCB process.</li> <li>2. Become a participating member of the CCB team.</li> <li>3. Review proposed changes for consideration and impacts to:               <ol style="list-style-type: none"> <li>a. Supportability (Product Support Elements)</li> <li>b. Humans (HSI domains and integration)</li> <li>c. DOTMLPF</li> </ol> </li> <li>4. Initiate actions to ensure supportability considerations are implemented as required</li> <li>5. Follow local exhibit management, storage and processing procedures for changes</li> <li>6. Make appropriate changes to system documentation i.e.;               <ol style="list-style-type: none"> <li>a. Technical data (Drawings, TO, Data, etc.)</li> <li>b. Spares</li> <li>c. Support Equipment</li> <li>d. Calibration</li> </ol> </li> </ol>	<p><a href="#">MIL-HDBK-61A</a> Configuration Management Guidance  <a href="#">AFI 63-101/20-101</a> Life Cycle Systems Engineering  <a href="#">ANSI/EIA 649A</a>  <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">AF Form 3525</a> CCB Modification Requirements and Approval Document  <a href="#">AFMC Form 518</a> Configuration Control Board Directive</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
<p>Identify supportability Issues            Verified changes incorporated in all affected items, documents            Status accounting data base appropriate to each phase            Configuration Management-competent contractor base            Configuration Management process performance measured and continuously improved            Lesson learned            CCB Recommendations and Disposition</p>			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
3.47.4	Accomplish Provisioning Guidance Conference	Spares acquisition CLIN on contract
<b>DESCRIPTION:</b>		
<p>The Provisioning Guidance Conference (PGC) provides a means by which the contractor, major vendors, and Air Force personnel can gain a mutual understanding of the contractual data requirements. Provides an opportunity for explanation of the current logistics concept or plan applicable to the system/end article under contract as well as the techniques and methods used by the Air Force in requirements determinations. Responsibilities should be clearly defined and the various deadlines in the provisioning cycle should be specifically identified. This provides for a responsive and effective provisioning effort. Result should be a mutual understanding of the provisioning data contractual requirements, and reduce some of the more crucial problems inherent in provisioning, such as:</p> <ul style="list-style-type: none"> <li>- Improperly prepared Provisioning Technical Documentation (PTD).</li> <li>- Delinquent submission of PTD.</li> <li>- Inadequate/omitted Engineering Data for Provisioning (EDFP).</li> <li>- Incomplete or invalid recommendations by the contractor.</li> <li>- Late scheduling of the provisioning conference and the resulting delivery of the initial spares/repair support.</li> </ul>		
<b>CHECKLIST SUBTASKS:</b>		
TASK	SOURCE DOCUMENTATION	PHASE
<ol style="list-style-type: none"> <li>1. Establish a firm date and location with the contractor or prospective contractor(s).</li> <li>2. Prepare and distribute, on a timely basis, the conference notification, AFMC Form 771. If sufficient time is not available to insure delivery of the conference notification by mail, the notification will be issued by message.</li> <li>3. Develop agenda and furnish a copy with each AFMC Form 771 distributed.</li> <li>4. Prepare or review tentative milestone dates for the provisioning actions.</li> <li>5. Obtain qualified personnel for detailed discussions such as; Engineers, Equipment Specialist, Item Manager, Production Manager, Packaging, Using Command and DLA representative.</li> <li>6. Obtain a copy of the Initial Provisioning Performance Specification (IPPS) with attachments and applicable programming checklists available for the conference.</li> <li>7. Hold a closed Air Force familiarization meeting before conducting the conference to:               <ol style="list-style-type: none"> <li>a. Review proposed agenda for the conference.</li> <li>b. Resolve any difference of opinion.</li> <li>c. Establish or review the rules of conduct to be in effect during the conference.</li> <li>d. Recognize and resolve any questions/discussions that relate solely to internal Air Force affairs so as to avoid undue embarrassment.</li> <li>e. Achieve an Air Force position.</li> <li>f. Meeting chairperson may invite other government agencies such as DLA or have a separate government only meeting.</li> </ol> </li> <li>8. Review the maintenance and support concept strategies.</li> <li>9. Request contractor to hold a briefing on the system/end article on contract. The briefing should generally include:               <ol style="list-style-type: none"> <li>a. Design/maintainability/reliability.</li> <li>b. Operation requirements.</li> <li>c. Equipment capabilities.</li> <li>d. Organizational structure in relation to manufacture, delivery, and logistics support.</li> </ol> </li> </ol>	<p><a href="#">AFMCMAN 20-106</a> Provisioning</p> <p><a href="#">AFMC Form 771</a> Conference Notification</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>

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<p>e. Tour of manufacturer's area if conference is held at the contractor's facility.</p> <p>f. Contractor(s) proposed Provisioning Performance Schedule (PPS).</p> <p>10. Government and prime contractor review, complete, document, and sign PPS that reflects a mutual agreement on provisioning data timelines.</p>		
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**EXIT CRITERIA:**  
Approved Provisioning Performance Schedule

<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>
<a href="#">3.50</a>	Evaluate Contractor Delivered Data (Including COTS and CDRLs)	Contract Award CDRLs on contract Test and Evaluation Management Plan (TEMP) Support and Maintenance Concept and Technologies Technical Maturation Risk Reduction (TMRR) Set Product Support Strategy
<b>DESCRIPTION:</b>		
Provides examples and guidance to evaluate data delivered under the Contractor Data Requirements List placed on contract for logistical support. A formal, system-level review conducted to ensure that system requirements have been completely and properly identified and that a mutual understanding between the government and contractor exists.		
<b>CHECKLIST SUBTASKS:</b>		
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>

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<p>1. Coordinate with program IPTs to ensure contractor(s) meet supportability requirements contained in contract deliverables (i.e. CDRLs).</p> <p>2. Determine COTS requirements</p> <p>3. Verify contractor meets CDRL deliverables. Some examples of types of CDRLs are:</p> <ul style="list-style-type: none"> <li>• DI-CMAN-81254A, Request for Nomenclature</li> <li>• DI-SESS-81000B, Product Drawings and Associated Lists</li> <li>• DI-MGMT-80004, Management Plan</li> <li>• DI-ILSS-81089, Training Facilities Report</li> <li>• DI-ILSS-81070, Training Program Development and Management Plan</li> <li>• DI-ILSS-80872, Training Materials</li> <li>• TMCR, TM-86-01, Technical Manuals</li> <li>• DI-MISC-81454A Automated Computer Program Identification Number Data and Control Record</li> <li>• DI-ILSS-80134B, Proposed Spare Parts List</li> <li>• Review applicable documentation against product support strategy such Life Cycle Sustainment Plan, Validate Systems Support and Maintenance Objectives and Requirements, SEP, etc.)</li> </ul> <p>Note: The DIDs listed above are only samples of what a program may need to be logistically supportable.</p> <p>4. Prepare for Milestone B or C decision as appropriate</p> <p>5. Update Acquisition Plan for Source Selection</p>	<p><a href="#">Systems Engineering Fundamentals</a> Entire document provides an overall on Systems Engineering. See Chapter 19 for Contracting information.</p> <p><a href="#">MIL-HDBK-502</a> Product Support Analysis</p> <p><a href="#">MIL-STD-963C</a> DoD Standard Practice Data Item Deliverables (DIDS), <a href="#">DoD IPS Element Guidebook</a> &amp; <a href="#">DoD PSM Guidebook</a></p> <p><a href="#">Defense Acquisition Guidebook</a></p> <p><a href="#">DoD LA Guidebook</a></p> <p><a href="#">Acquisition Streamlining and Standardization Information System Tool</a> ASSIST Quick Search - Enter "DI" in the [Document ID] block and click [Submit] button, to generate a list of over 1100 DIDs</p> <p><a href="#">Product Data Acquisition Guidance</a></p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment and O&amp;S Phases</p>
<p><b>EXIT CRITERIA:</b></p>		
<p>Demonstrated Product Support Capability</p> <p>Updated Acquisition Contract</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">3.50.1</a>	Manage Technical Order Acquisition Program	Capability Development Document (CDD) Maintenance Strategy Product Support Strategy Technical Manual Contract Requirements (TMCR) Document, TM-86-01
<b>DESCRIPTION:</b>		
Technical order requirements must be progressively monitored and updated to ensure completion and delivery concurrent with the equipment or hardware. The organization or individual assigned TO acquisition responsibility is called the Technical Order Manager. This checklist gives instruction on how to manage a technical order acquisition program from development of the strategy to sustainment of the formal manuals.		
<b>CHECKLIST SUBTASKS:</b>		
TASK	SOURCE DOCUMENTATION	PHASE
<ol style="list-style-type: none"> <li>1. Refine a <i>Technical Order Life Cycle MANAGEMENT Plan (TO LCMP)</i>.as soon as feasible. See Product Support Contracts Requirement Tool, Appendix D.</li> <li>2. Once a TO acquisition program is established and a contract awarded, begin managing the activities involved with delivery of preliminary and formal technical manuals. The TO Manager and Contractor will:               <ol style="list-style-type: none"> <li>a. Perform TO Guidance Conference</li> <li>b. Number and index TOs as required. See TO Numbering and Indexing Process Flow.</li> <li>c. Perform in Process Reviews (IPR) as required by the contract.</li> <li>d. Monitor contractor TO certification process.</li> <li>e. Contractor will update preliminary TOs as they are reviewed and certified.</li> <li>f. Contractor will submit proposed Commercial off the shelf (COTS) manuals for government evaluation and acceptance as required.</li> <li>g. Contractor will deliver certified, preliminary TOs IAW the TMCR.</li> </ol> </li> <li>3. Verification planning is a critical step in the acquisition process of preparing and delivering adequate and accurate TOs that meet the needs of the users. Verification planning decisions will be documented in a Technical Order Life Cycle Verification Plan (TOLCVP) prepared by the TO manager.</li> <li>4. The TO Manager will ensure verification is performed and documented IAW TO 00-5-3 and the Technical Order Life Cycle Verification Plan (TOLCVP). Contractor support will be IAW TM-86-01.</li> <li>5. The TO Manager will perform pre-pub reviews as required IAW TO 00-5-3 and TMCR.</li> <li>6. Contractor will deliver formal TOs IAW the TMCR</li> <li>7. Contractor will develop and deliver formal TO updates if required by the TMCR.</li> <li>8. Budget (POM) for TO sustainment 2 years prior to transition to Sustainment organization (if applicable) should reflect the annual CAFTOP requirements IAW 00-5-3.</li> </ol>	<p><a href="#">TO 00-5-3</a> Air Force Technical Order Life Cycle Management</p> <p><a href="#">Develop TO strategy</a></p> <p>TO 00-5-18 AF Technical Order Numbering System</p> <p><a href="#">Enhanced Technical Information Management System (ETIMS)</a></p> <p>ETIMS is the prescribed method of accessing the 00-5 series of TOs. Users request access to the applicable TO's through ETIMS which is an AF Portal program.</p> <p><a href="#">Technical Order Contract Requirements</a></p> <p><a href="#">TO Delivery Requirements</a></p> <p>TM 86-01 Air Force Technical Manual Contract Requirements</p> <p><a href="#">Manage TO Acquisition Program</a></p> <p><a href="#">TO Verification Planning</a></p> <p><a href="#">TO Verification</a></p> <p><a href="#">MIL-PRF-32216</a></p> <p><a href="#">TO Numbering and Indexing Process Flow</a></p> <p><a href="#">AFI 63-101/20-101</a></p> <p>Integrated Life Cycle Management</p> <p><a href="#">AFI 65-601 Vol. 1</a> Budget Guidance and Procedures</p> <p><a href="#">AFMCI21-301 (New publication is in the final stages of review and this reference will be renamed AFMCI63-301)</a></p> <p>*NOTE: HQ AFMC is designated the executive</p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p>



Product Support Took Kit (PSTK)

	agent for the AF TO System, IAW AFI 63- 101/20-101.  <b>Sample Documents:</b> <a href="#">TMCR</a> <a href="#">TMCR Writing Guide</a> <a href="#">TOLCMP</a> <a href="#">TOLCVP</a>	
<b>EXIT CRITERIA:</b>		
Delivery of formal TOs. Development of Technical Order Life Cycle Management Plan (TOLCMP) Development of Technical Order Life Cycle Management Plan (TOLCVP) Development Technical Manual Contract Requirements (TMCR) Current approved CAFTOP budget submission.		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">3.50.4</a>	Establish and Manage Training Systems	Acquisition Strategy approved Training System Requirements Analysis (TSRA) completed Life Cycle Sustainment Plan (LCSP) completed Systems Engineering Plan (SEP) completed Contract awarded	
<b>DESCRIPTION:</b>			
Responsible for developing and sustaining aircraft training systems to train aircrew and maintenance students. The program uses the four Training System Requirements Analysis Reports to identify and assign the mandatory training tasks to both the maintenance and aircrew training devices. The devices and training materials are built, tested, approved and delivered to the government. After delivery, the devices and training materials are maintained using contractor logistics support and updated to keep concurrent with aircraft modifications. The following checklist represents a standardized training system program tasks. Depending on the scope of the program, these tasks maybe removed if not applicable.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Design of training devices meets contractual specification requirements via the following milestones:               <ol style="list-style-type: none"> <li>a. Systems Requirements Review</li> <li>b. Preliminary Design Review</li> <li>c. Critical Design Review</li> </ol> </li> <li>2. Consider HSI implications</li> <li>3. Training devices are tested to ensure compliance with contractual specifications. Two phases of testing include:               <ol style="list-style-type: none"> <li>a. Government In-plant testing</li> <li>b. On-site Acceptance testing</li> <li>c. Final device certification</li> </ol> </li> <li>4. Training Devices are sustained via the following:               <ol style="list-style-type: none"> <li>a. Contractor Logistics Support</li> <li>b. Simulators Division Agile Combat Support Directorate (AFLCMC/WNS)</li> </ol> </li> <li>5. Ensure all facilities requirements are identified and tracked to include any facility modifications and National Environmental Policy Act (NEPA) actions</li> <li>6. Ensure all manpower and personnel requirements are identified and planned for. REF checklist 3.10.1</li> <li>7. Ensure training system sustainment is addressed in the product support strategy for the life of the system.</li> <li>8. Ensure training systems requirements are documented in the System Training Plan, and updated annually for the entire life cycle.</li> <li>9. See Product Support Contracts Requirement Tool, Appendix D. Note: If a concurrent training device is not delivered prior to the first production aircraft a waiver is required to be documented in the Milestone Decision Review prior to Milestone C</li> </ol>	<a href="#">AFI 36-2251</a> Management of Air Force Training Systems <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">Performance Based Logistics CoP</a> <a href="#">42 USC 4321</a> <a href="#">40 CFR 1500</a> <a href="#">32 CFR 989.3(c)(3)</a> <b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">SEP</a>	Technical Maturation Risk Reduction  Engineering & Manufacturing Development          Operations & Support          All	
<b>EXIT CRITERIA:</b>			
Devices and training materials delivered and used for training Annual sustainment contract options set up Annual training and instruction contract options set up Training System Support Center tracking device baselines and also incorporating minor modifications into devices Devices maintaining concurrency with aircraft			



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.51	Identify and Plan Supportability Requirements for the TEMP	Test and Evaluation Master Plan (TEMP) Live Fire Test Strategy Initial Capabilities Document (ICD) (Draft) Capability Development Document (CDD) (Draft) System Engineering Plan (SEP) Support and Maintenance Concept and Technologies	
<b>DESCRIPTION:</b>			
A comprehensive plan of developmental and operational testing to determine system suitability and readiness for delivery to operational users.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure sustainment KPP/KSAs are fully tested, analyzed, and assessed within the TEMP to meet acceptance criteria.</li> <li>2. Ensure product support strategy and CONOPs are assessed for operational safety, suitability and effectiveness.</li> <li>3. Ensure TEMP assesses product support readiness to include training for maintenance and operators.</li> <li>4. Ensure TEMP assesses system logistics footprint.</li> <li>5. Ensure TEMP assesses product support facility and infrastructure requirements.</li> <li>6. Ensure TEMP assesses maintenance procedures, to include technical manual development and data availability.</li> <li>7. Ensure TEMP assesses support equipment suitability (to include calibration requirements) and compatibility with system maintenance concept</li> <li>8. Ensure TEMP assesses on-equipment vs. off-equipment maintenance tasks.</li> <li>9. Ensure TEMP assesses system size and weight, permitting economical handling, loading, securing, transporting, and disassembling for shipment, to include handling hazardous materials.</li> <li>10. Ensure TEMP includes the means to assess future logistics initiatives, due to cost reduction, technical maturation risk reduction, etc.</li> <li>11. Ensure TEMP includes Intelligence support concept and technologies.</li> <li>12. Ensure TEMP includes appropriate considerations for ESOH, the National Environmental Policy Act (NEPA), and addresses chemicals of emerging regulatory interest.</li> <li>13. Ensure TEMP includes plans for site cleanup and asset disposition following test.</li> <li>14. Ensure TEMP includes specific identified or unique HSI considerations.</li> <li>15. Ensure TEMP assesses design interface.</li> <li>16. Ensure TEMP assesses supply support.</li> <li>17. Ensure TEMP assesses maintenance planning and management</li> <li>18. Ensure TEMP assesses manpower and personnel.</li> <li>19. Ensure TEMP assesses IT Systems Continuous Support.</li> <li>20. Ensure TEMP assesses sustaining/system engineering.</li> </ol>	<p> <a href="#">Defense Acquisition Guidebook Chapter 9</a>  <a href="#">AFPD 99-1</a> Test and Evaluation Process  <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a> Paragraphs: 1.5.1, 2.3.3, 2.3.5, 4.6, 5.4.1, 5.5.3)  <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management  <a href="#">42 USC 4321</a>  <a href="#">40 CFR 1500</a>  <a href="#">32 CFR 989.3(c)(3)</a> </p> <p><b>Sample Documents:</b>  <a href="#">ICD</a>  <a href="#">LCSP</a>  <a href="#">SEP</a>  <a href="#">TEMP</a> </p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

Product Support Took Kit (PSTK)

<p>21. Ensure TEMP assesses protection of critical program information and anti-tamper provisions.</p> <p>22. Ensure TEMP assesses Logistics Test and Evaluation (LT&amp;E) – The test methodology, criteria and tools for evaluating and analyzing the logistics support elements (DAG)/product support elements (DAFPAM 63-128) as they apply to a system under test. The objective is to influence system design as early as possible in the acquisition cycle and verify that the logistics support being developed is capable of meeting peacetime and wartime employment objectives.</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Approved/Updated TEMP</p> <p>Updated Live Fire Test Strategy</p> <p>Updated Initial Capabilities Document (ICD)</p> <p>Updated Capability Development Document (CDD)</p> <p>Updated System Engineering Plan (SEP) (including HSI, if not identified as a separate plan)</p> <p>Updated Product Support Strategy in the Life Cycle Sustainment Plan</p> <p>Updated Support and Maintenance Concept and Technologies</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
3.54	Participate in System Requirements Review (SRR) (System Specification)	Initial Capabilities Document (ICD) Draft Capability Development Document (CDD) Analysis of Alternatives (AoA) Test and Evaluation Master Plan (TEMP) System Engineering Plan (SEP) Support and Maintenance Concept and Technologies Technical Maturation Risk Reduction (TMRR) Life Cycle Sustainment Plan (LCSP) Draft System Specification SRR (Demo) Minutes, if applicable Threat assessment baseline from Intelligence	
<b>DESCRIPTION:</b>			
A formal, system-level review conducted to ensure that system requirements have been completely and properly identified and that a mutual understanding between the government and contractor exists.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Coordinate with lead engineer regarding supportability requirements</li> <li>2. Review applicable documentation against product support strategy such as system maintenance concept, significant system design criteria (reliability, maintainability, logistics requirements, layout drawings, conceptual design drawings, selected supplier components data, etc.)</li> <li>3. Ensure product support requirements satisfy the ICD or draft CDD. (For Intelligence Reference Appendix A, Checklist 1.1)</li> <li>4. Ensure that the system supportability requirements are consistent with the preferred system solution</li> <li>5. Understand the approach and methods planned for use in arriving at a balanced set of requirements to include product support (manpower, personnel, training, reliability, supportability, life cycle cost analysis, etc.).</li> <li>6. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational) and Alternate Fuels are considered.</li> <li>7. Ensure HSI implications, constraints and issues are adequately addressed by the requirements for the planned operational and sustainment concepts</li> <li>8. Ensure provisioning concepts and strategies are compatible with maintenance concept</li> <li>9. Ensure contractual requirements levy the need for detailed facility requirements data</li> <li>10. Participate in site survey development and input into the Facility project books</li> <li>11. Provides an overview of government and contractor data rights for the system to include what key technical information and data will be developed during this phase</li> <li>12. Review the technical approach reflect the capabilities, concepts of operation and support, and required attributes</li> <li>13. Understanding requirements driving the preferred system concept, including: potential statutory and regulatory requirements, supportability requirements, training</li> </ol>	<a href="#">Systems Engineering Fundamentals</a> <a href="#">System Requirements Review Procedures</a> <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">Navy Acquisition Guide</a> <a href="#">ISO 15288</a> (for fee service) <a href="#">SAE GEIA-STD-0007</a> Logistics Product Data <a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards <a href="#">AFMAN 32-7002</a> Environment Compliance and Pollution Prevention <a href="#">AFI 32-1015</a> Integrated Installation Planning <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">HSI Requirements Pocket Guide</a>	Technical Maturation Risk Reduction	



Product Support Took Kit (PSTK)

<p>requirements, life-cycle cost requirements, and other design considerations</p> <p>14. Review applicable operational effectiveness analyses to understand the linkage between overall operational effectiveness, weapon system performance, and execution of an effective product support strategy</p> <p>15. Establish a consistent set of objectives for readiness and logistics parameters</p> <p>16. Conduct trade-offs among design, support concepts, and support resource requirements.</p> <p>17. Participate in market research for supportability attributes of potential commercial products; assess impact of deployment, evaluate support alternatives</p> <p>18. Ensure logistics decisions and risk identified and are incorporated into the minutes</p>	<p><a href="#">HSI Acquisition Phase Guide</a>  <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a></p> <p><b>Sample Documents:</b>  <a href="#">AOA Study Plan</a>  <a href="#">ICD</a>  <a href="#">LCSP</a>  <a href="#">SEP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Updated Capability Development Document (CDD)          Updated Analysis of Alternatives (AoA)          Updated System Engineering Plan (SEP)          Updated Life Cycle Sustainment Plan (LCSP)          Test and Evaluation Management Plan (TEMP) or equivalent          Technology Readiness Assessment (TRA)          System Performance Specification          SRR (Sys Func Spec) Minutes</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">3.58</a>	Participate in System Functional Review (SFR)	Capabilities Development Document (CDD) Acquisition Program Baseline (APB) Life Cycle Sustainment Plan (LCSP) Test and Evaluation Master Plan (TEMP) System Engineering Plan (SEP) Validated System Support and Maintenance Objective Requirements Draft System Performance Specification System Functional Specification System Verification Plan Functional Analysis and Allocation of Requirements Technical Performance Measurement data and analysis Updated threat assessment baseline from Intelligence

**DESCRIPTION:**

A formal review of the conceptual design of the system to establish its capacity to satisfy requirements. It establishes the functional baseline.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Participate in refining the system functional baseline for supportability 2. Review applicable documentation against product support strategy such as system maintenance concept, significant system design criteria (reliability, maintainability, logistics requirements, layout drawings, conceptual design drawings, selected supplier components data, etc.) 3. Ensure provisioning concepts and strategies are compatible with maintenance concept 4. Understanding the linkage between overall operational effectiveness, weapon system performance, and execution of an effective product support strategy 5. Ensure intelligence interests are addressed. Reference Appendix A, Checklist 1.1 6. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational) and Alternate Fuels are considered. 7. Ensure HSI implications, constraints and issues are addressed and included in the design sufficient to ensure that those tasks and functions allocated to humans actually match the functional capabilities of the operators, maintainers and sustainers with the total system to optimize system effectiveness 8. Conduct trade-offs among design, support concepts, and support resource requirements. 9. Ensure the system functional requirements satisfy the Capability Development Document for product support 10. Ensure adequate product support processes and metrics are in place for the program to succeed 11. Identify product support risks known and manageable for development	DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">Systems Engineering Fundamentals</a> <a href="#">System Requirements Review Procedures</a> <a href="#">MIL-HDBK-502</a> Product Support Analysis <a href="#">MIL-HDBK-61A</a> , Configuration Management Guidance (Tables 4.2-4.3) <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> <a href="#">System Functional Review Procedure (Gunter)</a> <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation <a href="#">Navy Acquisition Guide</a> <a href="#">ISO 15288</a> (for fee service) <a href="#">SAE GEIA-STD-0007</a> Logistics Product Data <a href="#">HSI Requirements Pocket Guide</a> <a href="#">HSI Acquisition Phase Guide</a>	Technical Maturation Risk Reduction

Product Support Took Kit (PSTK)

<p>12. Ensure the Cost Analysis Requirements Description is consistent with the approved functional baseline for product support</p> <p>13. Ensure the system functional baseline been established to enable proper configuration management for product support</p>	<p><a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management <a href="#">DoD LA Guidebook</a> <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards AFI 32-1015 Integrated Installation Planning <b>Sample Documents:</b> <a href="#">CARD</a> <a href="#">LCSP</a> <a href="#">TEMP</a> <a href="#">SEP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Updated Technical Performance Measurement Data Updated Life Cycle Sustainment Plan (LCSP) Updated System Engineering Plan System Functional Baseline Updated Life Cycle Cost Analysis Updated Test and Evaluation Management Plan, or equivalent Updated Acquisition Program Baseline Update Cost Analysis Requirement Description (CARD) Supplier data describing specific components Updated documentation (technical orders; commercial manuals; preliminary materials, parts, and processes; analyses; reports; trade studies; logistics support analysis data; etc. SFR minutes</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">3.59</a>	Participate in Preliminary Design Review (PDR)	Capabilities Development Document Technical Performance Measurement Data Life Cycle Sustainment Plan (LCSP) System Engineering Plan System Performance Specification System Allocated Baseline Cost Analysis Requirements Description Life Cycle Cost Analysis Test and Evaluation Management Plan Acquisition Program Baseline Supplier data describing specific components Equipment layout drawings and preliminary drawings (includes proprietary or restricted data) Existing documentation (technical orders; commercial manuals; preliminary materials, parts, and processes; analyses; reports; trade studies; logistics support analysis data; etc. Successful completion of all SRR action items Applicable CDRs Updated threat assessment baseline from Intelligence

**DESCRIPTION:**

A formal review that confirms the preliminary design logically follows the System Functional Review findings and meets the requirements. It normally results in approval to begin detailed design. For complex systems, the program manager may conduct a PDR for each subsystem or configuration item, leading to an overall system PDR. When individual reviews have been conducted, the emphasis of the overall system PDR should focus on configuration item functional and physical interface design, as well as overall system design requirements.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Review progress of long-lead time support equipment items and Support Equipment Recommendation Data (SERD) procedures 2. Review the Reliability, Availability, Maintainability (RAM), Cost to include support equipment items 3. Review calibration requirements 4. Describe technical manuals and data availability to include support equipment. 5. Verify compatibility of proposed support equipment with the system maintenance concept 6. Verify on-equipment vs. off-equipment maintenance task trade study results to include support equipment impacts 7. Review updated list of required support equipment 8. Review Level 1 engineering drawings for ease of conversion to higher levels 9. Review repair rate sources and prediction methods 10. Identify design changes that will permit a greater use of standard or preferred parts and evaluate the trade-offs 11. Review Program Parts Selection List and status of all non-standard parts identified 12. Determine if design meets contracts requirements governing size and weight to permit economical handling, loading, securing, transporting, and disassembly for shipment.	<a href="#">DoD Systems Engineering Fundamentals</a> <a href="#">AFLCMC Systems Engineering Technical Review (SETR) Guide</a> <a href="#">DoD LA Guidebook</a> <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">AFMAN 32-7002</a> Environment Compliance and Pollution Prevention <a href="#">AFI 32-1015</a> Integrated Installation Planning	Technical Maturation Risk Reduction  Engineering & Manufacturing Development

Product Support Took Kit (PSTK)

<p>Identify potential outsized and overweight items. Identify system/items defined as being hazardous and ensure compliance with hazardous materials regulations.</p> <ol style="list-style-type: none"> <li>13. Review Transportability Analysis to determine that transportation conditions have been evaluated</li> <li>14. Determine understanding of the background, purpose, requirements, and usage of Maintenance Data Collection, historical/status records and methods of providing maintenance, failure, reliability, maintainability data</li> <li>15. Review plans for Work Unit Coding of the equipment</li> <li>16. Review logistics and provisioning planning to insure full understanding of scope of requirements to include provisioning requirements, GFP usage, and spare parts, and support during installation, checkout, and test</li> <li>17. Ensure Energy Efficiency, ESOH, Noise (ambient and occupational) and Alternate Fuels are considered.</li> <li>14. Ensure HSI implications, constraints and issues are addressed and included in the design sufficient to ensure that those tasks and functions allocated to humans actually match the functional capabilities of the operators, maintainers and sustainers with the total system to optimize system effectiveness</li> <li>18. Review plans for maximum screening and usage of GFP, and extent plans have been implemented</li> <li>19. Review status of the Technical Manual Publications Plan to include availability of technical manuals for validation and verification during DT&amp;E testing</li> <li>20. Evaluate the training system/simulator item development specifications and facilities / infrastructure impacts</li> <li>21. Ensure logistics decisions and risk identified and are incorporated into the minutes</li> <li>22. Ensure intelligence interests are addressed. Reference Appendix A, Checklist 1.1</li> </ol>	<p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a>  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">HSI Acquisition Phase Guide</a>  <b>Sample Documents:</b>  <a href="#">CARD</a>  <a href="#">LCSP</a>  <a href="#">TEMP</a>  <a href="#">SEP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Established system allocated baseline          Updated risk assessment for EMD          Updated Cost Analysis Requirements Description (CARD) based on the system allocated baseline          Updated program schedule including system and software critical path drivers          Updated Life Cycle Sustainment Plan (LCSP)          Updated Test and Evaluation Management Plan (TEMP)          Updated System Engineering Plan (SEP)          Acceptance of CDRLS due at PDR          Requirements Traceability Matrix          PDR Minutes</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
3.62	Prepare Documentation for Milestone B	Determination that MSD for MS B is required Initial Capabilities Document Capability Development Document
<p>There are two types of decision points: milestone decisions and decision reviews. Each decision point results in a decision to initiate, continue, advance, or terminate a project or program work effort or phase. The review associated with each decision point typically addresses program progress and risk, affordability, program trade-offs, acquisition strategy updates, and the development of exit criteria for the next phase or effort. The Milestone Decision Authority approves the program structure, including the type and number of decision points, as part of the acquisition strategy. Milestone B initiates engineering and manufacturing development. Per 10 USC 2366A the MDA must provide a signed certification memorandum for record prior to Milestone B approval. There shall be only one Milestone B per program. Entrance into this phase depends on technology maturity (including software), approved requirements, and funding. Unless some other factor is overriding in its impact, the maturity of the technology shall determine the path to be followed. Programs that enter the acquisition process at Milestone B shall have an ICD that provides the context in which the capability was determined and approved, and a CDD that describes specific program requirements</p>		
CHECKLIST SUBTASKS:		
TASK	SOURCE DOCUMENTATION	PHASE
Review and make inputs to applicable documents required by statute or regulation before milestone decision	<a href="#">Milestone B Documentation</a> DoDI 5000.89 Test and Evaluation <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">10 USC 2366</a> <a href="#">Replaced System Sustainment Plan Summary</a> <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a>	Technical Maturation Risk Reduction
EXIT CRITERIA:		
Milestone decision approved All proper supporting documentation put in the official files		



Product Support Took Kit (PSTK)

<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>	
<a href="#">4.11</a>	DLA Weapon System Support Program (WSSP)	Milestone B Decision	
<b>DESCRIPTION:</b>			
This checklist gives instructions on actions required to ensure DLA WSSP matters are included in weapon system support planning activities.			
<b>CHECKLIST SUBTASKS:</b>			
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>	
<ol style="list-style-type: none"> <li>1. Ensure WSSP Focal (WSFP) point is assigned.</li> <li>2. WSFP will nominate weapon system for Weapon System Designator Code (WSDC) assignment.</li> <li>3. Load, Change, and Delete items by National Stock Number (NSN) into DLA WSSP as required.</li> </ol>	DoDM 4140.01, Volumes 1, 2 and 6 <a href="#">AFI 23-101</a> Air Force Materiel Management AFI 23-101 Air Force Materiel Management, AFMC Supplement	Engineering & Manufacturing Development  Production & Deployment  Operations & Support	
<b>EXIT CRITERIA:</b>			
DLA support is no longer needed for weapon system being supported / removed from service.			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
4.64	Prepare Documentation for Milestone C	Determination MS C is required Capability Production Document Information Support Plan Test and Evaluation Master Plan	
DESCRIPTION:			
<p>There are two types of decision points: milestone decisions and decision reviews. Each decision point results in a decision to initiate, continue, advance, or terminate a project or program work effort or phase. The review associated with each decision point typically addresses program progress and risk, affordability, program trade-offs, acquisition strategy updates, and the development of exit criteria for the next phase or effort. The Milestone Decision Authority approves the program structure, including the type and number of decision points, as part of the acquisition strategy. Milestone C authorizes entry into LRIP (for MDAPs and major systems), into production or procurement (for non-major systems that do not require LRIP) or into limited deployment in support of operational testing for MAIS programs or software-intensive systems with no production components.</p>			
CHECKLIST SUBTASKS:			
TASK	SOURCE DOCUMENTATION	PHASE	
Review and make inputs to applicable documents required by statute or regulation before milestone decision.	<a href="#">Milestone C Documentation</a> DoDI 5000.89 Test and Evaluation <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">Replaced System Sustainment Plan Summary</a>	Engineering & Manufacturing Development	
EXIT CRITERIA:			
Milestone decision approved; full rate production decision All proper supporting documentation put in the official files			

Product Support Took Kit (PSTK)

TAS K #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">4.65</a>	Accomplish Spares Provisioning Conference	Spares Acquisition CLIN on Contract Nomenclature, Weapon System Designator Code (WSDC) Provisioning Technical Documentation (PTD) Has Been Screened PTD Has Been Loaded in D220 Approved Provisioning Performance Schedule (PPS)	
<b>DESCRIPTION:</b>			
<p>The provisioning conference provides for the Government to make item selection and assign technical and management codes (previously referred to within the Air force as a source coding conference). Scope includes approved (reparable) support equipment when applicable.</p> <p>The following resources will normally be used:</p> <ul style="list-style-type: none"> <li>Sample articles when specified in the Initial Provisioning Performance Specification (IPPS).</li> <li>Provisioning technical documentation/SUPPLEMENTAL data for provisioning (PTD/EDFP).</li> <li>Maintenance engineering analysis (MEA), and/or RLA, when a requirement of the contract.</li> <li>Competent personnel with expert technical knowledge of the system/end article with regard to the design, reliability and maintenance characteristics of the system/end article or the portion being provisioned.</li> </ul>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>The following activities are accomplished/addressed during a provisioning conference:</p> <ol style="list-style-type: none"> <li>1. Hold a closed Air Force meeting (similar to the familiarization meeting held during the guidance conference) before the start of the provisioning conference as required. Meeting chairperson may invite other government agencies such as DLA or have a separate government only meeting.</li> <li>2. Ensure the availability of adequate facilities, PTD, EDFP, qualified contractor personnel, and Repair Level Analysis (RLA) data, when applicable.</li> <li>3. Assign Source Maintenance Recoverability (SMR) coding action and documentation.</li> <li>4. Refer problems that cannot be adequately resolved to the 401 SCMS provisioning Policy Office with all pertinent facts for resolution with the appropriate staff.</li> <li>5. Ensure that all personnel are aware of the principle of the price challenge policy HQ AFMC direction. Refer all unresolved questions to the AFSC/LOMM Provisioning System OPR for policy guidance.</li> <li>6. Make sure official SMR codes are given to the contractor, through the Contracting Office, for publication in the IPB or the numerical index of the Illustrated Parts Breakdown (IPB) IAW MIL-M-38807 (USAF). Expendability Recoverability Reparability Category (ERRC) codes will not be included.</li> <li>7. Assure resolution of or action taken on all problem areas.</li> <li>8. Make sure requirement for the Repairable Items List (RIL), including dates needed are given to the contractor through the Contracting Office.</li> <li>9. Prepare and distribute minutes.</li> <li>10. When a Recoverable Item Breakdown (RIB) is sent to the Recoverable Item Inventory Manager (RIIM) ALC, the PTD is forwarded to the D155.</li> </ol>	<p><a href="#">AFMCMAN 20-106</a>                      Provisioning                      AFMAN 21-106 Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes  <a href="#">TO 00-25-195</a> AF Technical Order System Source, Maintenance, and Recoverability Coding of Air Force Weapons, Systems, and Equipment  <a href="#">AFMCMAN 23-3</a> Cataloging and Standardization  <a href="#">ASME Y14.100</a> Engineering Drawing Practices Fee for service  <a href="#">MIL-STD-31000C</a> Technical Data Packages  <a href="#">AFMCMAN 20-106</a>                      Provisioning  <a href="#">Product Data Acquisition Guidance</a></p>	<p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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### **EXIT CRITERIA:**

Provisioning Office will update D220 based on changes during the Provisioning Conference.

D220 generates a Supply Support Request (SSR) for Consumables to Defense Logistics Agency (DLA).

D220 generates Required Provisioning Item Order (PIO) for Air Force Managed Items.

Provisioning Conference minutes

Generate Non-consumable item material support request (NIMSR)

406 SCMS will update Stock Control System (SCS) D035T Packaging, Transportation, and Regulated Material (PT&RM) Data System

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
5.6	Workload Realignment	Milestone C (completion of all acquisition activities) Initial Operating Capability (IOC) Full Rate Production (FRP) Site Activation Task Force (SATAF) Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
<p>Workload transition is an orderly, timely and efficient transfer of workload for all ACAT level programs to the sustainment portfolio at the most appropriate point in the program. AFI 63-101/20-101, states, “The program realignment process is a collaborative activity that is executed by the PM. PMs may initiate planning for program realignment at any point in the acquisition process, but must establish and document the initial target transition date in the AS no later than MS C or as determined by the MDA.” Planning for sustainment (activities, schedule, resources, milestones, etc.) should occur early in the program life cycle and be documented and updated in the Life Cycle Sustainment Plan (LCSP) or Acquisition Strategy. AFI 63-101/20-101, requires the System Program Manager (PM) to develop/maintain an LCSP that, “...makes visible to senior leadership all aspects of the program plan” including sustainment activities.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure the tasks required by checklists 4.64 (Prepare Documentation for Milestone C), 5.14(Participate in Site Activation Task Force), and 5.42 (Prepare Documentation for Full Rate Production) have been addressed.</li> <li>2. Ensure a logistician is included on any Integrated Product Teams (IPTs), Program Management Reviews (PMRs), or Portfolio Reviews to confirm the system’s supportability worthiness for transfer. Focus should be on programs due to transfer in next five years</li> <li>3. Workload transition begins when the PM (in collaboration with the PSM recommend workload to transfer to another organization.</li> <li>4. PEO and gaining Air Logistics Complex (ALC)/CC will review and recommend transfer to the Service Acquisition Executive (SAE) and AFMC/CC based on: <ul style="list-style-type: none"> <li>• Review of established criteria: Reference DAFPAM 63-128</li> <li>• Product Support Elements: Independent Logistics Analysis (ILA) Handbook tools may be used for evaluation of Product Support elements</li> </ul> </li> <li>5. Ensure Program Objective Memorandum (POM) input is coordinated with the ALC for supportability requirements (i.e. manpower) specifically to include subsequent support after transfer.</li> <li>6. Ensure O&amp;M POM input, including CAFDEx, is coordinated with the AFMC/A4F Workflow and the designated ALC</li> <li>7. SAE and AFMC/CC evaluate and approve/decline transfer</li> <li>8. Participate in IPT activities for the development and negotiation of realignment agreement. Delivering Center will be IPT lead.</li> <li>9. Participate in IPT activities associated with the preparation of the workload realignment</li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System DoDM 4140.26, Volumes 2 and 4 DoDM 4140.68 Integrated Materiel Management of No consumable Items <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System</a> <a href="#">Acquisition Reform Act</a> <a href="#">DoD LA Guidebook</a> <a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management <a href="#">Centralized Asset Management</a> <a href="#">SharePoint Site</a> <a href="#">Centralized Access For Data Exchange (CAFDEx)</a> <a href="#">CAFDEx Access Instructions</a> <a href="#">Logistics Requirements Determination Process</a> <a href="#">Logistics Reassignment of Supply Chain</a></p>	<p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p>	

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	<a href="#">Management to AFSC Standard Process</a> <a href="#">Product Data</a> <a href="#">Acquisition Guidance</a> <a href="#">Transition Support Plan (TSP) Standard Process</a> <b>Sample Documents:</b> <a href="#">LCSP</a>	
<b>EXIT CRITERIA:</b>		
Life Cycle Sustainment Plan (LCSP) Workload realignment plan		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
5.8.1	Utilize Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx)	Program Objective Memorandum (POM) Program Office Estimate (POE) Life Cycle Sustainment Plan (LCSP)	
<p>CAM provides AF enterprise level optimization to maximize warfighting capability through performance based outcomes and centralized programming, budgeting and execution for AF weapon system sustainment. It standardizes/streamlines sustainment requirements focused on fleet-based management. CAM’s purpose is to optimize the shrinking 3400 sustainment budgets to target top AF priorities. CAM encompasses Depot Purchased Equipment Maintenance (DPEM) which includes Aircraft &amp; Missiles, Engines, Other Major End Items (OMEI), Non – CSAG-S exchangeable, Area / Base Support / Local Manufacture (ABM), Software, Support Equipment repair, and Storage. CAM also includes Contractor Logistics Support (CLS), Technical Order maintenance, Sustaining Engineering, and Aviation Petroleum Oil and Lubricants (AvPOL). CAM does not include second destination transportation funding.</p>			
CHECKLIST SUBTASKS:			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Contact HQ AFMC/A4F Workflow to notify CAM Office of your program. HQ AFMC/A4F will assign a CAM analyst.</li> <li>2. Obtain CAFDEx account. Register using link in Source Documentation column. Attend any available CAM / CAFDEx training.</li> <li>3. Work with Program Financial Manager to determine CAM portion of the:               <ol style="list-style-type: none"> <li>a. Program Office Estimate</li> <li>b. POM inputs</li> <li>c. Specifically, 3400 funding requirements</li> </ol> </li> <li>4. Coordinate with the designated ALC on budgeting inputs and program schedule.</li> <li>5. Ensure requirements are input into CAFDEx within the FYDP to include:               <ol style="list-style-type: none"> <li>a. DPEM</li> <li>b. CLS</li> <li>c. Sustaining Engineering</li> <li>d. Technical Order</li> </ol> </li> <li>6. Ensure quantities and amounts are input into Funded Requirements Module (FRM) of CAFDEx to include:               <ol style="list-style-type: none"> <li>a. Obligations</li> <li>b. Distribution</li> <li>c. Inductions</li> <li>d. Completions</li> <li>e. deferrals</li> </ol> </li> <li>7. Ensure Weapon System Annex (WSA) is developed within WSA/PBO module of CAFDEx               <ol style="list-style-type: none"> <li>a. Contact HQ AFMC/A4F for CAM WSA annex template and instructions. WSA guidance on CAM CoP folder 5.</li> </ol> </li> </ol>	<p><a href="#">Logistics Requirements Determination Process (LRDP)</a>  <a href="#">Centralized Access For Data Exchange (CAFDEx)</a>  <a href="#">AFI 63-101/20-101</a>            Integrated Lifecycle Management  <a href="#">AFMAN 63-143</a>            Centralize Asset Management (CAM) Procedures</p>	<p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	



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<p>b. Contact Lead command for the approved standards for your weapon system. e.g., A4 &amp; A8.</p> <p>c. Ensure current program information is used to develop projections for template input. Projections are PM/PGM best estimates of capability achievable under current constraints (against your program standards).</p> <p>d. Obtain written coordination between the PM/PGM and Lead Command IAW template guidance annually. Specified schedule for update can be found on the CAM CoP and dialogue with CAM analyst.</p> <p>e. Work with CAM Program Office to monitor actual performance against projections and standards quarterly.</p> <p>f. Evaluate the relationship between the standards/projections against any contracts such as CLS.</p> <p>g. Ensure you review the enterprise CAM WSA business rules annually and provide input through the official comments matrix when guidance is coordinated.</p> <p>8. Repeat steps 3 through 7 annually.</p> <p>9. Recognize that full funding may not be available and ensure you have a flexible contract vehicle.          Notify HQ AFMC/A4F Workflow and your CAM Analyst of any major program changes. e.g., major change in quantities or schedule adjustments</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Program Office Estimate          POM Inputs          CAFDEx inputs          Updates to LCSP</p>		



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	<p><a href="#">HSI Requirements Pocket Guide</a> <a href="#">AFI 32-1021</a> Planning and Programming Military Construction (MILCON) Projects <a href="#">AFI 32-1023</a> Designing and Constructing Military Construction (MILCON) Projects <a href="#">AFI 32-1015</a> Integrated Installation Planning <b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">PMA/SMA</a> <a href="#">SEP</a></p>	
<b>EXIT CRITERIA:</b>		
Update SIP and SEP / LCSP / PMA/SMA SATAF out brief Completed National Environmental Policy Act (NEPA) Documentation		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
5.27	Participate in Operational Test Readiness Review (OTRR)	Test Plan Test and Evaluation Master Plan (TEMP) Initial Capabilities Document (ICD) Capability Development Document (CDD) System Engineering Plan (SEP) Support and Maintenance Concept and Technologies Threat assessment baseline from Intelligence	
<b>DESCRIPTION:</b>			
A review of the test plan, including safety and facilities/infrastructure, to determine readiness to begin testing.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Identify any Product Support (PS) KPP/KSAs within the test plan and ensure they are fully tested, analyzed, and assessed to meet acceptance criteria.</li> <li>2. Review operational safety, suitability and effectiveness of the PS strategy and CONOPs assessments, as possible.</li> <li>3. Review PS readiness assessments, as possible.</li> <li>4. Review system logistics footprint assessments, as possible.</li> <li>5. Review PS facility and infrastructure requirements assessments, as possible.</li> <li>6. Review maintenance procedures assessments, as possible, to include technical manual development and data availability.</li> <li>7. Review support equipment suitability (to include calibration requirements) and compatibility with system maintenance concept assessments, as possible.</li> <li>8. Review on-equipment vs. off-equipment maintenance tasks assessments, as possible.</li> <li>9. Review system size and weight, permitting economical handling, loading, securing, transporting, and disassembling for shipment, to include handling hazardous materials assessments, as possible.</li> <li>10. Ensure test plan includes adequate funding for PS testing requirements, to include fee for service support and contracted logistics/maintenance support. Scope and plan the necessary resources to support the test program. (including test participants)</li> <li>11. Ensure test plan includes adequate testing for all HSI relevant requirements.</li> <li>12. Assess the risk of items or issues not fully addressed in the test plan and address the impact of DT issues that have not yet been resolved.</li> <li>13. Assess status of Training Systems to ensure supportability requirements have been met</li> <li>14. Ensure Intelligence interests are addressed. Reference Appendix A, Checklist 1.1</li> </ol>	<p> <a href="#">Defense Acquisition Guidebook Chapter 9</a>  <a href="#">AFPD 99-1</a> Test and Evaluation Process  <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a>  <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation  <a href="#">DoD LA Guidebook</a>  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a>                      Intelligence Analysis and Targeting Tradecraft/Data Standards DoDI 5000.81 Urgent Capability Acquisition  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">HSI Acquisition Phase Guide</a> </p> <p><b>Sample Documents:</b></p> <p> <a href="#">SEP</a>  <a href="#">ICD</a>  <a href="#">TEMP</a> </p>	<p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	
<b>EXIT CRITERIA:</b>			
Approved Readiness to Conduct Test Updated/Approved Test Plan			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">5.31</a>	Participate in Physical Configuration Audit (PCA)	Acceptable performance in development, test and evaluation and operational assessment; mature software capability No significant manufacturing risks Manufacturing processes under control Approved ICD (if Milestone C is program initiation) Approved Capability Production Document (CPD) Acceptable interoperability; acceptable operational supportability Compliance with the DoD Strategic Plan; and demonstration that the system is affordable throughout the life cycle, optimally funded, and properly phased for rapid acquisition. CPD reflects the operational requirements resulting from EMD and details the performance expected of the production system.

**DESCRIPTION:**

A formal audit that establishes the product baseline as reflected in an early production configuration item. The PCA is conducted around the time of the full rate production decision and examines the actual configuration of an item being produced. It verifies that the related design documentation matches the item as specified in the contract. In addition to the standard practice of assuring product verification, the PCA confirms that the manufacturing processes, quality control system, measurement and test equipment, and training are adequately planned, tracked, and controlled. The PCA validates many of the supporting processes used by the contractor in the production of the item and verifies other elements of the item that may have been impacted / redesigned after completion of the System Verification Review (SVR). A PCA is normally conducted when the government plans to control the detail design of the item it is acquiring via the Technical Data Package. When the government does not plan to exercise such control or purchase the item's Technical Data Package (e.g., performance based procurement) the contractor should conduct an internal PCA to define the starting point for controlling the detail design of the item and establishing a product baseline. The PCA is complete when the design and manufacturing documentation match the item as specified in the contract. If the PCA was not conducted prior to the full rate production decision, it should be performed as soon as production systems are available.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
<ol style="list-style-type: none"> <li>1. Review technical data (specifically drawings, models, and associated lists) for accuracy, completeness, and compliance with contract requirements.</li> <li>2. Ensure product definition data is the latest release which matches the configuration of the product</li> <li>3. Ensure build data is the latest release which matches the configuration of the product with appropriate quality assurance stamp</li> <li>4. Ensure associated lists (e.g., notes lists, application lists, parts list, bill of materials) are accurate, complete, and consistent with product definition data</li> <li>5. Ensure nomenclature descriptions, part numbers and serial numbers on the drawings are listed on the build paper</li> <li>6. Ensure special instructions and processes on the drawings are listed on the build paper to include dimensions, tolerances, finishes, etc.</li> <li>7. Ensure ESOH safeguards are included.</li> <li>8. Verify the human related attributes are accurately included in the configuration</li> </ol>	<a href="#">Defense Acquisition Guidebook</a> <a href="#">ASC/EN Guide: Technical Reviews/Audits for Aeronautical Weapon System Acquisition</a> <a href="#">ASC Configuration Management Processes Guide</a> <a href="#">MIL-HDBK-61A</a> Configuration Management Guidance <a href="#">DoD LA Guidebook</a> <a href="#">HSI Acquisition Phase Guide</a>  <b>Sample Documents:</b> <a href="#">SEP</a> <a href="#">ICD</a> <a href="#">TEMP</a>	Production & Deployment

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<p>9. Ensure that the markings on the data match the rights in the contract.</p> <p>10. Ensure nomenclature consistency between the models, drawings, and hardware</p> <p>11. Review the Program Parts Selection List (PPSL) and ensure the list match the hardware and technical data</p> <p>12. Define which parts will be provisioned. If so, ensure the test data that is essential to manufacturing is included on, or furnished with the technical data.</p> <p>13. Review documentation to ensure the configuration before and after qualification testing is available to include any changes made since qualification testing (e.g., engineering change orders).</p> <p>14. Review documentation to ensure changes made since the last audit or drawing review (e.g., engineering change orders) are maintained.</p>	<p><a href="#">LCSP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Established production baseline          Updated CPD, TEMP, PESHE, LCSP, and SEP as required          Inputs to Cost/Manpower estimate          FCA/PCA Certificate of Completion</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">5.32</a>	Update Product Support Strategy in the Life Cycle Sustainment Plan (LCSP)	Existing Life Cycle Sustainment Plan Post-CDR Assessment Operational Test Plan Capability Production Document	
<b>DESCRIPTION:</b>			
A Life Cycle Sustainment Plan (LCSP) is a comprehensive document that consolidates the weapon system life cycle acquisition management and product support strategies from materiel solution analysis through reclamation/disposal. It is a document that must be maintained to remain compliant with revised/new DoD policy and statutory requirements. It represents a corporate AF position on how to best execute and manage a specific program and requires participation from all program stakeholders in its development and update.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure points in checklist 2.49 are updated</li> <li>2. Discuss demonstration of system affordability throughout the life cycle, optimal funding, and proper phasing for rapid acquisition</li> <li>3. Review Cost as an Independent Variable (CAIV). Include any funding shortfalls and discuss current and planned cost reduction initiatives</li> <li>4. Update discussion of HSI implications, constraints, and issues</li> <li>5. Identify potential PBL product support integrators and providers</li> <li>6. Refine life cycle logistics documents and analyses as a result of development and operational tests, and iterative systems engineering analyses</li> <li>7. Review SEP to identify processes for development and updates for the Failure Modes, Effects and Criticality Analysis (FMECA) matrix, Failure Reporting, Analysis and Corrective Action System (FRACAS), and Trend Analysis for maturation purposes of the weapon system and its support system</li> <li>8. Discuss secure and integrated information systems across industry and government that enable comprehensive product support reporting</li> <li>9. Review the Capability Production Document (CPD) for System Maintenance/Support Profiles and Use Case Scenarios (Support Capability Packages); Reliability and Maintenance Rates; Support Environmental and Locations for Support; Support and Maintenance Effectiveness; Duration of Support. Ensure consideration of the proposed target audience (user). This includes the cognitive, physical and sensory abilities i.e., capabilities and limitations of the operators, maintainers, and support personnel that are expected to be in place at the time the system is fielded.</li> <li>10. Ensure sufficient coverage of product support elements. Include Diminishing Manufacturing Sources and Material Shortages, Energy Efficiency, Alternate Fuels considerations, demilitarization, declassification and disposal.</li> <li>11. Review the MDA for exit criteria</li> <li>12. Assess status of Training Systems to ensure supportability requirements have been met</li> <li>13. The designated Support Equipment Manager updates the support equipment strategy with the support of the Support</li> </ol>	<p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">Integrated Defense Acquisition Technology and Logistics Life Cycle Mgmt Framework ("Wall Chart")</a>  <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management  <a href="#">Combined DT&amp;E/OT&amp;E/LFT&amp;E Configuration Mgmt Configuration Mgmt 2 Cost as an Independent Variable (CAIV)</a>  <a href="#">DoDD 5000.01</a> The Defense Acquisition System E1.1.17 - Performance-Based Logistics  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">DoDM 4140.01, Volume 3</a>  DoD Supply Chain Material Management Procedures: Materiel Sourcing  <a href="#">Supply Chain Management Interoperability</a>  <a href="#">Life Cycle Costs</a>  <a href="#">PBL: A PM's Product Support Guide</a>  <a href="#">Product Support AFI 99-103</a> Capabilities Based Test and Evaluation  <a href="#">Air Force Installation Energy Strategic Plan</a>  <a href="#">DoD LA Guidebook</a>  <a href="#">Centralized Asset Management (CAM)</a>  <a href="#">Document Library in the</a></p>	Engineering & Manufacturing Development	



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<p>Equipment Working Group, to include how the program will continue to prioritize the selection of existing, common USAF / DoD support equipment over the selection of system unique, peculiar support equipment (generally via the Support Equipment Recommendation Data (SERD) Process))</p> <p>14. Ensure National Environmental Policy Act (NEPA), facilities/infrastructure; SRM and MILCON funding requirements are addressed lead time away as applicable.</p> <p>15. Review Air Force installation energy strategic plan along with the specific installation’s plan.</p> <p>16. Ensure the HSI process is used to support generation of a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), and affordability.</p> <p>17. Ensure planning for Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx) inputs are accomplished. See Task 5.8.1</p> <p>18. This task is one in a series to ensure the LCSP is continually updated to address additional program information and maturity. Reference checklists 2.15, 2.49, 3.29, 5.32, and 6.10.</p>	<p><a href="#">United States Air Force Enterprise Information Service Centralized Access For Data Exchange (CAFDEx) CAFDEx Access Instructions Logistics Requirements Determination Process DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">42 USC 4321</a></p> <p><a href="#">40 CFR 1500</a></p> <p><a href="#">32 CFR 989.3(c)(3)</a></p> <p>DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a></p> <p><a href="#">DoD Product Support BCA Guidebook</a></p> <p><a href="#">Weapon System Acquisition Reform Act</a></p> <p><a href="#">Preservation and Storage of Tooling for MDAPs</a></p> <p><a href="#">HSI Handbook</a></p> <p><a href="#">HSI Requirements Pocket Guide</a></p> <p><a href="#">Product Data Acquisition Guidance</a></p> <p><a href="#">Next Generation CLS Contract Sustainment Support Guide (CSSG)</a></p> <p><a href="#">DoD PBL Guidebook</a></p> <p><a href="#">AFLCMC LCSP Standard Process and OSD Sample Outline Version 2.0 (dtd 17 Jan 2017)</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">LCSP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Elements of Product Support  Updated Life Cycle Sustainment Plan  Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE)</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">5.42</a>	Prepare Documentation for Full Rate Production (FRP) Decision	Determination that FRP Decision is required	
<b>DESCRIPTION:</b>			
The logistician should review and make input to the following documents required by statute or regulation before Milestone Decision can be sought and rendered			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. <b>Post-Deployment Performance Review</b></li> <li>2. <b>CCA Compliance</b> (All IT-including NSS)(Table E4.T1)</li> <li>3. Programmatic Environment, Safety, and Occupational Health Evaluations (PESHE) <b>(including National Environmental Policy Act (NEPA) compliance schedule)</b></li> <li>4. <b>Selected Acquisition Report (MDAPs only)(MS B and annually thereafter)</b></li> <li>5. <b>Independent Cost Estimate (CAIG) and Manpower Estimate (reviewed by OUSD(P&amp;R))(N/A for AISs, MDAPs only)</b></li> <li>6. <b>LFT&amp;E Report</b></li> <li>7. <b>Acquisition Program Baseline</b></li> <li>8. <b>Acquisition Strategy</b></li> <li>9. <b>Analysis of Alternatives (for MAIS, MS B or equivalent)</b></li> <li>10. <b>Interoperability Certification</b></li> <li>11. <b>Economic Analysis (MAIS only)(MS B or equivalent)</b></li> <li>12. <b>Component Cost Analysis (mandatory of MAIS anytime an economic analysis is required, either by statute or by the MDA, as requested by CAE for MDAP)</b></li> <li>13. <b>Cost Analysis Requirements Description (MDAPs and MAIS acquisition programs only) (for MAIS, anytime an economic analysis is required either by statute or by the MDA) (CARDS shall be prepared according to the procedures specified in DoD Instruction 5000.02). Ensure energy costs are considered.</b></li> <li>14. <b>Test and Evaluation Master Plan</b></li> <li>15. <b>Operational Test Agency Report of Operational Test and Evaluation Results</b></li> <li>16. <b>Acquisition Decision Memorandum</b></li> </ol>	<p> <a href="#">5 USC 306</a>  <a href="#">15 U.S.C. 644(e)(2)</a>  <a href="#">40 U.S.C. Subtitle III Sec. 8088, Pub.L. 107-248 (or successor appropriations act provision)</a>  <a href="#">42 U.S.C. 4321</a>  <a href="#">10 U.S.C. 2432</a>  <a href="#">10 U.S.C. 2434</a>  <a href="#">10 U.S.C. 2366</a>  <a href="#">10 U.S.C. 2399</a>  <a href="#">10 U.S.C. 2435</a>  <a href="#">DoDD 5000.01</a> The Defense Acquisition System  <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System  <a href="#">DoD PSM Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a>  <a href="#">32 CFR 989.3(c)(3)</a>  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">Replaced System</a>  <a href="#">Sustainment Plan Summary</a> </p>	IOC – FRP Decision	
<b>EXIT CRITERIA:</b>			
Milestone decision approved All proper supporting documentation put in the official files			

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">5.42.1</a>	Participate in Foreign Military Sales (FMS) Activities	Foreign Government Letter of Request (LOR) Tasking from Undersecretary of Defense for International Affairs (SAF/IA) or the Air Force Security Assistance and Cooperation Directorate (AFSAC)	
<b>DESCRIPTION:</b>			
The Foreign Military Sales (FMS) Program is that part of Security Assistance authorized by the Arms Export Control Act and conducted using formal contracts or agreements between the Government and an authorized foreign country. These contracts, called Letters of Offer and Acceptance (LOAs), provide for the sale of defense articles and/or defense services (to include training) usually from DoD.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. Respond to request for assistance in development of Foreign Military Sales requirement. The program office will receive a request from the SAF/IA Desk Officer or the AFSAC Command Country Manager (CCM) to provide assistance to a foreign government wishing to procure capabilities through the FMS process. Per DSCA 5105.38-M, Table C5.T2., all requests must come through SAF/IA and/or AFSAC.</p> <p>a. The Program Manager must determine if resources are available to support the requested effort.</p> <p>b. If additional resources are needed, communicate with SAF/IA or AFSAC.</p> <p>c. If total resources needed for a Pre-LOA effort exceeds ½ man-year, or \$25,000, inform SAF/IA and AFSAC CCM for potential development of LOA Support Case funded by the foreign government, or waiver.</p> <p>d. Funding for Pre-LOA travel must be coordinated through the center International Programs Office (IPO).</p> <p>e. Identify HSI concerns related to target user population and country differences. See 2.13.1 HSI Checklist</p> <p>2. Perform Site Survey or other case planning to definitive foreign government requirements. If the foreign government is new to Foreign Military Sales or is wanting to acquire a system new to their inventory a Site Survey may be necessary to develop a program baseline. This effort is funded by the foreign government via a Letter of Offer and Acceptance (LOA), either written to specifically fund manpower (USG and contractor) and travel, or via recoupment through a system sale LOA. General case planning of lesser extent may be funded by FMS Administrative Funds.</p> <p>a. Form Site Survey or informal team that are capable of addressing the area in b below in addition to persons that can identify essential components of the weapon system to be offered</p> <p>b. Perform a survey that will evaluate the following areas:</p> <p>i. Facilities footprint required to operate and maintain the weapon system (existing and new)</p> <p>ii. Logistics Support requirements to include CLS if necessary</p> <p>iii. Training</p> <p>iv. Information security requirements</p> <p>v. Technical assessments, as necessary</p>	<p><a href="#">DSCA 5105.38-M</a> Security Assistance Management Manual C5.T6., Row #1</p> <p><a href="#">AFMAN 16-101</a> International Affairs and Security Assistance Management Chapter 3</p> <p><a href="#">DSCA 5105.38-M</a> Security Assistance Management Manual C5.T6., Row #2</p> <p><a href="#">HSI Handbook</a> App 4</p> <p><a href="#">AFMAN 16-101</a> International Affairs and Security Assistance Management Chapter 3</p> <p><a href="#">DSCA 5105.38-M</a> C5.T6., Row #3</p> <p><a href="#">AFMAN 16-101</a> International Affairs and Security Assistance Management AFMCI 16-101 Security Cooperation (SC), Security Assistance (SA) and Foreign Military Sales (FMS) Management</p> <p><b>Sample Documents:</b> <a href="#">Site Survey</a></p>	<p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	

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<p>vi. The capability of the base infrastructure to sustain the increased base population associated with the weapon system operations</p> <p>c. Prepare a report and/or brief the potential FMS purchaser whether Site Survey or informal review.</p> <p>d. If a formal Site Survey, prepare quarterly summary report for Congress, as directed by SAF/IA.</p> <p>3. Prepare Price and Availability (P&amp;A) data. P&amp;A data are Rough Order of Magnitude (ROM). If the development of the response requires preparation of reports or other documentation, or travel to meetings, it does not qualify as ROM/P&amp;A.</p> <p>a. Receive validated P&amp;A request from SAF/IA or AFSAC</p> <p>b. Using available information, including standard Air Force factors and formulas, formulate P&amp;A.</p> <p>c. Include standard disclaimer on P&amp;A response stating the data provided is to be used for planning purposes only.</p> <p>4. Prepare LOA Data (LOAD). The Letter of Offer and Acceptance is a formal, binding document between the USG and the foreign government utilizing the Foreign Military Sales (FMS) system. The LOR is validated by the Command Country Manager at AFSAC who then passes the LOR to the Case Manager who requests formal, detailed information from the Program Office. This LOA Data (or LOAD) generally includes pricing for items being acquired and USG personnel to implement the program, schedules, Sole Source arrangements, services being acquired through contracts, Technical Data, training, testing, source of supply, etc. The request for LOAD is accomplished through the Defense Security Assistance Management System (DSAMS).</p> <p>a. Receive DSAMS tasking from Center IPO to prepare LOAD</p> <p>b. Review LOR to ensure information is sufficient to develop valid and accurate LOAD estimates.</p> <p>c. If information in the LOR is not sufficient, request additional information via the Case Manager</p> <p>d. Develop LOAD to include line item descriptions and notes, estimated delivery schedules, program milestones, payment schedules, and manpower and associated cost required to execute the case and all other required information.</p> <p>e. Complete LOAD tasking within 30 calendar days of the tasking date via DSAMS.</p> <p>f. If LOAD development cannot be completed by the due date the preparing office must request an extension from the Case Manager, providing justification.</p> <p>g. Review LOAD through Internal Program Office and IPO process</p> <p>h. Complete LOAD tasking via DSAMS to Center IPO</p> <p>5. Prepare FMS Manpower Data. During the development of an LOA the Program Manager, in conjunction with the Case Manager, may determine that the execution of the case requires dedicated manpower and personnel resources. Manpower and personnel resources are managed by a cooperative process involving SAF/IAPX and the MAJCOM Manpower and Organization Office. FMS manpower and personnel requirements must be categorized based on the duties performed. All case funded manpower requirements must be documented by the development of a Manpower Requirements Package (MRP)</p>	<p><a href="#">LOA</a></p>	
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or Manpower Change Notice (MCN). A Manpower and Travel Data Sheet (MTDS) is mandated by the Defense Security Cooperation Agency (DSCA) and must accompany all LOAs requiring case funded manpower or case funded travel.		
<b>EXIT CRITERIA:</b>		
Available resources are in place or are provided via AFSAC or SAF/IA Site Survey Report Price and Availability Data LOAD FMS Manpower Data Letter of Offer and Assistance		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
6.10	Update Product Support Strategy for Sustainment in Life Cycle Sustainment Plan (LCSP)	Existing LCSP Capability Production Document (CPD) Transition Support Plan (TSP) Sustainment Decision	
<b>DESCRIPTION:</b>			
A Life Cycle Sustainment Plan (LCSP) is a comprehensive document that consolidates the weapon system life cycle acquisition management and product support strategies from materiel solution analysis through reclamation/disposal. It is a document that must be maintained to remain compliant with revised/new DoD policy and statutory requirements. It represents a corporate AF position on how to best execute and manage a specific program and requires participation from all program stakeholders in its development and update.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure points in checklist 5.32 are updated</li> <li>2. Discuss demonstration of system affordability throughout the life cycle, optimal funding, and proper phasing for rapid acquisition</li> <li>3. Refine life cycle logistics documents and analyses as a result of development and operational tests, and iterative systems engineering analyses</li> <li>4. Review SEP to identify processes for development and updates for the Failure Modes, Effects and Criticality Analysis (FMECA) matrix, Failure Reporting, Analysis and Corrective Action System (FRACAS), and Trend Analysis for maturation purposes of the weapon system and its support system</li> <li>5. Discuss secure and integrated information systems across industry and government that enable comprehensive product support reporting</li> <li>6. Review the Capability Production Document (CPD) for:               <ol style="list-style-type: none"> <li>a. System Maintenance/Support Profiles and Use Case Scenarios (Support Capability Packages)</li> <li>b. Reliability and Maintenance Rates</li> <li>c. Reflection of any changes to the support environment</li> <li>d. Support and Maintenance Effectiveness</li> <li>e. Duration of Support</li> <li>f. HSI implications, issues and constraints</li> </ol> </li> <li>7. Ensure sufficient coverage of product support elements. Include Diminishing Manufacturing Sources and Material Shortages, Energy Efficiency, ESOH, Noise (ambient and occupational), Alternate Fuels considerations, demilitarization, declassification and disposal. Specifically consider facilities requirements for classified materials and unique storage issues.</li> <li>8. Ensure the HSI process is used to support generation of a robust plan that considers all human-related domains in an integrated manner. It must be addressed throughout the life cycle, and must be consistently integrated into SE implementation to balance total system performance (hardware, software, and human), and affordability.</li> <li>9. Develop and coordinate Program Management / Services Management Agreement between System Sustainment Management and users.</li> <li>10. The designated Support Equipment Manager updates the support equipment strategy with the support of the Support</li> </ol>	<p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management  <a href="#">Defense Acquisition Guidebook</a>  <a href="#">Integrated Defense Acquisition Technology and Logistics Life Cycle Mgmt Framework ("Wall Chart")</a>  <a href="#">AFI 63-101/20-101</a>,            Integrated Life Cycle Management  <a href="#">Combined DT&amp;E/OT&amp;E/LFT&amp;E Configuration Mgmt Configuration Mgmt 2 Condition Based Maintenance Plus (CBM+) Interoperability Life Cycle Costs Product Support</a>  <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation  <a href="#">DoD LA Guidebook</a>  <a href="#">Centralized Asset Management (CAM) Document Library in the United States Air Force Enterprise Information Service Centralized Access For Data Exchange (CAFDEx)</a>  <a href="#">CAFDEx Access Instructions</a>  <a href="#">Logistics Requirements Determination Process</a>            DoDI 5000.81 Urgent Capability Acquisition <a href="#">DoD PSM Guidebook</a>  <a href="#">DoD Product Support BCA Guidebook</a>  <a href="#">Weapon System Acquisition Reform Act</a></p>	Operations & Support	

Product Support Took Kit (PSTK)

<p>Equipment Working Group, to include how the program will continue to prioritize the selection of existing, common USAF / DoD support equipment over the selection of system unique, peculiar support equipment (generally via the Support Equipment Recommendation Data (SERD) Process))</p> <p>11. Ensure approval of transition support plan and seamless process between acquisition and sustainment portfolios.</p> <p>12. Ensure systems can be supported throughout its life cycle (DMSMS, Life Cycle Sustainment Plan, and Migration/Disposal Planning).</p> <p>a. Use to improve maintenance agility and responsiveness, increase operational availability, and reduce life cycle total ownership costs.</p> <p>13. Ensure RAM is not compromised by use of chemicals of emerging regulatory interest.</p> <p>14. Ensure planning for Centralized Asset Management (CAM) / Centralized Access for Data Exchange (CAFDEx) inputs are accomplished. See Task 5.8.1 prior to program transfer all inputs should be coordinated with the Program Office and designated ALC.</p> <p>15. This task is one in a series to ensure the LCSP is continually updated to address additional program information and maturity. Reference checklists 2.15, 2.49, 3.29, 5.32, and 6.10.</p>	<p><a href="#">AFI 32 7086</a>, Hazardous Material Management</p> <p><a href="#">AFI 32-1015</a> Integrated Installation Planning</p> <p><a href="#">Preservation and Storage of Tooling for MDAPs</a></p> <p><a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a></p> <p><a href="#">HSI Handbook</a></p> <p><a href="#">HSI Requirements Pocket Guide</a></p> <p><a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a></p> <p><a href="#">Next Generation CLS</a></p> <p><a href="#">Contract Sustainment Support Guide (CSSG)</a></p> <p><a href="#">AFLCMC LCSP Standard Process and OSD Sample Outline Version 2.0 (dtd 17 Jan 2017)</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">LCSP</a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Updated Life Cycle Sustainment Plan to include all Elements of Product Support (Life Cycle Sustainment Plan)</p> <p>Updated Product Support Strategy</p> <p>Migration Plan</p>		



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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">6.11</a>	Sustainment Systems Engineering	Capability Production Document (CPD) Production contract Technical data Program Management / Services Management Agreement (PMA/SMA) Systems Engineering Plan (SEP) Final Product Baseline and product specifications Life Cycle Sustainment Plan (LCSP) Transfer Plan Initial Operational Capability (IOC) and/or Full Operational Capability (FOC) Milestone C approval

**DESCRIPTION:**

Sustainment Systems Engineering is the process which provides technical and engineering support during the life of the sustainment phase. This process includes the entire set of scientific, technical and engineering managerial efforts needed to deploy, support and dispose of a weapon system. Sustainment Systems Engineering contributes to the overall sustainment management function, of maintaining the required weapon system availability, capability and OSS&E to support the warfighter mission.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Review the SEP annually and update as required. 2. Execute sustainment engineering in accordance with the SEP. 3. Develop prioritized list of tasks/requirements coordinated with the MAJCOM/users. These tasks and requirements will support either weapon system availability and/or new capability. The final prioritized list must be entered into CAFDEx. 4. Basic Sustainment Engineering processes to support weapon system availability. <ul style="list-style-type: none"> <li>– Monitor and collect all RAM, cost, supportability, equipment status reporting, and maintenance data, user Feedback, Failure Reports, Discrepancy Reports, Deficiency Reports, Crash reports, and Safety bulletins.</li> <li>– Analyze data to determine root causes</li> <li>– Determine system Hazard/Risk Severity and Probability</li> <li>– Identify HSI relevant issues and constraints that can be used to provide input into modifications to the system</li> <li>– Provide inputs to appropriate lessons learned repositories</li> <li>– Develop Corrective Action</li> <li>– Integrate and Test Corrective Action</li> <li>– Assess Risk of improved System</li> <li>– In-Service Review – implement and field</li> <li>– Ensure analysis and corrective actions are properly documented.</li> <li>– Inputs to CDD</li> <li>– Modifications / upgrades to fielded systems – Maintain Product Baseline documentation to reflect all approved changes.</li> <li>– Maintain Systems Engineering Plan</li> <li>– Provide technical / engineering support for hardware and software depot maintenance activities</li> </ul>	<a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">DoD Guide for Achieving Reliability, Availability, and Maintainability</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">AFMCI 63-1201</a> Implementing Operational Safety, Suitability and Effectiveness (OSS&E) and Life Cycle Systems Engineering <a href="#">AFI 99-103 (T&amp;E)</a> <a href="#">AFI 63-131</a> – Supersede by AFI 63-101/20-101 Chapter 9 <a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management <a href="#">DoDI 8500.01</a> Information Assurance (IA) <a href="#">Systems Engineering Plan (SEP) Outline</a> <a href="#">Systems Engineering Fundamentals Guide</a> <a href="#">MIL-STD-882E</a> (System Safety)	Production and Deployment  Operations and Support

Product Support Took Kit (PSTK)

<ul style="list-style-type: none"> <li>– Provide technical / engineering support for supply chain management activities</li> <li>– Support the PM in managing all Sustainment / support contracts / tasks.</li> </ul> <p>5. Other supporting process supported and managed by Sustainment Engineering function to support system availability requirements: configuration management and control, OSS&amp;E, DMSMS, technical refresh, F3I analysis and approval, information insurance (IA) re-certification, system security management and Program Protection Planning (PPP), technology protection, corrosion control plan execution, and on-site engineering support.</p> <p>6. Basic Sustainment Engineering processes to support weapon system new capabilities (Note, if the new capability requirements results in initiation of an ACAT program and development of an ICD then refer to EMD phase): These include:</p> <ul style="list-style-type: none"> <li>– AF Form 1067 requirements analysis and initial engineering evaluation.</li> <li>– Identify, analyze and select material solution option. This will include cost estimates and trade studies.</li> <li>– Once a material solution is selected/approved and funded, the engineer will develop technical contract inputs. This includes a Performance Work Statement, Technical Requirements Document (TRD), draft system specification, and technical CDRL.</li> <li>– Perform technical evaluation to include Basis of Estimate Evaluations on all contract/task proposals</li> <li>– See Product Support Contracts Requirement Tool, Appendix D.</li> <li>– Manage, oversee, verify and test the system development baselines, to include the required support elements. Review and approve the performance baseline (SRR), allocated baseline (PDR), and product baseline (CDR). Verify and test the product to include the support elements.</li> <li>– Support the PM in managing all modification / upgrade contracts/tasks.</li> </ul>	<p><a href="#">MIL-STD-882E</a> (Safety)  <a href="#">DoD LA Guidebook</a>  <a href="#">Centralized Access For Data Exchange (CAFDEx)</a>  <a href="#">CAFDEx Access Instructions</a>  <a href="#">Logistics Requirements Determination Process</a> See Section 2.9  <a href="#">DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</a>  <a href="#">HSI Acquisition Phase Guide</a>  <a href="#">HSI Handbook</a>  <a href="#">Joint Lessons Learned Information System (JLLIS)</a>  <a href="#">Product Data Acquisition Guidance</a></p> <p><b>Sample Documents:</b>  <a href="#">LCSP</a>  <a href="#">SEP</a>  <a href="#">PMA/SMA</a></p>	
<b>EXIT CRITERIA:</b>		
<p>Updated: CPD  Contracts  Technical data  PMA/SMAs  SEP  Updated Product Baseline and product specifications  LCSP  Engineering studies analysis and reports  Performance Based Agreements (PBA)s  Aircraft Availability reports</p>		

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TAS K #	PROCESS NAME:	ENTRANCE CRITERIA:
<a href="#">6.12</a>	Execute Material Support for Sustainment Management - Defense Logistics Agency (DLA) Interface	Program Management / Services Management Agreements (PMA/SMA) Weapon System Coding in support of the WSSP Life Cycle Sustainment Plan (LCSP) Supply Support Strategy Support Equipment Recommendation Data (SERD) Provisioning Technical Documentation Supply Support Requests (SSR) Technical Data Packages Packaging, Handling, Storage, Transportation (PHS&T) Requirements Diminishing Manufacturing Sources and Material Shortages (DMSMS) Items Disposal/Reutilization of Items

**DESCRIPTION:**

This checklist describes how, when, and where in the Acquisition and Sustainment Phases to interface with DLA. DLA is DoD’s largest combat support agency providing worldwide logistics support to the military services as well as several civilian agencies and foreign countries. The DLA centers are organized by Defense Supply Chains: DSC Richmond - Aviation, DSC Columbus – Land and Maritime, DSC Philadelphia - Medical, Clothing and Textile, Subsistence, Construction Equipment and Defense Energy Supply Center (DESC) - Fuel/Energy. DLA provides consumable items management, Procurement of Depot Level Repairable (DLRs), Cataloging, Packaging, Handling, Storage, Transportation (PHS&T), Asset Marking to include IUID, and Disposal of materials for the Air Force and other services.

**CHECKLIST SUBTASKS:**

TASK	SOURCE DOCUMENTATION	PHASE
1. Coordinate with DLA Distribution for PHS&T and Asset Marking to include IUID Requirements (Reference Task 2.37) 2. Coordinate with DLA Aviation for DMSMS program plan (Reference Task 3.37.13) 3. Coordinate with DLA Supply Center Richmond – Aviation on the Supply Support Strategy (Reference Task 3.37.14) 4. Contact DLA DSCR for support when standing up the Program Office (Reference Task 3.02) 5. Coordinate DLA DLIS and DLA Distribution for Support Equipment (SE) Guidance Conference (Reference Task 3.47.1) 6. Coordinate with DLA DLIS for the Provisioning Guidance Conference (PGC) and Spares Provisioning Conference (SPC) respectively (Reference Task 3.47.4) 7. Coordinate with AF WSSP Monitor to ensure DLA WSDC is identified. (Reference Task 4.11) 8. Coordinate with DLA DLIS for Provisioning Guidance Conference (PGC) and Spares Provisioning Conference (SPC) respectively (Reference Task 5.5.4) 9. Coordinate with DLA DSCR for Supply Requirements (Reference Task 6.45) 10. Coordinate with DLA Disposition Services for Disposal/Reutilization of Items (Reference Task 5.51 and 6.67)	<a href="#">DLA</a> <a href="#">DLIS</a> <a href="#">DLA Aviation</a> <a href="#">AFI 23-101</a> Air Force Materiel Management <a href="#">DoDM 4140.01, Volume 2, 3, 4, 6, 8 and 9</a> Supply Chain Materiel Management <a href="#">AFMCI 24-201 AFMC Packaging and Materials Handling Policies and Procedures</a> <b>Sample Documents:</b> <a href="#">LCSP</a> <a href="#">PMA/SMA</a>	Technical Maturation Risk Reduction  Engineering & Manufacturing Development  Production and Deployment  Operations and Support

**EXIT CRITERIA:**

Supply Requirements Determination  
 PHS&T Requirements  
 Consumable Item Management

Product Support Took Kit (PSTK)

Cataloging and Standardization of Items Procurement of DLRs Disposal/Reutilization of Items WSDC Assignment DMSMS Program Plan		
<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>
<a href="#">6.18</a>	Equipment Specialist	Equipment List (Installation and non-configured items) Government Furnished Property (GFP-MAT) Support Equipment (SE) Material List Unique Tooling Unique Facility Equipment (Uninterruptible Power Supply, Generators, Filter, etc.) Unique Test Equipment Software/Hardware support equipment (Hardware/Software/Firmware/Installation Equipment)
<b>DESCRIPTION:</b>		
The purpose of the Equipment Specialist is to assist in planning for and implementing effective DoD equipment management activities and practices during all life cycle phases of defense systems and configuration/non-configured items. It supports acquisition based on performance specifications, and the use of industry standards and methods to the greatest practicable extent throughout all phases of the life cycle from concept exploration to disposition and disposal. Activities and practices include: Equipment/Material Identification Equipment/Material Control Equipment/Material Status Accounting Equipment/Material Verification and Audit Equipment/Material Data Management		
<b>CHECKLIST SUBTASKS:</b>		
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>
1. Understand MIL-HDBK-61A, local and contractor Equipment Control process. 2. Become a participating member of the EC and DMSMS teams. 3. Review proposed changes for equipment considerations and impacts (i.e. Product Support Elements) 4. Initiate actions to ensure supportability considerations are implemented as required 5. Follow local exhibit management, storage, processing, and disposal procedures 6. Make appropriate planning and control to system documentation i.e.; <ul style="list-style-type: none"> <li>• Installation Drawings</li> <li>• Master Equipment List</li> <li>• Equipment/Material Technical data Reference task 6.41.1 (Non-configured Drawings, TO, Data, etc.)</li> <li>• Equipment/Material Spares</li> <li>• Equipment/Material Support Equipment</li> <li>• Equipment/Material Calibration</li> </ul>	<a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a> <a href="#">MIL-HDBK-61A</a> Configuration Management Guidance  <a href="#">ANSI/EIA 649A</a> Click on “Standards”	Materiel Solution Analysis  Engineering & Manufacturing Development  Production & Deployment  Operations & Support
<b>EXIT CRITERIA:</b>		
Identify Equipment supportability Issues (EC Checklist)		

## Product Support Took Kit (PSTK)

Verified EC incorporated in all affected items with appropriate documents  
Status Equipment accounting data base appropriate to each phase  
Equipment Management-competent contractor base  
Equipment Management process performance measured and continuously improved  
Lesson learned  
EC Recommendations and Disposition

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
6.31	Post Production Support Planning		
<b>DESCRIPTION:</b>			
<p>Post-Production Support Planning (PPSP) occurs primarily during system development and is required by <a href="#">DoD 5000.2-R</a>. PPSP is a joint endeavor shared by government and industry. To achieve maximum, affordable readiness throughout a system's life cycle, careful planning is required prior to, during, and beyond production. PPSP is required by the DoD 5000.2-R and occurs primarily during system development. To assist the acquisition community in PPSP, the <a href="#">Joint Service Guide for Aviation Post Production Support Planning</a> dated October 1997, was created. This guide was developed by the Joint Services Technical Working Group, under the direction of the Aviation Logistics Board (ALB) of the Joint Aeronautical Commanders Group (JACG). It provides guidance and assists program and logistics managers in understanding and applying post-production support planning to all aviation weapon system/subsystem programs within DoD.</p> <p>Additional tools designed to assist program managers and logistics professionals prepare integrated logistics support and supportability planning documentation can also be found at the <a href="#">U.S. Army Materiel Command (AMC) Logistics Support Activity (LOGSA) Tools</a> site. DoD Supply Chain Materiel Management Procedures: Materiel Sourcing <a href="#">DoDM 4140.01, Volume 3</a> also provides post production support planning information as it relates to DMSMS. Further information related to obsolescence planning, DMSMS, and technology insertion can be found on the <a href="#">Obsolescence and DMSMS</a> DAU Logistics Community of Practice site.</p> <p>Additional post production support-related information is also available in Chapter 5 of the <a href="#">DoD Defense Acquisition Guidebook</a>.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>Prepare Execution Plan</p> <ol style="list-style-type: none"> <li>1.Complete Executive Summary, Introduction, Purpose, and Scope</li> <li>2 Define Roles and Responsibilities detailing retention, transfer and disposal for the weapons system in compliance with Air Force policies and procedures between AFSC, Inventory Control Points (ICP), Aerospace Maintenance and Regeneration Group (AMARG), and Defense Logistics Agency (DLA)</li> <li>3.Complete Asset Dissemination Roadmap, detailing reutilization, storage and disposal</li> <li>4. Define and detail any special disposal requirements, e.g., Hazardous Material, Recycling, etc.</li> <li>5.Detail recommendations <ul style="list-style-type: none"> <li>• Aircraft Disposal – Identify the storage facility and any associated storage categories. Conduct site survey to ensure requirements.</li> <li>• Spares - Where is the storage facility for spares and production kits</li> <li>• GFE - Determine which facility is utilized for the government furnished equipment (GFE) and how the inventory will be accomplished</li> <li>• Technical Orders (TOs) – IAW with TO-00-5-3 status TOs</li> <li>• Cost associated with all bullets identified but not limited to those listed</li> <li>• Coordinate with the AFLCMC PHS&amp;T Office or prime AFSC PHS&amp;T office on packaging &amp; transportation input.</li> </ul> </li> <li>6.Develop a schedule</li> <li>7.Determine Funding Requirements</li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p><a href="#">AFI 16-402</a> Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination</p> <p><a href="#">AFI 23-101</a> Air Force Materiel Management</p> <p><a href="#">AFMCI 23-111</a> Reclamation of Air Force Property</p> <p><a href="#">DoDM 4160.21</a> Defense Materiel Disposition, multiple volumes</p> <p><a href="#">DoDI 4160.28</a> DoD Demilitarization: (DEMIL) Program</p> <p><a href="#">AFMAN 32-7002</a> Environmental Compliance and Pollution Prevention</p> <p><a href="#">DoDI 4715.4</a> Pollution Prevention</p> <p><a href="#">10 USC 2577</a> Disposal of Recyclable Materials</p> <p><a href="#">Executive Order 12780</a> Federal Agency Recycling and the Council on Federal</p>	<p>Technology and Development Phase</p> <p>Early in Engineering, Manufacturing and Development (EMD)</p> <p>Production and Deployment Phase</p> <p>Operations and Support Phase</p>	

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	<p>Recycling and Procurement Policy  <a href="#">TO-00-5-3</a> Technical Manual Methods and Procedures  <a href="#">DoD 5000.02</a> Operation of the Defense Acquisition System  <a href="#">AFI 24-210 IP</a> Packaging of Hazardous Materials  <a href="#">AFMAN 24-204 IP</a> Preparing Hazardous Materials for Military Air Shipments  <a href="#">AFI 23-119</a>, Exchange, Sale, or Temporary Custody of Non-excess Personal Property  <a href="#">DoDI 5000.64</a>, Accountability and Management of DoD Equipment and Other Accountable Property</p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Completion of PPS Checklist addressing: Maintenance Planning; Manpower and Personnel, Facilities; Supply Support; Support and Test Equipment; Technical Data and Technical Manuals; Training and Training Devices; Packaging, Handling, Storage and Transportation; IT Systems Continuous Support; Design Interface                  Completion of approved Execution Plan</p>		



Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
6.33	Manage Sustainment Business Activities	Initial Capabilities Document (ICD) Capability Development Document (CDD) Capability Production Document (CPD) CONOPS Defense Acquisition Officer (DAO) Assignment Sustainment System Program Manager (PM) assignment Mission Assignment Process (MAP) Production contract Sustainment Contracts Program Management / Services Management Agreements (PMA/SMA)s Performance Based Agreements (PBA)s Life Cycle Sustainment Plan (LCSP) Transfer Plan Materiel Fielding Plan Initial Operational Capability (IOC) and/or Full Operational Capability (FOC) Milestone C approval	
<b>DESCRIPTION:</b>			
Sustainment Program Management is the process of executing Program Management for an operational fielded system, beginning during the Production and Deployment phase, and maturing and normalizing during the Operations and Sustainment phase of the life cycle. This Sustainment Management process includes the entire set of management, technical, and logistics support efforts and tasks needed to plan, fund and execute a successful sustainment program to sustain, support, maintain and improve the assigned weapon system. Sustainment Program Management leads and manages the overall sustainment management program to support weapon system availability and capability requirements and meet warfighter mission requirements. Sustainment Management also includes adding new capability based on approved MAJCOM and COCOM requirements, and continues through disposal of the weapon system and drawdown of the sustainment program office. The Sustainment Program Manager leads a team of functional experts, including, system engineers, security engineers, equipment specialists, inventory managers, etc., and is supported by financial managers, contracting specialists, and other functional experts as required.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
1. Execute, lead and manage the overall Sustainment Program for assigned system, subsystem, or system segment 2. Utilize applicable guidance executing the Sustainment program 3. Perform as IPT Lead for the Sustainment Management Team, leading and guiding all team members, supporting personnel, support organizations and support contractors to maintain required system availability, improve system capability, and meet mission objectives in a highly effective and efficient manner 4. Effectively and efficiently manage and employ resources, e.g., personnel, funds, etc., to meet or exceed all cost, schedule and performance requirement for assigned system/subsystem 5. Identify HSI relevant issues that can be used to provide inputs to modifications and lessons learned. 6. Analyze, manage and report resource deficiencies, e.g., funding, personnel, infrastructure capabilities, etc., up the execution and command chains to advocate for resolution. This includes modernization of depot facilities as required.	<a href="#">DoDD 5000.01</a> The Defense Acquisition System <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a>  <a href="#">AFMCI 63-1201</a> Implementing Operational Safety, Suitability and Effectiveness (OSS&E) and Life Cycle Systems Engineering <a href="#">AFI 99-103</a> Capabilities Based Test and Evaluation	Operations & Support	

Product Support Took Kit (PSTK)

<ol style="list-style-type: none"> <li>7. Review and update LCSP, PMA/SMAs, PBAs, SEP, to include IUID Implementation Plans, ISP and other program management and technical documentation as required to maintain the management and technical baselines for the program, and support User and system maintenance and support requirements</li> <li>8. Execute MAJCOM approved sustainment and upgrade/modification requirements according to MAJCOM approved priorities, in support of the warfighter mission</li> <li>9. Manage effective Performance Based sustainment and support contracts, by developing processes, work products, and tailored CDRLs to facilitate effective execution of the contract requirements, and include appropriate contractual quantitative and qualitative performance measures, to require and incentivize adequate availability, improved capability, reduced Logistics Footprint, adequate Logistics Response Times, and reduced life cycle cost</li> <li>10. Manage re-competition efforts for expiring sustainment, support and upgrade/modification contracts</li> <li>11. Manage and measure performance of organic support providers, e.g., SCM, Depot Maintenance Activities, etc., IAW PBAs requirements</li> <li>12. Develop, submit, and advocate for Sustainment budget</li> <li>13. Effectively and efficiently execute Sustainment funds to satisfy User / Warfighter requirements IAW MAJCOM approved priorities</li> <li>14. Conduct and support Sustainment Management Reviews, PMRs, PIWGs and other technical and management reviews with MAJCOM/User, PM, PEO/DOA, and higher Headquarters as required</li> <li>15. Establish and foster working relations with User/MAJCOM, organic and contractor support providers, and higher Headquarters to facilitate effective and efficient support to the warfighter, and successful program execution</li> <li>16. Ensure Data Management activities, tools and processes are effectively managed and executed</li> <li>17. Ensure all engineering, technical and system baseline configuration management activities are effectively managed and executed</li> <li>18. Ensure all maintenance activities are effectively managed and executed</li> <li>19. Ensure all supply chain management activities are effectively managed and executed</li> <li>20. Ensure all IA and system certification activities are effectively managed and executed</li> <li>21. Ensure all Program Protection Planning and System Security Management activities are effectively managed and executed</li> <li>22. Ensure all test and verification activities are effectively managed and executed</li> <li>23. Stay current on and execute all legal and policy requirements pertaining to Sustainment Management of assigned system</li> <li>24. Assess User satisfaction with sustainment management and support provided by the PM and all support providers and improve processes as required to ensure customer satisfaction</li> </ol>	<p><a href="#">AFI 63-101/20-101</a> Integrated Life Cycle Management</p> <p><a href="#">AFPD 63-1/20-1</a> Integrated Life Cycle Management</p> <p><a href="#">DoDI 8500.01</a> Information Assurance (IA)</p> <p><a href="#">DAFPAM 63-128</a> Integrated Life Cycle Management</p> <p><a href="#">Preservation and Storage of Tooling for MDAPs</a></p> <p><a href="#">HSI Acquisition Phase Guide</a></p> <p><a href="#">HSI Handbook</a></p> <p><a href="#">Joint Lessons Learned Information System (JLLIS)</a></p> <p><a href="#">Product Data Acquisition Guidance</a></p> <p><a href="#">Material Fielding Plan</a></p> <p><b>Sample Documents:</b></p> <p><a href="#">LCSP</a></p> <p><a href="#">PMA/SMA</a></p> <p><a href="#">ICD</a></p> <p><a href="#">PPP</a></p>	
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Product Support Took Kit (PSTK)

25. Oversee all Reclamation, Re-Use, Disposal, and migration activities for assigned system		
<b>EXIT CRITERIA:</b>		
<p>Updated ICD, CDD, CPD  Updated CONOPS  Management and Execution of Sustainment and Support Contract  Compliance with Laws and Policy  CDRL Deliverables  Managing New and Re-Competition Efforts for Sustainment and Upgrade/Modification Contracts  Updated TOs, Specifications, and Engineering Data  Well Managed Supply Chain  Efficient and Effective Depot Maintenance Management  Maintained or Improved System Availability  Improved Weapon System Capability  Improved Effectiveness and Efficiency of Sustainment Program Management  Updated LCSP  Budget Planning and Execution Documents  Updated PMA/SMAs  Updated PBAs  Updated SEP  Updated ISP  Updated Program Protection Plans and Security Classification Guides (Sags)  Engineering/Technical Studies, Analyses and Reports  Management Studies, Analyses, and Reports  Cost/Benefit and Business Case Analyses and Reports  Briefings to Air Force/DoD Leaders, Managers, MAJCOMs/COCOMs and Warfighters  Program Reviews  Weapon System Reliability, Availability and Equipment Status Reports</p>		

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<b>TASK #</b>	<b>PROCESS NAME:</b>	<b>ENTRANCE CRITERIA:</b>	
<a href="#">6.35</a>	Manage Information and Communication Activities	Requirement for Logistics IT System(s)	
<b>DESCRIPTION:</b>			
The logistics information systems are critical to providing acquisition logisticians with rapid, current, and complete logistics information for making informed command and control decisions.			
<b>CHECKLIST SUBTASKS:</b>			
<b>TASK</b>	<b>SOURCE DOCUMENTATION</b>	<b>PHASE</b>	
<ol style="list-style-type: none"> <li>1. Obtain an Information System Management Tool (ISMT) account</li> <li>2. Submit a Communications and Information Systems Requirements Document (CSRD) via ISMT Requirements Document Tracking Module (RDTM)</li> <li>3. Provide support as required throughout the Logistics IT Requirements Management Process</li> <li>4. Ensure all IT systems are registered in the Enterprise Information Technology Data Repository (EITDR)</li> <li>5. Ensure all Authority to Operate (ATO) and Authority to Connect (ATC) has been obtained for all IT systems</li> </ol>	<a href="#">ISMT Website</a> <a href="#">AFMC Requirements Management Plan located on the AFMC/A4N SharePoint</a> <a href="#">AFI 33-210</a> Air Force Certification and Accreditation (C&A) Program (AFCAP) <a href="#">AFMC Logistics IT Governance</a> <a href="#">DoD LA Guidebook</a>	Engineering & Manufacturing Development  Production & Deployment  Operations & Support	
<b>EXIT CRITERIA:</b>			
Disposition of CSRD/Baseline Change Requests (BCR) directed towards the affected IT systems.			

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">6.41.1</a>	Manage Technical Order (TO) Sustainment	Formal Technical Orders and supporting data Technical Order Life Cycle Management Plan (TOLCMP) Maintenance Strategy Product Support Strategy Transition Support Plan (TSP) (If Applicable) Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
Technical Orders must be sustained and maintained to ensure currency, completeness and accuracy for support of affected equipment. Sustainment includes: updating, numbering, indexing, publication (editing and printing), stocking, and delivery to the user. The organization or individual assigned TO sustainment responsibility is called the Technical Order Manager. The TO content is managed by the equipment specialist (ES) or engineer responsible for the equipment covered by the TO. This individual is known as the Technical Content Manager (TCM). This checklist gives instructions on the processes used to maintain a technical order from TO formalization to equipment disposal.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Number and index TOs. See TO Numbering and Indexing Process Flow.</li> <li>2. Manage the correction and improvement of TOs through the TO update process. See TO Improvement Process Flow.</li> <li>3. Manage the verification process for new TOs and TO updates. See TO 00-5-3 and the Technical Order Life Cycle Verification Plan (TOLCVP).</li> <li>4. Publish TOs and updates. Includes developing, formatting, pre-pub review and printing. See TO Publishing Process Flow</li> <li>5. Stock and store TOs IAW TO 00-5-3</li> <li>6. To read: Distribute TOs IAW validated orders received through the TO Management System, ETIMS. Ensure a digital copy is provided to the Air Force TO Archives. See TO 00-5-3.</li> <li>7. Develop TO budget inputs based on the Comprehensive Air Force Technical Order Plan (CAFTOP). See TO 00-5-3. Ensure TO budget inputs are inserted into CAFDEX. See task 5.8.1</li> <li>8. Evaluate and approve Commercial Off-The-Shelf (COTS) manuals for equipment support as required. See MIL-PRF-32216</li> <li>9. Review and rescind TOs when no longer required. See TO 00-5-3.</li> </ol>	<a href="#">TO 00-5-3</a> AF Technical Order Life Cycle Management <a href="#">TO 00-5-18</a> AF Technical Order Numbering System <a href="#">TO 00-5-1</a> AF Technical Order System <a href="#">AFRIMS</a> (T33-40 R 03.00) <a href="#">Enhanced Technical Information Management System (ETIMS)</a> ETIMS is the prescribed method of accessing the 00-5 series of TOs. Users request access to the applicable TO's through ETIMS which is an AF Portal program. <a href="#">Develop TO strategy</a> <a href="#">Technical Order Contract Requirements</a> <a href="#">TO Delivery Requirements</a> <a href="#">TM-86-01</a> <a href="#">TO Verification Planning</a> <a href="#">TO Verification</a> <a href="#">Manage TO Improvement System</a> <a href="#">TO Improvement Process Flow</a> <a href="#">TO Numbering and Indexing Process Flow</a> <a href="#">TO Publishing Process Flow</a> <a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">AFI 65-601 Vol. 1</a> Budget Guidance and Procedures	Production & Deployment  Operations & Support	

	<p><a href="#">MIL-PRF-32216</a> Evaluation of Commercial Off-the-Shelf (COTS) Manuals and Preparation of Supplemental Data</p> <p><a href="#">Centralized Asset Management</a></p> <p><a href="#">Centralized Access For Data Exchange (CAFDEx)</a></p> <p><a href="#">CAFDEx Access Instructions</a></p> <p><a href="#">Logistics Requirements Determination Process (LRDP)</a> See Section 2.10</p> <p><a href="#">AFMCI21-301 (New publication is in the final stages of review and this reference will be renamed AFMCI63-301)</a></p> <p>*NOTE: HQ AFMC is designated the executive agent for the AF TO System, IAW AFI 63- 101/20-101.</p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Sustainment of quality TOs that satisfy the needs of the users</p> <p>Disposal of Technical Orders</p>		

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
6.50	Management of Warranties for Contractor Logistics Support (CLS) Commercial Contracts	Cost Benefit Analysis (CBA) Essential Performance Requirements (EPRs)	
<b>DESCRIPTION:</b>			
A warranty is a promise or affirmation given by a contractor to the Government regarding the nature, usefulness, or condition of the supplies or performance of services furnished under the contract. When the responsible PM determines a warranty is appropriate for certain items or systems, the PM shall request technical evaluation and input to the warranty requirements, and provide input documenting the type of warranty required, terms and conditions for enforcement, corrective actions to resolve warranty claim, etc.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<p>1. Materiel Solution Analysis and Technical Maturation Risk Reduction:</p> <ul style="list-style-type: none"> <li>a. Determine the appropriateness of a warranty</li> <li>b. Select potential EPRs to warrant</li> </ul> <p>2. Engineering and Manufacturing Development (EMD):</p> <ul style="list-style-type: none"> <li>a. Determine the appropriateness of a warranty</li> <li>b. Develop a cost benefit analysis (CBA)</li> <li>c. When cost beneficial, alert the Contractor that a warranty is required</li> <li>d. Warranty manager appointed by the PM within 30 days of Milestone B decision</li> <li>e. Warranty Team is convened within 90 days of Milestone B decision</li> <li>f. Warranty strategy planning is initiated</li> <li>g. Warranty requirements are drafted for inclusion in EMD or Production RFP</li> <li>h. Warranty Team develops the Warranty Plan</li> <li>i. Warranty Team evaluates warranty data collection and tracking systems</li> <li>j. Chief of Contracting Office and PM approve Warranty Plan</li> </ul> <p>3. Production and Deployment Phase:</p> <ul style="list-style-type: none"> <li>a. Refine warranty provisions for inclusion in the Production RFPs</li> <li>b. Define EPRs</li> <li>c. Update the CBA and Warranty Plan</li> <li>d. Obtain assessment of proposed EPRs</li> <li>e. Finalize EPRs</li> <li>f. Finalize CBA</li> </ul> <p>4. Operations and Support:</p> <ul style="list-style-type: none"> <li>a. Evaluate warranty administration, data collection and tracking system procedures</li> <li>b. Revise Warranty Plan as required</li> <li>c. Revise warranty clauses as needed</li> <li>d. Tailor clauses and administration procedures to include closeout administration</li> </ul> <p>5. Close Out:</p> <ul style="list-style-type: none"> <li>a. Verify that the warranty is complete.</li> </ul>	<p><a href="#">AFMCI 20-102</a> DoD Warranty Guide <a href="#">AFI 63-101/20-101</a>, Integrated Life Cycle Management FAR Part 46 “Quality Assurance”: Subpart 46.7 – “Warranties” DFARS Subpart 246.7 “Warranties” DFARS Subpart 246.704 “Authority for Use of Warranties” FAR Subpart 46.703 “Criteria for Use of Warranties” FAR Subpart 46.706 “Warranties Terms and Conditions” FAR 46.709 “Warranties of Commercial Items” FAR Subpart 52.212-4 “Contracts Terms and Conditions-Commercial Items” DFARS 211,204 “Solicitation Provisions and Contract Clauses” Office of the Under SECDEF Memo Apr 2012 “Final Rule Warranty Tracking for Serialized Items”, The Electronic Tracking of Warranties by Serial Number SUBPART 204.71— “UNIFORM CONTRACT LINE ITEM NUMBERING SYSTEM”, (Revised August 28, 2014) FAR 46.710 / 48 CFR Chapter 1 “Contract Clauses”</p>	<p>Materiel Solution Analysis</p> <p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production &amp; Deployment</p> <p>Operations &amp; Support</p>	



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<p>b. Tracking and enforcement mechanisms must be in place during the warranty period of performance.</p>	<p>Military Standard 130, “Standard Practice for Identification Marking of U. S. Military Property”, latest version.          Military Standard 129, “Military Marking for Shipment and Storage”          DFARS 252.211-7003, “Item Unique Identification and Valuation”          Military Standard 961, “Defense and Program-Unique Specifications Format and Content”          FAR—Part 12 “Acquisition of Commercial Items”, Subpart 12.404 “Warranties”          DFARS 211.2, Subpart 252.211-6 “Contract Clauses”          DFARS 211.274-2 “Policy for item unique identification”.          DFARS 252.246-7005 “Notice of Warranty Tracking of Serialized Items.”          DFARS Subpart 246.704(2) “Authority for Use of Warranties”          DFARS 246.7 “Warranties”          DFARS 211.274-6 “Contract Clauses”          DFAR Subpart 215.470 “CDRLs and DIDs”</p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>Verification that the warranty is complete.</p>		

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TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">6.56</a>	Modification Management (AF Form 1067)	Product baseline and specifications AF form 1067 Modification Proposal Initial Capabilities Document (ICD) (As Required) Funding	
<b>DESCRIPTION:</b>			
<p>ACAT level modifications are treated as new acquisitions and would start at the beginning in the PS Tool Kit. Refer to Supersede by AFI 63-101/20-101 Chapter 9 for specific determination of mod type. Follow the tasks as for a new program and tailor them.</p> <p>Modification Management refers to non-ACAT level modification for this checklist. This is a non-inclusive overview, so continue to use applicable tasks in Operation and Support Phase. In this checklist, modifications are upgrades or changes that impact the product baseline. These efforts will be able to follow a tailored process.</p>			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Ensure that the proposed modification requirement is approved; this is done via AF Form 1067 in response to maintenance, new capability, or operational problems. Supportability consideration must be addressed when finalizing the requirement</li> <li>2. Ensure HSI implications, constraints and other issues are thoroughly addressed in the process. See task 2.13.1 HSI.</li> <li>3. IPT assigned to work the modification as a Material improvement Project or ECP. Systems engineering process is used to determine feasibility, OSS&amp;E, and estimated costs</li> <li>4. Funding for the Mod must be identified. Valid P3A and R2 documentation must be provided in accordance with AFI 65-601</li> <li>5. Lead command approves the modification plan</li> <li>6. Depending on the size of the mod an IMP/IMS may be developed</li> <li>7. Participate in the risk assessment/analysis</li> <li>8. Consult Intelligence for threat baseline currency. Reference Appendix A, Checklist 1.1</li> <li>9. Ensure Program Protection Plan is Updated</li> <li>10. Develop requirement baseline specification</li> <li>11. Determine options and select modification plan. Block updates could include several modifications depending on accessibility of the equipment system (platform) or other considerations</li> <li>12. Following CCB approval, contracting actions are prepared or organic sources scheduled to perform initial mod. See checklist 3.47.3 for detailed CCB information</li> <li>13. Testing may be required for the modification. T-2 mod could in fact be used for this testing. Ensure all supportability considerations are planned for any testing or T-2 program. See Supersede by AFI 63-101/20-101 Chapter 9 for detailed T-2 process</li> <li>14. Following successful test, perform PCA/FCA if needed</li> <li>15. Communicate supply chain management requirements. This includes communicating with DLA and AFSC for spares support</li> </ol>	<p>Supersede by AFI 63-101/20-101 Chapter 9  <a href="#">AF Form 3525</a> CCB Modification Requirements and Approval Document  <a href="#">AF Form 1067</a> Modification Proposal  <a href="#">AFMC Form 518</a> Configuration Control Board Directive  <a href="#">AFI 65-601</a> Vol. 1 Budget Guidance and Procedures  <a href="#">CJCSI 3312.01A</a> Joint Military Intelligence Requirements Certification  <a href="#">DAFMAN 14-401</a> Intelligence Analysis and Targeting Tradecraft/Data Standards  <a href="#">AFI 14-1020</a> Intelligence Mission Qualification and Readiness  <a href="#">HSI Requirements Pocket Guide</a>  <a href="#">Product Data Acquisition Guidance</a>  <a href="#">Organic Modification Checklist</a>  <a href="mailto:AFSC.LZB.Workflow@us.af.mil">(AFSC.LZB.Workflow@us.af.mil)</a></p>	Operations & Support	

Product Support Took Kit (PSTK)

<p>16. The installation schedule is completed, and may entail installation kits. Ensure that all support requirements are planned. This can include TO changes, Support Equipment, training, and spares. For additional information on TOs see checklist 6.56.1</p> <p>17. Kit proofing must also be supported by appropriate manpower and resources</p> <p>18. Update system product baseline including any specification, drawing etc.</p> <p>19. Ensure that technical support is planned for modification installation. This may include organic depot field teams or Contractor Field Teams (CFT)s. Often this is done at the operational location in the field</p> <p>20. For temporary modifications (T-2), the final step is returning equipment to the original configuration</p> <p>21. Ensure compliance with IUID requirements</p> <p>22. See Product Support Contracts Requirement Tool, Appendix D</p>		
<p><b>EXIT CRITERIA:</b></p>		
<p>Updated Product Baseline and OSS&amp;E Baseline          Temporary Modification (T-2) completed and returned to original configuration          Completed modifications          Closed AF Form 1067</p>		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">6.56.1</a>	Manage Time Compliance Technical Order (TCTO) Process	Configuration Control Board (CCB) approved: Engineering Change Request or Order Engineering Change Proposal (ECP) Engineering Change Notice (ECN) Technical Order Life Cycle Management Plan (TOLCMP) Technical Order Life Cycle Verification Plan (TOLCVP) Technical Manual Contract Requirements (TMCR) Document, TM-86-01 Maintenance Strategy Product Support Strategy	
<b>DESCRIPTION:</b>			
TCTOs shall be used to document all permanent modifications, update changes and retrofit changes to standard Air Force (AF) systems and commodities. TCTOs are authorized by TO 00-5-1. They provide instructions for modifying military systems or commodities within specified time limits, initiate special “one time” inspections, or impose temporary restrictions on systems or commodities. This checklist gives instructions on the TCTO process used to maintain and update equipment configuration.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Initiate TCTO package. (AFMC Forms 873, 874, 875 and AFTO Form 82). Ensure funding has been addressed prior to the Configuration Control Board (CCB)</li> <li>2. Obtain TCTO number and assign data code number from and establish a Reliability and Maintainability Information System (REMIS) record.</li> <li>3. Develop formal or interim TCTO IAW TO 00-5-15, 00-5-1 and MIL-PRF-38804.</li> <li>4. If required, provide advanced notifications of Interim TCTO IAW TO 00-5-15.</li> <li>5. Develop TO updates as required to document TCTO “before” and “after” data.</li> <li>6. Develop and number TCTO Kits as required by the complete kit concept (TO 00-5-15)</li> <li>7. Perform TCTO verification (kit proofing) of the TCTO, any applicable TO updates and the TCTO kit.</li> <li>8. Publish and distribute formal or interim TCTO, TO updates and TCTO kit concurrently to meet compliance period schedules.</li> <li>9. Rescind TCTO after compliance or upon reaching the rescission date. Update TOs to remove “before” data. Disposition kits after completion/rescission.</li> <li>10. Update REMIS and ETIMS records as necessary.</li> </ol>	<a href="#">Technical Order Contract Requirements TM-86-01</a> <a href="#">Generic TOLCMP</a> <a href="#">Generic Technical Order Life Cycle Verification Plan (TOLCVP)</a> <a href="#">TO 00-5-1</a> Air Force Technical Order System <a href="#">TO 00-5-18</a> Air Force Technical Order Numbering System <a href="#">TO 00-5-15</a> Air Force Time Compliance Technical Order Process <a href="#">Enhanced Technical Information Management System (ETIMS)</a> ETIMS is the prescribed method of accessing the 00-5 series of TOs. Users request access to the applicable TO’s through ETIMS which is an AF Portal program. <a href="#">AFI 63-101/20-101</a> , Integrated Life Cycle Management <a href="#">AFI 65-601 Vol. 1</a> Budget Guidance and Procedures <a href="#">MIL-DTL-38804 Manuals, Technical – Time Compliance Technical Orders</a>	Production & Deployment  Operations & Support	

Product Support Took Kit (PSTK)

	<a href="#">(TCTO and TCTO Supplements)</a>  <b>Sample Documents:</b> <a href="#">TMCR</a> <a href="#">TMCR Writing Guide</a>	
<b>EXIT CRITERIA:</b>		
Completion of modification to all affected equipment Rescission of TCTO		

Product Support Took Kit (PSTK)

TASK #	PROCESS NAME:	ENTRANCE CRITERIA:	
<a href="#">6.67</a>	Disposing of Weapon System, Major end items and associated components	Weapon System / End Item enters the Air Force inventory Life Cycle Sustainment Plan (LCSP)	
<b>DESCRIPTION:</b>			
This checklist gives instructions on actions required to ensure readiness to dispose of items as well as the disposal process.			
<b>CHECKLIST SUBTASKS:</b>			
TASK	SOURCE DOCUMENTATION	PHASE	
<ol style="list-style-type: none"> <li>1. Planning for demilitarization and disposal of items starts during cataloging of all components/completion of design of a weapon system. The demilitarization and classification codes for all items must be identified as soon as material designs are documented. Procedures on how to demilitarized/sanitize (declassify) parts/components must also be developed. For non-stock listed items, the program office must still develop/identify these requirements.</li> <li>2. Prototypes that are not used for production/fielded must be demilitarized when they are no longer required.</li> <li>3. The Program Office, during design process, must document hazardous material, and estimate the cost and plan for the system's demilitarization and safe disposal. A Demilitarization and Disposal Plan for the weapon system should be generated prior to DT&amp;E and created/updated when a system is modified/upgraded, the security classification guide is significantly changed, and prior to release of a system to a non-governmental agency.</li> <li>4. Coordinate with HSI SME for planning Disposal activities to prevent unintended human impacts.</li> <li>5. The Program Office must program/budget for the cost to prepare turn-in documents, remove/dispose of hazardous material and perform demilitarization actions required for classified/DEMIL G, P, and F coded items (if the service is determined as responsible for DEMIL. This includes long term facilities storage requirements.</li> <li>6. Once weapon systems, end items are identified as excess to the Air Force, reclamation must be considered/ performed.</li> <li>7. Aircraft and Missiles which are retained for future reclamation must be evaluated for potential reclamation and the program office must determine when retention is not cost effective.</li> <li>8. Reutilization, transfer, donation, sale, actions must be taken IAW AFI 23-101.</li> <li>9. Coordinate with local qualified recycling program (QRP) for disposition of QRP eligible materials/commodities.</li> <li>10. Provide inputs to appropriate lessons learned repositories</li> </ol>	<p><a href="#">DoDI 4160.28</a> DoD Demilitarization (DEMIL) Program DoDM 4140.01, Volumes 1, 2, 6, 8, and 11 <a href="#">DoDM 4160.28 Vol. 1</a> Defense Demilitarization: Program Administration <a href="#">DoDM 4160.28 Vol 2</a> Defense Demilitarization: DEMIL Coding <a href="#">DoDM 4160.28 Vol 3</a> Defense Demilitarization: Procedural Guidance <a href="#">DoD DEMIL Web Page</a> <a href="#">AFI 23-101</a> Air Force Materiel Management <a href="#">DoDI 5000.02</a> Operation of the Defense Acquisition System <a href="#">DoD PSM Guidebook</a> <a href="#">Weapon System Acquisition Reform Act</a> <a href="#">Defense Acquisition Guidebook</a> (5.1.3) <a href="#">AFMCI 23-111</a> Reclamation of Air Force Property <a href="#">Preservation and Storage of Tooling for MDAPs</a> <a href="#">AFI 16-402</a> Aerospace Vehicle Programming, Assignment, Distribution, Accounting and Termination <a href="#">Joint Lessons Learned Information System (JLLIS)</a> <a href="#">DoDM 4160.21, Vol 1, Defense Materiel Disposition: Disposal Guidance And Procedures</a></p> <p><a href="#">DoDM 4160.21, Vol 2, Defense Materiel</a></p>	<p>Technical Maturation Risk Reduction</p> <p>Engineering &amp; Manufacturing Development</p> <p>Production and Deployment</p> <p>Operations and Support</p>	

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	<p><a href="#"><u>Disposition: Property Disposal And Reclamation</u></a></p> <p><a href="#"><u>DoDM 4160.21, Vol 3, Defense Materiel Disposition: Reutilization, Transfer, And Sale Of Property</u></a></p> <p><a href="#"><u>DoDM 4160.21, Vol 4, Defense Materiel Disposition: Instructions For Hazardous Property And Other Special Processing Materiel</u></a></p>	
<p><b>EXIT CRITERIA:</b></p>		
<p>All Air Force owned / managed systems, all excess assets were appropriately reutilized, demilitarized/sanitized (declassified), transferred, and no longer on any Air Force inventory (Exception: assets may be on the National Museum of the Air Force's inventory). Update to LCSP</p>		



**APPENDIX B - ACRONYMS**

**ACAT** - Acquisition Category  
**ADM** - Acquisition Decision Memorandum  
**AETC** - Air Education Training Command  
**AF** - Air Force  
**AFFARS** - Air Force Federal Acquisition Regulation Supplement  
**AFI** - Air Force Instruction  
**AFIMSC** - Air Force Installation and Mission Support Center  
**AFMC** - Air Force Materiel Command  
**AFMCI** - AFMC Instruction  
**AFLCMC** - Air Force Life Cycle Management Center  
**AFMCP** - AFMC Pamphlet  
**AFMETCAL** - Air Force Metrology and Calibration  
**AFNWC** - Air Force Nuclear Weapon Center  
**AFOTEC** - Air Force Operational Test and Evaluation Center  
**AFPD** - Air Force Policy Directive  
**AFRL** - Air Force Research Laboratory  
**AFSC** - Air Force Sustainment Center  
**AFTC** - Air Force Test Center  
**AFTOC** - Air Force Total Ownership Cost  
**AICUZ** - Air Installation Compatible Use Zones  
**AIS** - Automated Information System  
**ALC** - Air Logistics Complex  
**AMARG** - Aerospace Maintenance and Regeneration Group  
**AML** - Acquisition Master List  
**AMRB** - Aircraft and Missile Requirements Board  
**AoA** - Analysis of Alternatives  
**APB** - Acquisition Program Baseline  
**APD** - AFLCMC Process Directory  
**AS** - Acquisition Strategy  
**ASIP** - Aircraft Structural Integrity Program  
**ASP** - Acquisition Strategy Plan  
**ASR** - Alternative Systems Review  
**BCA** - Business Case Analysis  
**BLRIP** - Beyond Low Rate Initial Production  
**CAE** - Component Acquisition Executive  
**CAG** - Cost Analysis Group  
**CAIG** - Cost Analysis Improvement Group  
**CAIV** - Cost as an Independent Variable  
**CAM** - Centralized Asset Management  
**CARD** - Cost Analysis Requirements Description  
**CBM+** - Condition Based Maintenance +  
**CC** - Critical Components  
**CCA** - Component Cost Analysis  
**CCB** - Configuration Control Board  
**CCP** - Configuration Change Proposal  
**CCTD** - Concept Characterization and Technical Documents

## Product Support Tool Kit (PSTK)

**CDD** - Capability Development Document  
**CDR** - Critical Design Review  
**CDRL** - Contract Data Requirements List  
**CFT** - Contractor Field Team  
**CI** - Configuration Item  
**CITE** - Center of Industrial and Technical Excellence  
**CJCSI** - Chairman Joint Chiefs of Staff Instruction  
**CJCSM** - Chairman Joint Chiefs of Staff Manual  
**CLIN** - Contract Line Item Number  
**CLS** - Contractor Logistics Support  
**CM** - Configuration Management  
**COA** - Course of Action  
**COCOM** - Combatant Command  
**COLT** - Customer Oriented Leveling Technique  
**CONOPS** - Concept of Operations  
**COTS** - Commercial off the shelf  
**CP** - Capability Development  
**CPCP** - Corrosion Prevention and Control Plan  
**CPD** - Capability Production Document  
**CPI** - Critical Program Information  
**CRRA** - Capability Review and Risk Assessment  
**CSB** - Configuration Steering Board  
**CSO** - Communication and Information Systems Officer  
**CSWS** - Contractor Supported Weapon System  
**CTE** - Critical Technology Elements  
**DAB** - Defense Acquisition Board  
**DAG** - Defense Acquisition Guide  
**DAU** - Defense Acquisition University  
**DCMA** - Defense Contract Management Agency  
**DFARS** - Defense Federal Acquisition Regulation Supplement  
**DID** - Data Item Description  
**DLA** - Defense Logistics Agency  
**DLR** - Depot Level Repair  
**DMAWG** - Depot Maintenance Activation Working Group  
**DMI** - Depot Maintenance Interservicing  
**DMISA** - Depot Maintenance Inter-Service Support Agreement  
**DMSMS** - Diminishing Manufacturing Sources and Material Shortages  
**DOD** - Department of Defense  
**DODI** - Department of Defense Instruction  
**DOTMLPF** - Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities  
**DOT&E** - Director, Operational Test & Evaluation  
**DPAS** - Defense Property Accountability System  
**DPEM** - Depot Purchased Equipment Maintenance  
**DRG** - Direct Reporting Group  
**DRU** - Direct Reporting Unit  
**DSOR** - Depot Source of Repair  
**DT&E** - Development Test and Evaluation

## Product Support Tool Kit (PSTK)

**ECP** - Engineering Change Proposal  
**EDMO** - Engineering Data Management Office  
**EDMS** - Engineering Data Management Specialist  
**EDFP** - Engineering Data for Provisioning  
**EMD** - Engineering & Manufacturing Development  
**EOA** - Early Operational Assessment  
**ENSIP** - Engine Structural Integrity Program  
**ERRC** - Expendability Recoverability Reparability Category  
**ESOH** - Environment, Safety, and Occupational Health  
**FAA** - First Asset Available  
**FAR** - Federal Acquisition Regulation  
**FCA** - Functional Configuration Audit  
**FDE** - Force Development Evaluation  
**FM** - Financial Management  
**FMECA** - Failure Modes, Effects and Criticality Analysis  
**FMRC** - Flight Manual Review Conference  
**FMS** - Foreign Military Sales  
**FMSP** - Force Structure Maintenance Plan  
**FRACAS** - Failure Reporting and Corrective Action System  
**FOT&E** - Follow-on Operational Test and Evaluation  
**FRP** - Full Rate Production  
**FTA** - Failure Tree Analysis  
**FYDP** - Future Year Defense Program  
**GFE** - Government Furnished Equipment  
**GFP** - Government Furnished Property  
**GFP-MAT** - Government Furnished Property-Material  
**GIDEP** - Government Industry Data Exchange Program  
**HAF** - Headquarters Air Force  
**HPT** - High Performance Team  
**HSI** - Human Systems Integration  
**IAW** - In Accordance With  
**IBR** - Integrated Baseline Review  
**ICA** - Independent Cost Analysis  
**ICD** - Initial Capabilities Document  
**ICE** - Independent Cost Estimate  
**ICS** - Interim Contractor Support  
**IETMS** - Interactive Electronic Technical Manuals  
**ILA** - Independent Logistics Assessment  
**ILS** - Integrated Logistics Support  
**IMP** - Integrated Master Plan  
**IMS** - Integrated Master Schedule  
**IOC** - Initial Operational Capability  
**IOT&E** - Initial Operational Test and Evaluation  
**IPA** - Independent Program Assessment  
**IPG** - Internal Process Guide  
**IPPS** - Initial Provisioning Performance Specification  
**IPS** - Intellectual Property (IP) Strategy (IPS) (Formerly known as Technical Data Rights Strategy (TDRS))

## Product Support Tool Kit (PSTK)

**IPT** - Integrated Process Team  
**IRA** - Integrated Risk Assessment  
**ISP** - Information Support Plan  
**ISR** - In-Service Review  
**ITR** - Initial Technical Review  
**ITT** - Integrated Tech Team  
**IUID** - Item Unique Identification  
**JCD** - Joint Capabilities Document  
**JCIDS** - Joint Capabilities Integration and Development System  
**JEDMICS** - Joint Engineering Data Management Information Control System  
**JOC** - Joint Operations Concept  
**JPG** - Joint Programming Guidance  
**JROC** - Joint Requirements Oversight Council  
**JITC** - Joint Interoperability Test Command  
**KPP** - Key Performance Parameter  
**KSA** - Key System Attribute  
**LA** - Logistics Assessment  
**LCCE** - Life Cycle Cost Estimate  
**LCL** - Life Cycle Logistics  
**LCMP** - Life Cycle Management Plan  
**LCO** - Loan Control Officer  
**LCSP** - Life Cycle Sustainment Plan  
**LFT&E** - Live-Fire Test and Evaluation  
**LHA** - Logistics Health Assessment  
**LMI** - Logistics Management Information  
**LORA** - Level of Repair Analysis  
**LRIP** - Low Rate Initial Production  
**LT&E** - Logistics Test and Evaluation  
**MAIS** - Major Automated Information System  
**MAJCOM** - Major Command  
**MCCR** - Mission Critical Computer Resources  
**MCF** - Mission Critical Function  
**MDA** - Milestone Decision Authority  
**MDAP** - Major Defense Acquisition Program  
**MDD** - Materiel Development Decision  
**MDS** - Mission Design Series  
**MEA** - Maintenance Engineering Analysis  
**MECHSIP** Mechanical Systems Integrity Program  
**MEPV** - Military Equipment Program Evaluation  
**MIL-HDBK** - Military Handbook  
**MIL-STD** - Military Standard  
**MILCON** - Military Construction  
**MILSTRIP** - Military Standard Requisitioning and Issue Procedures  
**MIPR** - Military Interdepartmental Purchase Request  
**MNS** - Mission Need Statement  
**MOA** - Memorandum of Agreement  
**MOSA** - Modular Open Systems Approach

## Product Support Tool Kit (PSTK)

**MPT** - Manpower Personnel and Training  
**MRRB** - Maintenance Requirements Review Board  
**MS** - Milestone  
**MSD** - Milestone Decision  
**MTA** - Maintenance Task Analysis  
**MTBF** - Mean Time Between Failure  
**NDI** - Non-Development Item  
**NEPA** - National Environmental Policy Act  
**NIMSR** - Non-consumable item material support request  
**OA** - Operational Assessment  
**OPR** - Office of Primary Responsibility  
**OSD** - Office of the Secretary of Defense  
**OSS&E** - Operational Safety, Suitability & Effectiveness  
**OT** - Operational Test  
**OTA** - Operational Test Agency  
**OT&E** - Operational Test & Evaluation  
**OTRR** - Operational Test Readiness Review  
**O&S** - Operations & Support  
**PBD** - Program Budget Decision  
**PBL** - Performance Based Logistics  
**PCA** - Physical Configuration Audit  
**PDR** - Preliminary Design Review  
**PESHE** - Programmatic Environment, Safety, & Occupational & Health Evaluation  
**PEO** - Program Executive Officer  
**PHS&T** - Packaging, Handling, Storage, and Transportation  
**PICA** - Primary Inventory Control Activity  
**PIO** - Provisioning Item Order  
**PGM** - Product Group Manager  
**PLM** - Product Lifecycle Management  
**PM** - Program Manager  
**PMRT** - Project Management Resource Tools  
**POE** - Program Office Estimate  
**POM** - Program Objective Memorandum  
**PPBE** - Planning, Programming, Budgeting and Execution  
**PPP** - Program Protection Plan  
**PPP** - Public-Private Partnership  
**PPS** - Provisioning Performance Schedule  
**PPSL** - Program Parts Selection List  
**PR** - Purchase Request  
**PRR** - Production Readiness Review  
**PRT** - Programmatic Risk Tool  
**PS** - Product Support  
**PSE** - Product Support Element  
**PSI** - Product Support Integrator  
**PSM** - Product Support Manager  
**PTD** - Provisioning Technical Documentation  
**PWIG** - Product Improvement Working Group

## Product Support Tool Kit (PSTK)

**RAM** - Reliability, Availability, Maintainability  
**RCM** - Reliability Centered Maintenance  
**RDEL** - Requirements Data Exchange List  
**REMIS** - Reliability and Maintainability Information System  
**RFID** - Radio-Frequency Identification  
**RFP** - Request for Proposal  
**RFQ** - Request for Quotation  
**RIB** - Recoverable Item Breakdown  
**RIIM** - Recoverable Item Inventory Manager  
**RIL** - Repairable Items List  
**RIPPL** - Recoverable Item Provisioning Parts List  
**RLA** - Repair Level Analysis  
**RM** - Risk Management  
**RM&A** - Reliability, Maintainability, and Availability  
**RMS** - Reliability, Maintainability, and Supportability  
**ROE** - Rules of Engagement  
**ROM** - Rough Order of Magnitude  
**RSP** - Readiness Spares Package  
**RUL** - Remaining Useable Life  
**R&M** - Reliability and Maintainability  
**SAE** - Service Acquisition Executive  
**SAF/AQ** - Secretary of the Air Force (Acquisition)  
**SAM** - Support Assessment Model  
**SATAF** - Site Activation and Fielding  
**SBSS** - Standard Base Supply System  
**SCRM** - Supply Chain Risk Management  
**SDT** - Site Destination Transportation  
**SE/ATS** - Support Equipment/Automatic Test Systems  
**SE** - Systems Engineering  
**SEP** - System Engineering Plan  
**SERD** - Support Equipment Recommendation Data  
**SFR** - System Functional Review  
**SMR** - Source Maintenance Recoverability  
**SOE** - System Operational Effectiveness  
**SOO** - Statement of Objectives  
**SORA** - Source of Repair Assignment  
**SPG** - Strategic Planning Guidance  
**SRD** - Standard Reporting Designator  
**SRM** - Sustainment, Restoration & Modernization  
**SRR** - System Requirement Review  
**SSR** - Supply Support Request  
**SSP** - Source Selection Plan  
**SSWG** - Supply Support Working Group  
**STA** - System Threat Assessment  
**SVR** - System Verification Review  
**SVV** - Software Verification and Verification  
**TAV** - Total Asset Visibility

## Product Support Tool Kit (PSTK)

**TCTO** - Time Compliant Technical Order

**TDP** - Technical Data Package

**TEMP** - Test and Evaluation Master Plan

**TLCSM** - Total Life Cycle Systems Management

**TMCR** - Technical Manual Contract Requirements

**TMDE** - Test, Measurement, and Diagnostic Equipment

**TMRR** - Technical Maturation Risk Reduction

**TO** - Technical Order

**TOC** - Total Ownership Cost

**TOLCMP** - Technical Order Life Cycle Management Plan

**TOLCVP** - Technical Order Life Cycle Verification Plan

**TOMA** - Technical Order Management Agent/Agency

**TRA** - Technology Readiness Assessment

**TRR** - Test Readiness Review

**TSP** - Transition Support Plan

**T&E** - Test & Evaluation

**USC** - United States Code

**V&V**-Verification and Validation

**WASP** - Web Applications Software Products

**WBS** - Work Breakdown Structure

**WSDC** - Weapon System Designator Code

**WSER** - Weapon System Enterprise Review

**WS-SA** - Weapon System - Supportability Analysis

**WSSP** - Weapon System Support Program



## APPENDIX C - GLOSSARY

**AUTOMATED TEST EQUIPMENT (ATE):** A generic terminology used for separate or built-in equipment satisfying a diagnostic or condition-indicating test function and processing an automatic capability. ATE can be either mission equipment or support equipment.

**AUTOMATIC TEST SYSTEM (ATS):** Equipment, software, and data items required to operate and maintain ATE and software used thereon. This system includes test equipment, interface test adapters, test software, calibration software, compilers, programming information, and tester data but not offline automatic data processing equipment (ADPE) used to support software.

**COMMON SUPPORT EQUIPMENT (CSE):** Equipment item applicable to more than one system, subsystem or item of equipment; has a national stock number assigned to it and is currently in the Air Force inventory.

**INFORMATION TECHNOLOGY SYSTEMS CONTINUOUS SUPPORT:** Information technology systems continuous support encompasses the facilities, hardware, software, firmware, documentation, manpower, and personnel needed to operate and support mission critical information technology systems hardware/software systems. Life cycle sustainment planning and management for the IT Systems Continuous Support IPS Element includes the following objectives:

- a) Identify, plan, resource, and acquire facilities, hardware, software, documentation, manpower and personnel necessary for planning and management of mission critical computer hardware and software systems.
- b) Coordinate and implement agreements necessary to manage technical interfaces, and to manage work performed by maintenance activities.
- c) Establish and update plans for periodic test and certification activities required throughout the lifecycle.

**CONTRACTOR-FURNISHED EQUIPMENT (CFE):** Items acquired or manufactured directly by the contractor and provided to the government during the execution of a contractor.

**CORE - CORE DEPOT MAINTENANCE:** Core Depot Maintenance is Organic Depot Capability required to assure mission support for the weapon system designated for the Joint Chiefs of Staff (JCS) contingency scenario(s). Core logistics capabilities must be performed at government-owned, government-operated facilities of the Department of Defense with government employee and government-owned equipment including government-owned, government operated facilities of a Military department.

**DEFENSE ACQUISITION BOARD (DAB):** The DAB is the Department's senior-level forum for advising the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)) on critical decisions concerning designated acquisition programs. The DAB is composed of the DoD's senior officials, service secretaries and user representatives.

**DEPOT MAINTENANCE INTER-SERVICE SUPPORT AGREEMENT (DMISA):** A formalized agreement, similar to a contract, whereby one Service (the Agent) obligates itself to provide depot maintenance support for another Service (the Principal). DMISAs may also be used when a Military Service is the Agent, and another Federal Government department or agency, or element thereof, is the Principal. DMISA is the DoD mandated method used to capture and document all multi-year interservice depot maintenance work unless the credit exchange method of support is selected.

**DEPOT SOURCE OF REPAIR (DSOR):** The DSOR is a two part process. Part I is the AF process called Source of Repair Assignment (SORA). The SORA includes the core logistics analysis, and 50/50 assessments. Part II is the DoD process called Depot Maintenance Interservice (DMI) Review.

**DESIGN INTERFACE:** Involves the relationship of logistics-related design parameters, such as Reliability and Maintainability (R&M), to readiness and support resource requirements. These logistics-related design parameters are expressed in operational terms rather than inherent values and specifically related to System Readiness Objectives (SROs) and support costs of the materiel system.

**ENVIRONMENT, SAFETY, and OCCUPATIONAL HEALTH (ESOH):** Environmental factors concern water, air, and land and the interrelationships which exist among and between water, air, and land and all living things. Safety factors are design and operational characteristics that minimize the possibilities for accidents or mishaps to operators or which threaten the survival of the system. Occupational Health factors are design features that minimize risk of injury, acute and/or chronic illness, or disability, and/or reduced job performance of personnel who operate, maintain, or support the system.

DoD policy requires PMs to integrate across the three ESOH disciplines and into systems engineering using the MIL-STD-882, System Safety process. MIL-STD-882E defines ESOH as the combination of disciplines that encompass the processes and approaches for addressing environmental compliance, and hazards associated with environmental impacts, system safety (e.g., [hazard management for] platforms, systems, system-of-systems, weapons, explosives, software, ordnance, combat systems), occupational safety and health, hazardous materials management, and pollution prevention.

**FACILITIES:** Includes the permanent, semi-permanent, or temporary real property assets required to operate and support the materiel system, including conducting studies to define types of facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment.

**GOVERNMENT-FURNISHED PROPERTY (GFP-MAT):** Property (material classification) in the possession of or directly acquired by the Government and subsequently furnished to the contractor for performance of a contract (integration into the system or deliverable end-item).

**GROUND SUPPORT EQUIPMENT (GSE):** Equipment that is required to directly assist in supporting weapon systems, subsystems and equipment, or provide a service to, or are an aid in performing maintenance on weapon systems whole on the ground. This equipment does not have test, measurement, or diagnostic capabilities as its principal function.

**HABITABILITY:** Factors of living and working conditions that is necessary to sustain the morale, safety, health, and comfort of the user population which contribute directly to personnel effectiveness and mission accomplishment, and often preclude recruitment and retention problems.

**HUMAN FACTORS:** The comprehensive integration of human capabilities and limitations (cognitive, physical, sensory, and team dynamic) into system design, development, modification and evaluation to optimize human-machine performance for both operation and maintenance of a system. Human Factors Engineering designs Systems that require minimal manpower, provide effective training, can be operated and maintained by users; and are suitable and survivable.

**HUMAN SYSTEMS INTEGRATION:** A process to ensure systems are designed and developed that effectively and affordably integrate with human capabilities and limitations. The HSI process considers human factors engineering, manpower, personnel, training (MPT) issues, and Environment, Safety, and Occupational Health (ESOH) aspects along with survivability and habitability throughout system design, development, fielding and sustainment.

**INDEPENDENT COST ANALYSIS:** A cost analysis conducted by an Independent Cost Analysis Team for the Space MDA.

**INDEPENDENT PROGRAM ASSESSMENT:** Conference where an Independent Program Assessment Team (IPAT) assesses advancement to the next space program phase, on behalf of the Space MDA.

**MAINTENANCE PLANNING:** The process conducted to evolve and establish maintenance/support concepts and requirements for the life cycle of a materiel system.

**MANPOWER:** A critical resource that supports an approved program. It is not a program by itself and should not be manipulated separately from the program it supports.

**MANPOWER and PERSONNEL:** The process of identifying and acquiring military and civilian personnel with the skills and grades required to operate and support a materiel system over its lifetime at peacetime and wartime rates.

## Product Support Tool Kit (PSTK)

**MANPOWER REQUIREMENT:** A statement of manpower needed to accomplish a job, workload, mission, or program. There are two types of manpower requirements: funded and unfunded. Funded manpower requirements are those that have been validated and allocated. Unfunded requirements are validated manpower needs but deferred because of budgetary constraints.

**MILITARY CONSTRUCTION (MILCON):** Appropriations that fund major projects such as bases, schools, missile storage facilities, maintenance facilities, medical/dental clinics, libraries, and military family housing.

**PACKAGING, HANDLING, STORAGE and TRANSPORTATION (PHS&T):** The resources, processes, procedures, design considerations, and methods to ensure all system, equipment, and support items are preserved, packaged, handled, and transported properly. This includes environmental considerations, equipment preservation requirements for short- and long-term storage, and transportability.

**PECULIAR SUPPORT EQUIPMENT (PSE):** An equipment item applicable to one system, subsystem or item of equipment. An equipment item that is being introduced into the Air Force inventory for the first time; or a CSE item reconfigured for a specific function or purpose.

**PERSONNEL:** The human aptitudes, skills, and knowledge, experience levels, and abilities required to operate, maintain, and support the system at the time it is fielded.

**PRODUCT SUPPORT ELEMENTS:** A traditional group of items that taken together constitute Integrated Logistics Support. These include: Sustaining/Systems Engineering; Maintenance Planning and Management; Manpower and Personnel; Supply Support; Support Equipment/Automatic Test Systems; Technical Data Management/Technical Orders; Training; IT Systems Continuous Support; Facilities; Packaging, Handling, Storage, and Transportation (PHST); Product Support Management and Design Interface.

**PRODUCT SUPPORT MANAGER:** The PSM is an individual with responsibility to lead the development, implementation, and top-level integration and management of all sources of support to meet Warfighter sustainment and readiness requirements. Additional guidance for PSM implementation can be found in the AFGM and at the Defense Acquisition University PSM website:

<https://www.dau.edu/cop/log/Pages/Topics/Product%20Support%20Manager%20PSM.aspx>.

**PUBLIC PRIVATE PARTNERSHIP:** A government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies.

**PRODUCT SUPPORT ELEMENT:** Department of Defense recognizes 12 product support elements as a foundation for logistics planning and operations. These 12 elements are:

**PRODUCT SUPPORT INTEGRATOR:** The single point responsible for integrating the activities of the product support providers. Normally, this is a government function.

**SUPPORT EQUIPMENT:** All equipment (mobile or fixed) required to support the Operation and Maintenance (O&M) of a materiel system. This includes associated multi-use support items, ground-handling and maintenance equipment, tools, meteorology and calibration equipment, and manual/Automatic Test Equipment (ATE). It includes the acquisition of Product Support for the support equipment itself.

**SUPPLY CHAIN RISK MANAGEMENT (SCRM):** The systematic process for managing risk by identifying, assessing, and mitigating actual or potential threats, vulnerabilities, and disruptions to the AF supply chain from beginning to end to ensure mission effectiveness.

**SUPPLY SUPPORT:** The management actions, procedures, and techniques necessary to determine requirements to acquire, catalog, receive, store, transfer, issue, and dispose of spares, repair parts, and supplies. Supply support includes provisioning for initial support as well as acquiring, distributing, and replenishing inventories. Proper supply support management results in having the right spares, repair parts, and all classes of supplies available, in the right quantities, at the right place, at the right time, at the right price.

## Product Support Tool Kit (PSTK)

**SURVIVABILITY:** The characteristics of a system that reduce risk of fratricide, detection, and the probability of being attacked; and that enable the crew to withstand man-made and natural hostile environments without aborting the mission or suffering acute and/or chronic illness, disability, or death

**TECHNICAL DATA:** Information, regardless of the form or method of the recording, of a scientific or technical nature, including computer software documentation. 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.

**TECHNICAL DATA – PRODUCT DATA:** All data created as a consequence of defining (requirements), designing, testing, producing, packaging, storing, distributing, operating, maintaining, modifying and disposing of a product.

**TECHNICAL DATA PACKAGE:** A technical data package (TDP) typically consists of 2D drawings, 3D models, specifications, associated lists, software documentation, interface control documents, and engineering product structure.

**TEST, MEASUREMENT, and DIAGNOSTIC EQUIPMENT (TMDE):** Devices used to maintain, evaluate, measure, calibrate, test, inspect, diagnose, or otherwise examine materials, supplies, equipment, and systems to identify or isolate actual or potential malfunction, or decide if they meet operational specifications established in technical documents. ANSI/NCSL Z540-1-1994 and ISO 17025 refer to this equipment as “measuring and test equipment.”

**TRAINING:** The level of learning required to adequately perform the responsibilities designated to the function and accomplish the mission assigned to the system.

**TRAINING and TRAINING SUPPORT:** The processes, procedures, techniques, training devices, and equipment used to train civilian and active duty and reserve military personnel to operate and support a materiel system. This includes individual and crew training; new equipment training; initial, formal, and On-The-Job (OJT) training; and Logistics Support (LS) planning for training equipment and training device acquisitions and installations.

## APPENDIX D – REFERENCES / LINKS

<u>Term</u>	<u>Regulation Reference</u> (As Applicable)	<u>Web Location</u>
<b>2009 DoD ATS Selection Process Guide</b>		<a href="https://www.acq.osd.mil/log/MPP/ATS/.ats_selection.html/DoD_ATS_Selection_Process_Guide_-_2009.pdf">https://www.acq.osd.mil/log/MPP/ATS/.ats_selection.html/DoD_ATS_Selection_Process_Guide_-_2009.pdf</a>
<b>Abolishment of the Joint Depot Maintenance Activities Group (JDMAG) 24 March 2012</b>		<a href="https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/JDMAG%20Disestablishment%20Memo%2013%20Jun%2011.pdf&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/JDMAG%20Disestablishment%20Memo%2013%20Jun%2011.pdf&amp;action=default&amp;DefaultItemOpen=1</a>
<b>Accountability and Management of DoD Equipment and Other Accountable Property</b>	DoDI 5000.64	<a href="http://www.esd.whs.mil/Directives/issuances/dodi/">http://www.esd.whs.mil/Directives/issuances/dodi/</a>
<b>Acquisition Decision Memorandum (ADM)</b>		<a href="https://www.afacpo.com/apm/core-documents/templates/">https://www.afacpo.com/apm/core-documents/templates/</a>
<b>Acquisition Program Baseline (APB)</b>		<a href="https://static.e-publishing.af.mil/production/1/saf_aq/publication/dafpam63-128/dafpam63-128.pdf">https://static.e-publishing.af.mil/production/1/saf_aq/publication/dafpam63-128/dafpam63-128.pdf</a>
<b>Acquisition Strategy Panel (ASP) Template</b>		<a href="https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes">https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes</a> or <a href="https://www.afacpo.com/apm/core-documents/templates/">https://www.afacpo.com/apm/core-documents/templates/</a>
<b>Acquisition Strategy Template</b>		<a href="https://www.dau.edu/cop/pm/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/pm/DAU%20Sponsored%20Documents/Acquisition%20Strategy%20ADDM%20Template%20v2.4.docx&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/pm/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/pm/DAU%20Sponsored%20Documents/Acquisition%20Strategy%20ADDM%20Template%20v2.4.docx&amp;action=default&amp;DefaultItemOpen=1</a>
<b>Acquisition Streamlining and Standardization Information System Tool (ASSIST) Quick Search (Secure website requiring registration)</b>		<a href="http://quicksearch.dla.mil/">http://quicksearch.dla.mil/</a>
<b>Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination</b>	AFI 16-402	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>AF IT Portfolio Management and IT Investment Review</b>	AFI 17-110	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>AF Form 332</b>	AF Form 332	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>AFLCMC Systems Engineering Technical Review (SETR) Guide</b>		<a href="https://cs2.eis.af.mil/sites/23230/SETR/SitePages/Home.aspx">https://cs2.eis.af.mil/sites/23230/SETR/SitePages/Home.aspx</a>
<b>AF Technical Compliance Technical Order Process</b>	00-5-15	<a href="https://etims.cce.af.mil/ETIMS/index">https://etims.cce.af.mil/ETIMS/index</a>
<b>AFLCMC Process Directory (APD)</b>	AFLCMC Standard Process for SERDs	<a href="https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes">https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes</a>
<b>Integrated Life Cycle Management</b>	AFI 63-101/20-101	<a href="https://www.e-publishing.af.mil/">https://www.e-publishing.af.mil/</a>
<b>AFTOMS SharePoint</b>	TM-86-01	<a href="https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/Program%20Documents%20and%20Templates/Forms/AllItems.aspx?RootFolder=%2Fteams%2FHill%2FUSAFTOMANAGEMENT%2FProgram%20Documents%20and%20Templates%2FTemplates&amp;FolderCTID=0x0120008656D00B4962E541ACD38C1CBC7562BA">https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/Program%20Documents%20and%20Templates/Forms/AllItems.aspx?RootFolder=%2Fteams%2FHill%2FUSAFTOMANAGEMENT%2FProgram%20Documents%20and%20Templates%2FTemplates&amp;FolderCTID=0x0120008656D00B4962E541ACD38C1CBC7562BA</a>

<u>Term</u>	<u>Regulation Reference</u> <i>(As Applicable)</i>	<u>Web Location</u>
<b>AF Technical Order System Source, Maintenance, and Recoverability Coding of Air Force Weapons, Systems, and Equipment</b>	TO 00-25-195	<a href="https://etims.cce.af.mil/ETIMS/index">https://etims.cce.af.mil/ETIMS/index</a>
<b>Affordable System Operational Effectiveness</b>		<a href="https://www.dau.edu/acquipedia/pages/articledetails.aspx#!553">https://www.dau.edu/acquipedia/pages/articledetails.aspx#!553</a>
<b>AFMC Guide to the Defense Depot Maintenance Council Cost Comparability Handbook</b>		<a href="https://apps.dtic.mil/dtic/tr/fulltext/u2/a278901.pdf">https://apps.dtic.mil/dtic/tr/fulltext/u2/a278901.pdf</a>
<b>AFMC PK Mandatory Procedures 5347.05, Transportation, Packaging Instructions and Data</b>		<a href="https://login.acquisition.gov/affars/transportation#_AFMC_PGI_5347.301-1">https://login.acquisition.gov/affars/transportation#_AFMC_PGI_5347.301-1</a>
<b>Air Force Installation Energy Strategic Plan</b>		<a href="https://www.af.mil/Portals/1/documents/2021SAF/01_Jan/AF_Installation_Energy_Strategic_Plan_15JAN2021.pdf">https://www.af.mil/Portals/1/documents/2021SAF/01_Jan/AF_Installation_Energy_Strategic_Plan_15JAN2021.pdf</a>
<b>Air Force Federal Acquisition Regulation Supplement (AFFARS) 5315.305(c) (Proposal Evaluation Procedures)</b>		<a href="http://www.farsmarterbids.com/regs/fars/section.php?sectionID=72150305">http://www.farsmarterbids.com/regs/fars/section.php?sectionID=72150305</a>
<b>Air Force Federal Acquisition Regulation Supplement (AFFARS) Mandatory Procedures 5315.3 (Source Selection Responsibilities and Procedures)</b>		<a href="http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/af_afmc/affars/5315.htm">http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/af_afmc/affars/5315.htm</a>
<b>Air Force Materiel Management</b>	AFI 23-101	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afi23-101/afi23-101.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afi23-101/afi23-101.pdf</a>
<b>Air Force Materiel Management, Air Force Materiel Command Supplement</b>	AFI 23-101, AFMC Sup	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afi23-101_afmc-sup_afmcgm-2020-01/afi23-101_afmc-sup_afmcgm2020-01.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afi23-101_afmc-sup_afmcgm-2020-01/afi23-101_afmc-sup_afmcgm2020-01.pdf</a>
<b>Air Force Metrology and Calibration (AFMETCAL) Management</b>	AFI 21-113	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Air Force Packaging Technology and Engineering Facility</b>		<a href="http://www.wpafb.af.mil/units/afptef/index.asp">http://www.wpafb.af.mil/units/afptef/index.asp</a>
<b>Air Force Spares Requirements Review Board</b>	AFMAN 23-120	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afman23-120/afman23-120.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afman23-120/afman23-120.pdf</a>
<b>Air Force Standard Analysis Toolkit (AFSAT)</b>	AFI 16-1003	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Air Force Strategic Energy Strategic Plan</b>		<a href="https://www.af.mil/Portals/1/documents/2021SAF/01_Jan/AF_Installation_Energy_Strategic_Plan_15JAN2021.pdf">https://www.af.mil/Portals/1/documents/2021SAF/01_Jan/AF_Installation_Energy_Strategic_Plan_15JAN2021.pdf</a>
<b>Integrated Installation Planning</b>	AFI 32-1015	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Aircraft and Equipment Maintenance Management</b>	AFI 21-101	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Aircraft Information Program</b>	AFI 63-133 (replaced AFI 63-1401)	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Aircraft Structural Integrity Program (ASIP)</b>	MIL-STD-1530D	<a href="https://quicksearch.dla.mil/Transient/F6AD09488B1445FE8DCBF3DE1496A799.pdf">https://quicksearch.dla.mil/Transient/F6AD09488B1445FE8DCBF3DE1496A799.pdf</a>

<b><u>Term</u></b>	<b><u>Regulation Reference</u> (As Applicable)</b>	<b><u>Web Location</u></b>
<b>Aircraft Structural Integrity Program (ASIP)</b>	AFI 63-140	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Air Force Materiel Management</b>	AFI 23-101	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Airworthiness Certification Criteria</b>	MIL-HDBK 516B	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=212162">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=212162</a>
<b>Analysis of Alternative (AoA) Study Plan</b>		<a href="https://www.dau.edu/cop/pm/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/pm/DAU%20Sponsored%20Documents/AoA%20Study%20Plan%20ADDM%20Template%20v%202.0.docx&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/pm/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/pm/DAU%20Sponsored%20Documents/AoA%20Study%20Plan%20ADDM%20Template%20v%202.0.docx&amp;action=default&amp;DefaultItemOpen=1</a>
<b>Analysis of Alternatives (AoA) Handbook</b>		<a href="http://www.acqnotes.com/Attachments/Analysis%20of%20Alternative%20(AoA)%20Handbook%20July%202008.pdf">http://www.acqnotes.com/Attachments/Analysis%20of%20Alternative%20(AoA)%20Handbook%20July%202008.pdf</a>
<b>ASTM D3951</b>		<a href="http://everyspec.com/ASTM/ASTM-D3951_16692/">http://everyspec.com/ASTM/ASTM-D3951_16692/</a>
<b>Authorization and Consent - Rights in Data - General</b>	FAR 52.227-14	<a href="https://www.acquisition.gov/far/52.227-14">https://www.acquisition.gov/far/52.227-14</a>
<b>Aviation Safety Programs</b>	AFI 91-225	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Base Support And Expeditionary (BAS&amp;E) Site Planning</b>	AFI 10-404	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Basing</b>	AFPD 10-5	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Berry Amendment</b>		<a href="http://www.acq.osd.mil/dpap/cpic/ic/berry_amendment_faq.html">http://www.acq.osd.mil/dpap/cpic/ic/berry_amendment_faq.html</a>
<b>Calibration and Measurement Requirements</b>	MIL-STD-1839	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=67317">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=67317</a>
<b>Calibration Measurement Requirements Summary (CMRS)</b>	DI-QCIC 80278B	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=206453">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=206453</a>
<b>Capabilities Based Test and Evaluation</b>	AFI 99-103	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Capability Requirements Development</b>	AFI 10-601	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Capability Development Document (CDD) Review Checklist</b>	CJCSI 5123.01HI	<a href="http://acqnotes.com/wp-content/uploads/2014/09/CJCS-Instruction-3170-011-Joint-Capabilities-Integration-and-Development-System-23-Jan-15.pdf">http://acqnotes.com/wp-content/uploads/2014/09/CJCS-Instruction-3170-011-Joint-Capabilities-Integration-and-Development-System-23-Jan-15.pdf</a>
<b>Cataloging And Standardization</b>	AFMCMAN 23-3	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afmcmman23-3/afmcmman23-3.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afmcmman23-3/afmcmman23-3.pdf</a>
<b>Centralized Access For Data Exchange (CAFDEX) Registration</b>		<a href="https://cafdex.us.af.mil/CAFDEXAuthorization/Default.aspx?&amp;suite=RSEP">https://cafdex.us.af.mil/CAFDEXAuthorization/Default.aspx?&amp;suite=RSEP</a>
<b>Centralized Asset Management (CAM) Fact Sheet</b>		<a href="https://www.dau.edu/acquipedia/pages/articledetails.aspx#!429">https://www.dau.edu/acquipedia/pages/articledetails.aspx#!429</a>
<b>Certification of Systems Readiness for Dedicated Operational Test and Evaluation</b>	AFMAN 63-119	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Centralized Asset Management (CAM) Procedures</b>	AFMAN 63-143	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>IT Systems Continuous Support Life Cycle Planning</b>		<a href="https://www.dau.edu/pdfviewer?Guidebooks/Integrated-Product-Support-(IPS)-Element-Guidebook.pdf">https://www.dau.edu/pdfviewer?Guidebooks/Integrated-Product-Support-(IPS)-Element-Guidebook.pdf</a>
<b>Configuration Control Board Directive</b>	AFMC Form 518	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>



<u>Term</u>	<u>Regulation Reference</u> (As Applicable)	<u>Web Location</u>
<b>Configuration Management - Defense Acquisition Guidebook (DAG) – 4-3.1 Materiel Solution Analysis Phase</b>		<a href="https://www.dau.edu/tools/dag">https://www.dau.edu/tools/dag</a>
<b>Configuration Management – Defense Acquisition Guidebook (DAG) – 3-4.1.6 Configuration Management</b>		<a href="https://www.dau.edu/tools/dag">https://www.dau.edu/tools/dag</a>
<b>Configuration Management Guidance</b>	MIL-HDBK-61A	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=202239">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=202239</a>
<b>Container Design Retrieval System (CDRS)</b>		<a href="http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=206043">http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=206043</a>
<b>Contract Sustainment Support Guide (CSSG)</b>		<a href="https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/Contract%20Sustainment%20Support%20Guide%202013%20v7.pdf&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/Contract%20Sustainment%20Support%20Guide%202013%20v7.pdf&amp;action=default&amp;DefaultItemOpen=1</a>
<b>Contractor Supported Weapon System Data Exchange (CSWS) Data Exchange (DE)</b>		<a href="https://www.fbo.gov/index?s=opportunity&amp;mode=form&amp;id=27a48faed416c0cdbc6914f560a9e226&amp;tab=core&amp;_cview=1">https://www.fbo.gov/index?s=opportunity&amp;mode=form&amp;id=27a48faed416c0cdbc6914f560a9e226&amp;tab=core&amp;_cview=1</a>
<b>Contracts To Perform Workloads Previously Performed By Depot-Level Activities Of The Department Of Defense: Requirement Of Competition</b>	10 USC 2469	<a href="https://www.law.cornell.edu/uscode/text/10/2469">https://www.law.cornell.edu/uscode/text/10/2469</a>
<b>Core Depot-Level Maintenance And Repair Capabilities</b>	10 USC 2464	<a href="http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title10-section2464&amp;num=0&amp;edition=prelim">http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title10-section2464&amp;num=0&amp;edition=prelim</a>
<b>Cost Analysis Requirements Description (CARD)</b>		<a href="http://www.acqnotes.com/acqnote/careerfields/cost-analysis-requirements-description">http://www.acqnotes.com/acqnote/careerfields/cost-analysis-requirements-description</a>
<b>Cost as an Independent Variable (CAIV)</b>		<a href="http://acqnotes.com/acqnote/careerfields/cost-as-an-independent-variable">http://acqnotes.com/acqnote/careerfields/cost-as-an-independent-variable</a>
<b>Critical Program Information (CPI) Identification and Protection Within Research, Development, Test and Evaluation</b>	DoDD 5200.39	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520039p.pdf">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520039p.pdf</a>
<b>Cyberspace Architecting</b>	AFI 17-140	<a href="https://static.e-publishing.af.mil/production/1/saf_cio_a6/publication/afi17-140/afi17-140.pdf">https://static.e-publishing.af.mil/production/1/saf_cio_a6/publication/afi17-140/afi17-140.pdf</a>
<b>Dangerous Goods Regulations</b>		<a href="http://www.iata.org/publications/dgr/Pages/index.aspx">http://www.iata.org/publications/dgr/Pages/index.aspx</a>
<b>Data Management in Engineering</b>		<a href="https://www.dau.edu/tools/se-brainbook/Pages/Management%20Processes/Overview.aspx">https://www.dau.edu/tools/se-brainbook/Pages/Management%20Processes/Overview.aspx</a>
<b>Defense Acquisition University</b>		<a href="https://www.dau.edu/">https://www.dau.edu/</a>
<b>Defense and Program-Unique Specifications Format and Content</b>	MIL-STD-961	<a href="http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=36063">http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=36063</a>
<b>Defense Industrial Base Assessments</b>		<a href="https://www.businessdefense.gov/Industrial-Assessments/Assessments/">https://www.businessdefense.gov/Industrial-Assessments/Assessments/</a>

<b><u>Term</u></b>	<b><u>Regulation Reference</u></b> <i>(As Applicable)</i>	<b><u>Web Location</u></b>
<b>Defense Federal Acquisition Regulation Supplement (DFARS) and Procedures, Guidance, and Information (PGI) – Source Selection</b>	DFARS 215.3	<a href="http://www.acq.osd.mil/dpap/dars/dfars/html/current/215_3.htm">http://www.acq.osd.mil/dpap/dars/dfars/html/current/215_3.htm</a>
<b>Defense Logistics Agency Distribution</b>		<a href="http://www.distribution.dla.mil/">http://www.distribution.dla.mil/</a>
<b>Defense Logistics Management System</b>	DLM 4000.25	<a href="https://www.dla.mil/Portals/104/Documents/DLMS/Manuals/DLM/DLM_4000.25_DLMS_Manual_Combined.pdf">https://www.dla.mil/Portals/104/Documents/DLMS/Manuals/DLM/DLM_4000.25_DLMS_Manual_Combined.pdf</a>
<b>Defense Materiel Disposition: Disposal Guidance and Procedures</b>	DoDM 4160.21 Vol 1	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol1.pdf?ver=2019-10-02-080613-750">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol1.pdf?ver=2019-10-02-080613-750</a>
<b>Defense Materiel Disposition: Property Disposal and Reclamation</b>	DoDM 4160.21 Vol 2	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021m_vol2.PDF?ver=2019-09-30-130020-577">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021m_vol2.PDF?ver=2019-09-30-130020-577</a>
<b>Defense Materiel Disposition: Reutilization, Transfer, and Sale of Property</b>	DoDM 4160.21 Vol 3	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol3.PDF?ver=2019-09-30-130146-047">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol3.PDF?ver=2019-09-30-130146-047</a>
<b>Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel</b>	DoDM 4160.21 Vol 4	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol4.PDF?ver=2019-09-30-130144-453">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416021_vol4.PDF?ver=2019-09-30-130144-453</a>
<b>Defense Logistics Agency (DLA) Aviation</b>		<a href="http://www.dla.mil/Aviation/">http://www.dla.mil/Aviation/</a>
<b>Defense Transportation Regulation (DTR)</b>	DoD 4500.9-R	<a href="https://www.ustranscom.mil/dtr/dtrp1.cfm">https://www.ustranscom.mil/dtr/dtrp1.cfm</a>
<b>Demilitarization and Disposal - Defense Acquisition Guidebook (DAG) – Chap 3 Systems Engineering</b>		<a href="https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-3-Systems-Engineering.pdf">https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-3-Systems-Engineering.pdf</a>
<b>Depot Source of Repair (DSOR) Planning and Activation</b>	AFMCI 21-101	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Depot Source of Repair Planning and Activation</b>	AFMAN 63-122	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Depot Source of Repair (DSOR) Determination Process</b>	DoDI 4151.24	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/415124p.pdf?ver=2019-05-28-074638-903">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/415124p.pdf?ver=2019-05-28-074638-903</a>
<b>Depot Source of Repair (DSOR-II) Automated Management System (AMS)</b>		<a href="https://usaf.deps.mil/sites/DSOR/AMS/SitePages/Home.aspx">https://usaf.deps.mil/sites/DSOR/AMS/SitePages/Home.aspx</a>
<b>Depot Maintenance Management</b>	AFI 21-102	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint</b>		<a href="https://www.dau.edu/cop/pbl/DAU%20Sponsored%20Documents/FINAL%20GUIDE%20with%20Memo%20October%202024.pdf">https://www.dau.edu/cop/pbl/DAU%20Sponsored%20Documents/FINAL%20GUIDE%20with%20Memo%20October%202024.pdf</a>
<b>Designing and Constructing Military Construction Projects</b>	AFI 32-1023	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Designing and Developing Maintainable Products and Systems, Volume I</b>	MIL-HDBK-470A	<a href="http://everyspec.com/MIL-HDBK/MIL-HDBK-0300-0499/MIL_HDBK_470A_29/">http://everyspec.com/MIL-HDBK/MIL-HDBK-0300-0499/MIL_HDBK_470A_29/</a>
<b>Designing for Internal Aerial Delivery in Fixed Wing Aircraft</b>	MIL-STD-1791 Replaces MIL-HDBK-1791	<a href="http://everyspec.com/MIL-STD/MIL-STD-1700-1799/MIL-STD-1791A_52123/">http://everyspec.com/MIL-STD/MIL-STD-1700-1799/MIL-STD-1791A_52123/</a>

<b><u>Term</u></b>	<b><u>Regulation Reference</u> (As Applicable)</b>	<b><u>Web Location</u></b>
<b>Development of Major Defense Acquisition Programs: Sustainment of System to be Replaced</b>	10 USC 2437	<a href="https://www.law.cornell.edu/uscode/text/10/2437">https://www.law.cornell.edu/uscode/text/10/2437</a>
<b>Diminishing Manufacturing Sources and Material Shortages (DMSMS)</b>	SD-22	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=275490">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=275490</a>
<b>Diminishing Manufacturing Sources and Material Shortages (DMSMS) – Contracting Language</b>	SD-26	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=283456">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=283456</a>
<b>Diminishing Manufacturing Sources and Material Shortages (DMSMS)</b>	AFMCI 20-105	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afmci20-105/afmci20-105.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afmci20-105/afmci20-105.pdf</a>
<b>Disposal of Real Property</b>	AFI 32-9004	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>DoD ATS Executive Directorate Home Page</b>		<a href="https://www.acq.osd.mil/log/mpp/ats.html">https://www.acq.osd.mil/log/mpp/ats.html</a>
<b>DoD Conditioned Based Maintenance Plus (CBM+) for Materiel Maintenance</b>	DoDI 4151.22	<a href="http://www.acqnotes.com/Attachments/DoD%20Instruction%204151.22%20CMB+%20for%20Materiel%20Maintenance%202%20Dec%2007.pdf">http://www.acqnotes.com/Attachments/DoD%20Instruction%204151.22%20CMB+%20for%20Materiel%20Maintenance%202%20Dec%2007.pdf</a>
<b>DoD Conditioned Based Maintenance Plus (CBM+) Guidebook</b>		<a href="https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/ARMY%20Partnering%20Textbook%20SB%2021%20SEP%2004.doc&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/ARMY%20Partnering%20Textbook%20SB%2021%20SEP%2004.doc&amp;action=default&amp;DefaultItemOpen=1</a>
<b>DoD Demil Web Page</b>		<a href="http://www.dla.mil/DispositionServices/Offers/Disposal/DEMIL.aspx">http://www.dla.mil/DispositionServices/Offers/Disposal/DEMIL.aspx</a>
<b>DoD Demilitarization (DEMIL) and Trade Security Controls Programs</b>		<a href="https://demil.osd.mil/">https://demil.osd.mil/</a>
<b>DoD Demilitarization (DEMIL) Program</b>	DoDI 4160.28	<a href="https://demil.osd.mil/">https://demil.osd.mil/</a>
<b>DoD Demilitarization (DEMIL): Demilitarization Coding</b>	DoDM 4160.28 VOL 2	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028v2.PDF?ver=2019-08-09-091048-130">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028v2.PDF?ver=2019-08-09-091048-130</a>
<b>DoD Demilitarization (DEMIL): Procedural Guidance</b>	DoDM 4160.28 VOL 3	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028m_vol3.pdf?ver=2018-12-03-091004-467">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028m_vol3.pdf?ver=2018-12-03-091004-467</a>
<b>DoD Demilitarization (DEMIL): Program Administration</b>	DoDM 4160.28 VOL 1	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028m_vol1.pdf?ver=2019-07-17-083913-820">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/416028m_vol1.pdf?ver=2019-07-17-083913-820</a>
<b>DoD Education and Training Opportunities HSI</b>		<a href="https://www.dau.edu/tools/se-brainbook/Pages/Design%20Considerations/Human-Systems-Integration.aspx">https://www.dau.edu/tools/se-brainbook/Pages/Design%20Considerations/Human-Systems-Integration.aspx</a>
<b>DoD Environment, Safety &amp; Occupational Health Network &amp; Information Exchange (DENIX)</b>		<a href="http://www.denix.osd.mil/">http://www.denix.osd.mil/</a>
<b>DoD Environmental, Safety, &amp; Occupational Health (ESOH) in Acquisition Planning</b>		<a href="http://www.denix.osd.mil/esohacq/home/">http://www.denix.osd.mil/esohacq/home/</a>
<b>DoD Environmental, Safety, &amp; Occupational Health (ESOH) in Acquisition - Integrating into Systems Engineering</b>		<a href="http://www.denix.osd.mil/esohacq/home/">http://www.denix.osd.mil/esohacq/home/</a>
<b>DoD Guide for Achieving Reliability, Availability, and Maintainability (RAM)</b>		<a href="http://www.acqnotes.com/Attachments/DoD%20Reliability%20Availability%20and%20Maintainability%20(RAM)%20Guide.pdf">http://www.acqnotes.com/Attachments/DoD%20Reliability%20Availability%20and%20Maintainability%20(RAM)%20Guide.pdf</a>
<b>DoD Handbook for Preparation of Statement of Work (SOW)</b>	MIL-HDBK-245D	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=53962">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=53962</a>

<u>Term</u>	<u>Regulation Reference</u> <i>(As Applicable)</i>	<u>Web Location</u>
<b>DoD Handbook Product Support Analysis</b>	MIL-HDBK-502A Supersedes MIL-HDBK-502	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=201462">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=201462</a>
<b>DoD Integrated Materiel Management (IMM) for Consumable Items: Item Management Coding (IMC) Criteria</b>	DoDM 4140.26, Volume 2	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414026_vol02.PDF?ver=2020-03-06-100526-033">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414026_vol02.PDF?ver=2020-03-06-100526-033</a>
<b>DoD Integrated Materiel Management (IMM) for Consumable Items: Logistics Reassignment (LR)</b>	DoDM 4140.26, Volume 4	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414026m_vol4.pdf?ver=2018-11-30-093627-840">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414026m_vol4.pdf?ver=2018-11-30-093627-840</a>
<b>DoD Integrated Product Support (IPS) Element Guidebook</b>		<a href="https://www.dau.edu/tools/t/Integrated-Product-Support-(IPS)-Element-Guidebook-">https://www.dau.edu/tools/t/Integrated-Product-Support-(IPS)-Element-Guidebook-</a>
<b>DoD Integrated Product Support (IPS) Life Cycle Roadmap</b>		<a href="http://www.acqnotes.com/Attachments/DoD%20Integrated%20Product%20Support%20Implementation%20Roadmap.pdf">http://www.acqnotes.com/Attachments/DoD%20Integrated%20Product%20Support%20Implementation%20Roadmap.pdf</a>
<b>DoD Logistics Assessment (LA) Guidebook</b>	July 2011	<a href="https://www.acq.osd.mil/log/MR/_mr_library.html/Logistics_Assessment_Guidebook_July2011.pdf">https://www.acq.osd.mil/log/MR/_mr_library.html/Logistics_Assessment_Guidebook_July2011.pdf</a>
<b>DoD Acquisition Modeling and Simulation Master Plan</b>		<a href="http://www.acqnotes.com/acqnote/tasks/modeling-simulation-overview">http://www.acqnotes.com/acqnote/tasks/modeling-simulation-overview</a> <a href="http://www.acqnotes.com/Attachments/Acquisition%20Modeling%20and%20Simulation%20Master%20Plan,%20April%2017,%202006.pdf">http://www.acqnotes.com/Attachments/Acquisition%20Modeling%20and%20Simulation%20Master%20Plan,%20April%2017,%202006.pdf</a>
<b>DoD Operating and Support Cost Estimating Guide (dated Feb 2016)</b>		<a href="https://www.dau.edu/guidebooks/Shared%20Documents/OS%20Cost%20Guide.pdf">https://www.dau.edu/guidebooks/Shared%20Documents/OS%20Cost%20Guide.pdf</a>
<b>DoD Product Support Business Case Analysis (BCA) Guidebook</b>		<a href="https://usaf.dps.mil:/w:/r/sites/41289/Pages/_layouts/15/Doc.aspx?sourcedoc=%7B67702139-209A-47DB-BEBE-447107A99FAA%7D&amp;file=AFLCMC%20PS-BCA%20Standard%20Process%20v1.8.docx&amp;action=default&amp;mobileredirect=true&amp;cid=3d7c859c-5867-4e17-ba00-c2aa6d2903f4">https://usaf.dps.mil:/w:/r/sites/41289/Pages/_layouts/15/Doc.aspx?sourcedoc=%7B67702139-209A-47DB-BEBE-447107A99FAA%7D&amp;file=AFLCMC%20PS-BCA%20Standard%20Process%20v1.8.docx&amp;action=default&amp;mobileredirect=true&amp;cid=3d7c859c-5867-4e17-ba00-c2aa6d2903f4</a>
<b>DoD Product Support Manager (PSM) Guidebook</b>		<a href="https://www.dau.edu/tools/t/Product-Support-Manager-(PSM)-Guidebook">https://www.dau.edu/tools/t/Product-Support-Manager-(PSM)-Guidebook</a> <a href="http://www.acqnotes.com/acqnote/careerfields/product-support-manager">http://www.acqnotes.com/acqnote/careerfields/product-support-manager</a>
<b>DoD Reliability, Availability, Maintainability and Cost Rationale Report (RAM-C) Manual</b>	DoD-RAM-C-Manual 2009-06-01	<a href="https://www.dau.edu/tools/Lists/DAUTools/Attachments/133/DoD-RAM-C-Manual.pdf">https://www.dau.edu/tools/Lists/DAUTools/Attachments/133/DoD-RAM-C-Manual.pdf</a>
<b>DoD Standard Practice Data Item Deliverables (DIDS)</b>	MIL-STD-963C	<a href="http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=202450">http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=202450</a> <a href="http://quicksearch.dla.mil/Transient/734E602930A7473BB195927681E1955B.pdf">http://quicksearch.dla.mil/Transient/734E602930A7473BB195927681E1955B.pdf</a>
<b>DoD Standard Practice System Safety</b>	MIL-STD-882E	<a href="https://quicksearch.dla.mil/qsSearch.aspx">https://quicksearch.dla.mil/qsSearch.aspx</a>
<b>DoD Standard Practice Technical Data Packages</b>	MIL-STD-31000	<a href="http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=276980">http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=276980</a>
<b>DoD Supply Chain Materiel Management Policy</b>	DoDI 4140.01	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/414001p.pdf?ver=2019-03-06-083517-007">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/414001p.pdf?ver=2019-03-06-083517-007</a>

<u>Term</u>	<u>Regulation Reference</u> <i>(As Applicable)</i>	<u>Web Location</u>
<b>DoD Supply Chain Materiel Management Procedures: Operational Requirements</b>	DoDM 4140.01, Volume 1	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol01.pdf?ver=2018-10-17-080029-167">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol01.pdf?ver=2018-10-17-080029-167</a>
<b>DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning</b>	DoDM 4140.01, Volume 2	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol02.pdf?ver=G5hlMU14vEkNrNGbf7stjw%3d%3d">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol02.pdf?ver=G5hlMU14vEkNrNGbf7stjw%3d%3d</a>
<b>DoD Supply Chain Materiel Management Procedures: Materiel Sourcing</b>	DoDM 4140.01, Volume 3	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol03.pdf?ver=2019-10-09-102545-007">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol03.pdf?ver=2019-10-09-102545-007</a>
<b>DoD Supply Chain Materiel Management Procedures: Delivery of Materiel</b>	DoDM 4140.01, Volume 5	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol05.pdf?ver=2018-09-17-125611-903">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol05.pdf?ver=2018-09-17-125611-903</a>
<b>DoD Supply Chain Materiel Management Procedures: Materiel Returns, Retention, and Disposition</b>	DoDM 4140.01, Volume 6	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol6.pdf?ver=XhxS9PL3WMT_sUO7zuoCjg%3d%3d">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol6.pdf?ver=XhxS9PL3WMT_sUO7zuoCjg%3d%3d</a>
<b>DoD Supply Chain Materiel Management Procedures: Supporting Technologies</b>	DoDM 4140.01, Volume 7	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol07.pdf?ver=Pgw9Hwlt8xm63eT6x7R0gg%3d%3d">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol07.pdf?ver=Pgw9Hwlt8xm63eT6x7R0gg%3d%3d</a>
<b>DoD Supply Chain Materiel Management Procedures: Materiel Data Management and Exchange</b>	DoDM 4140.01, Volume 8	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol08.pdf?ver=2019-10-21-094350-087">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol08.pdf?ver=2019-10-21-094350-087</a>
<b>DoD Supply Chain Materiel Management Procedures: Materiel Programs</b>	DoDM 4140.01, Volume 9	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol09.pdf?ver=zeTVy8SrQMxdHQQsthn_Ww%3d%3d">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/414001m/414001m_vol09.pdf?ver=zeTVy8SrQMxdHQQsthn_Ww%3d%3d</a>
<b>DoD Supply Chain Materiel Management Procedures: Supply Chain Inventory Reporting and Metrics</b>	DoDM 4140.01, Volume 10	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414001m_vol10.pdf?ver=2019-04-15-084051-667">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414001m_vol10.pdf?ver=2019-04-15-084051-667</a>
<b>DoD Supply Chain Materiel Management Procedures: Inventory Accountability and Special Management and Handling</b>	DoDM 4140.01, Volume 11	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414001m_vol10.pdf?ver=2019-04-15-084051-667">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414001m_vol10.pdf?ver=2019-04-15-084051-667</a>
<b>DoD Technology Readiness Assessment (TRA) Guidance</b>		<a href="https://apps.dtic.mil/dtic/tr/fulltext/u2/a554900.pdf">https://apps.dtic.mil/dtic/tr/fulltext/u2/a554900.pdf</a>
<b>DoD Template for Application of Total Life Cycle Systems Management (TLCSM) and Performance Based Logistics (PBL) In the Weapon System Life Cycle</b>		<a href="http://www.acqnotes.com/acqnote/careerfields/total-life-cycle-systems-management-tlcsm">http://www.acqnotes.com/acqnote/careerfields/total-life-cycle-systems-management-tlcsm</a> <a href="https://www.google.com/search?source=hp&amp;ei=9b2eWruIJKG1ggeS-pqQDw&amp;q=DoD+Template+for+Application+of+total+Life+Cycle&amp;oq=DoD+Template+for+Application+of+total+Life+Cycle&amp;gs_l=psy-ab.3...2204.42944.0.44124.48.48.0.0.0.129.4250.42j6.48.0...0...1.1.64.psy-ab..0.41.3664...0j0i131k1j0i22i30k1j33i22i29i30k1j33i160k1j33i21k1.0.heV5fsKmj04">https://www.google.com/search?source=hp&amp;ei=9b2eWruIJKG1ggeS-pqQDw&amp;q=DoD+Template+for+Application+of+total+Life+Cycle&amp;oq=DoD+Template+for+Application+of+total+Life+Cycle&amp;gs_l=psy-ab.3...2204.42944.0.44124.48.48.0.0.0.129.4250.42j6.48.0...0...1.1.64.psy-ab..0.41.3664...0j0i131k1j0i22i30k1j33i22i29i30k1j33i160k1j33i21k1.0.heV5fsKmj04</a>
<b>DoDD Modeling and Simulation Management</b>	DoDD 5000.59	<a href="http://www.esd.whs.mil/Directives/issuances/dodd/">http://www.esd.whs.mil/Directives/issuances/dodd/</a>
<b>Early Systems Engineering Guidebook</b>		<a href="https://www.dau.edu/cop/pm/DAU_Sponsored_Documents/USAF_Guidebook_Early_Systems_Engineering_Guide_31_Mar_2009.pdf">https://www.dau.edu/cop/pm/DAU_Sponsored_Documents/USAF_Guidebook_Early_Systems_Engineering_Guide_31_Mar_2009.pdf</a>



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<b>Electronic Code of Federal Regulations</b>	Titles 29, 40, 49	<a href="https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true">https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true</a>
<b>Electronic Code of Federal Regulations - Source Selection</b>	Part 3415.3	<a href="https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true">https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true</a>
<b>Electronic Code of Federal Regulation-Subpart 3415.3 Source Selection</b>		<a href="https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true">https://www.gpo.gov/fdsys/search/pagedetails.action?packageName=CFR-2009-title7-vol15&amp;granuleId=CFR-2009-title7-vol15-sec3415-3&amp;collectionCode=CFR&amp;browsePath=Title+7%2FSubtitle+B%2FChapter+Xxxiv%2FPart+3415%2FSubpart+A%2FSection+3415.3&amp;collapse=true&amp;fromBrowse=true&amp;bread=true</a>
<b>Enhanced Technical Information Management System (ETIMS)</b>		<a href="https://www.my.af.mil/etims/ETIMS/index.jsp">https://www.my.af.mil/etims/ETIMS/index.jsp</a>
<b>Ensuring Safety Regarding Insensitive Munitions</b>	10 USC 2389 Subtitle A Part IV Chapter 141	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2010-title10/USCODE-2010-title10-subtitleA-partIV-chap141-sec2389">https://www.gpo.gov/fdsys/granule/USCODE-2010-title10/USCODE-2010-title10-subtitleA-partIV-chap141-sec2389</a>
Environment Compliance and Pollution Prevention	AFMAN 32-7002	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afman32-7002/afman32-7002.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afman32-7002/afman32-7002.pdf</a>
<b>Environment, Safety, and Occupational Health</b>	DoDD 4715.1E	<a href="http://www.esd.whs.mil/Directives/issuances/dodd/">http://www.esd.whs.mil/Directives/issuances/dodd/</a>
<b>Environmental Compliance and Pollution Prevention</b>	AFMAN 32-7002	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afman32-7002/afman32-7002.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afman32-7002/afman32-7002.pdf</a>
<b>Environmental Protection</b>	32 CFR 989.3	<a href="https://www.gpo.gov/fdsys/granule/CFR-2010-title32-vol6/CFR-2010-title32-vol6-sec989-3">https://www.gpo.gov/fdsys/granule/CFR-2010-title32-vol6/CFR-2010-title32-vol6-sec989-3</a>
<b>Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support</b>	DoDI 7041.04	<a href="http://www.asamra.army.mil/scra/documents/DoDI%207041.04%20Estimating%20and%20Comparing%20the%20Full%20Costs%20of%20Civilian%20and%20Active%20Duty%20Military%20Manpower%20and%20Contract%20Support%20(3%20July%202013).pdf">http://www.asamra.army.mil/scra/documents/DoDI%207041.04%20Estimating%20and%20Comparing%20the%20Full%20Costs%20of%20Civilian%20and%20Active%20Duty%20Military%20Manpower%20and%20Contract%20Support%20(3%20July%202013).pdf</a>
<b>Exchange, Sale, or Temporary Custody of Non-excess Personal Property</b>	AFI 23-119	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Explosive Ordnance Disposal (EOD) Program</b>	AFMAN 32-3001	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Explosives Safety Standards</b>	AFMAN 91-201	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>

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<b>FAR &amp; DFAR clauses for Data Rights</b>  <b>Subpart 27.4—Rights in Data and Copyrights</b>  <b>DFARS 252.227</b>  <b>Subpart 227.71 – Rights in Technical Data</b>		<a href="https://www.acquisition.gov/browse/index/far">https://www.acquisition.gov/browse/index/far</a>  <a href="http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html">http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html</a>  <a href="http://www.acq.osd.mil/dpap/dars/dfarspgi/current/">http://www.acq.osd.mil/dpap/dars/dfarspgi/current/</a>
<b>Federal Logistics Information System (FLIS) Technical Procedures</b>		<a href="https://www.dla.mil/HQ/LogisticsOperations/TrainingandReference/FLISProcedures.aspx">https://www.dla.mil/HQ/LogisticsOperations/TrainingandReference/FLISProcedures.aspx</a>
<b>FEDLOG Information Center</b>		<a href="http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/FEDLOG.aspx">http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/FEDLOG.aspx</a>
<b>Fuels Logistics Planning</b>	AFPAM 23-221	<a href="https://static.e-publishing.af.mil/production/1/af_a4_7/publication/afpam23-221/afpam23-221.pdf">https://static.e-publishing.af.mil/production/1/af_a4_7/publication/afpam23-221/afpam23-221.pdf</a>
<b>Fuels Management</b>	AFI 23-201	<a href="https://static.e-publishing.af.mil/production/1/af_a4_7/publication/afi23-201/afi23-201.pdf">https://static.e-publishing.af.mil/production/1/af_a4_7/publication/afi23-201/afi23-201.pdf</a>
<b>FY Military Construction Project Data</b>	DD Form 1391	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/forms/dd/dd1391.pdf">https://www.esd.whs.mil/Portals/54/Documents/DD/forms/dd/dd1391.pdf</a>
<b>General Information, Regulations and Definitions</b>	49 CFR Part 171	<a href="https://www.law.cornell.edu/cfr/text/49/part-171">https://www.law.cornell.edu/cfr/text/49/part-171</a>
<b>Geospatial Intelligence (GEOINT)</b>	AFI 14-132	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Government Industry Data Exchange Program (GIDEP)</b>		<a href="https://www.dsp.dla.mil/Programs/GIDEP/">https://www.dsp.dla.mil/Programs/GIDEP/</a>
<b>Hazard Assessment Tests For Non-Nuclear Munitions</b>	MIL-STD-2105D	<a href="http://everyspec.com/MIL-STD/MIL-STD-2000-2999/MIL-STD-2105D_34120/">http://everyspec.com/MIL-STD/MIL-STD-2000-2999/MIL-STD-2105D_34120/</a>
<b>Hazardous Material Management Program Report</b>	DI-MISC-81397B	<a href="http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-MISC/DI-MISC-81397B_42658/">http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-MISC/DI-MISC-81397B_42658/</a>
<b>Hazardous Materials Management Program (HMMP) Plan</b>	DI-MGMT-81398B	<a href="http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-MGMT/DI-MGMT-81398B_42660/">http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-MGMT/DI-MGMT-81398B_42660/</a>
<b>Human Engineering Program Process &amp; Procedures</b>	MIL-HDBK-46855A	<a href="http://everyspec.com/MIL-HDBK/MIL-HDBK-9000-and-Up/MIL-HDBK-46855A_24734/">http://everyspec.com/MIL-HDBK/MIL-HDBK-9000-and-Up/MIL-HDBK-46855A_24734/</a>
<b>Human Systems Integration (HSI) Guide for Contracts</b>		<a href="http://www.acqnotes.com/acqnote/references/dod-guides">http://www.acqnotes.com/acqnote/references/dod-guides</a>
<b>Human Systems Integration (HSI) Handbook</b>		<a href="http://www.acqnotes.com/acqnote/references/dod-guides">http://www.acqnotes.com/acqnote/references/dod-guides</a>
<b>Human Systems Integration (HSI) Requirements Pocket Guide</b>		<a href="https://ww3.safaq.hq.af.mil/Portals/63/documents/organizations/ADA517632%20(5).pdf?ver=RH05EEco8OoRS93kk1zVYw%3d%3d">https://ww3.safaq.hq.af.mil/Portals/63/documents/organizations/ADA517632%20(5).pdf?ver=RH05EEco8OoRS93kk1zVYw%3d%3d</a>
<b>Human Systems Integration (HSI) Acquisition Phase Guide</b>		<a href="http://ww3.safaq.hq.af.mil/Portals/63/documents/organizations/ADA519018%20(1).pdf?ver=2016-07-28-120826-660">http://ww3.safaq.hq.af.mil/Portals/63/documents/organizations/ADA519018%20(1).pdf?ver=2016-07-28-120826-660</a>
<b>HQ AFMC Packaging and Materials Handling Policies and Procedures</b>	AFMCI 24-201	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Implementing Open Systems Architecture</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Computer-Resources-Support.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Computer-Resources-Support.aspx</a>



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<b>Implementing Operational Safety Suitability and Effectiveness (OSS&amp;E) and Life Cycle Systems Engineering (LCSE)</b>	AFMCI 63-1201	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Independent Cost Estimates; Operational Manpower Requirements</b>	10 USC 2434	<a href="http://codes.findlaw.com/us/title-10-armed-forces/10-usc-sect-2434.html">http://codes.findlaw.com/us/title-10-armed-forces/10-usc-sect-2434.html</a>
<b>Information Support Plan (ISP) Summary</b>		<a href="http://www.acqnotes.com/acqnote/acquisitions/information-support-plan">http://www.acqnotes.com/acqnote/acquisitions/information-support-plan</a>
<b>Initial Capabilities Document</b>	Ref JCIDS	<a href="http://acqnotes.com/acqnote/acquisitions/initial-capabilities-document-icd">http://acqnotes.com/acqnote/acquisitions/initial-capabilities-document-icd</a>
<b>Initial Capabilities Document (ICD) Writer's Guide / Review Checklist</b>		<a href="http://www.acqnotes.com/Attachments/Initial%20Capabilities%20Document%20(ICD)%20Writers%20Guide.pdf">http://www.acqnotes.com/Attachments/Initial%20Capabilities%20Document%20(ICD)%20Writers%20Guide.pdf</a>
<b>Intelligence Mission Qualification and Readiness</b>	AFI 14-1020	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Integrated Defense Acquisition Technology and Logistics Life Cycle Management Framework Chart (aka "Wall Chart")</b>		<a href="https://www.dau.edu/cop/it/DAU_Sponsored_Documents/AGILE_ASSESSMENT_GUIDE.pdf">https://www.dau.edu/cop/it/DAU_Sponsored_Documents/AGILE_ASSESSMENT_GUIDE.pdf</a>
<b>Integrated Life Cycle Management</b>	AFPD 63-1/20-1	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Integrated Life Cycle Management</b>	AFI 63-101/20-101	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Integrated Life Cycle Management</b>	DAFPAM 63-128	<a href="https://static.e-publishing.af.mil/production/1/saf_aq/publication/dafpam63-128/dafpam63-128.pdf">https://static.e-publishing.af.mil/production/1/saf_aq/publication/dafpam63-128/dafpam63-128.pdf</a>
<b>Integrated Master Plan and Schedule Guide</b>		<a href="https://www.acqnotes.com/Attachments/DoD%20Integrated%20Master%20Plan%20and%20Integrated%20Master%20Schedule%20Preparation%20and%20User%20Guide.pdf">https://www.acqnotes.com/Attachments/DoD%20Integrated%20Master%20Plan%20and%20Integrated%20Master%20Schedule%20Preparation%20and%20User%20Guide.pdf</a>
<b>Integrated Materiel Management of Non-consumable Items</b>	DoDM 4140.68	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414068m.pdf?ver=2020-03-05-150922-867">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/414068m.pdf?ver=2020-03-05-150922-867</a>
<b>Integrated Product Support (IPS) Element Guidebook-Support Equipment</b>		<a href="https://www.dau.edu/pdfviewer?Guidebooks/Integrated-Product-Support-(IPS)-Element-Guidebook.pdf">https://www.dau.edu/pdfviewer?Guidebooks/Integrated-Product-Support-(IPS)-Element-Guidebook.pdf</a>
<b>Intelligence Analysis and Targeting Tradecraft/Data Standards</b>	DAFMAN 14-401	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Interoperability</b>		<a href="http://www.acqnotes.com/acqnote/acquisitions/interoperability">http://www.acqnotes.com/acqnote/acquisitions/interoperability</a>
<b>Implementing Open Systems Architecture</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Computer-Resources-Support.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Computer-Resources-Support.aspx</a>
<b>Interoperability and Modular Open Systems Approach (MOSA).</b>		<a href="http://www.acqnotes.com/acqnote/careerfields/modular-open-systems-approach">http://www.acqnotes.com/acqnote/careerfields/modular-open-systems-approach</a>
<b>Item Unique Identification (IUID) Standards for Tangible Personal Property</b>	DoDI 8320.04	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/832004p.pdf?ver=2019-08-27-131820-793">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/832004p.pdf?ver=2019-08-27-131820-793</a>
<b>Joint ATS MOA (July 2004)</b>		<a href="https://www.acq.osd.mil/log/mpp/ATS/.ats_library.html/5_2004_Joint_ATS_MOA.pdf">https://www.acq.osd.mil/log/mpp/ATS/.ats_library.html/5_2004_Joint_ATS_MOA.pdf</a>
<b>Joint Capabilities Integration and Development System (JCIDS)</b>	CJCSI 5123.01HH	<a href="http://acqnotes.com/acqnote/acquisitions/cjcsi-3170">http://acqnotes.com/acqnote/acquisitions/cjcsi-3170</a>

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<b>Joint Lessons Learned Information System (JLLIS) (Secure web site requiring registration)</b>		<a href="http://www.logtool.com/Toolbox/ArticleId/176/dla-joint-lessons-learned-info-system-jllis">http://www.logtool.com/Toolbox/ArticleId/176/dla-joint-lessons-learned-info-system-jllis</a>
<b>Joint Logistics Commanders (JLC) Form 44 – Depot Maintenance Planning Information</b>		<a href="https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf">https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf</a>
<b>Joint Logistics Commanders (JLC) Form 27 – DMI Candidate Information</b>		<a href="https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf">https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf</a>
<b>Joint Logistics Commanders (JLC) Form 28 – Depot Repairable Item List</b>		<a href="https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf">https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/821003/FID577/pubs/af/21/afi21-133(i)/afi21-133(i).pdf</a>
<b>Joint Military Intelligence Requirements Certification</b>	CJCSI 3312.01B CJCSI 3312.01A is CANX	<a href="https://standards.globalspec.com/std/1402083/cjcsi-3312-01b">https://standards.globalspec.com/std/1402083/cjcsi-3312-01b</a>
<b>Joint Operations Concepts Development Process (JOpsC-DP)</b>	CJCSI 3010.02B	<a href="http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=2E04E109CB924DDEF6FA6E04BFEA457D?doi=10.1.1.29.5.4633&amp;rep=rep1&amp;type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=2E04E109CB924DDEF6FA6E04BFEA457D?doi=10.1.1.29.5.4633&amp;rep=rep1&amp;type=pdf</a>
<b>Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes</b>	AFMAN 21-106	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afman21-106/afman21-106.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afman21-106/afman21-106.pdf</a>
<b>Letter of Offer and Acceptance (LOA) Sample</b>		<a href="https://www.samm.dsca.mil/figure/figure-c5f3">https://www.samm.dsca.mil/figure/figure-c5f3</a>
<b>Life Cycle Assessments</b>		<a href="https://www.e-education.psu.edu/eme807/node/690">https://www.e-education.psu.edu/eme807/node/690</a>
<b>Life Cycle Cost (LCC)</b>		<a href="http://www.acqnotes.com/acqnote/tasks/life-cycle-cost-estimatecost-estimate">http://www.acqnotes.com/acqnote/tasks/life-cycle-cost-estimatecost-estimate</a>
<b>Life Cycle Cost Estimate (LCCE)</b>		<a href="http://www.acqnotes.com/acqnote/tasks/life-cycle-cost-estimatecost-estimate">http://www.acqnotes.com/acqnote/tasks/life-cycle-cost-estimatecost-estimate</a>
<b>Life Cycle Sustainment Plan (LCSP)</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/LCSP.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/LCSP.aspx</a>
<b>Limitations On The Performance Of Depot-Level Maintenance Of Materiel</b>	10 USC 2466	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap146-sec2466/content-detail.html">https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap146-sec2466/content-detail.html</a>
<b>Logistics Assessment (LA) Guidebook (DoD)</b>		<a href="https://www.acq.osd.mil/log/MR/.mr_library.html/Logistics_Assessment_Guidebook_July2011.pdf">https://www.acq.osd.mil/log/MR/.mr_library.html/Logistics_Assessment_Guidebook_July2011.pdf</a>
<b>Logistics Footprint Minimization - Defense Acquisition Guidebook (DAG) 4.3.2.1.1 – Sustainment Strategy</b>		<a href="https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-4-Life-Cycle-Sustainment.pdf">https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-4-Life-Cycle-Sustainment.pdf</a>
<b>Logistics Product Data</b>	SAE GEIA-STD-0007	<a href="https://www.sae.org/standards/content/geiastd0007b/">https://www.sae.org/standards/content/geiastd0007b/</a>
<b>Logistics Reassignment of Supply Chain Management to AFSC</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Support.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Support.aspx</a>
<b>Logistics Requirements Determination Process (LRDP) Guide</b>	TO 00-25-4	<a href="http://www.tinker.af.mil/Portals/106/Documents/Technical%20Orders/AFD-082216-00-25-4.pdf">http://www.tinker.af.mil/Portals/106/Documents/Technical%20Orders/AFD-082216-00-25-4.pdf</a>

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<b>Maintaining Air Force DoD Activity Address Codes (DoDAAC)</b>	AFMAN 23-230	<a href="https://static.e-publishing.af.mil/production/1/af_a4/publication/afman23-230/afman23-230.pdf">https://static.e-publishing.af.mil/production/1/af_a4/publication/afman23-230/afman23-230.pdf</a>
<b>Maintenance Data Collection Codes and Calibration Measurement Summaries</b>	TO 33K1-100 or AFI 21-113	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a> See your TODO to order TO 33K1-100
<b>Maintenance of Military Materiel</b>	DoDD 4151.18	<a href="http://www.esd.whs.mil/Directives/issuances/dodd/">http://www.esd.whs.mil/Directives/issuances/dodd/</a>
<b>Maintenance Planning and Execution System</b>	AFMCMAN 20-102	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Major Capability Acquisition</b>	DoDI 5000.85	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500085p.pdf?ver=2020-08-06-151441-153">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500085p.pdf?ver=2020-08-06-151441-153</a>
<b>Major Defense Acquisition Programs: certification required before Milestone A A1 approval</b>	10 USC 2366A	<a href="http://www.acqnotes.com/acqnote/acquisitions/2366ab-certification-memorandum">http://www.acqnotes.com/acqnote/acquisitions/2366ab-certification-memorandum</a>
<b>Major Systems And Munitions Programs: Survivability Testing And Lethality Testing Required Before Full Scale Production</b>	10 USC 2366	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap139-sec2366">https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap139-sec2366</a>
<b>Manuals, Technical – Time Compliance Technical Orders (TCTO and TCTO Supplements)</b>	MIL-DTL-38804	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=22465">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=22465</a>
<b>Management of Air Force Training Systems</b>	AFI 36-2251	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Management Of Manpower Requirements And Authorizations</b>	AFI 38-201	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Management of Science and Technology</b>	AFI 61-101	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Manpower Estimate Report (MER)</b>		<a href="http://www.acqnotes.com/acqnote/careerfields/manpower-estimates">http://www.acqnotes.com/acqnote/careerfields/manpower-estimates</a>
<b>Market Research</b>		<a href="http://acqnotes.com/acqnote/acquisitions/market-research">http://acqnotes.com/acqnote/acquisitions/market-research</a>
<b>Materiel Management</b>	AFPD 23-1	<a href="https://static.e-publishing.af.mil/production/1/saf_aq/publication/afpd23-1/afpd23-1.pdf">https://static.e-publishing.af.mil/production/1/saf_aq/publication/afpd23-1/afpd23-1.pdf</a>
<b>Mechanical Equipment and Subsystems Integrity Program (MECSIP)</b>	MIL-HDBK-1798 superseded MIL-STD-1798	<a href="https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=208713">https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=208713</a>
<b>Milestone A Documentation</b>		<a href="http://acqnotes.com/acqnote/acquisitions/milestone-a">http://acqnotes.com/acqnote/acquisitions/milestone-a</a>
<b>Military Packaging</b>	MIL-STD-2073/E1	<a href="http://everyspec.com/MIL-STD/MIL-STD-2000-2999/MIL-STD-2073-1E_11690/">http://everyspec.com/MIL-STD/MIL-STD-2000-2999/MIL-STD-2073-1E_11690/</a>
<b>Modeling and Simulation</b>	AFPD 16-10	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Modification Proposal</b>	AF 1067	<a href="http://www.e-publishing.af.mil/">http://www.e-publishing.af.mil/</a>
<b>Munitions Management</b>	AFI 21-201	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>National Environmental Policy Act</b>	Title 42, Chapter 55 Sec 4321	<a href="http://www.faa.gov/about/office_org/headquarters_offices/ast/licenses_permits/htm/nepa/">http://www.faa.gov/about/office_org/headquarters_offices/ast/licenses_permits/htm/nepa/</a>
<b>Nonnuclear Munitions Safety Board</b>	AFI 91-205	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Operation of the Defense Acquisition System</b>	DoDI 5000.02	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500002p.pdf?ver=2020-01-23-144114-093">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500002p.pdf?ver=2020-01-23-144114-093</a>
<b>Operation of the Joint Capabilities Integration and Development System</b>	CJCSI 5123.01HI	<a href="https://standards.globalspec.com/std/9900497/cjcsi-3170-01i">https://standards.globalspec.com/std/9900497/cjcsi-3170-01i</a>

Product Support Tool Kit (PSTK)

<u>Term</u>	<u>Regulation Reference</u> <i>(As Applicable)</i>	<u>Web Location</u>
Performance Based Logistics		<a href="http://www.acqnotes.com/acqnote/careerfields/performance-bases-logistics">http://www.acqnotes.com/acqnote/careerfields/performance-bases-logistics</a>
Performance Based Logistics: A Program Manager's Product Support Guide March 2005		<a href="http://www.acqnotes.com/acqnote/careerfields/performance-bases-logistics">http://www.acqnotes.com/acqnote/careerfields/performance-bases-logistics</a>
Planning and Programming Appropriated Funded Maintenance , Repair and Construction Projects	AFI 32-1032	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Planning and Programming Military Construction (MILCON) Projects	AFI 32-1021	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Planning, Programming, Budgeting and Execution (PPBE) Process		<a href="http://www.acqnotes.com/acqnote/acquisitions/ppbe-overview">http://www.acqnotes.com/acqnote/acquisitions/ppbe-overview</a>
Pre-Materiel Development Decision (MDD) Analysis Handbook		<a href="http://www.acqnotes.com/acqnote/acquisitions/materiel-development-decision">http://www.acqnotes.com/acqnote/acquisitions/materiel-development-decision</a>
Preparing Hazardous Materials for Military Air Shipments	AFMAN 24-204	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Preservation & Storage of Tooling for Major Defense Acquisition Programs		<a href="https://www.acq.osd.mil/dpap/pdi/uid/docs/DrCarterSignedMemo.pdf">https://www.acq.osd.mil/dpap/pdi/uid/docs/DrCarterSignedMemo.pdf</a>
Procedures For Performing A Failure Mode, Effects And Criticality Analysis (No S/S Document)	MIL-STD-1629 Though cancelled still used	<a href="http://everyspec.com/MIL-STD/MIL-STD-1600-1699/MIL_STD_1629A_1556/">http://everyspec.com/MIL-STD/MIL-STD-1600-1699/MIL_STD_1629A_1556/</a>
Product Data Specification Drawing – Joint Engineering Data Management Information and Control System (JEDMICS)		<a href="https://www.jedemics.net/">https://www.jedemics.net/</a>
Product Quality Deficiency Report Program	AFI 21-115_IP	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Product Support Contracts Requirements Tool		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx</a>
Product Support – Defense Acquisition Guidebook (DAG) – Chap 4 Life Cycle Sustainment		<a href="https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-4-Life-Cycle-Sustainment.pdf">https://www.dau.edu/pdfviewer?Guidebooks/DAG/DAG-CH-4-Life-Cycle-Sustainment.pdf</a>
Product Support Plan for Information Technology Guide (SWGDO32)		<a href="http://www.gunter.af.mil/shared/media/document/AFD-140211-059.pdf">http://www.gunter.af.mil/shared/media/document/AFD-140211-059.pdf</a>
Product Support Tool Kit (PSTK) SharePoint		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Toolkit.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Toolkit.aspx</a>
Program Action Directives (PAD) and Programming Plans (PPLAN)	AFI 10-501	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Program Management Agreement (PMA)/Services Management Agreement (SMA)		<a href="https://www.dau.edu/tools/t/Program-Management-Agreement-(PMA)-Template-v1-08">https://www.dau.edu/tools/t/Program-Management-Agreement-(PMA)-Template-v1-08</a>
Program Objective Memorandum (POM) Summary		<a href="http://acqnotes.com/acqnote/acquisitions/program-objective-memorandum-pom">http://acqnotes.com/acqnote/acquisitions/program-objective-memorandum-pom</a>
Program Protection Planning for Life Cycle Management	AFPAM 63-113	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Program Protection Plan (PPP) Sample		<a href="https://www.dau.mil/tools/t/Program-Protection-Plan-(PPP)-Template-v3-2">https://www.dau.mil/tools/t/Program-Protection-Plan-(PPP)-Template-v3-2</a>

<b><u>Term</u></b>	<b><u>Regulation Reference</u> <i>(As Applicable)</i></b>	<b><u>Web Location</u></b>
<b>Programming USAF Manpower</b>	AFI 38-204	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Propulsion System Integrity Program (PSIP)</b>	MIL-STD-3024	<a href="http://everyspec.com/MIL-STD/MIL-STD-3000-9999/MIL-STD-3024_6876/">http://everyspec.com/MIL-STD/MIL-STD-3000-9999/MIL-STD-3024_6876/</a>
<b>Protection of Mission Critical Functions to Achieve Trusted Systems and Networks (TSN)</b>	DoDI 5200.44	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520044p.pdf?ver=2018-11-08-075800-903">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520044p.pdf?ver=2018-11-08-075800-903</a>
<b>Provisioning</b>	AFMCMAN 20-106	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afmcm20-106/afmcm20-106.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afmcm20-106/afmcm20-106.pdf</a>
<b>Public-Private Partnerships for Product Support</b>	DoDI 4151.21	<a href="http://www.esd.whs.mil/Directives/issuances/dodi/">http://www.esd.whs.mil/Directives/issuances/dodi/</a>
<b>Range Commanders Council Flight Termination Commonality Standard</b>	RC-319-10	<a href="http://www.wsmr.army.mil/RCCsite/Pages/default.aspx">http://www.wsmr.army.mil/RCCsite/Pages/default.aspx</a>
<b>Reclamation of Air Force Property</b>	AFMCI 23-111	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afmci23-111/afmci_23-111.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afmci23-111/afmci_23-111.pdf</a>
<b>Reliability Centered Maintenance (RCM) Programs</b>	AFMCI 21-103	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Request For Environmental Impact Analysis</b>	AF IMT 813	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Request for Proposal (RFP) Information</b>		<a href="http://acqnotes.com/acqnote/tasks/request-for-proposalproposal-development">http://acqnotes.com/acqnote/tasks/request-for-proposalproposal-development</a>
<b>Product Support Contracts Requirements Tool</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Product-Support-Contracts-Requirements-Tool.aspx</a>
<b>Rights in Technical Data</b>	10 USC 2320	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap137-sec2320">https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap137-sec2320</a>
<b>Risk Management Plan Template and Guide</b>		<a href="http://www.acqnotes.com/acqnote/tasks/risk-management-plan">http://www.acqnotes.com/acqnote/tasks/risk-management-plan</a>
<b>Security Assistance Management Manual (SAMM)</b>	DSCA 5105.38	<a href="http://www.samm.dsc.mil/">http://www.samm.dsc.mil/</a>
<b>Security Cooperation (SC), Security Assistance (SC) and Foreign Military Sales (FMS) Management</b>	AFMCI 16-101	<a href="https://static.e-publishing.af.mil/production/1/afmc/publication/afmci16-101/afmci16-101.pdf">https://static.e-publishing.af.mil/production/1/afmc/publication/afmci16-101/afmci16-101.pdf</a>
<b>Security Enterprise Governance</b>	AFPD 16-14	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Special Packaging Instructions Retrieval &amp; Exchange System (SPIRES)</b>		<a href="https://spires.wpafb.af.mil">https://spires.wpafb.af.mil</a>
<b>Standard Facility Requirements</b>	DAFMAN 32-1084	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Stock Readiness</b>	AFMAN 23-125 (IP)	<a href="http://static.e-publishing.af.mil/production/1/af_a4_7/publication/afman23-125_ip/afman23-125_ip.pdf">http://static.e-publishing.af.mil/production/1/af_a4_7/publication/afman23-125_ip/afman23-125_ip.pdf</a>
<b>Strategic Basing</b>	AFI 10-503	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
<b>Supply Catalog: New or Obsolete Items</b>	10 USC 2454	<a href="https://www.govinfo.gov/app/details/USCODE-2018-title10/USCODE-2018-title10-subtitleA-partIV-chap145-sec2454">https://www.govinfo.gov/app/details/USCODE-2018-title10/USCODE-2018-title10-subtitleA-partIV-chap145-sec2454</a>
<b>AFLCMC SCRM SharePoint</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Chain-Risk-Management-(SCRM).aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Chain-Risk-Management-(SCRM).aspx</a>



<b><u>Term</u></b>	<b><u>Regulation Reference</u> (As Applicable)</b>	<b><u>Web Location</u></b>
<b>Supply Support</b>		<a href="https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Support.aspx">https://usaf.dps.mil/sites/41289/Pages/SitePages/Supply-Support.aspx</a>
<b>Support Equipment Resources (SE Activation Worksheet, AFLCMC Standard Process for SERDs, SERD Sample)</b>		<a href="https://usaf.dps.mil/sites/41289/LG%20Pages/Support%20Equipment.aspx">https://usaf.dps.mil/sites/41289/LG%20Pages/Support%20Equipment.aspx</a>
<b>Supportability Requirements</b>		<a href="http://acqnotes.com/acqnote/careerfields/supportability">http://acqnotes.com/acqnote/careerfields/supportability</a>
<b>System Requirements Review Procedure</b>		<a href="http://acqnotes.com/acqnote/acquisitions/system-requirements-review-srr">http://acqnotes.com/acqnote/acquisitions/system-requirements-review-srr</a>
<b>Systems Engineering Plan (SEP) Outline</b>		<a href="https://www.dau.edu/cop/stm/layouts/15/WopiFrame.aspx?sourcedoc=/cop/stm/DAU%20Sponsored%20Documents/SEP%20Outline%20Version%203.0%2020170512.docx&amp;action=default">https://www.dau.edu/cop/stm/layouts/15/WopiFrame.aspx?sourcedoc=/cop/stm/DAU%20Sponsored%20Documents/SEP%20Outline%20Version%203.0%2020170512.docx&amp;action=default</a>
<b>Systems Engineering Plan (SEP) Summary</b>		<a href="https://www.dau.edu/cop/esoh/pages/topics/Systems%20Engineering%20Plan%20SEP.aspx">https://www.dau.edu/cop/esoh/pages/topics/Systems%20Engineering%20Plan%20SEP.aspx</a>
<b>Target Audience Description Guide</b>		<a href="http://www.acqnotes.com/?q=Target+Audiaience+Descripti on&amp;s=">http://www.acqnotes.com/?q=Target+Audiaience+Descripti on&amp;s=</a>
<b>Technical Data For Munitions (TDM)</b>	DI-SAFT-80182B	<a href="http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-SAFT/DI-SAFT-80182B_11930/">http://everyspec.com/DATA-ITEM-DESC-DIDs/DI-SAFT/DI-SAFT-80182B_11930/</a>
<b>Technical Order Life Cycle Management Plan (TOLCMP)</b>		<a href="https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx">https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx</a> Note: Must request access
<b>Technical Order Life Cycle Verification Plan (TOLCVP)</b>		<a href="https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx">https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx</a> Note: Must request access
<b>Technical Manual Contract Requirements (TMCR) Writing Guide</b>		<a href="https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx">https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx</a> Note: Must request access
<b>Technical Manual Contract Requirements (TMCR) Sample</b>		<a href="https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx">https://usaf.dps.mil/teams/Hill/USAFTOMANAGEMENT/SitePages/AFTOMSC.aspx</a> Note: Must request access
<b>Technical Manual Methods and Procedures</b>	TO 00-5-3	<a href="https://www.tinker.af.mil/Portals/106/Documents/Technical%20Orders/AFD%20030519%2000-5-3_locked.pdf">https://www.tinker.af.mil/Portals/106/Documents/Technical%20Orders/AFD%20030519%2000-5-3_locked.pdf</a>
<b>Technical Orders</b>		<a href="http://www.tinker.af.mil/Home/TechnicalOrders.aspx">http://www.tinker.af.mil/Home/TechnicalOrders.aspx</a>
<b>Technology and Industrial Base Plans</b>	10 USC 2440	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2010-title10/USCODE-2010-title10-subtitleA-partIV-chap144-sec2440">https://www.gpo.gov/fdsys/granule/USCODE-2010-title10/USCODE-2010-title10-subtitleA-partIV-chap144-sec2440</a>
<b>Technology and Program Protection to Maintain Technological Advantage</b>	DoDI 5000.83	<a href="https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500083p.pdf?ver=fmz4Sx5tYVXnJZnKIOPoUQ%3d%3d">https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500083p.pdf?ver=fmz4Sx5tYVXnJZnKIOPoUQ%3d%3d</a>
<b>Technology Program Management Model</b>		<a href="https://apps.dtic.mil/dtic/tr/fulltext/u2/a509616.pdf">https://apps.dtic.mil/dtic/tr/fulltext/u2/a509616.pdf</a>
<b>Test and Evaluation Management Guide</b>		<a href="https://www.dau.edu/cop/test/layouts/15/WopiFrame.aspx?sourcedoc=/cop/test/DAU%20Sponsored%20Documents/AFTE%20Guidebook%20Combined_20200924%20v2.pdf&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.edu/cop/test/layouts/15/WopiFrame.aspx?sourcedoc=/cop/test/DAU%20Sponsored%20Documents/AFTE%20Guidebook%20Combined_20200924%20v2.pdf&amp;action=default&amp;DefaultItemOpen=1</a>
<b>Test and Evaluation Master Plan</b>		<a href="http://www.acqnotes.com/acqnote/careerfields/test-and-evaluation-master-plan-temp">http://www.acqnotes.com/acqnote/careerfields/test-and-evaluation-master-plan-temp</a>
<b>The Defense Acquisition System</b>	DoDD 5000.01	<a href="http://www.esd.whs.mil/Directives/issuances/dodd/">http://www.esd.whs.mil/Directives/issuances/dodd/</a>
<b>Integrated Installation Planning</b>	AFI 32-1015	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>

<u>Term</u>	<u>Regulation Reference</u> <i>(As Applicable)</i>	<u>Web Location</u>
TM 86-01 (TMCR)		<a href="http://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=2&amp;ved=0ahUKEwjKybCbn8zSAhVLQSYKH_ebjDcUQFgghMAE&amp;url=http%3A%2F%2Feveryspec.com%2FUSAF%2FUSAF-Tech-Manuals%2Fdownload.php%3Fspec%3D%2000-5-3_2001.029517.pdf&amp;usq=AFQjCNHRyridh6TAB_2v8f21HKRs37SGvg&amp;bvm=bv.149093890,d.eWE">http://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=2&amp;ved=0ahUKEwjKybCbn8zSAhVLQSYKH_ebjDcUQFgghMAE&amp;url=http%3A%2F%2Feveryspec.com%2FUSAF%2FUSAF-Tech-Manuals%2Fdownload.php%3Fspec%3D%2000-5-3_2001.029517.pdf&amp;usq=AFQjCNHRyridh6TAB_2v8f21HKRs37SGvg&amp;bvm=bv.149093890,d.eWE</a> Contact your TODO for access
Transition Support Plan (TSP) Standard Process		<a href="https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/bizcaps/details/34">https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/bizcaps/details/34</a>
Under Secretary of Defense for Acquisition and Sustainment (USD(A&S))		<a href="http://www.esd.whs.mil/Directives/issuances/dodd/">http://www.esd.whs.mil/Directives/issuances/dodd/</a>
Unified Facilities Criteria and Unified Facilities Guide Specifications	MIL-STD-3007	<a href="https://quicksearch.dla.mil/qsSearch.aspx">https://quicksearch.dla.mil/qsSearch.aspx</a>
US Government publishing Office		<a href="http://www.gpo.gov/fdsys/search/home.action">http://www.gpo.gov/fdsys/search/home.action</a>
United States Department of Defense Passive RFID Information Guide		<a href="https://www.acq.osd.mil/log/sci/.AIT.html/DoD_Suppliers_Passive_RFID_Info_Guide_v15update.pdf">https://www.acq.osd.mil/log/sci/.AIT.html/DoD_Suppliers_Passive_RFID_Info_Guide_v15update.pdf</a>
USAF Aircraft Airworthiness Certification	AFPD 62-6	<a href="https://www.e-publishing.af.mil/Product-Index/">https://www.e-publishing.af.mil/Product-Index/</a>
USAF Contract Sustainment Support Guide (CSSG)		<a href="https://www.dau.mil/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/Contract%20Sustainment%20Support%20Guide%202013%20v7.pdf&amp;action=default&amp;DefaultItemOpen=1">https://www.dau.mil/cop/log/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/log/DAU%20Sponsored%20Documents/Contract%20Sustainment%20Support%20Guide%202013%20v7.pdf&amp;action=default&amp;DefaultItemOpen=1</a>
USAF Flight Manuals Program (FMP)	AFI 11-215	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Validation of Proprietary Data Restrictions	10 USC 2321	<a href="https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap137-sec2321">https://www.gpo.gov/fdsys/granule/USCODE-2011-title10/USCODE-2011-title10-subtitleA-partIV-chap137-sec2321</a>
Verification, Validation and Accreditation (VV&A)	AFI 16-1001	<a href="http://www.e-publishing.af.mil/index.asp">http://www.e-publishing.af.mil/index.asp</a>
Weapon System Acquisition Reform Act		<a href="https://www.gpo.gov/fdsys/pkg/PLAW-111publ23/content-detail.html">https://www.gpo.gov/fdsys/pkg/PLAW-111publ23/content-detail.html</a>
Weapon System-Supportability Analysis (WS-SA) Guide		<a href="https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes">https://cs2.eis.af.mil/sites/22842/VANTIJ/app/index.aspx#!/processes</a>



**APPENDIX E – CONTACT**

For questions or comments about the PSTK, please contact

AFLCMC/LZS AT:  
[aflcmc.lzs@us.af.mil](mailto:aflcmc.lzs@us.af.mil)

**APPENDIX F – COMMONALITY THROUGHOUT PROGRAM LIFE CYCLE**

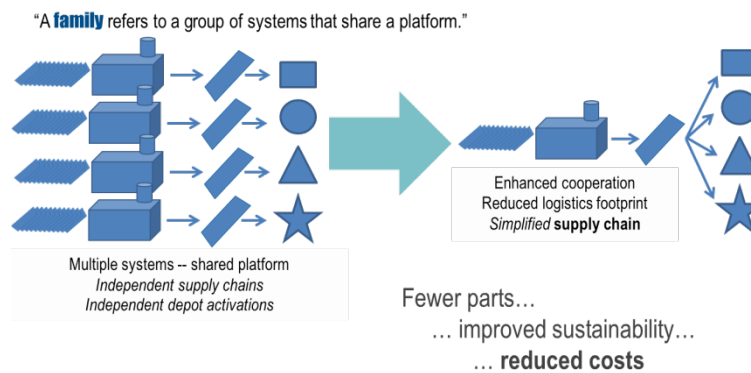
**GENERAL –**

As with all program decisions, commonality decisions made early in the program typically have a far greater total impact over the life cycle of the program; however, opportunities exist to design for the efficient use of common parts or processes, modernize using common parts, or leverage common parts or processes throughout the entire life cycle of the program, from inception through sustainment and disposal. Although greater commonality is often associated with lower costs, research shows a subtler picture. Depending upon how it is implemented and the specific applications, commonality can also increase costs. To assess the systemic value of commonality, the program office should understand how the use of common items affects several different costs categories, including development, acquisition, sustainment, training, and personnel. The following appendix serves as a guide to maximizing the potential gains from effective use of common parts and processes.

**TYPES OF COMMONALITY –**

Operational needs and tradeoffs determine which type of commonality are most effective in a given situation. There is no single "best" option that will apply to all types of common systems. The following commonality types provide the four basic types of commonality and opportunities when each is often most effective:

- (1) **HYBRID:** A hybrid approach combines multiple capabilities that are normally separated into a single system
- (2) **MODULAR:** A modular system allows functions to be exchanged within one system
- (3) **FAMILY:** A family refers to a group of systems that share a platform
- (4) **DIFFERENTIATED:** A differentiated system is distinguished by its unique platform, components, and capabilities in pursuit of specialization

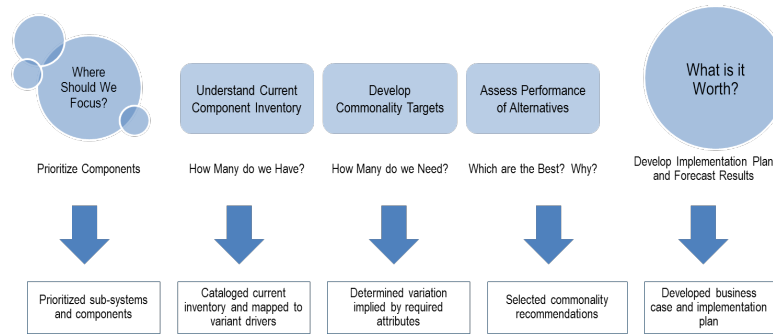


Appendix E – Figure 1: Family commonality example

**WHEN TO LOOK FOR COMMONALITY –**

While cost savings and efficiency increase opportunities exist throughout a program life cycle, the following four general categories of components identify opportunities for which it could be financially advantageous to pursue commonality:

- (1) **COMPLEXITY:** Complex, expensive items present opportunities for reducing costs by spreading the R&D cost over multiple systems (e.g., a new family of weapon platforms like the Future Combat System)
- (2) **HIGH-DEMAND:** High-demand items that have similar specifications can lead to reduced costs through economies of scale, lower inventory levels, increased purchasing power, and lower order costs (e.g., certain vehicle engines, tires)
- (3) **TRAINING BURDEN:** Items that are burdensome for operations or maintenance training should be made common to save on the training burden and personnel needs
- (4) **LOGISTICALLY BURDENSOME:** Logistically burdensome items, such as tires, tracks, engines, and transmissions, tend to dominate bulk storage, which can be problematic given storage constraints for mobile field warehouses



Appendix E – Figure 2: Deep dive process for implementing commonality initiatives

### VALUE ENGINEERING CHANGE PROPOSAL FOR COMMONALITY –

Following contract award, an effective opportunity to embrace commonality without imposing constraints on the contract performance is through the use of the Value Engineering Change Proposal (VECP) process. As directed by the Federal Acquisition Regulation (FAR) Part 48 and AFI 63-101/20-101, the VECP clause is typically found as a clause on each Air Force contract.

#### FAR Subpart 48.1—Policies and Procedures

##### 48.101 General.

(a) Value engineering is the formal technique by which contractors may (1) voluntarily suggest methods for performing more economically and share in any resulting savings or (2) be required to establish a program to identify and submit to the Government methods for performing more economically. Value engineering attempts to eliminate, without impairing essential functions or characteristics, anything that increases acquisition, operation, or support costs.

(b) There are two value engineering approaches:

(1) The first is an incentive approach in which contractor participation is voluntary and the contractor uses its own resources to develop and submit any value engineering change proposals (VECP's). The contract provides for sharing of savings and for payment of the contractor's allowable development and implementation costs only if a VECP is accepted. This voluntary approach should not in itself increase costs to the Government.

(2) The second approach is a mandatory program in which the Government requires and pays for a specific value engineering program effort. The contractor must perform value engineering of the scope and level of effort required by the Government's program plan and included as a separately priced item of work in the contract Schedule. No value engineering sharing is permitted in architect engineer contracts. All other contracts with a program clause share in savings on accepted VECP's, but at a lower percentage rate than under the voluntary approach. The objective of this value engineering program requirement is to ensure that the contractor's value engineering effort is applied to areas of the contract that offer opportunities for considerable savings consistent with the functional requirements of the end item of the contract.

#### AFI 63-101/20-101 Table 4.2—Other Acquisition Planning Requirements

##### Value Engineering

VE is one of the tools in the AF acquisition continuous process improvement tool kit. PMs include VE requirements on contracts as required by FAR Parts 48 and 52. Reference: FAR Part 48 and 52; DoDI 4245.14

### DEFENSE STANDARDIZATION PROGRAM (DSP) –

Another example of Department of Defense guidance available to support increased commonality is the Defense Standardization Program (DSP). The DSP is in charge of standardization throughout the Department of Defense (DoD) to reduce costs and improve operational effectiveness and is governed by [DoD Instruction 4120.24](#). The program is run by the DoD Standardization Program Office (DSPO). The DSP seeks to identify, influence, develop, manage, and provide access to standardization processes, products, and services for warfighters, the acquisition community, and the logistics community to promote interoperability, reduce total ownership costs, and sustain readiness. DSP is a comprehensive,

## Product Support Tool Kit (PSTK)

integrated standardization program linking DoD acquisition, operational, sustainment, and related military and civil communities providing an abundance of resources for program offices to seek efficient use of commonality.

**As defined by the DoD Manual 4120.24-M, the goals of the DSP are:**

***Reduce total ownership costs by:***

- (1) Reducing the number of nonstandard parts.*
- (2) Facilitating competition.*
- (3) Promoting the use of common processes and open systems.*
- (4) Promoting standard commercial processes and practices.*
- (5) Reducing training costs and standardizing best training practices.*
- (6) Optimizing systems engineering requirements by reaching a consensus on requirements.*
- (7) Keeping standards current by incorporating cost-saving changes and lessons learned.*

***Improve military operational readiness by:***

- (1) Achieving interoperability of systems, subsystems, and equipment with U.S. allies and among the Military Departments.*

*DoDM 4120.24, September 24, 2014*

- (2) Reducing the variety of supply items to improve logistics support.*
- (3) Improving the reliability, maintainability, and safety of systems and supply items.*
- (4) Modernizing existing systems, subsystems, and equipment through the insertion of new technology and parts.*
- (5) Ensuring relevance of standards to the warfighter.*

***Reduce cycle time by:***

- (1) Using readily available standard items.*
- (2) Identifying interchangeability and interoperability requirements to permit rapid introduction of new technologies.*

Through the effective use to common parts and processes, the program office can achieve efficient sustainment through interoperability and cooperative military-commercial integration. Program decisions made early in the life cycle typically have a far greater impact on the program; however, there are opportunities to introduce commonality throughout the life cycle, from inception through development, sustainment, and disposal. The guidance and instructions mentioned in this appendix are just a small sample of the abundant resources available to support decisions and increase the efficient use of common parts and processes.

### **ADDITIONAL RESOURCES AVAILABLE –**

NAVSEA Commonality Handbook:

[https://www.dla.mil/Portals/104/Documents/LandAndMaritime/V/VA/PSMC/Apr15/LM\\_NAVSEA\\_151030.pdf](https://www.dla.mil/Portals/104/Documents/LandAndMaritime/V/VA/PSMC/Apr15/LM_NAVSEA_151030.pdf)

Navy Virtual Shelf: [https://www.pdrep.csd.disa.mil/pdrep\\_files/report\\_tools/vs.htm](https://www.pdrep.csd.disa.mil/pdrep_files/report_tools/vs.htm)

RAND Arroyo – Commonality Study: <http://www.rand.org/pubs/monographs/MG719.html>

Defense Standardization Program: <https://www.dsp.dla.mil/>

Federal Acquisition Regulation: <http://www.acq.osd.mil/dpap/dars/far.html>