BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE MANUAL 63-143

18 DECEMBER 2020



Acquisition

CENTRALIZED ASSET MANAGEMENT PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at

www.e-publishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AFMC/A4F Certified by: SAF/AQX

(William D. Bailey)

Supersedes: AFMAN 63-143, 12 August 2015 Pages: 96

This Air Force (AF) Manual (AFMAN) implements and identifies Centralized Asset Management (CAM) procedures referenced in Air Force Instruction (AFI) 63-101/20-101, Integrated Life Cycle Management. This publication applies to civilian employees and uniformed members of the Regular Air Force (AF), the United States AF Reserves (USAFR), the Air National Guard (ANG), and the United States Space Force (USSF), as well as other individuals and organizations based on binding agreement or obligation with the Department of the Air Force. Compliance with attachments 2, 3, and 4 in this publication are mandatory. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33-322, Records Management and Information Governance Program, and disposed of in accordance with the Air Force Records Disposition Schedule located in the Air Force Records Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate chain of command to the CAM Requirements Branch (AFMC/A4FR) Workflow or AFMC/A4FR, 4375 Chidlaw Road, Room N237, Wright-Patterson Air Force Base, OH 45433-5759. To ensure standardization, any organization supplementing this manual must send the implementing publication to SAF/AQX for review and coordination before publishing. The authorities to waive wing or unit level requirements that are outside of the acquisition execution chain in this publication are identified with a Tier ("Tier 0, 1, 2, 3") number following the compliance statement. See Department of the Air Force Instruction (DAFI) 33-360, Publication and Forms Management, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor's commander for non-tiered, non-acquisition execution

compliance items. Mandates to the acquisition execution chain as described in AFI 63-101/20-101 are not elevated through the organizational chain of authority; therefore tiering in accordance with DAFI 33-360, is not applied and the waiver authority is as specified. Waivers to the CAM processes and procedures are reviewed by the applicable program's Service Core Lead, coordinated by the branch chief, and the waiver authority is the appropriate Air Force Materiel Command (AFMC) CAM Chief (AFMC/A4F or AFMC/FMM). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the AF.

SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed. Major changes include reformatted chapters based on CAM processes, expanded language on CAM governance to include chairs and voting members, updated process flow charts, inclusion of a roles and responsibilities chapter, inclusion of file maintenance instructions and additional guidance within each risk category, removal of references to CAFDEx, inclusion of waiver instruction and tier waiver authority for compliance items, and addition out of cycle guidance, definitions, and process flow.

Chapte	er 1—I	NTRODUCTION	6
	1.1.	Overview	6
	1.2.	Applicability.	6
	1.3.	Scope	6
	1.4.	CAM Governance.	6
	1.5.	CAM Process and Process Flow.	7
Figure	1.1.	The CAM Process.	8
	1.6.	Program Group Entry to Total Force WSS.	9
	1.7.	Flying Hour Program (FHP).	9
Chapte	er 2—R	ROLES AND RESPONSIBILITIES	10
	2.1.	Headquarters AF Directorates	10
	2.2.	AF/A3.	10
	2.3.	AF/A4.	10
	2.4.	Budget Operations Directorate (SAF/FMBO).	10
	2.5.	Air Force Material Command Commander (AFMC/CC)	11
	2.6.	Working Capital Funds Division (HQ AFMC/FMR).	11
	2.7.	AF CAM Executive Agent	11

	2.8.	MAJCOM/CCs.
	2.9.	Lead/Supported MAJCOMs.
	2.10.	Lead Command POC.
	2.11.	Supported Commands.
	2.12.	Program Executive Officers (PEOs).
	2.13.	Funds Holder POCs.
	2.14.	Program Manager (PM).
	2.15.	Chief Engineer.
	2.16.	Engineering Requirements Review (ERR) Manager
	2.17.	Program Office Engineer.
	2.18.	Program Office Equipment Specialist (ES).
	2.19.	Program Office Logistics Specialist.
	2.20.	Maintenance Groups.
	2.21.	Work Specification Manager.
	2.22.	Air Force Sustainment Center (AFSC) 448th Supply Chain Management Wing (SCMW)
	2.23.	Defense Logistics Agency (DLA).
	2.24.	Depot Maintenance Planner.
Chapt	er 3—A	IRCRAFT AND MISSILE REQUIREMENTS (AMR) PROCESS
	3.1.	Overview
	3.2.	Supporting Guidance.
	3.3.	Aircraft Requirements
	3.4.	Missile Requirements.
	3.5.	Depot Schedule and Depot Customer Workload Agreement (DCWA)
	3.6.	Fixed Price Worksheet (FPWS)
	3.7.	The AMR Process Overview.
	3.8.	AMR Process: Stage 1 – Define New Tasks and Update Existing Tasks
	3.9.	AMR Process: Stage 2 – Build and Adjust Hours.
	3.10.	Reviews

	3.11.	AMR Brochure.	28
	3.12.	AMR Process: Stage 3 – PM Certification of Hours.	28
	3.13.	Coordination.	29
	3.14.	Engineering Requirement Review Process (ERRP).	30
	3.15.	Bill of Work (BOW) Process.	34
	3.16.	Maintenance Requirements Supportability Process (MRSP).	3:
Table	3.1.	Strategic Supportability – Risk Assessment Criteria.	3
Figure	3.1.	Strategic Supportability Assessment Process.	
Figure	3.2.	Published AMR Brochure Supportability Assessment.	
Figure	3.3.	Operational Supportability Assessment Process	
Chapte	er 4—L	OGISTICS REQUIREMENTS DETERMINATION PROCESS (LRDP)	4
	4.1.	Overview	4
Figure	4.1.	LRDP Flow.	4
	4.2.	LRDP Phases.	4
	4.3.	General Requirements Management.	4
	4.4.	Explanation of Risk Categories.	4
Chapte	er 5—P	ROGRAM OBJECTIVE MEMORANDUM (POM) PROCESS	6
	5.1.	Overview	6
Figure	5.1.	POM Phases.	6
	5.2.	Phase One - Preparation Phase.	6
	5.3.	Phase Two - Development Phase	6
	5.4.	Phase Three - Review, Validation, and Adjustment Phase	6
	5.5.	Phase Four - Approval Phase.	6
Chapte	er 6—E	XECUTION PLAN (EXPLAN) PROCESS	6
	6.1.	Overview	6
Figure	6.1.	ExPlan Process.	6
	6.2.	Phase One - Preparation Phase.	6
	6.3.	Phase Two - Development Phase	6
	6.4.	Phase Three - Review, Validation & Adjustment Phase.	6

	6.5.	Phase Four - Approval Phase.	66
	6.6.	Post-Approval Activities	67
Chapte	er 7— E	EXECUTION PROCESS	68
	7.1.	Overview	68
Figure	7.1.	Execution Activities Timeline.	68
	7.2.	Weapon System Sustainment Requirements	68
	7.3.	Funding.	69
	7.4.	Forecast and Actual Obligation Updates.	69
	7.5.	Out Of Cycle (OOC) Process	70
	7.6.	Unfunded Requirement Requests.	71
Chapte	er 8—C	COST PER FLYING HOUR (CPFH) PROGRAM	72
	8.1.	Overview	72
Figure	8.1.	CPFH Execution Process.	72
	8.2.	Authorized CAM CPFH Supplies	72
Table	8.1.	Authorized CPFH Supplies.	73
	8.3.	Baseline Validation for Authorized CPFH Supplies	73
	8.4.	Requirements Process for CPFH Supplies	73
	8.5.	Finalize CPFH Supply Requirements.	74
	8.6.	Building and Managing AvPOL Requirements.	74
	8.7.	Depot Working Capital Fund (DWCF) Bill	75
	8.8.	Disbursements and Reimbursements.	75
Attach	ment 1	—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	76
Attach	ment 2	—PROGRAM GROUP ENTRY TO WSS DECISION TREE	90
Attach	ment 3	—FAILURE POINT DEFINITIONS BY RISK CATEGORY	93
Attach	mont 1	OUT OF CVCLE THRESHOLD AND ARROWAL CRITERIA	05

Chapter 1

INTRODUCTION

- **1.1. Overview.** Centralized Asset Management (CAM) is the management and execution of sustainment funding by one AF process owner. AFMC is the designated AF Executive Agent in accordance with AFI 63-101/20-101. CAM-associated funding includes depot-level weapon system sustainment (WSS) and active-duty AF Cost per Flying Hour (CPFH) program.
- **1.2. Applicability.** This AFMAN applies to all program managers (PMs) and Major Commands (MAJCOMs) utilizing CAM-associated funding or involved in sustainment requirements determination. AF Special Operations Command (AFSOC), ANG, AFRC, and USSF utilize CAM processes and schedules, but manage their own requirements validation and funds execution processes.

1.3. Scope.

- 1.3.1. CAM processes provide enterprise management at the AF level by focusing resources on AF priorities. CAM funding encompasses the AF WSS enterprise and the CPFH program. Within WSS, there are four business process areas managed as part of CAM: depot purchased equipment maintenance (DPEM), contractor logistics support (CLS), sustaining engineering (SE), and technical orders (TOs).
- 1.3.2. The DPEM business process includes multiple sub-categories: aircraft and missile requirements (AMR), engine maintenance, area support/base support/local manufacturing (A/B/M), software maintenance, storage, exchangeables, and other major end items (OMEI). Additionally, the first DPEM sub-category, AMR, has three supporting processes: Engineering Requirements Review Process (ERRP), the Bill of Work (BOW) process, and Maintenance Requirements Supportability Process (MRSP).
- 1.3.3. The CPFH program covers costs that directly support the following: the launch, recovery, inspection, servicing, and maintenance of an aircraft; the inspection, servicing, and maintenance of an aircraft component or a piece of support equipment that directly supports aircraft maintenance; or the fuel used in the operation of aircraft or support equipment that directly supports aircraft maintenance and fuel. The CPFH budget is comprised of the following components: depot-level reparables (DLR), spares, and exchangeables, consumable supplies, and aviation petroleum, oil, and lubricants (AvPOL).

1.4. CAM Governance.

- 1.4.1. AFMC/A4F and AFMC/FMM provide oversight over the CAM process through the approved governance structure. The Advisory Council (AC), Executive Steering Group (ESG), and Executive Committee (EC) comprise the CAM governance structure. A list of current advisors, members, and co-chairs are located on the CAM SharePoint® at https://usaf.dps.mil/:f:/r/teams/11015/CAM%20Document%20Library/CAMTEL%20(CAM%20Training%20Hub)/00.%20Getting%20Started/01.%20Branch%20Org%20C harts%20%26%20Governance%20Structure?csf=1&web=1&e=16zT4j.
- 1.4.2. The CAM governance structure ensures continuous process improvements are documented and implemented as required. The governance structure also manages CAM

- technical content, releases process data calls to all stakeholders, and participates in process collaboration and reviews. Voting membership is established at each level with chairs having final responsibility.
- 1.4.3. The frequency of CAM governance structure meetings are driven by major planning, programming, budgeting and execution (PPB&E) milestones, usually to develop risk-assessed positions in support of the Program Objective Memorandum (POM) and Execution Plan (ExPlan).
- 1.4.4. The AC serves as the advisory board to HQ AFMC CAM Executive Agent. Process development and execution should be worked at the lowest level through integrated process teams.
 - 1.4.4.1. Chair. Co-chaired by the CAM chiefs (i.e., Product Support Division (AFMC/A4F) and CAM Financial Management Division (AFMC/FMM)).
 - 1.4.4.2. Voting Members. Each of the following organizations get one vote during the AC: AFMC; Air Combat Command (ACC); AMC; AFRC; ANG; USSF; AFSOC; Air Force Global Strike Command (AFGSC); Air Force Flight Standards Agency; Air Education and Training Center (AETC); Operations, Plans and Requirements (AF/A3); Logistics, Engineering and Force Protection (AF/A4); Logistics and Product Support (SAF/AQD); and, Assistant Secretary of the Air Force, Financial Management and Comptroller (SAF/FM).
- 1.4.5. The ESG is the decision making body for the process development effort and is responsible for resolving issues that cannot be resolved at lower levels.
 - 1.4.5.1. Chair. Senior Executive Director (AFMC/CA).
 - 1.4.5.2. Voting Members. Each of the following organizations get one vote during the ESG: AFMC, ACC, AMC, AFRC, ANG, USSF, AFSOC, AFGSC, Air Force Flight Standards Agency, AETC, SAF/AQD, AF/A4, SAF/FM, and AF/A3.
- 1.4.6. The EC is the decision making body that provides oversight for the CAM process, sets goals, and provides vision and resources. The CAM EC meets quarterly or as needed.
 - 1.4.6.1. Tri-Chair. Deputy Commander, Air Force Materiel Command (AFMC/CD), Deputy Assistant Secretary for Budget (SAF/FMB), and AF/A4.
 - 1.4.6.2. Voting Members. Each of the following organizations get one vote during the EC: AFMC, ACC, AMC, AFRC, ANG, USSF, AFSOC, AFGSC, AETC, SAF/AQD, and AF/A3.
- **1.5. CAM Process and Process Flow.** The CAM process, as identified in **Figure 1.1** below, entails requirements definition and refinement, planning and programming, and budget and execution to provide AF-wide visibility for WSS requirements. CPFH requirements utilize the Spares Requirements Review Board (SRRB) process in accordance with AFMAN 23-120, *Spares Requirement Review Board (SRRB)*.

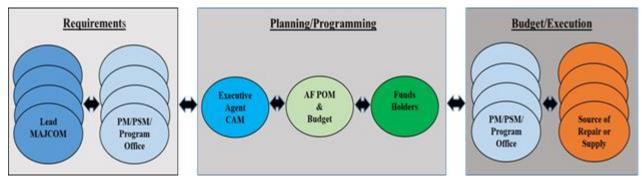


Figure 1.1. The CAM Process.

- 1.5.1. Lead MAJCOMs coordinate with air staff and supported commands (e.g., United States Air Forces in Europe, Pacific Air Force, AFRC, etc.) to provide the PM and program offices with their weapon systems desired level of performance. Requirements from the lead MAJCOM(s) utilize the CAM information technology (IT) system of record to provide requirements to AFMC.
- 1.5.2. The PMs and program offices use guidance, direction, and where applicable, flying hours (FHs), to develop valid and defendable requirements. Stakeholders collaborate on requirements during the Logistics Requirements Determination Process (LRDP) and publish requirements on or around November 1 of each year. The published requirements are provided to CAM and the applicable Funds Holder for use in the development of the POM and ExPlan.
- 1.5.3. The Funds Holder works with the program offices and lead MAJCOMs to achieve a CAM governance-approved POM and ExPlan each year to be submitted to Air Staff. Air Staff works to receive an approved budget that meets the Strategic Defense Objectives and distributes dollars in each year of execution to the appropriate Funds Holder (e.g., Operating Agency Code (OAC) 41-ANG, OAC 62-AFRC, OAC 65-TWCF/AMC, and OAC 87-CAM).
- 1.5.4. The Funds Holder distributes dollars to the program offices for execution.
- 1.5.5. Program offices send their dollars via funding documents to the desired source of repair (SOR) and source of supply which execute the dollars received.
- 1.5.6. Organic depot repair facilities and the CPFH program reimburse the AF Working Capital Fund (AFWCF). Program offices pay for organic depot repair based on a BOW with hours multiplied by a depot rate which the Air Force Sustainment Center Working Capital Fund (WCF) establishes two years in advance.
- 1.5.7. Service providing contractors (e.g., contract DPEM, interservice repair, CLS contractors, contract SE, and TOs) generally execute dollars directly and return excess funding to the PM to flow up to the Funds Holder.
- 1.5.8. Headquarters Air Force (HAF) staff has visibility in all steps and processes which ensure standard, repeatable, and auditable PPB&E processes within the CPFH and WSS enterprise execution.

1.6. Program Group Entry to Total Force WSS.

- 1.6.1. To be considered for entry into the CAM WSS portfolio, the responsible PM shall ensure the new program group, program (including Section 804 programs), or system meets the entry criteria as identified in the Program Group Entry to WSS Decision Tree (see Attachment 2). (T-1).
- 1.6.2. If the requesting program office determines the entry criteria within **Attachment 2** have been met, a "New Program Group, Program, or System Request" form should be completed and submitted by the requesting program office to the AFMC/A4FR Workflow.
- 1.6.3. The CAM Service Core Team Lead will coordinate the remaining signatures on the New Program Group, Program, or System Request form. (**T-3**). The full routing of the form is approved by an AFMC/A4F CAM Branch Chief before any new program group, program, or system is allowed to enter CAM.
- 1.6.4. The WSS Decision Tree and the "New Program Group, Program, or System Request" form are located on the CAM SharePoint® at <a href="https://usaf.dps.mil/:f:/r/teams/11015/CAM%20Document%20Library/CAMTEL%20(CAM%20Training%20Hub)/00.%20Getting%20Started/00.%20New%20Program%20Group,%20Program,%20or%20System%20Request?csf=1&web=1&e=wsBkAi.
- **1.7. Flying Hour Program** (**FHP**). Per Department of the AF Policy Directive (DAFPD) 11-1, *Flying Hour Program*, AF/A3, with coordination from the National Guard Bureau for ANG and AFRC, provides guidance for resource advocacy and oversight of the Total Force FHP.
 - 1.7.1. The FHP is a closely monitored program that produces the FHs necessary to develop and sustain combat airpower. Separate from the normal acquisition processes, interested PMs shall direct requests to become a part of the total force FHP to the Deputy Chief of Staff, Operations, AF/A3. (T-1).
 - 1.7.2. Per AFI 65-503, *US Air Force Cost and Planning Factors*, the CPFH is a subset of logistics factors that are used to forecast the AF FHP budget requirement. Therefore, CPFH factors will be developed as required to support the total force FHP.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Headquarters AF Directorates.

- 2.1.1. Provide strategic guidance and advocacy through the Logistics Panel and other corporate structure forums.
- 2.1.2. Support the CAM governance structure.

2.2. AF/A3.

- 2.2.1. In addition to the responsibilities listed in **paragraph 2.1**, delivers monthly flying hour (FH) reports required in support of the WCF bills.
- 2.2.2. Works with SAF/FMB and CAM on execution year emerging issues.
- 2.2.3. Provides FH for the Future Years Defense Program (FYDP), to include a planning factor and final position.
- 2.2.4. Provides an annual execution guidance memo for the Total Force FHP.

2.3. AF/A4.

- 2.3.1. In addition to the responsibilities listed in **paragraph 2.1**, provides the Force Structure Decision Memorandum file for aircraft inventory as outlined in AFI 16-402, *Aerospace Vehicle Programming Assignment, Distribution, Accounting, and Termination*.
- 2.3.2. Provides the budget position to the applicable Funds Holder and provides POM technical and strategic guidance.
- 2.3.3. Provides advocacy through Logistics Panel and other corporate structure forums.
- 2.3.4. Coordinates Force Structure changes with AF/A8, SAF/FMB, Deputy Assistant Secretary for Cost and Economics (SAF/FMC), AF/A3, and key SRRB stakeholders for the FHP.
- 2.3.5. Advocates for additional funds in support of emerging AF priorities and informs CAM of impending force structure changes during the execution process.
- 2.3.6. Serves as the voice for WSS to AF corporate structure.
- 2.3.7. Provides the deferral report to the Office of the Secretary of Defense (OSD).

2.4. Budget Operations Directorate (SAF/FMBO).

- 2.4.1. Provides initial funding budget outlay governing execution year to the applicable Funds Holder for the development of the Execution Plan (ExPlan).
- 2.4.2. Receives the final ExPlan position after approval from the CAM governance.
- 2.4.3. Provides execution year funding and financial guidance
- 2.4.4. Informs CAM on funding changes directed down by AF corporate structure.
- 2.4.5. Publishes Air Force (AF) Element of Expense/Investment Codes (EEIC) (AFEEICs) and Program Element Codes (PEC) within the Financial Management Data Quality Service.

2.4.6. Oversees the FHP execution of dollars and funding.

2.5. Air Force Material Command Commander (AFMC/CC).

- 2.5.1. Authorizes CAM guidance and training as coordinated through the CAM EC.
- 2.5.2. Authorizes the CAM governance structure as the approving body for CAM procedures and POM deliverables.

2.6. Working Capital Funds Division (HQ AFMC/FMR).

- 2.6.1. Responsible for the AF Working Capital Fund (WCF).
- 2.6.2. Provides the organic DPEM rates to AFMC/A4F during the POM process.
- 2.6.3. Provides updates to the organic DPEM rates previously provided.

2.7. AF CAM Executive Agent.

- 2.7.1. Comprises of AFMC/A4F and AFMC/FMM. The have combined and individual responsibilities. AFMC/A4F and AFMC/FMM both:
 - 2.7.1.1. Provide enterprise-level oversight for the AF WSS processes and the spread of funds against approved requirements. Serve as the integrator, facilitator, and continuous process improvement champion.
 - 2.7.1.2. Manage the AF WSS portfolio through approved, standard, and repeatable processes.
 - 2.7.1.3. Manage the AF WSS account through oversight and validation of requirements and performs activities as the Executive Agent.
 - 2.7.1.4. Ensure out of cycle (OOC) actions are reviewed, processed, and approved in the CAM information technology (IT) system of record.
 - 2.7.1.5. Manage and oversee the planning, programming, budgeting, & execution (PPB&E) of active-duty AF WSS.
 - 2.7.1.6. Engage with key stakeholders to ensure the AF's most important sustainment needs are met with the funding available.
 - 2.7.1.7. Ensure available funding is provided to the highest priorities based on the OSD and Secretary of the AF guidance such as projected need dates, program or mission risk, contract period of performance, aircraft availability, prior year execution, response to natural disasters, impacts to readiness, and urgent requirements to prevent loss of life and/or aircraft.
 - 2.7.1.8. Validate final funding levels through CAM governance.
 - 2.7.1.9. Coordinate on all policy agreements or procedures that impact CAM funding and commitments.
 - 2.7.1.10. Comply with higher headquarters taskings, call letters, and policy letters.

2.7.2. AFMC/FMM.

2.7.2.1. Provides ExPlan kickoff and training to programs and lead commands.

- 2.7.2.2. Sets funding baseline for initial distribution in the execution year and facilitates and oversees program office funds spread throughout the execution year.
- 2.7.2.3. Ensures program offices reconcile their obligations on a monthly basis within the CAM IT system of record.
- 2.7.2.4. Interfaces with applicable agencies for AvPOL to reimburse or disburse for missions flown on behalf of active-duty AF organizations and as approved by AF/A3 and SAF/FMBOO.
- 2.7.2.5. Manages Contingent Liabilities.
- 2.7.2.6. Resolves shortfalls in the execution year utilizing the unfunded process.
- 2.7.2.7. Oversees funds distribution and balancing within the program groups.
- 2.7.2.8. Monitors funds control and execution of AvPOL funds and disbursements.
- 2.7.2.9. Validates and processes active-duty AF Depot Working Capital Fund (DWCF) bill for authorized CPFH supplies.
- 2.7.2.10. Provides AvPOL funds disbursements to agencies that fly in support of approved active-duty AF missions and are CPFH model driven.

2.7.3. AFMC/A4F.

- 2.7.3.1. Manages the CAM LRDP timeline, checklist, and kickoff training. Also approves and validates data calls and integrates all stakeholder requirements.
- 2.7.3.2. Responsible for development and management of CAM training program.
- 2.7.3.3. Collaborates on requirements and ensures all requirements with non-concur status are resolved or mediated.
- 2.7.3.4. Provides direct assistance, oversight, and analysis to all stakeholders in developing and documenting WSS requirements and POM inputs.
- 2.7.3.5. Responsible for developing the CAM POM by providing POM kickoff training to stakeholders, consolidating and integrating inputs, defending requirements, and approving and validating data calls.
- 2.7.3.6. Validates final funding levels and risk through CAM governance.
- 2.7.3.7. Manages a listing of all CAM funded CPFH supply accounts.
- 2.7.3.8. Develops the Budget Code (BC) 8 requirements for active-duty AF via the SRRB process.
- 2.7.3.9. Responsible for the CAM IT system of record as the PM and functional manager.
- 2.7.3.10. Performs requirements analysis and reports metrics to stakeholders.
- 2.7.3.11. Validates requirement reconciliation and prepares deferral report.
- 2.7.3.12. Ensures program offices reconcile their obligations within the CAM IT system of record on a quarterly basis.

2.7.3.13. Manages CAM policy and provides guidance through this publication, AFMAN 63-143.

2.8. MAJCOM/CCs.

- 2.8.1. Provide operational perspectives and recommendations that affect their respective weapon system requirements.
- 2.8.2. Provide MAJCOM WSS point of contacts (POCs) who review, validate, prioritize and coordinate requirement inputs, as applicable.

2.9. Lead/Supported MAJCOMs.

- 2.9.1. Support CPFH requirements development and variance analysis.
- 2.9.2. Assist CAM/Funds Holder(s) with validation and maintenance of base-level supply accounts to ensure and validate accounts are accurately coded.
- 2.9.3. Correct and reverse erroneous or unauthorized purchases against CAM CPFH supply accounts.
- 2.9.4. Approve consumable Consolidated Sustainment Activity Group-Retail (CSAG-R), BC 9 requirement rates as submitted by SAF.
- 2.9.5. Provide service core function operational risk assessments and associated impact statements, as well as other information needed to assess service core function as part of the overall portfolio.

2.10. Lead Command POC.

- 2.10.1. During the LRDP, establishes desired capability levels, collaborates on requirements, ensures all non-concurs have been resolved or mediated, and works with program offices to prioritize requirements.
- 2.10.2. During the POM process, sets desired risk levels and weighting of programs within their respective service core function(s), assists programs with operational impacts on program parade slides, and provides funding trade-off options within 'owned' weapon systems and service core functions to minimize risk to highest prioritized weapon system(s).
- 2.10.3. During ExPlan development, provides funding trade-off options within owned weapon systems to minimize risk to highest prioritized weapon system(s) and provides weights for each program within each service core function.
- 2.10.4. During the execution year, advocates for program requirements based on mission need, coordinates on OOCs, and provides the prioritized 1 to N list of WSS unfunded requirements.

2.11. Supported Commands.

- 2.11.1. Provide operational perspectives and recommendations that affect the requirements process (e.g., weapon system availability, capability, pilot throughput, etc.) to the lead command.
- 2.11.2. Collaborate on applicable requirements as desired.
- 2.11.3. Ensure all non-concurs are resolved or mediated.

2.12. Program Executive Officers (PEOs).

- 2.12.1. Ensure assigned PMs define, review, validate, and publish accurate, reliable, timely, and executable requirements.
- 2.12.2. Ensure requirements are properly documented within the CAM IT system of record for their programs.

2.13. Funds Holder POCs.

- 2.13.1. Includes active-duty AF (as managed by CAM), ANG, AFRC, TWCF, USSF, and AFSOC (only for CPFH).
- 2.13.2. Coordinate with the lead command POCs in validating, prioritizing and budgeting all requirements.
- 2.13.3. Collaborate on requirements and ensure all non-concurs have been resolved or mediated.
- 2.13.4. Work with program offices to prioritize requirements.
- 2.13.5. Establish funding levels for applicable appropriation for each program group.
- 2.13.6. Perform initial funds spread in the CAM IT system of record.
- 2.13.7. Spread approved funding received from SAF/FMBO across its weapon systems' requirements using the CAM risk model during the ExPlan.
- 2.13.8. Coordinate on OOCs.
- 2.13.9. Manage funds according to existing approved requirements based on AF priorities, and the mitigation solution for WSS unfunded requirements within their OAC.

2.14. Program Manager (PM).

- 2.14.1. Develops detailed requirements to meet desired capabilities and spreads funding to minimize risk and maximize capability to the warfighter.
- 2.14.2. Develops and updates detailed requirements to sustain desired level of capability.
- 2.14.3. Ensures documentation of PM or PM designee response to requirements with non-concur status within the CAM IT system of record. The PM shall adjudicate all requirements with non-concur status prior to publishing requirements for the POM. (T-1).
- 2.14.4. Validates, prioritizes, and publishes requirements according to established timelines.
- 2.14.5. During the POM process, the PM is responsible for the following tasks:
 - 2.14.5.1. Establishes risk category weights;
 - 2.14.5.2. Provides information to and gathers information from lead MAJCOMs to support operational risk assessments;
 - 2.14.5.3. Prioritizes requirements from 1 to N in collaboration with MAJCOM users;
 - 2.14.5.4. Spreads allocated funding to minimize risk and maximize capability to the warfighter in the CAM IT system of record;
 - 2.14.5.5. Provides impact statements at various funding scenarios; and,

- 2.14.5.6. Develops program parade slides.
- 2.14.6. During the ExPlan process, the PM is responsible for the following tasks:
 - 2.14.6.1. Establishes risk category weights;
 - 2.14.6.2. Prioritizes requirements from 1 to N in collaboration with MAJCOM users; and,
 - 2.14.6.3. Spreads allocated funding to minimize risk and maximize capability to the warfighter in the CAM IT system of record.
- 2.14.7. During the execution year, manages program requirements, funding, projected obligations, actual obligations and contingent liabilities, processes OOCs, and identifies unfunded requirements in the CAM IT system of record.
- 2.14.8. During the AMR process, the PM is responsible for the following tasks:
 - 2.14.8.1. Manages and coordinates the Engineering Requirements Review Process (ERRP) and the Maintenance Requirements Supportability Process (MRSP);
 - 2.14.8.2. Hosts the annual review to include facilitating collaboration meetings;
 - 2.14.8.3. Negotiates and resolves complex maintenance concerns to ensure scheduled maintenance tasks, hours, and narratives are updated annually;
 - 2.14.8.4. Completes a depot customer workload agreement (DCWA) for the year of execution for organic depot maintenance workload;
 - 2.14.8.5. Appoints an Engineering Requirements Review (ERR) Manager;
 - 2.14.8.6. Determines which current or existing tasks to include in the annual Development Packet (DEV PAC) reviews; and,
 - 2.14.8.7. Ensures that the appropriate trigger code is used to forecast materiel when there is a significant change in future requirements for a Defense Logistics Agency (DLA)-managed consumable item.
- 2.14.9. Responsible for monthly obligation reconciliation within the CAM IT system of record which is an input to the deferral report.
- 2.14.10. Appoints PM designee via email to HQ AFMC A4FR Workflow.

2.15. Chief Engineer.

- 2.15.1. Serves as the final authority for the technical requirements in AMR.
- 2.15.2. Chairs the Requirements Review Board during the ERRP.
- 2.15.3. Serves as the final authority for AMR software maintenance (e.g., AFEEICs 54001, 54002, and 56000) and SE requirements (e.g., AFEEICs 57834, 57836, 58300, and 5830R).

2.16. Engineering Requirements Review (ERR) Manager.

2.16.1. The PM appoints the ERR manager and the ERR manager oversees, manages, and facilitates the ERRP.

- 2.16.2. Coordinates with the program office, Production Management and Maintenance Managers to ensure a thorough review and validation effort takes place for all new, amended or deleted DEV PACs.
- 2.16.3. Updates the ERRP Performance Matrix quarterly.
- 2.16.4. The ERR Manager receives and documents the proposed requirement within the DEVPAC.
- 2.16.5. Plans, schedules, and tracks all new, amended, or deleted DEV PACs through completion; provides AFMC/CAM with a list of completed DEV PACs annually after the ERRP is complete.
- 2.16.6. Coordinates the Requirements Review Board (when requested by the chair, the Chief Engineer) for the defined requirement.
- 2.16.7. Documents the final actions and outcomes from the Requirements Review Board (e.g., approve, disapprove, rework, approve on subsequent submission).
- 2.16.8. Performs follow up(s) on any issues the BOW or requirements supportability teams may have with the scheduled maintenance task.
- 2.16.9. Serves as the gatekeeper to maintain, coordinate, and facilitate corrective actions for DEV PAC revisions, updates, and changes.
- 2.16.10. Plans, schedules, and tracks a review of completed DEV PACs. Ensures 100% review of the completed DEV PACs over the course of the programmed depot maintenance (PDM) interval.
- 2.16.11. Coordinates with the program office, Production Management, and Maintenance Managers to select and prioritize tasks for review.

2.17. Program Office Engineer.

- 2.17.1. Populates the proposed requirements data fields and elements in the DEV PAC.
- 2.17.2. Leads collaborative meeting discussion on statement of work, technical order, and Time Compliance Technical Order (TCTO) procedures.
- 2.17.3. Briefs what is included in the DEV PAC data fields and list of materiel (LOM).

2.18. Program Office Equipment Specialist (ES).

- 2.18.1. Works in conjunction with the program office engineer to populate the requirements data fields and elements on the DEV PAC, Part I, blocks one through 25.
- 2.18.2. Assists the engineer with the collaborative meeting discussion on statement of work, technical order, and TCTO procedures. Briefs what is included in the LOM.

2.19. Program Office Logistics Specialist.

- 2.19.1. Evaluates the new or updated task materiel list to perform an initial assessment of availability and identify long-lead items in the ERRP.
- 2.19.2. Ensures proper notification when there is a significant change in future requirements for a DLA-managed consumable item.

- **2.20. Maintenance Groups.** Perform trend analysis on tasks with occurrence factors less than 100% and tasks with unpredictable workload during the AMR process.
- **2.21. Work Specification Manager.** During the AMR process, certifies and publishes the work specification.
- **2.22.** Air Force Sustainment Center (AFSC) 448th Supply Chain Management Wing (SCMW). During the AMR process, provides supportability assessment on parts managed by the 448 SCMW.
- **2.23. Defense Logistics Agency (DLA).** Provides an initial assessment on asset availability to assist the program office in determining the year of planned task execution in accordance with AFMC Instruction (AFMCI) 23-105, *Planning for DLA Managed Consumables (PDMC)*.
- **2.24. Depot Maintenance Planner.** Validates Direct Product Standard Hours (DPSH) on existing scheduled depot maintenance tasks selected for annual review. This validation occurs concurrently with the ERRP development and review of the DEV PACs for existing tasks.

Chapter 3

AIRCRAFT AND MISSILE REQUIREMENTS (AMR) PROCESS

3.1. Overview.

- 3.1.1. The AMR process applies to all AF organizations that require and provide depot maintenance on aircraft or missile systems utilizing CAM funding and includes all work performed organically or via interservice agreement. This process also applies to contract depot maintenance workload.
- 3.1.2. The AMR process covers AFEEICs 54101, 54102, 56010, 54201, 54202, 56020, and repair group category (RGC) A, B, C, and D. This chapter outlines how to develop, review, validate, and approve depot-level maintenance and repair for aircraft and missile systems at the task level.

3.2. Supporting Guidance.

- 3.2.1. AFMCI 21-102, *Analytical Condition Inspection (ACI) Programs*, provides guidance and procedures for establishing and monitoring ACI programs for aerospace equipment. ACI programs are established to reveal defects that may not otherwise be detected through normal technical order and PDM inspections. Data generated from ACIs is used to refine or create mandatory aircraft inspection programs (e.g., field and depot programs).
- 3.2.2. AFMCI 21-103, *Reliability-Centered Maintenance (RCM) Programs*, provides guidance and procedures for establishing and monitoring preventive maintenance programs for aerospace equipment using RCM methodology. RCM analysis is used to develop scheduled inspection and maintenance requirements and reveals requirements for potential PDM and ACI tasks.
- 3.2.3. AFMCI 21-104, *Controlled Interval Extension (CIE) Programs*, provides guidance and procedures for establishing and monitoring CIE programs for aerospace equipment. CIE programs are established to control conditions for extending maintenance and inspection intervals without sacrificing safety of flight or reliability.
- 3.2.4. PDM intervals are determined by evaluating aircraft or missile safety, reliability, and mission requirements. TO 00-25-4, *Depot Maintenance of Aerospace Vehicles and Training Equipment*, outlines the technique used to determine the appropriate CIE sample size based on the force size of the mission design series (MDS) being evaluated under the CIE programs.
- 3.2.5. The Aircraft Structural Integrity Program (ASIP) establishes a timed-phased set of required actions to be performed to ensure the structural integrity of the aircraft. Reference AF Policy Directive (AFPD) AFPD 63-1/20-1, *Integrated Life Cycle Management*, DAFI 63-140, *Aircraft Structural Integrity Program and Air and Space Equipment Structural Management*, and MIL-STD-1530D, *DoD Standard Practice*, for additional ASIP guidance.
- 3.2.6. AFMCI 21-100, *Depot Maintenance Management* documents additional information on RGCs.

3.3. Aircraft Requirements.

- 3.3.1. Funds holder funds are used to support all depot-level maintenance requirements for aircraft in RGC A and B.
 - 3.3.1.1. RGC A designates programmed requirements. Programmed requirements are those which are scheduled on a calendar or time cycle basis.
 - 3.3.1.2. RGC B designates field teams and unprogrammed maintenance. Unprogrammed maintenance requirements generate unpredictably. If a field team is used, RGC B organic rates and contract prices include labor costs only. The owning unit will order required material against its local flying hour account. (T-3).
- 3.3.2. Aircraft maintenance, such as defueling, disarming, and flight prep, is generally paid for by the Funds Holder who funds the driving workload. Driving workload is the primary reason an aircraft is scheduled into a repair facility.
- 3.3.3. PDM and ACI aircraft requirements use DPEM customer funding under RGC A. These requirements must be presented to and approved by the PM with coordination from the MAJCOM. (T-3).
- 3.3.4. Airframe condition evaluation and on-condition maintenance for rotary winged aircraft are funded under DPEM RGC A.
- 3.3.5. The pre-induction inspection is accomplished months before the aircraft enters its scheduled depot maintenance. This provides sufficient lead time for improving the real-time maintenance requirements that establishes the known aircraft condition baseline. This leads to a well-defined maintenance support plan for the submitted depot-level work package. Detailed pre-induction inspection instructions are documented in TO 00-25-4.
- 3.3.6. Maintenance assist requests submitted according to AF Technical Order (AFTO) 00-25-107, *Maintenance Assistance*, from the customer for depot assistance are funded under RGC B. The Air Logistics Complex (ALC) may fulfill the requirement using a field team or by repairing the aircraft at a depot-level facility.
- 3.3.7. Negotiated organizational and intermediate level aircraft maintenance performed by depot-level personnel at the request of the user is a DPEM requirement. This type of work must be negotiated between the customer, Funds Holder(s), lead command, PM, and the SOR. (T-3). Organizational and intermediate level maintenance can also be accomplished via an AFTO Form 103, *Aircraft/Missile Condition Data*, request certified by the MAJCOM as mission essential and beyond its current capability.
- 3.3.8. The aircraft depot-level modification installation is funded with appropriation 3010, Budget Program 1100.
- 3.3.9. Damage that is not due to reasonable wear and tear and exceeds \$250,000 total repair cost is called aircraft damage repair. Operations and Maintenance (O&M) funding pays to recover the aircraft to a flying condition. SE EEIC 583 pays for engineering evaluations to determine the cause of the damage. EEIC 583 is generally used for contract support only. However, it is possible to use organic resources for this purpose, but the funds must first be realigned to AF EEIC 583OR. The DPEM requirement consists of the cost of examining the damaged aircraft by contract or organic depot-level maintenance personnel to determine the

cost of repair and to assemble a materials list. The labor and material used to repair the aircraft is also a valid DPEM requirement.

3.4. Missile Requirements.

- 3.4.1. Requirements in RGC C and D support all depot-level maintenance activities required for AF missile systems. RGC C designates programmed requirements, i.e., those that are scheduled on a cyclical basis. RGC D is used for unprogrammed maintenance and field teams. If a field team is used, RGC D organic rates and contract prices include labor costs only.
- 3.4.2. The owning unit orders required material against its local funds for:
 - 3.4.2.1. Induction and withdrawal of operational missiles from storage and the maintenance to preserve them while in storage. Storage and maintenance is the permanent, on-site environmentally-controlled storage and preservation maintenance performed by a SOR other than the Aerospace Maintenance and Regeneration Group (AMARG).
 - 3.4.2.2. PDM and ACI for defects, deterioration, or corrosion in the air-vehicle equipment and operational ground equipment.
 - 3.4.2.3. Disassembly for shipment. Assembly or reassembly to an operational condition.
 - 3.4.2.4. Preparation for shipment.
 - 3.4.2.5. Depot field teams (DFTs) located at each operational wing that accomplishes required phase tasks to include:
 - 3.4.2.5.1. Testing and subsequent repair of a missile for structural integrity.
 - 3.4.2.5.2. Analysis such as fatigue analysis of a component or section of a missile to determine if the class of assets is beyond economical repair.
 - 3.4.2.5.3. Reclamation and repair of stock-fund exempt missile components.
 - 3.4.2.5.4. Depot-level repairs for damage that was not caused by fair wear and tear.
 - 3.4.2.5.5. Inspection TCTO.
 - 3.4.2.5.6. Maintenance assistance requests (in accordance with AFTO 00-25-107) accomplished by organic or contract field teams (CFTs).
 - 3.4.2.5.7. Aging and surveillance tasks.
 - 3.4.2.5.8. Demilitarization and disposal.
 - 3.4.2.5.9. Fault isolation and repair.
 - 3.4.2.5.10. Computed tomography of intercontinental ballistic missile (ICBM) rocket motors.
- 3.4.3. Unprogrammed, RGC D organic and contract maintenance requirements for the ICBM weapon system are generated primarily by the use of program management, engineering assessments, and the historical trend of past year obligations, as well as known program changes, (e.g., PDM directions or the Strategic Arms Reduction Treaty). ICBM unprogrammed requirements may result from:

- 3.4.3.1. A deficiency identified by one of the PMs within the ICBM program group (e.g., guidance, propulsion, re-entry, or ground). Once a deficiency is identified, an integrated product team should meet to develop a viable solution.
- 3.4.3.2. A risk to the program based on engineering assessments identified by the ICBM Chief Engineer.
- 3.4.4. The Item Manager initiates an AFMC Form 800, *Item Manager Workload Projection Summary*, and sends it to the Production Management Specialist (PMS). The PMS uses this spreadsheet to determine if the requirement's SOR is either contract or organic and document the quantity and time frequency of repair. The programmed, RGC C DPEM organic and contract support requirements are computed by the parts forecasting system.
- 3.4.5. Emergency response teams for ICBM rocket motors and Propulsion System Rocket Engines have been deemed not valid WSS or depot-level maintenance activities per AFMC Financial Management Policy Division (AFMC/FMAP). AFGSC is responsible for budgeting and funding for ICBM Emergency Response Teams outside the WSS process, including hardiness surveillance electronic pulse program for ICBM Launch facilities, and static-fire performance testing for ICBM rocket motors and propulsion-system rocket engines.

3.5. Depot Schedule and Depot Customer Workload Agreement (DCWA).

- 3.5.1. Depot maintenance scheduling is required to facilitate an effective use of resources in providing maximum weapon system availability to the warfighter. The purpose of the DCWA is to define the scope of work, outline specific requirements, and specify customer responsibilities for accomplishing organic pre- and post-depot-level maintenance for inductions and deliveries of all specific weapon systems at ALCs.
- 3.5.2. The PM, in conjunction with MAJCOMs, ALC business office, maintenance, and appropriate stakeholders, will develop and publish an official schedule annually by 1 July for the next execution year plus draft two-years of the FYDP (at a minimum) aligned with the approved AMR brochure. (T-3). The intent is to develop the official baseline schedule by tail number, engineering requirement, quantity, or missile site.
- 3.5.3. The PM shall ensure the core elements of a depot schedule consists of the following: tail number, missile, sites, quantity, induction date, target completion date, flow days, and program or type of work (e.g., PDM, modification, etc.). (**T-1**).
- 3.5.4. In addition to the core elements, the optional following elements provide increased value to the customer: program control number, owning unit or base, MDS, MAJCOM, SOR, and additional requirements as needed (e.g., ACI).
- 3.5.5. Each PM is responsible for coordinating and completing a DCWA for the year of execution for organic depot maintenance workload. At a minimum, the PM and the PM equivalent from each of the following groups will coordinate on and sign the DCWA: lead command; Funds Holder; MAJCOM logisticians; ALC maintenance group; and ALC business office. (T-3).
- 3.5.6. All ANG aircraft and missile workload agreements are coordinated through National Guard Bureau (NGB) Maintenance Division (NGB/A4M) and NGB Resources Division (NGB/A4P) for signature.

- 3.5.7. The PM will coordinate a memorandum requesting deviation from guidance if the designated representatives in **paragraphs 3.5.5** and **3.5.6** (if applicable) agree not to utilize a DCWA. (**T-3**). The DCWA or the memo must be fully signed by all parties and in place not later than 1 September for each year it is used. (**T-1**).
- 3.5.8. The PM, maintenance group, ALC Business Office, and MAJCOM(s) POC(s) (on behalf of their respective units) will jointly agree on the DCWA. (T-1). The AMR work specification is used as the basis for scheduled maintenance tasks to be accomplished, whereas the AMR brochure is used as the basis for the scheduled maintenance sub-tasks and hours associated with each weapon system in the agreement. Each PM and ALC local operating instruction may provide guidance on format, title, and schedule for the DCWA. The PM will provide copies of the workload agreement or the letter of deviation to AFMC/A4FR workflow upon final approval and signature. (T-1). The PM will ensure the DCWA is provided to all applicable stakeholders. (T-3).
- 3.5.9. At a minimum, the PM will ensure the DCWA addresses the following elements: assessment period, flow days, induction configuration, key POCs, period of performance, purpose, quality statement, required documents or references, duties, tasks, scope of work, signature block(s) with dates, special instructions, and warranties. (T-1).
- 3.5.10. The PM, MAJCOM(s), POC(s), ALC maintenance group, and ALC Business Office coordinates on deviations from the negotiated work package(s), support responsibilities, or other agreements. The PM is responsible for ensuring the deviations have been approved and those deviations are documented within the DCWA. (T-3).

3.6. Fixed Price Worksheet (FPWS).

- 3.6.1. The PM develops and coordinates the FPWS. The FPWS documents the agreement between the weapon system PM and the ALC maintenance group for each tail or serial numbered aircraft or missile system undergoing organic depot maintenance and other tasks performed in conjunction with depot maintenance.
- 3.6.2. The FPWS applies to the following workloads: 3400-funded sustainment, 3600-funded development, 3010- or 3020-funded modifications, foreign military sales or other direct cite, and partnership workload.
 - 3.6.2.1. MAJCOM specific requirements, are documented on the FPWS in the "other negotiated maintenance" and "scheduled mods, TCTO, and other negotiated maintenance (i.e., other than 3400 Funded)" sections.
 - 3.6.2.2. The FPWS includes all tasks accomplished during depot maintenance that generate revenue for the complex.
 - 3.6.2.3. A template for the AFMC Standard FPWS is located on the CAM SharePoint® at

 $\frac{https://usaf.dps.mil/:f:/r/teams/11015/CAM\%20Document\%20Library/CAMTEL\%}{20(CAM\%20Training\%20Hub)/01.\%20Aircraft\%20and\%20Missile\%20Requirements\%20(AMR)?csf=1\&web=1\&e=f0IGQa.$

- 3.6.3. The FPWS is divided into the following four areas:
 - 3.6.3.1. Area 1, the FPWS Header, identifies the tail or serial numbered aircraft or missile system undergoing organic depot maintenance and other applicable data.

- 3.6.3.2. Area 2, the Planned Depot Work (Fixed Price Area), documents the three elements of the fixed price: basic, options, and over and above (O&A). This area constitutes the fixed price area of the FPWS.
- 3.6.3.3. Area 3, the Other Negotiated Maintenance (i.e., AFTO Form 103 items that are not in AMR), documents any maintenance to be completed during depot and not included in the AMR brochure. This area is not part of the fixed price and is listed for revenue tracking.
- 3.6.3.4. Area 4, the Scheduled Mods, Time Compliance Technical Orders (TCTO), and Other Negotiated Maintenance, documents any other non-3400 funded work accomplished (e.g., mods, TCTO, foreign military sales, etc.). This area is not part of the fixed price and is listed for revenue tracking.
- 3.6.4. The FPWS is prepared using the AMR brochure for the respective weapon system by tail or serial numbered aircraft or missile. The weapon system PM and the maintenance group will coordinate on and agree to all changes between the initial and final FPWS. (T-3). There are two FPWS:
 - 3.6.4.1. The weapon system PM will develop and forward the initial FPWS to AFMC/A4FR Workflow no later than 30 days prior to depot maintenance induction. (T-1).
 - 3.6.4.2. The PM will update the final FPWS with approved changes to include approved OOC requests and provide to AFMC/A4FR Workflow. (**T-3**). This is a coordinated effort between the weapon system PM and the ALC maintenance group and business office after all work is completed.
- 3.6.5. Calculation of fixed price. Tasks performed during depot maintenance are a predetermined series of common depot maintenance tasks and tail or serial numbered aircraft or missile specific tasks for each aircraft, missile or Other Major End Items (OMEI) undergoing depot-level maintenance. Fixed prices are developed for each MDS and are comprised of three elements: basic, options, and O&A.
- 3.6.6. The basic element of a fixed price is the price charged for each like aircraft, missile, or item undergoing PDM, regardless of condition, for a predetermined series of common depot maintenance tasks. The basic charge is computed by multiplying the number of DPSH by the occurrence factors and by the approved sales rates. The tasks and number of DPSH are determined by the appropriate planning and workload activity and are directly traceable to AMR tasks and hours. Generally, tasks with 100% occurrence factors are included in the basic package. However, tasks with less than 100% occurrence factor are also included. The percent occurrence factor is charged for each item undergoing PDM.
- 3.6.7. Options are those tasks which are not common to every induction. This element allows the customer and the depot to determine each price according to the needs of the end item. For example, a modification may not be required for all inductions. Likewise, all aircraft may not require painting. By identifying such tasks as options and computing a price for each, the customer is provided a shopping list and the depot is given a more finite AMR work specification. In most cases, the price for each option is determined by multiplying the task hours from AMR or TCTO by the rates. **Note:** Options are not the same as occurrence tasks.

- 3.6.8. As documented in AFMCI 21-118, Aircraft Maintenance Production/Compression Report, O&A items of work are done to correct a critical or major deficiency and depots must receive approval from the Project Administration Officer or the PM Representative. (T-3). Each depot package includes a standard number of trended O&A hours. Unused O&A hours can be moved from tail to tail as needed, but only between the same MDS, fiscal year (FY), and Funds Holder.
- 3.6.9. Fixed price includes average AMR brochure earned hours for the basic depot maintenance tasks, option tasks and O&A hours funded and billed at earned hours times the stabilized sales rate. This is known as standard cost. If actual cost is above or below the fixed price standard cost, the working capital fund earns the difference or takes a loss between the actual and the fixed price.
- 3.6.10. Billing is for average AMR brochure earned hours times sales rate.
 - 3.6.10.1. If excess funding has occurred due to the maintenance group and PM agreeing to change the requirement, the PM must use the OOC process and return the excess funds as soon as possible prior to the end of the FY with the estimate of the remaining work to be done by the maintenance group on this year's inductions carried into the next FY. (T-1).
 - 3.6.10.2. If the PM or maintenance group discovers an additional task or deficiency that is beyond the accepted scope of traditional O&A, the PM shall request additional funding before the funds expire at the end of the FY. (T-1).
 - 3.6.10.3. If the PM or maintenance group identifies unforeseen tasks for prior year inductions and current year funding is needed, it must be for O&A tasks which are not covered by the line item(s) for the basic work under the contract.
 - 3.6.10.4. Depot work that carries over from one FY to another requires an estimate of the price of the work required to be carried over into the next FY. The depot provides the estimate to the PM so that adequate current-FY funding can be provided. Funding on open job order numbers (JONs) must be analyzed by the depot and PM to ensure adequate funding for the current year work. (T-3). However, it is the acceptance and obligation of funding documents such as the customer order numbers that determine the funding actually available for carryover.

3.7. The AMR Process Overview.

- 3.7.1. Stage one involves defining new tasks and updating existing tasks. Stage two involves building hours for new tasks and adjusting hours associated with existing tasks. Stage three involves the validation of the hours for each active maintenance task to produce a validated depot maintenance requirement by FY.
- 3.7.2. Task level aircraft and missile depot maintenance requirements are documented in three areas: work specification, AMR trended and non-trended tasks, and engineering requirements DEV PAC. Each has its own purpose and content and serves as subsets of the overarching AMR process.
 - 3.7.2.1. The work specification documents general information relating to specific weapon system depot maintenance requirements.

- 3.7.2.2. The AMR trended and non-trended tasks identify the depot maintenance task requirements and hours required to maintain aircraft and missile systems in mission-ready status.
- 3.7.2.3. The Engineering Requirements DEV PAC fully defines new and existing scheduled depot maintenance task details, analysis, supportability elements and approval prior to a task being added, deleted, or amended in the work specification.

3.8. AMR Process: Stage 1 – Define New Tasks and Update Existing Tasks.

- 3.8.1. The first stage begins with CAM sending a tasking correspondence to air logistics complex (ALC) offices, program offices, MAJCOMs, maintenance groups Defense Logistics Agency (DLA), and 448th Supply Chain Maintenance Wing (SCMW) for the current year on or about 15 November each year. Exact beginning and completion dates are driven by the start date for the LRDP.
- 3.8.2. Emerging requirements can occur at any time, but maintenance tasks are file maintained in the work specification in accordance with the LRDP timeline. Requirements are based on need and not on the availability of funds.
- 3.8.3. Work specifications are of prime importance in securing maintenance services under the AF depot maintenance concept and are the most critical documents in maintenance negotiations. Work specifications are developed and file maintained within the CAM IT system of record. They are prepared for supporting organic workload agreements, contract depot maintenance, and interservice agreements. The work specification documents information relating to specific weapon systems including: general information, receipt of the weapon system at the facility, work requirements, final processing of the weapon system, and applicable technical orders and directives. Work specifications are not authoritative technical manuals and are not used to perform depot-level maintenance.
- 3.8.4. Program engineers develop the depot maintenance technical requirements and provide them to the work specification manager who is responsible for the overall preparation, content, and coordination of the work specification. The work specification is file maintained in the CAM IT system of record. The work specification manager incorporates changes to the work specification identified during the DEV PAC review and forwards the work specification to the SOR for the development of the DPSH.
- 3.8.5. The work specification manager will be updated and reviewed to ensure new or changed tasks, as well as existing tasks, are adequately defined. (**T-3**). The work specifications govern the scope of maintenance and state the depot maintenance required to be performed on government equipment.
- 3.8.6. The annual review may be used by program engineers to address other initiatives which may impact a weapon system's technical inspection and maintenance practices.
 - 3.8.6.1. Items procured under the Improved Item Replacement Program may necessitate a change to the work specification if the items are to be replaced during PDM (ref AFI 23-101, *Material Management Policy*).
 - 3.8.6.2. Any engineering issues affecting the maintenance of AF weapon systems that may adversely or positively affect airworthiness of the systems should be discussed during the annual review and the Engineering Requirements Review Process (ERRP).

- 3.8.7. The lead command, PM, and the appropriate Funds Holder(s) collaborate on all new, amended or deleted active depot maintenance tasks for the performance year.
- 3.8.8. Changes to the work specification are addressed in the build and adjust hours stage. The lead command, PM, and appropriate Funds Holder(s) shall complete collaboration in the CAM IT system of record no later than the first week in April. (**T-1**).
- 3.8.9. After completing collaboration, the work specification manager will certify and publish the work specification in the CAM IT system of record by the first week in April. (T-1).

3.9. AMR Process: Stage 2 – Build and Adjust Hours.

- 3.9.1. The PM will ensure all organic depot maintenance workloads are file maintained in the CAM IT system of record by man-hour. (**T-1**).
- 3.9.2. DPSH and occurrence factors are developed for new scheduled maintenance tasks, and are adjusted as needed. Man-hour data is shown in DPSH. New or changed scheduled maintenance tasks identified during the work specification reviews are assigned DPSH labor standards by maintenance planning units. Standards are based on approved data, group timing, work sampling, technical estimates, or trend analysis, and maintained in a project workload planning system. Where feasible, three years of data should be considered.
- 3.9.3. When a task applies to a MDS but is not active or recommended for deletion, the DPSH are kept and the occurrence factor is set to 0.00.
- 3.9.4. The PM shall use occurrence factors on non-trended task. (**T-3**). If all aircraft or missiles of the same MDS are to receive the task or have that task applied to them, then the occurrence factor is 1.00. If only a percentage of the aircraft or missiles receive the task, then the occurrence factor should reflect that percentage. For example, if 12 PDMs are scheduled in a FY, but only 6 receives a particular task, then the occurrence factor is .50.
- 3.9.5. Trend analysis is be performed on all tasks with occurrence factors less than 100% and tasks with unpredictable workload. Trend analysis is not performed on a once-through-the-fleet or predictable task. The two main purposes of trend analysis are to recommend hour changes to trended tasks and recommend changes to occurrence factors of trended tasks. Neither purpose should be seen as automatic approval of projections or to usurp any of the functions of the AMR review process. Any large growth in hours (i.e., plus or minus 20% and/or 50 hours) using the recommended trend value is justified in the CAM IT system of record to document the driver of the increase or decrease. Properly justified alternative trend analysis methods may be used if approved during the review process. The following subparagraphs contain rules to use during trend analysis:
 - 3.9.5.1. The PM will utilize standard data for trend analysis comes from the PDM scheduling system and includes the following five categories of information: MDS, serial number, AMR work specification code, completion date, and standard hours. Use of alternate data, such as engineering data from systems other than PDM scheduling system, is acceptable if all five categories of information are used. The PM will document the use of alternate data. (T-3).
 - 3.9.5.2. Three years of historical or engineering data is the standard number of years to use for trend analysis. More or fewer years can be used to accommodate small fleets or to

- compensate for changes in scope. The PM will document any deviation from the three-year standard. (**T-3**).
- 3.9.5.3. If a strong upward trend (i.e., R-squared value greater than .75) is shown and other factors have been ruled out, use the trend line value as the out year recommendation. In this case, also check to see if the predicted cost to repair in the out years is below 70% of the cost to replace. If the case can be made to replace rather than repair, then the appropriate planning needs to be implemented to assure parts availability. Be prepared to discuss the cause of the increasing trend. The task should be monitored to see if the trend continues.
- 3.9.5.4. If a strong downward trend (i.e., R-Squared value greater than .75) is shown and other factors have been ruled out, then the recommendation is to use the mean value for the out year projection if the trend line is projected to be between the mean and lower range mean (LRM), or to use the LRM if the projected trend is below the LRM. Be prepared to discuss the cause of the downward trend. The task should be monitored to see if trend continues.
- 3.9.5.5. If the trend is upward and the R-Squared value is between .3 and .75, then the recommended out year projection is to use the upper range mean (URM).
- 3.9.5.6. If the trend is downward and the R-Squared value is between .3 and .75, then the recommendation is to use the mean value for the out year projection.
- 3.9.5.7. If the trend is either up or down and the R-Squared value is between zero and .3, then the data is assumed to be random in nature and the recommended out year projection is to use the URM.
- 3.9.5.8. In the case where recommendations for the out years fall outside the upper or LRM, it is up to the PM to provide sufficient explanation of the root causes to support the mathematical findings and document cause(s) and finding(s).
- 3.9.5.9. The LRM should be used for all O&A tasks. If the LRM is not used, the PM must provide sufficient documentation to explain the root causes and support the use of another value. (T-3).
- 3.9.5.10. The PM shall document the rationale of any deviations from the recommended hours based on the trending data or above business rules. (**T-3**).
- 3.9.6. The PM and ALC maintenance personnel review the draft DPSH and occurrence factors, and then negotiate if necessary. Unsupportable scheduled maintenance tasks are also reviewed to determine if actions can be taken to preclude delaying the task to a future year. Supportability research is completed with the DEV PAC, and negotiations between the collaborative review team decide the best implementation plan for a task including the FY. This activity should be completed by 1 April.
- 3.9.7. All operations that are task-specific are identified to the appropriate task group.
- **3.10. Reviews.** Requirement reviews are conducted during the August timeframe as directed by AFMC/A4F or biannually for new, changed, or deleted requirements for future FYs as directed by the Chief Engineer.

- 3.10.1. The PM, or their designee, file maintains changes from the review meetings and creates the baseline AMR brochure. Once changes from the review meeting have been file maintained in the CAM IT system of record, the AMR brochure is considered baselined.
- 3.10.2. Scheduled maintenance tasks meeting the following criteria are identified and reviewed by the team:
 - 3.10.2.1. Any new tasks.
 - 3.10.2.2. Once-through-the-fleet tasks.
 - 3.10.2.3. Tasks that have changed by plus or minus 20% and/or plus or minus 50 hours.
 - 3.10.2.4. Tasks with supportability issues that impact aircraft flow days or that will move a task to a future year.
 - 3.10.2.5. All tasks meeting the criteria established above will be reviewed and coordinated with the MAJCOM POC(s) and PM via the CAM IT system of record. (T-3).

3.11. AMR Brochure.

- 3.11.1. The AMR brochure baseline is completed with the successful collaboration of the scheduled maintenance task. These tasks are validated in accordance with the LRDP timeline.
- 3.11.2. The AMR brochure is developed to identify the depot maintenance tasks required to maintain AF aircraft and missile systems in mission-ready status and is digitally file maintained in the CAM IT system of record. Requirements are based on need and not on the availability of funds. The AMR brochure supports organic workload agreements and the work specification. New or changed scheduled maintenance tasks identified during the work specification reviews are assigned DPSH labor standards by maintenance planning units. Standards are based on approved data, group timing, work sampling, technical estimates, or trend analysis, and maintained in a project workload planning system. The specifications and explanation of the AMR brochure sections are contained in Table 2-5, of TO 00-25-4.
- 3.11.3. The AMR brochure is developed and managed by the PM responsible for the weapon system management, with input from the lead commands, Funds Holder(s), customers, and the organic SOR representative. It is used primarily by weapon system engineers, ES, production managers, planners, schedulers, requirement functionals, the Consolidated Sustainment Activity Group-Maintenance (CSAG-M), HQ United States Air Force (USAF), HQ AFMC, and the MAJCOMs. It also documents the programmed depot maintenance requirements for weapon systems and provides data used to substantiate budget submission.
- 3.11.4. The AMR work specification manager completes the draft AMR brochure after receiving the maintenance hours from the SOR representative. A new weapon system AMR brochure is prepared for each FY program, portrayed in a 3-year format. AMR brochures are finalized at least one FY prior to the execution year.

3.12. AMR Process: Stage 3 – PM Certification of Hours.

3.12.1. The PM will validate the finalized AMR task groups and their associated hours after completion of e-collaboration on changed or updated scheduled maintenance tasks in stage two. (**T-3**). The PM completes this activity in accordance with the LRDP timeline. Any

- changes or updates to the published AMR brochure must be coordinated and approved within the CAM IT system of record. (**T-1**).
- 3.12.2. Workload. The AMR published brochure is used by both the Budgeting and Requirements Review and Depot Determination (R2D2) processes and serves as the baseline for the hours associated with the scheduled maintenance tasks to be completed. The R2D2 process follows AFMCI 21-100.
- 3.12.3. Program Control Number (PCN) and Task Groups.
 - 3.12.3.1. The PCN is a six position alphanumeric character assigned and file maintained within the Maintenance Planning and Execution (MP&E) system (reference AFMC Manual (Man) AFMCMAN 20-102, *Maintenance Planning and Execution System (MP&E) (D363)*). The hours associated with the PCN and the quantities associated with the PCN are file maintained in the CAM IT system of record. Requirements at the PCN level are reflected by task groups. A task group is a breakout of the work that is performed when an aircraft or missile is brought into the depot. Examples of task groups are PDM, ACI, and paint. Each task must be assigned to a task group. The PM will provide variance narratives at the task group level. (**T-3**).
 - 3.12.3.2. Once the depot maintenance program for a weapon system has been approved at the AMR work specification review and the DPSH have been negotiated, the DPSH are summarized at the PCN level.
 - 3.12.3.3. For RGC A, B, C, and D requirements, quantities, hours, and dollars (where applicable) are file-maintained at the PCN level for organic, contractual, and interservice agreement aircraft and missile maintenance workloads.
 - 3.12.3.4. For the organic requirements programmed in the POM, the hours are pulled at the task group level. The user identifies the task groups that are assigned to each PCN.
 - 3.12.3.5. The task group that is driving the aircraft or missile into the depot is designated as the driving record. Only the quantities on the driving record are reflected in the PCN total. The user also identifies whether the estimated hours or the actual hours are used from each task group. It is very important that this step is done correctly to ensure that the total hours and dollars for the PCN are correct. Estimated hours are used for the driving record task group and the ACI task group. Actual hours are used for any other task groups.
 - 3.12.3.6. A breakout of quantities by lead and Supported Commands is required for programmed workloads.
 - 3.12.3.7. The PM shall develop a requirement narrative describing the PCN workload, an impact statement that provides impact to the mission if the requirement is not funded, and variance narratives at the PCN level for values that have changed by more than plus or minus \$100K and/or plus or minus 10% within the CAM IT system of record (T-3).

3.13. Coordination.

3.13.1. The PM will coordinate all organic depot maintenance correspondence in reference to the following items or any changes through the year of execution through the ALC maintenance group and business office to include:

- 3.13.1.1. Initial baselines and any changes to that baseline that reference tail numbers, sites, missiles and quantities. (**T-3**).
- 3.13.1.2. Flow days and revisions (reference AFMCI 21-118). (T-3).
- 3.13.1.3. AMR brochure hours by program control number. (T-3).
- 3.13.1.4. AMR work specification. (T-3).
- 3.13.1.5. PDM costs and DPEM rates (where applicable) as published by AFMC/FMR. **(T-3).**
- 3.13.2. In addition, the PM will inform the ALC maintenance group and applicable business office of all face-to-face scheduling conferences, video teleconferences, etc., that will affect current and future funding and manpower for each weapon system during the year of execution. (T-3).

3.14. Engineering Requirement Review Process (ERRP).

- 3.14.1. Overview. The ERRP and ERRP DEV PAC was developed in order to document a standardized methodology to fully define, develop, and approve a requirement that ensures scheduled maintenance tasks are valid with supportability elements identified upfront. It drives the generation of a new engineering requirement from conception through approval by providing justification with fully developed supportability elements. A web-based version of ERRP can be found in the Aging Fleet Integrity and Reliability Management (AFIRM) website at https://afrims.cce.af.mil/ which can be accessed after the user account is validated following the directions in the AFIRM user guide.
- 3.14.2. Applicability. ERRP applies to all proposed and existing scheduled depot-level aircraft or missile maintenance requirements (e.g., new, amended or deleted) and standardizes the development of an accurate and completely defined requirement before presenting it to the weapon system Chief Engineer for approval. Every child task with hours assigned is associated to a DEV PAC. O&A or unpredictable tasks do not require a DEV PAC. The chief engineer has the authority to determine which top-level tasks require a DEV PAC and which lower level parent tasks support a top-level parent task.
- 3.14.3. Process Scope. The action that triggers this process is the identification of a technical issue requiring an engineering resolution (e.g., a scheduled maintenance task that needs to be performed on a weapon system). For the purpose of this process, a scheduled depot maintenance requirement is defined as a maintenance action or group of maintenance actions, supported by engineering analysis, from which overall supportability can be determined. The scheduled maintenance task could be accomplished at a depot or contract facility.
 - 3.14.3.1. A defined scheduled maintenance requirement is comprised of the following elements: step-by-step work procedures, parts listings, non-parts listing, hazardous materials, special tools, personal protective equipment, support equipment, production skills, and facilities needed to perform the task.
 - 3.14.3.2. During this process, a requirement moves from a proposed new or existing requirement, then pass through the requirements definition stages and finally to an approved requirement. The approved requirement and output of this process becomes a DEV PAC. Once a DEV PAC is approved by the chief engineer, it goes to the BOW and MRSP. If a program office does not have an automated system or process for DEV

- PACs, a DEV PAC template is located on the CAM SharePoint® at <a href="https://usaf.dps.mil/:f:/r/teams/11015/CAM%20Document%20Library/CAMTEL%20(CAM%20Training%20Hub)/01.%20Aircraft%20and%20Missile%20Requirements%20(AMR)?csf=1&web=1&e=f0IGQa.
- 3.14.3.3. The Collaborative Functional Team is responsible for developing a fully defined engineering scheduled maintenance requirement utilizing the ERRP process to formulate the DEV PAC. This team consists of the following members: program office (e.g., engineering, ES, logistics specialists, PMS, and AMR lead), maintenance production specialists (e.g., aircraft mechanics, production or process engineering technicians), and industrial engineering technicians or planners. The Supply Chain Specialists from the 448 SCMW and DLA or other source of supply may also be brought in if needed.
- 3.14.4. Stage 1 Engineering Requirement Proposal.
 - 3.14.4.1. A scheduled maintenance requirement or task has been identified by the cognizant program office engineer with a corresponding task priority based on the anticipated need date for the task. The requirements can be new, amended or deleted requirements and are generated from instances such as analysis, field request, and policy. This requirement is the start of a DEV PAC.
 - 3.14.4.2. Potential sources of information for a proposed engineering requirement. The following is not to be construed as an exhaustive list: AFTO Form 103; AFTO 781A, *Maintenance Discrepancy and Work Document;* AFMC Form 202, *Non-Conforming Technical Request and Reply;* and data analysis which may include pre-induction inspection discoveries or pre-induction evaluation results.
 - 3.14.4.3. The Requirements Definition Team, which is comprised of the program office engineer and ES, will document the new, amended, or deleted proposed requirement and provide it to the Engineering Requirements Review (ERR) Manager. (T-3).
 - 3.14.4.4. Program office cognizant engineer's first level supervisor (or level as delegated by the Chief Engineer) approves the requirements definition to determine if proceeding to the next step, defining requirements.
 - 3.14.4.4.1. Approved. The first level supervisor or delegate assigns a Project Engineer (may be same as Cognizant Engineer) who develops tech data, if required. The Project Engineer supports the collaborative functional team to continue to fully define the proposed requirement.
 - 3.14.4.4.2. Further Justification. The proposed requirement is returned to the originator to make updates as needed.
 - 3.14.4.4.3. Disapproved. The first level supervisor or delegate must provide justification for disapproval to the ERR Manager for documentation. (**T-3**).
- 3.14.5. Stage 2 Defining the Engineering Requirement.
 - 3.14.5.1. The proposed DEV PAC requirement is fully defined, with step-by-step instructions, parts and materiel, tools, Hazardous Materials, etc. Technical data and/or drawings should exist at this stage, or there should be an electronic AFTO Form 252,

- Technical Order Publication Change Request, in process requesting a change to the technical data or drawing.
- 3.14.5.2. The ERR Manager receives and documents the proposed requirement and is responsible for planning, scheduling, and tracking all new, amended, and deleted DEV PACs through completion.
- 3.14.5.3. The Project Engineer, with support from the program office Equipment Specialist, will develop the work procedures and generate the draft technical data using the LOM or bill of materials) of the DEV PAC. (T-3).
- 3.14.5.4. The collaborative requirement review is conducted with the assigned project engineer and the collaborative functional team. This review assists in populating additional information within the DEV PAC.
- 3.14.5.5. Technical Data Walk-Through. The program office engineer and equipment specialist will walk the collaborative team through the draft technical data step-by-step to include validation and verification for every task being considered in the ERRP. (T-3). The collaborative requirements review team shall determine the appropriate scope for a validation and verification in order to accomplish the workload such as table-top validation and verification, on-aircraft validation and verification to ensure form, fit, and function, etc. (T-3). The program office engineer shall document these recommendations and provide them to the Chief Engineer. (T-3).
- 3.14.5.6. Technical Risk Assessment. The collaborative team review shall identify and assess the risk level associated with executing the task. (**T-3**). Risk areas to consider could include the following: lack of critical skills; lack of critical technology; lack of experience with the work to be performed (this could include issues such as unfamiliarity with the procedures or removing a panel for the first time), training, facility constraints (this could include limitations such as overhead hoists, fuel safe hangars, etc.), and environment, safety, and occupational health risks.
 - 3.14.5.6.1. High Technical Risk. For those tasks designated high technical risk, the collaborative team shall develop a risk mitigation plan using the methodology and approach outlined in the *Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs*. (**T-3**).
 - 3.14.5.6.2. Additionally, the collaborative team shall justify and document not prototyping aircraft or missile high-risk tasks. (**T-3**). The task mitigation strategy must be approved by the PM. (**T-3**).
 - 3.14.5.6.3. Risk mitigation plans may include prototyping or verifying the task on a non-production aircraft. Identification of alternate parts, suitable substitutes, or qualifying additional sources of supply may also be considered. To address facility concerns and constraints, task complexity issues, or aircraft availability issues, prototyping may be accomplished at the Aerospace Maintenance and Regeneration Group.
- 3.14.5.7. Revisions. Required revisions to the technical data may be identified during the course of the collaborative requirement review. Revisions may also occur during the performance of the risk mitigation plan. Regardless of when or where the technical data

revisions are identified, the ERR manager forwards the revisions to the project engineer and program office equipment specialist for re-work and resolution. Another collaborative requirement review may be reconvened upon completion of the re-work.

- 3.14.5.8. Initial Parts Assessment.
 - 3.14.5.8.1. When evaluating demand history for parts, the team shall list all parts necessary to accomplish the task (e.g., stock listed and non-stock listed). (**T-3**). The team should also consider demand history and work-around(s) when reviewing these parts. If demand history warrants, a stock listing action is required in accordance with AFI 23-101.
 - 3.14.5.8.2. For Non-parts supportability (e.g., personal protective equipment, support equipment, hazardous materials, special equipment, special tools, etc.), the determination is made by the Collaborative Functional Team.
- 3.14.6. Stage 3 Approving or Disapproving the Engineering Requirement.
 - 3.14.6.1. At the request of the Chief Engineer, the ERR Manager or delegate schedules a requirements review board chaired by the Chief Engineer. The project engineer responsible for the requirements under review assigns attendees. This may include the collaborative functional team.
 - 3.14.6.2. After reviewing the requirement, the Chief Engineer will decide on one of the following paths:
 - 3.14.6.2.1. Requirement Approved. The Chief Engineer approves the requirement and the ERR manager documents the approval in a locally-approved database and notifies depot maintenance planners. The AMR Manager will file maintain the changes in the CAM IT system of record. (T-1). The Chief Engineer must approve a defined requirement for it to transition into a scheduled maintenance task. (T-3). A DEV PAC is considered complete once the Chief Engineer approves the DEV PAC. It then advances to the BOW and MRSP.
 - 3.14.6.2.2. Requirement Disapproved. Reasons for disapproval are documented by the ERR Manager in a locally-approved database.
 - 3.14.6.2.3. Requirement Returned for Re-Work. Project Engineer reworks the analysis or tech data based upon the Chief Engineer's direction and documents the reason for return in a locally-approved database.
- 3.14.7. Requirements Process Metrics. The PM shall identify process metrics to measure the performance of the ERRP. (**T-3**).
 - 3.14.7.1. Each ALC shall report the number of new, amended, or deleted ERRP requirements initiated and completed within all stages of the DEV PAC compared to the number of total requirements (both existing and new). (**T-3**). Such reports shall be available upon request and during any face-to-face reviews. (**T-3**).
 - 3.14.7.2. Continuous Process Improvement. A root cause analysis will be initiated by the ERR Manager in conjunction with the Chief Engineer for the metrics cited above. (**T-3**).
- 3.14.8. Annual Review.

- 3.14.8.1. The annual review of completed DEV PACs does not have to be a complete Collaborative Functional Team review, but must be thorough enough to ensure the task is still valid and supportable. (**T-3**).
- 3.14.8.2. The annual review is complete once the Chief Engineer reapproves the DEV PAC being reviewed. The ERR Manager may coordinate with Engineering, Production Management and Maintenance Managers to select and prioritize tasks for review.
- 3.14.9. PDM Review. PDM intervals are listed in TO 00-25-4. Two examples: (1) If the PDM interval is 60 months or less, 20% of completed DEV PACs is reviewed each year. (2) If the PDM interval is 96 months, 12.5% of completed DEV PACs is reviewed each year.

3.15. Bill of Work (BOW) Process.

- 3.15.1. The BOW process identifies the operations required to execute tasks that are approved in the ERRP and calculates the man-hours to support the AMR brochure. This process directly supports the AMR process and is applicable to aircraft and missile assets belonging to the active-duty AF, NGB, AFRC, and AF Research, Development, Test, and Evaluation (RDT&E). Each complex may develop a local operating instruction to address specific roles and responsibilities to comply with the BOW process.
- 3.15.2. The BOW process utilizes the Engineering Requirements DEV PAC from the ERRP to update material data systems to include new, amended, or deleted scheduled organic depot maintenance tasks contained in the AMR work specification and AMR brochure.
 - 3.15.2.1. The BOW process lists the elements as follows: step-by-step work procedures; parts listings; hazardous materials; special tools; personal protective equipment; common tools (if utilizing task kits; support equipment; and, production skills needed to perform the task.
 - 3.15.2.2. Additionally, it can be utilized for the following:
 - 3.15.2.2.1. To create or modify aircraft or missile maintenance network such as major jobs; 3.15.2.2.1.1. Document the end-to-end sequencing or critical path of all scheduled depot maintenance tasks; and
 - 3.15.2.2.2. Document the conversion of the step-by-step work procedures for input into PDM Scheduling System to accomplish scheduled depot maintenance tasks to include calculating the man-hours or price out to update direct and indirect materiel lists.
- 3.15.3. The PM will provide the DEV PAC to the depot maintenance group to begin the BOW process. (**T-3**). The PM will also manage the master list of supportability elements and update any changes identified in the DEV PACs. (**T-3**). The PM may send the master list to the applicable source of supply or SOR to facilitate supportability assessments.
- 3.15.4. Depot maintenance strategic planners ensure the step-by-step operations required to accomplish a given task includes: inspection, predecessor, or successor operations, gain access, close-up, etc., and calculation of the man-hours or price out for scheduled maintenance tasks to support the AMR brochure.

- 3.15.5. BOW Criteria. The core elements identified below are used to provide an accurate and fully defined scheduled maintenance task requirement to update the AMR work specification and AMR brochure prior to publishing.
 - 3.15.5.1. Approved and signed DEV PAC, for pre-production planning;
 - 3.15.5.2. Completed AMR work specification;
 - 3.15.5.3. Operations accomplished for a given task, not later than 18 months prior to execution year;
 - 3.15.5.4. Man-hours or price out from ALC;
 - 3.15.5.5. AMR brochure or review hours; and,
 - 3.15.5.6. Master list of supportability elements.

3.16. Maintenance Requirements Supportability Process (MRSP).

- 3.16.1. The PM, in conjunction with other supportability stakeholders, is responsible for conducting overall supportability throughout the requirements process. During the MRSP, the PM identifies duties, tasks, and process steps to ensure the scheduled maintenance tasks in the AMR work specification and brochure are supportable. This applies to all AF organizations requiring and providing scheduled aircraft and missile organic depot maintenance on AF Systems.
- 3.16.2. The MRSP is a collaborative review to assess the level of risk associated to the execution of a scheduled maintenance task in the AMR work specification, AMR brochure, or BOW. Task level risk is determined by the PM based on the individual risk assessments provided by the supply chain managers and maintenance personnel for their assigned supportability elements (e.g., parts and non-parts). Inputs to the supportability process are the list of material developed through the ERRP and BOW, as well as maintenance data on existing tasks that have yet to be reviewed through the ERRP.
- 3.16.3. There are three intervals of supportability definitions and criteria for the overarching requirements process: strategic, operational, and tactical. The PM will assess overall task supportability to determine if further actions are necessary. (**T-3**).
- 3.16.4. Supportability Elements. The following elements to review for supportability are: 448 SCMW-managed parts, DLA-managed parts, non-parts support equipment, special tools, common tools, personal protective equipment, Hazardous Materials (HAZMAT), manpower and skills, and facilities and utilities.
- 3.16.5. Strategic Supportability.
 - 3.16.5.1. Strategic Supportability occurs 18 months prior to aircraft input into the depot through FY defense plan.
 - 3.16.5.2. Risk Assessment Criteria. At a minimum, the Strategic Supportability Risk Assessment reviews occur twice annually for all scheduled maintenance tasks for a particular MDS and is not tail or serial number specific. The refreshed risk assessment data is reported and used to support the AMR work specification review and collaboration; this is in preparation of the start of the new FY. The supportability assessment includes red, yellow, and green criteria. The PM will document and include

explanation for the supportability issue(s) causing red ratings in accordance with **Table 3.1** below. (**T-3**).

Color	Parts - 448 SCMW and DLA	Non-Parts	Task Program Office
Green (Low Risk)	Serviceable assets on shelf plus contract due-in or repair schedule meets requirement need date with lead time consideration.	All non-parts elements will be available to support the task.	All parts and non-part elements will be available or contract delivery date or repair schedule meets need due date requirement.
Yellow (Medium Risk)	Serviceable assets on shelf plus contract due-in or repair schedule will not meet requirement need date, but there is a documented workaround.	Not all non-part elements will be available to meet requirement, but there is a documented workaround.	Not all parts and non-parts elements will be available to meet date requirements but the task can be executed with the documented workaround.
Red (High Risk)	Serviceable assets on shelf plus contract due-in or repair schedule will not meet requirement need date and there is no workaround.	Not all non-part elements will be available to meet need date requirement and there is no workaround.	Scheduled maintenance tasks cannot be executed; requires moving the task in the work specification to an out year when it can be executed.

- 3.16.5.3. The PM provides scheduled maintenance requirements to source of supply and SOR via 448 SCMW Planning and Execution or DLA Aviation Planning and Support (P&S). The PM also actively manages the strategic supportability processes outlined herein and serves as the overall Supportability Chair, with reach back to the responsible organization for the supportability elements.
- 3.16.5.4. The PM leads the strategic supportability assessments and reviews. The goal of these assessments and reviews is continuous availability of all supportability elements. The PM will utilize the Element and Task level color code assessment as part of the review and analysis. (T-3).
- 3.16.5.5. The non-parts supportability template provides non-parts information for new tasks as identified during the ERRP and existing tasks directly to depot maintenance. It also provides parts information for new tasks identified during the ERRP and existing tasks directly to AFSC Planning and Execution and DLA Aviation P&S organizations. The template is located on the CAM document library under the General Information folder.
- 3.16.5.6. The PM will receive information back from AFSC/448 SCMW, DLA, and depot maintenance groups to summarize and assess risk at the task level. (**T-3**). Any changes to the validated AMR work specification must be communicated to 448 SCMW and DLA for parts and depot maintenance for non-parts. (**T-3**).

- 3.16.5.7. To support parts forecasting, the PM provides changes from the previous year's submission for 448 SCMW-managed parts requirements at publishing of the AMR brochure (in accordance with the applicable published LRDP schedule) annually for inclusion into the parts forecasting system.
 - 3.16.5.7.1. The PM will also provide changes from the previous year's submission of the aircraft or missile DLA-managed items to 448 SCMW Planning for DLA Managed Consumables (PDMC) at publishing of the AMR brochure (in accordance with the applicable published LRDP schedule) annually for inclusion into the DLA demand plan. (T-3).
 - 3.16.5.7.2. The PM will provide changes from the previous year's submission directly to the aircraft or missile DLA-managed items to AFSC/448 SCMW PDMC at publishing of the AMR brochure (in accordance with the applicable published LRDP schedule) annually for inclusion into the DLA demand plan. (**T-3**). Reference AFMCI 23-105 for additional information.
- 3.16.5.8. AFSC executes supportability actions on AFSC/448 SCMW-managed parts and documents mitigation plans for those parts deemed unsupportable based on approved business rules. Supportability actions may include, but are not limited to: demand data exchange input for DLA-managed items via the PDMC process, parts supportability analysis, and execution of parts supportability checklists. PM requested changes are incorporated in the parts forecasting system.
- 3.16.5.9. DLA executes supportability actions on DLA-managed parts and other supply parts (e.g., local manufacture, local purchase, etc.). Documents mitigation plans for those parts deemed unsupportable based on approved business rules. Supportability actions may include, but are not limited to: demand planning, conducting parts supportability analysis, and execution of parts supportability checklists. DLA also accepts changes from AFSC/448 SCMW PDMC flight on DLA-managed parts requirements to include in the demand plan. **Note**: DLA is an integral partner to the supportability process. This AFMAN is not a directive to DLA, but recommends DLA take those actions as outlined, agreed to, and currently being reported as part of their partnership with AFSC/448 SCMW.
- 3.16.5.10. Depot maintenance groups receive the PM's support equipment non-parts assessment list, and maintenance planners accomplish supportability actions on non-parts supportability elements. Depot maintenance provides detailed status on all scheduled maintenance tasks, provides root cause analysis on those items coded red or yellow based on agreed business rules, and executes the non-parts supportability checklist.
- 3.16.5.11. The depot supply chain manager, MRSP, and cross organizational requirements execution teams are organizational concepts for performing many tasks, including supportability actions. The 448 SCMW, DLA, and depot maintenance may have participants aligned to the depot supply chain manager, MRSP, or cross organizational requirements execution teams to perform the roles above and documented within this chapter.
- 3.16.5.12. Strategic Supportability Elements.

- 3.16.5.12.1. DLA Managed Parts. As an input, the PM provides a LOM from each DEV PAC and other parts assessment list to DLA which includes the following: national stock number (if no national stock number, list part number and Commercial and Government Entity (CAGE) code), quantity per aircraft, weapon system PDM Replacement percent, quantity per FY based on aircraft or missile schedule, scheduled depot maintenance task, quantity of aircraft or missile inductions, and proposed start year with duration. For PDMC items, ensure the appropriate PDMC trigger code is used to forecast materiel when there is significant change in future requirements for DLA-managed consumables. As an output, DLA provides supportability assessment.
- 3.16.5.12.2. 448 SCMW Managed Parts. As an input, the PM provides a LOM from each DEV PAC and other parts assessment list to 448 SCMW which includes the following: national stock number (if no national stock number, list part number and CAGE Code) quantity per aircraft, weapon system PDM replacement percent based on aircraft or missile schedule per FY, scheduled depot maintenance task, quantity of aircraft or missile inductions, and proposed start year with duration. As an output, the 448 SCMW provides a supportability assessment.
- 3.16.5.12.3. Hazardous Materials. As an input, the PM provides a list of hazardous materials each DEV PAC and other parts assessment lists to depot maintenance to include the following: unit of issue or quantity per aircraft, nomenclature, national stock number or part number, and associated Environment, Safety, and Occupational Health risks. As an output, depot maintenance provides supportability assessment.
- 3.16.5.12.4. Support Equipment Non-parts. As an input, the PM provides a list of support equipment from each DEV PAC and other parts assessment lists required to depot maintenance to include the following: type, national stock number or part number, nomenclature. As an output, depot maintenance provides supportability assessment, including training requirements.
- 3.16.5.12.5. Personal Protective Equipment. As an input, the PM provides a list of personal protective equipment to depot maintenance, issued or non-issued, from each DEV PAC and other required parts assessment lists that are scheduled for maintenance. The input includes type, nomenclature, standard (military standard, Occupational Safety and Health Administration, American National Standards Institute, etc.), and national stock number or part number as applicable. As an output, depot maintenance provides supportability assessment.
- 3.16.5.12.6. Special and Common Tools. As an input, the PM provides a list of special and common tools from each DEV PAC and other parts assessment lists required to depot maintenance to include the following: description and unit of issue for special tools. If utilizing task kits, provide common tool description and unit of issue. As an output, depot maintenance provides supportability assessment, including training, as required.
- 3.16.5.12.7. Facilities. As an input, the PM provides a list of facilities from each DEV PAC and other parts assessment lists required to depot maintenance. As an output, depot maintenance provides supportability assessment.

- 3.16.5.12.8. Manpower and Skills. As an input, the PM provides a LOM from each DEV PAC and other parts assessment lists to depot maintenance. As an output, depot maintenance provides supportability assessment to include training requirements.
- 3.16.5.12.9. Production Support Center or Tool Crib Material. As an input, the PM provides a list of production support center material from each DEV PAC and other parts assessment lists required to depot maintenance. As an output, depot maintenance provides supportability assessment.
- 3.16.5.13. AMR brochure Baselined Supportability Assessment occurs on all scheduled maintenance tasks for all years in the AMR brochure. This process is depicted by **Figure 3.1**

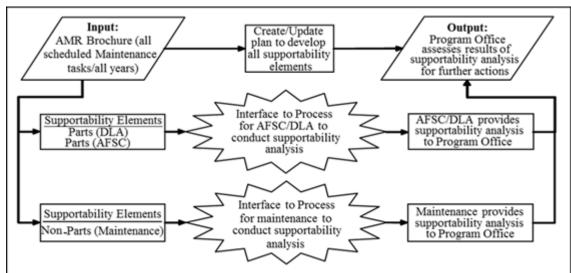


Figure 3.1. Strategic Supportability Assessment Process.

- 3.16.5.13.1. The PM begins with the previous year's published AMR brochure and notifies 448 SCMW planning and execution groups, DLA Aviation P&S and depot maintenance to perform supportability actions on all scheduled maintenance tasks within the AMR brochure tasks.
- 3.16.5.13.2. If supportability elements have been identified on all tasks, then the tasks are forwarded to 448 SCMW Planning and Execution, DLA Aviation P&S, and depot maintenance. If all supportability elements have not been identified, the PM will ensure, at a minimum, 80-100% replacement factor parts, manpower, skills, facilities, and special tools have been addressed. (**T-3**).
- 3.16.5.13.3. The PM provides approved engineering requirements DEV PAC Part III and a summary of changes from previous years to 448 SCMW planning and execution groups and DLA P&S. If there are issues with the supportability elements on the DEV PAC, the PM shall contact the ERR Manager for resolution. (T-3).
- 3.16.5.13.4. If there are tasks with unidentified supportability elements, the PM shall document the plan for when all supportability elements will be identified, but not later than the operational supportability interval. (**T-3**). The PM shall review supportability element progress at each strategic supportability review. (**T-3**).

- 3.16.5.13.5. The 448 SCMW Planning and Execution, DLA Aviation P&S, and depot maintenance conduct supportability analysis.
- 3.16.5.13.6. The PM receives supportability analysis from 448 SCMW Planning and Execution, DLA Aviation P&S, and depot maintenance and schedules working level meetings for supportability assessments.
- 3.16.5.13.7. The PM assesses results of the overall supportability analysis to determine if further actions are necessary, such as workarounds, deferments, or forecasts to source of supply.
- 3.16.5.14. The published AMR brochure supportability assessment applies to new or updated scheduled maintenance tasks and the process is depicted in **Figure 3.2**

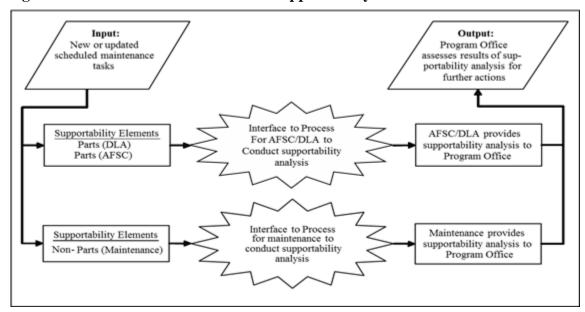


Figure 3.2. Published AMR Brochure Supportability Assessment.

- 3.16.5.14.1. Local operating instruction determines start dates, composition, how to conduct, and frequency of supportability reviews.
- 3.16.5.14.2. The PM receives new or updated scheduled maintenance tasks based on the change proposal process and provides maintenance requirements to 448 SCMW planning and execution, DLA Aviation P&S and depot maintenance.
- 3.16.5.14.3. Once the 448 SCMW planning and execution, DLA aviation P&S, and depot maintenance conduct supportability analysis and provide the results to the PM, the PM schedules working level meetings for the supportability assessments.
- 3.16.5.14.4. The PM will assess the results of supportability analysis to determine if further actions are necessary. (**T-3**).
- 3.16.6. Operational Supportability.
 - 3.16.6.1. Operational Supportability assessment occurs 17 months to 31 days prior to aircraft input into the depot or JON is opened (i.e., the ability to submit the first requisition). Based on the operational tail or serial number, as applicable, assumes all

- identified supportability elements are, or will be, available 31 days prior to task execution schedule.
- 3.16.6.2. Operational supportability assessment reviews occurs in conjunction with the strategic reviews; refreshed risk assessment data reporting is to be aligned with strategic supportability.
- 3.16.6.3. The PM provides scheduled maintenance task requirements to source of supply and SOR and actively manages the operational supportability processes and serves as the Supportability Chair.
- 3.16.6.4. The PM also leads operational supportability assessments or reviews with the goal of continuous availability of all supportability elements and provides and adjusts known tail or serial number specific requirements to 448 SCMW planning and execution, DLA Aviation P&S, and depot maintenance.
- 3.16.6.5. The 448 SCMW and DLA execute supportability actions on their respective managed parts and other supply parts and document the mitigation plan(s) for those parts deemed unsupportable based on approved business rules.
- 3.16.6.6. Supportability actions may include, but are not limited to, demand data input for DLA-managed items via the demand data exchange process and conducting parts analysis and execution of checklists.
- 3.16.6.7. Supportability guidance includes red, yellow, and green criteria; the PM will include explanation for the issues causing red ratings. (**T-3**). The PM will provide only the changes from the previous analysis to including an explanation of changes. (**T-3**).
- 3.16.6.8. Depot maintenance accomplishes supportability actions on non-parts elements. Supportability actions may include, but are not limited to, conducting analysis, execution of checklists, and demand data input for DLA-managed items via the PDMC process for existing tasks.
- 3.16.6.9. Elements of Operational Supportability.
 - 3.16.6.9.1. DLA-managed. The PM provides a list of parts materials from each DEV PAC and other parts assessment lists required to DLA which includes the following information: national stock number (if no national stock number, list part number and CAGE Code), quantity per aircraft, weapon system PDM replacement percent, and quantity per year of the specific tail or serial number requirements. DLA provides the supportability assessment.
 - 3.16.6.9.2. 448 SCMW Managed Parts. As an input, the PM provides a list of parts from each DEV PAC and other parts assessment lists required to 448 SCMW which includes the following: national stock number (if no national stock number, list part number and CAGE Code), quantity per aircraft, weapon system PDM replacement percent based on aircraft schedule per FY, and the tail or serial number specific requirements. As an output, the 448 SCMW provides supportability assessment.
 - 3.16.6.9.3. Hazardous Materials. As an input, the PM provides a list of hazardous materials from each DEV PAC and other parts assessment lists required to depot maintenance to include the following: unit of issue or quantity per aircraft, nomenclature, national stock number or part number, and associated Environment,

- Safety, and Occupational Health risks. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.4. Support Equipment. As an input, the PM provides a list of support equipment from each DEV PAC and other parts assessment lists required to depot maintenance to include the following: type, national stock number or part number, and nomenclature. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.5. Personal Protective Equipment. As an input, the PM provides a list of personal protective equipment issued or non-issued from each DEV PAC and other parts assessment lists that is required to perform a scheduled maintenance task required to depot maintenance to include the following: type, nomenclature, standard (e.g., military, Occupational Safety and Health Administration, American National Standards Institute, etc.), national stock number or part number as applicable for personal protective equipment, and Environment, Safety, and Occupational Health risks associated with each item of required personal protective equipment. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.6. Special and Common Tools. As an input, the PM provides a list of special and common tools from each DEV PAC and other parts assessment lists required to depot maintenance to include the following: description and unit of issue for special tools. If utilizing task kits, provide description and unit of issue for common tools. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.7. Facilities. As an input, the PM provides a list of facilities from each DEV PAC and other parts assessment lists required to allow depot maintenance to provide a supportability assessment. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.8. Manpower and Skills. As an input, the PM provides a list of manpower and skills from each DEV PAC and other parts assessment lists required to depot maintenance. As an output, depot maintenance provides supportability assessment.
- 3.16.6.9.9. Production Support Center or Blue Straw or Tool Crib Material. As an input, the PM provides a list of production support center material from each DEV PAC and other parts assessment lists required to depot maintenance. As an output, depot maintenance provides supportability assessment.
- 3.16.6.10. Operational Supportability Process Flow. The Operational Supportability Assessment process flow is depicted in **Figure 3.3**

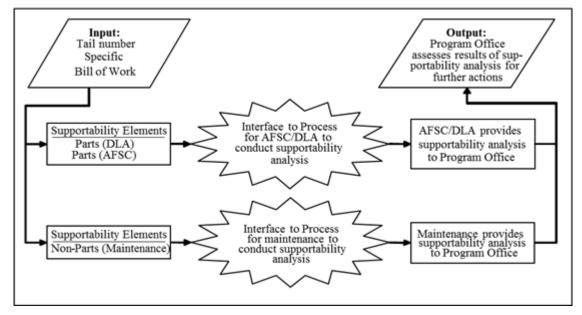


Figure 3.3. Operational Supportability Assessment Process.

- 3.16.6.10.1. The PM reviews the tail or serial number specific information via preinduction inspection, records review, and aircraft condition data (if applicable) and provides data to 448 SCMW planning and execution, DLA Aviation P&S, and depot maintenance to conduct supportability analysis.
- 3.16.6.10.2. The PM receives the supportability analysis from 448 SCMW Planning and Execution, DLA Aviation P&S, and depot maintenance with an explanation of changes, if applicable).
- 3.16.6.10.3. The PM assesses results of overall supportability analysis to include supportable or non-supportable, plus recommended supportability year, to determine if further actions are necessary.

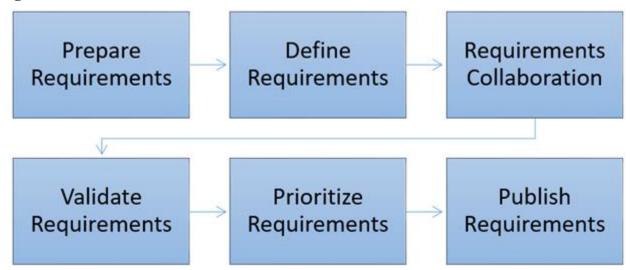
3.16.7. Tactical Supportability.

- 3.16.7.1. The PM provides depot maintenance the disposition (e.g., AFMC Form 202, deferment, etc.) for non-AMR work specification related tasks that are unplanned, unpredictable, or O&A as well as non-supportable AMR work specification related tasks.
- 3.16.7.2. Materiel management executes supportability actions on AF and DLA parts and other sources of supply parts. Materiel management has authority to reach back to 448 SCMW Planning and Execution relating to any AF parts determined to be non-supportable, and provides detailed status to depot maintenance.
- 3.16.7.3. The depot maintenance tactical execution lead is responsible for managing the execution of the production schedule. The tactical execution lead utilizes the AFMC Form 202 process for unresolved non- supportable depot maintenance tasks and accomplishes actions on all non-parts supportability elements.

LOGISTICS REQUIREMENTS DETERMINATION PROCESS (LRDP)

4.1. Overview. The LRDP provides the process flow, as depicted in **Figure 4.1**, for the CAM WSS requirements build for the POM process. LRDP is the cyclical process to create, validate, and defend WSS requirements; AFMC/A4FR provides the LRDP timeline for each POM cycle due to specific dates change on an annual basis. LRDP requirements are file maintained in the CAM IT system of record beginning on or around mid-March. Requirements roll into the CAM IT system of record for the applicable MAJCOM and Funds Holder to validate prior to PM publishing. Requirements are divided into different risk categories as discussed in **paragraph 4.4**

Figure 4.1. LRDP Flow.



4.2. LRDP Phases.

- 4.2.1. Prepare Requirements Phase. The PM in conjunction with the MAJCOM identifies new and emerging requirements and validates existing requirements in the CAM IT system of record.
- 4.2.2. Define Requirements Phase. The PM or PM designee documents new or updates existing program requirements in the CAM IT system of record and ensures requirements are documented in the appropriate risk category and AFEEIC. The PM or PM designee will evaluate each requirement based on force structure changes, changes in operational tempo, historical trends, programmed depot maintenance (PDM) schedules, engine overhaul projections, total aircraft inventory (TAI), FH, and any other major programmatic changes provided by Air Staff and lead command POCs through the Future Years Defense Program (FYDP). (T-1).
- 4.2.3. Requirements Collaboration Phase. The PM or PM designee, MAJCOMs, and Funds Holder will review and collaborate on all requirements using the CAM IT system of record. **(T-1).**

- 4.2.3.1. Collaboration provides concurrence of each requirement and documents a non-concurrence or a problem or concern. Emphasis should be on new requirements, criteria tasks, variances, and Over and Above (O&A) tasks.
- 4.2.3.2. Teleconferences, video teleconferences, e-collaboration, or face-to-face meetings may be used to discuss and reach consensus during the requirements collaboration phase. The PM will ensure all requirements with non-concur status and problems or concerns within the program group are adjudicated prior to moving into the next LRDP phase. (T-3). If left unresolved, the requirement is at risk of not receiving funding during the POM cycle.
- 4.2.4. Validate Requirements Phase. The PM or PM designee validates requirements that have been documented in the CAM IT system of record. This validation is to ensure requirements are accurate, reliable, timely, and properly formatted. Requirements validation requires an electronic signature within the CAM IT system of record.
- 4.2.5. Prioritize Requirements Phase. The PM or PM designee, with input from lead command and supported commands, prioritizes requirements according to their relative importance in meeting AF mission priorities (e.g., aircraft availability, weapon system availability, mission capability, readiness, nuclear assurance, pilot throughput, etc.).
- 4.2.6. Publish Requirements Phase. Requirements are electronically signed by the PM or PM designee and electronically published in the CAM IT system of record. These published requirements are due according to the CAM timeline and used to kickoff the POM.
- 4.2.7. Risk Categories. LRDP requirements are file maintained in the CAM IT system of record and are managed within their assigned risk categories determined by the AFEEIC for the requirement. The requirements and their risk category are used in the development of the POM, ExPlan, and during weapon system analysis. The risk category mapping is located on the CAM SharePoint® at https://usaf.dps.mil/:f:/r/teams/11015/CAM%20Document%20Library/CAMTEL%20(CAM%20Training%20Hub)/00.%20Getting%20Started/02.%20CAM%20AFEEIC%20Mapping?csf=1&web=1&e=fytszh.
- **4.3. General Requirements Management.** The PM or PM Designee will develop the requirements within the CAM IT system of record in accordance with this publication. (**T-1**). AFMC/A4FR will provide an LRDP Checklist as a reference guide to ensure that requirements across the CAM Portfolio are consistent. (**T-3**).
 - 4.3.1. The PM reviews requirements from an operational (i.e., what is the impact to the warfighter and mission?) and programmatic perspective (i.e., what is the impact to the program?) at an unclassified level with acronyms spelled out the first time they are used. Do not restate contract language when describing the requirement.
 - 4.3.2. Ensure requirement attributes are correct such as the POC, Program Element Code (PEC), AFEEIC, and SOR.
 - 4.3.3. When describing the requirement, explain that the requirement answers the following questions: who is doing the work (e.g., the name of the contractor or facility)? What is the requirement funding? Where, when, and how the work is accomplished?

- 4.3.4. When developing the requirement value, ensure how the dollar value of each requirement is computed (e.g., quantity of hours, man-hours, units, locations, number of PDMs, estimated unscheduled depot-level maintenance (UDLM) quantity, etc.).
 - 4.3.4.1. The basis of estimate should clearly define the logic, rational method, data, and documented calculations used to estimate the resources required to perform the tasks. Some typical methodologies are: historical program task and cost data, historical program or organizational productivity parametric data, firm quotation from a contractor or supplier, level of effort, or engineering estimate. Attach supporting documentation to the requirement that shows how requirement value was determined (e.g., a simplified independent cost estimate, like system, and original equipment manufacturer estimate). Do not reference an attachment to another requirement.
 - 4.3.4.2. If the requirement value is based on historical documentation, then supporting documentation should accompany the requirement. Do not reference an attachment to another requirement. If the value is based on historical execution, supporting documentation is not necessary.
 - 4.3.4.3. If the requirement is a DPEM requirement, ensure the Software Change Requests (SCR) Overview is updated reflecting Prior SCR, Expected SCR, Planned SCR and Remaining SCRs.
 - 4.3.4.4. If the historical or current-FY obligation amount is significantly lower than the requirement amount for the current POM year, document why there was an increase to the requirement. If there is a reason using actual obligations are not be sufficient for the current POM cycle requirement, the PM will ensure documentation is provided within the CAM IT system of record. (T-1).
 - 4.3.4.5. Placeholder requirements can be used when a requirement is unknown due to changing mission requirements and should equal \$1,000 for ease of identification.
 - 4.3.4.6. If there is a contract for the requirement, the PM will ensure the contract value, or pre-negotiated option value, is used to determine the dollar value of the requirement and should be captured as a true cost requirement that will not be inflated. (T-3). Contract information should be file maintained within the AF WSS software support system of effort to include, but not limited to, correct contract number, correct contract line item number (CLIN), and period of performance. A standard OSD inflation is added to requirements that do not utilize true cost; therefore, the PM should not insert additional inflation into the requirement. If inflation is added into the requirement, the PM shall document the rationale within the CAM IT system of record (T-3).
- 4.3.5. Historical Execution and Variance Narratives.
 - 4.3.5.1. When documenting either historical execution variance or the variance from the last year's LRDP requirement position to the current year's LRDP requirement, the PM will ensure the variance statement explains the positive or negative dollar amount and the variance statement change(s) are documented in the CAM IT system of record. (T-1).
 - 4.3.5.2. The PM shall document what occurred within the program to cause the increase or decrease to the requirement within the CAM IT system of record. (**T-1**).

- 4.3.5.3. The PM shall provide operational and programmatic impacts with reference to the change in quantities, man-hours, or other qualitative details to explain the variance. **(T-3).**
- 4.3.6. Success and Failure Point.
 - 4.3.6.1. Success Point. The success point is equal to the requirement for a given task and is defined as the point where there is zero risk for that task; the program achieves the ultimate goal or activity. Each requirement should have a success point which equals 100% of the requirement value.
 - 4.3.6.2. The failure point is the funding level which would result in a significant impact to capacity or capability or the inability to meet sustainment metric goals. It is expressed as a percentage point where operational mission is impacted.
 - 4.3.6.3. The current failure point definitions are defined in **Attachment 3**. The failure point definition is different for each of the risk categories.
 - 4.3.6.4. The PM shall ensure the failure point justification explains the rationale for how the failure point was determined and calculated. (**T-3**).
- 4.3.7. A new Program Control Number (PCN) is created if there is a type of work change to the requirement (e.g., requirement was software but is now heavy maintenance or source was organic and is now contract). Do not reuse PCNs if there is a scope change on the task as this can create issues when performing historical variances.
- 4.3.8. For changes in type of work or SOR, Funds Holder, or program group, the PM shall create a new requirement to maintain historical data for that requirement. (**T-1**). A new requirement does not have to be created if the scope remains the same and the AFEEIC is being updated to more accurately define the requirement.
- 4.3.9. Do not create tasks in any category for program management administration (PMA) work. PMA is a cost which supports the operation of a PM in their management and oversight role and is not a valid WSS requirement. PMA includes costs such as program office travel, office printing, supplies, equipment, and PM unique computer and communication costs, Advisory and Assistance Services Contract, and Federally Funded Research and Development.
- 4.3.10. Requirements should be broken out between scheduled and unscheduled requirements. The task description must reflect the proper cost element structure (CES) code. For example, if a CES code states "scheduled depot maintenance", then only scheduled depot maintenance activities should be built into the requirement. CES codes are located within the Operations and Support Guide published by OSD.
- 4.3.11. The official definitions of AFEEIC attributes are located within the Financial Management Data Quality Service (DQS) at https://fmdqs.cce.af.mil/.
- 4.3.12. If there is a disagreement between the PM and the Service Core Function Lead, a CAM branch chief will determine which AFEEIC is applicable and provide supporting documentation. (T-3).

4.4. Explanation of Risk Categories.

4.4.1. Aircraft Depot/Heavy Maintenance.

- 4.4.1.1. Aircraft Depot/Heavy Maintenance encompasses all depot-level maintenance activities and applies to all work performed on AF aircraft.
- 4.4.1.2. Requirements in this risk category can include PDM, UDLM, DFTs, scheduled depot-level maintenance, and contract field teams (CFTs). Items within this category have an RGC of A or B.
- 4.4.1.3. Organic requirements are derived using the Aircraft Missiles Requirement (AMR) process. The AMR hours develop the DPEM requirement. These requirements are classified under Aircraft Maintenance AFEEICs 54101, 54102, and 56010.
- 4.4.1.4. CLS requirements are classified under Depot Overhaul Aircraft AFEEICs 57811 or 57825.
- 4.4.1.5. File Maintenance requirements.
 - 4.4.1.5.1. Document induction cycle (e.g., 48 months) in the CAM IT system of record in the description, basis of estimate, or via attachment regardless of the maintenance type.
 - 4.4.1.5.2. Document the number of PDMs or heavy maintenance inductions per FY. The PM will ensure that PDM quantities are in line with the current induction schedule for each FY. (**T-3**). Contract and Depot Maintenance Interservice Support Agreement (DMISA) PDM induction requirements should have quantities as part of their requirement calculations. The PM should not express the requirement solely in dollars. (**T-3**).
 - 4.4.1.5.3. DFTs and CFTs should be dollar based.
 - 4.4.1.5.4. The PM will ensure variance statements document induction changes and why the quantity changed: retirements, change in the schedule (e.g., 48 months to 60 months), etc. (T-1).

4.4.2. Missiles.

- 4.4.2.1. Missiles maintenance requirement is defined as all depot-level maintenance on AF missiles and applies to all work performed using military personnel, government civilian personnel, interservice agreement, or CLS contractor personnel.
- 4.4.2.2. Requirements in this risk category include PDMs, UDLMs, DFTs and CFTs.
- 4.4.2.3. Organic missile maintenance requirements are derived using the AMR process and are classified under AFEEICs 54201, 54202, or 56020.
- 4.4.2.4. CLS for depot overhaul missiles are classified under AFEEICs 57812 or 57822.
- 4.4.2.5. File Maintenance Requirements.
 - 4.4.2.5.1. Ensure the annual PDM quantities are in line with the current induction schedule. The induction schedule is documented within the requirement, basis of estimate, or via attachment regardless of the maintenance type (e.g., organic, DMISA, or contract).
 - 4.4.2.5.2. Contract and DMISA PDM inductions should be documented as quantities, not just dollars.

- 4.4.2.5.3. DFT and CFT requirements should be dollar based requirements.
- 4.4.2.5.4. Variance Statements should explain why the quantity has increased or decreased. For example, platform or system retirements or change in the schedule from 48 months to 60 months.
- 4.4.2.5.5. Organic DPEM requirements should be documented as hours.

4.4.3. Engines.

- 4.4.3.1. Policy and procedures for the whole engine repair requirements computation and negotiation are found in AFI 63-101/20-101 and AFMAN 20-116, *Propulsion Life Cycle Management for Aerial Vehicles*, which facilitates the development of the engine AMR brochure.
- 4.4.3.2. Engine Requirements are either documented as RGC E for programmed or RGC F for unprogrammed.
- 4.4.3.3. Requirements in this risk category include engine overhaul organic, contract, DMISA, DFTs and CFTs.
- 4.4.3.4. Organic engine maintenance requirements are classified under AFEEICs 54301, 54302, or 56030.
- 4.4.3.5. CLS depot engine overhaul requirements are classified under AFEEICs 57813 or 57823.
- 4.4.3.6. File Maintenance Requirements.
 - 4.4.3.6.1. Ensure engine overhaul induction requirement describes the work to be accomplished and not just the name of the engine. Engine item sales price and engine type model series should be documented in the description.
 - 4.4.3.6.2. Organic, contract, and DMISA engine overhaul inductions should have quantities as part of their requirement calculations, not just dollars.
 - 4.4.3.6.3. DFTs and CFTs should be documented in dollars and are cost type requirements.
 - 4.4.3.6.4. Variance Statements for engine overhaul induction changes should document what is driving the change and what the change is (e.g., time on wing, FHs, total accumulated cycles, actuarial removal interval calculations, etc.).
 - 4.4.3.6.5. Engine Overhaul Tasks. Document the number of engine overhaul per FY within the requirement.

4.4.4. Other Major End Items (OMEI).

4.4.4.1. OMEI Requirements are defined as depot-level maintenance and contractor workloads, to include repair work, and utilize RGC G for programmed workload or RGC H for unprogrammed workload (i.e., hardware repaired on an as needed basis). These requirements do not fall under aircraft, missiles, engines, or exchangeables. This applies to all work performed using military personnel, government civilian personnel, interservice agreement or CLS contractor personnel. Requirements in this category include PDM, UDLM, DFTs and CFTs.

- 4.4.4.2. Communication-Electronic (C-E) OMEI requirements include PDM, DFT support, and un-programmed repair and overhaul items, and can also include fielded Atmospheric Early Warning System, Ground Theatre Air Control Systems, Air Traffic Control Landing Systems, Range Threat Systems, Radio and Television Communication Systems, and Military Satellite Communication Terminals. C-E OMEI requirements follow the C-E schedule review process contained in TO 00-25-108-WA-1 and will align with the LRDP and R2D2 process.
- 4.4.4.3. Other OMEI requirements consist of, but not limited to, repair work on support equipment, space systems shelters, pods, missile transportation and handling equipment, ground power generators, physiological trainers, specialty vehicles, cryogenic systems, automated test equipment, hush houses, and noise suppressors.
- 4.4.4.4. Tactical Shelters, Radomes, and Towers (TSRT). These requirements are non-system generated requirements and include cyclical mobile depot maintenance.
 - 4.4.4.4.1. TSRT requirements are based upon historical data to make a schedule. The indicated frequency of maintenance is based on environmental conditions, location, customer input, etc., making mobile depot maintenance actions non-programmed.
 - 4.4.4.4.2. The schedules are electronically maintained in the CAM IT system of record for current and out fiscal years. With input from the MAJCOMs, the schedule should take into account the last time maintenance actions were performed, the location where action occurred, and any applicable corrosion factors. The PM can make necessary adjustments to the requirement prior to finalizing them for the upcoming FY.
- 4.4.4.5. DPEM requirements are classified under AFEEICs 54401, 54402, or 56040.
- 4.4.4.6. CLS requirements are classified under AFEEICs 57814 or 57828.
- 4.4.4.7. File Maintenance Requirements.
 - 4.4.4.7.1. Ensure the requirement description fits the definition for OMEI.
 - 4.4.4.7.2. AFEEIC 54401 scheduled requirements must be documented in hours. Other AFEEICs and unscheduled requirements are documented as dollars.
 - 4.4.4.7.3. For TSRT requirements, if the requirement lacks historical execution data and the desire is to keep the requirement, reduce the requirement amount to \$1,000. Otherwise, reduce the requirement to zero and the requirement will automatically be archived after one more requirements build cycle.

4.4.5. Exchangeables.

- 4.4.5.1. Exchangeables are defined as stock fund exempt, Consolidated Sustainment Activity Group (CSAG), Non-CSAG-S (Supply) items.
 - 4.4.5.1.1. Exchangeables include replacement items subject to repair as depot-level maintenance in RGC coded J, K or L.
 - 4.4.5.1.2. Non-CSAG-S Exchangeables are defined as items that are DPEM exchangeables and do not fit into the business constructs of the AF Working Capital Fund under this requirement. These requirements must be accomplished within

- CSAG-M organically by military personnel, government civilian personnel, or via interservice agreement.
- 4.4.5.2. Examples of WSS requirements are: the repair of tactical and strategic CSAG-S exempt missile items; the repair of the fuel tanks, racks, adapters and pylons; repair, replacement, and testing of Cartridge Actuated Device/Propellant Actuated Device items usually required due to scheduled change out programs; and depot-level rework (e.g., inspections, component disassembly, paint stripping, and propellant and lot acceptance testing).
- 4.4.5.3. Organic Exchangeables Maintenance Items are classified under AFEEICs 54501, 54502, and 56050.
- 4.4.5.4. File Maintenance Requirements.
 - 4.4.5.4.1. Reparable requirement are documented as hours.
 - 4.4.5.4.2. Non-reparable requirements may be documented as dollars.
- 4.4.6. Area Support/Base Support/Local Manufacturing (A/B/M).
 - 4.4.6.1. A/B/M requirements are defined as maintenance on area or base support equipment. This includes Host Tenant Agreement maintenance support, Precision Measurement Equipment Laboratory, and local manufacturing costs and applies to all work performed using military personnel, government civilian personnel, or contractor personnel.
 - 4.4.6.2. Maintenance on area or base support equipment programs are identified in four separate RGCs (e.g., M, N, P, and R). These processes are applicable to the A/B/M requirements at the ALC.
 - 4.4.6.3. Requirements in this risk category account for purchase by organic or contract depot maintenance on area or base support equipment.
 - 4.4.6.4. A/B/M requirements are classified under AFEEICs 54601 or 56060.
 - 4.4.6.5. File Maintenance requirements.
 - 4.4.6.5.1. The requirement description must fit the definition for A/B/M.
 - 4.4.6.5.2. Historical data must be documented if the basis of estimate is based on historical data.
 - 4.4.6.5.3. Contract requirements will be represented in dollars.
 - 4.4.6.5.4. Organic DPEM manufacturing requirements will be file maintained in man-hours.

4.4.7. Software.

- 4.4.7.1. Software maintenance requirements include software embedded in aircraft, vehicles, missiles, and support equipment and fall under RGC S. Software maintenance requirements are changes designed to correct errors or deficiencies, improve performance within existing specifications, or adapt to a changing environment.
- 4.4.7.2. O&M appropriations fund maintenance for software changes or blocks of such changes and may fund increased capabilities that are relatively minor in scope and cost

- that can be accomplished during regular software maintenance (see AFMAN 65-605, Vol. 1, *Budget Guidance and Technical Procedures*). These software maintenance requirements primarily fall into two categories: DPEM and CSAG unit under test (UUT) funded software. **Note:** The AFSC manages CSAG software so it is not in the WSS portfolio.
- 4.4.7.3. The AF utilizes organic software engineers, contractors, interservice, or a combination, depending on the Depot Source of Repair (DSOR), to determine the best solution for software maintenance performance.
- 4.4.7.4. At a minimum, software that the PMs have direct responsibility for includes the following types: operational flight programs; test program sets (TPSs) that test a system as installed on the aircraft at the organizational level; software that supports a weapon system, and is not used for the repair of items (e.g., mission planning or organizational level TPSs); and DPEM software that is funded with EEIC 540 and includes National Security Software (NSS) and the associated software services (e.g., correcting, perfecting, and adapting deficiencies, and software validation and verification) for weapon systems.
- 4.4.7.5. The proper use of WSS software sustainment funding depends on the transition between software development (i.e., when the software is baselined) and software support (i.e., when the software is fielded).
 - 4.4.7.5.1. The key transition point between these two life cycle phases is the weapon system user operational acceptance of functional capability. This may happen as a full operational acceptance or it may happen incrementally with an Initial Operational Capability decision and multiple follow-on designated operational capability deliveries. It is imperative that all acceptance activities, either final or incremental, be specifically documented to clearly identify the software system's developmental or operational status at all times.
 - 4.4.7.5.2. Requirements can include the following: software maintenance engineering; analysis, design, code, and test; independent verification and validation; appropriate certifications (e.g., nuclear certifications); Ground, Flight, and Live Fire Test; engineering data and user documentation (e.g., TOs, source code, TCTOs); temporary duty (e.g., CSAG-M personnel in direct support of a software change); software reproduction and distribution; changes made to mission planning and trainer or simulator software driven by a change to operational flight program software; software initial deficiency investigation and lab sustainment; and software tools in direct support of a particular software change.
- 4.4.7.6. Software depot maintenance requirements are classified under AFEEICs 54001, 54002, or 56000.
- 4.4.7.7. CLS maintenance or modification requirements are classified under AFEEICs 57819 or 57820.
- 4.4.7.8. File Maintenance Requirements.
 - 4.4.7.8.1. Document software project or block cycle schedules to include as much detail and definition of the project as possible. All known elements such as urgent or

- emergency software updates, lab sustainment, initial deficiency investigations, and customer support (i.e., computability investigations, documentation reviews, phone, E-mail support, or site visits not necessarily related to currently fielded software) of each software project or block cycle should be documented within the requirement.
- 4.4.7.8.2. If the software project or block cycle work is accomplished using both organic and contract, there should be one requirement for each SOR and both requirements should reference each other.
- 4.4.7.8.3. Document the number of expected or planned Software Change Requests (SCR). Ensure historical SCRs that were accomplished are documented within the CAM IT system of record. The PM should monitor trends to ensure sufficient resources are applied to meet the most critical mission needs.
- 4.4.7.8.4. All Software Control Center requirements should be under the Common-ALC program group. These requirements should not be under a specific weapon system.
- 4.4.7.8.5. Organic software requirements are file maintained in man-hours.
- 4.4.7.8.6. Contract software requirements are file maintained in dollars.
- 4.4.7.8.7. Define and describe the DPEM software requirements for the entire, non-severable project in the year the project will begin.
- 4.4.7.8.8. For TSRT requirements, if the requirement lacks historical execution data and the desire is to keep the requirement, reduce the requirement amount to \$1,000. Otherwise, reduce the requirement to zero and the requirement will automatically be archived after one more requirements build cycle.

4.4.8. Storage.

- 4.4.8.1. This encompasses storage of AF-owned aircraft, missiles, engines, production tooling and OMEI.
- 4.4.8.2. Requirements in this risk category includes: input to storage; withdrawal (e.g., flyaway overland and demilitarization prior to disposal); mobilization upgrade or represervation; and all items such as storage containers, support equipment and other end item support requirements for storage.
 - 4.4.8.2.1. Excludes storage of consumable items and exchangeables components for CSAG-S.
 - 4.4.8.2.2. Miscellaneous requirements include support of equipment or assets not assigned to temporarily stored aircraft at AMARG by the PM. The Maintenance Inspections generally can be funded by DPEM funds that are budgeted and paid for by the PM.
- 4.4.8.3. Aircraft program offices develop migration plans in accordance with AFI 16-402 to forecast requirements for the induction of assets into storage, as well as storage sustainment program requirements related to represervation and disposal. Given the inherent variability in aircraft migration plans, the Storage Sustainment Program relies on historical data in budget development.

- 4.4.8.4. The Storage Sustainment Program is responsible for other storage related maintenance of USAF assets at AMARG. This includes but is not limited to funding instorage maintenance inspections and related repairs, aircraft and engine represervation, the induction of National Museum of the United States Air Force assets, and other activities or equipment that support the long-term preservation of USAF assets in storage at AMARG.
- 4.4.8.5. Tasks performed by AMARG include induction of aircraft into storage, storage maintenance, withdrawal or regeneration, and HAZMAT handling and mobilization upgrade. In addition to aircraft, AMARG accepts immediate supporting items such as storage containers, engines, exchangeable items, support equipment, special tooling or special test equipment and anything else required for storage and mobilization upgrade support. Other items stored at AMARG are the responsibility of the owning organization.
- 4.4.8.6. The Storage Sustainment PM develops post-induction storage requirements for most AF owned assets (e.g., aircraft, missiles, and all immediate supporting items such as engines, tooling and OMEI) currently stored at AMARG that are not part of a MAJCOM active inventory. AFI 16-402 requires weapon system PMs to develop and update their migration plan on a regular basis. Migration Plans communicate the AF's plans and requirements as related to the disposition of AF aircraft in order to better manage the operational fleets and coordinate on aircraft divestitures. These types of storage accomplished at AMARG are defined in AFTO 1-1-686, Desert Storage, Preservation and Process MNL for Acft, Acft Engs, and Acft Aux Power Unit Engs.
- 4.4.8.7. Once an asset is inducted into AMARG, assignment typically transfers to AFMC. The Storage Sustainment PM is then responsible for storage sustainment cost in accordance with AFTO 1-1-686, AF directive, or customer statement of work for aircraft, missiles, engines, production tooling and OMEI at AMARG. However, funding for any upward change in storage category other than what is directed by HAF or AFTO 1-1-686 should be sourced by the requestor of the change.
- 4.4.8.8. Requirements in this risk category include AFEEICs 54801 and 56080.
- 4.4.8.9. File Maintenance Requirements.
 - 4.4.8.9.1. Ensure the requirement quantities are in line with the retirement schedule and documented within the requirement.
 - 4.4.8.9.2. If there are changes to induction costs, notify the respective analyst within CAM for the Storage program to ensure the out year sustainment costs have been documented in the Storage portfolio.
 - 4.4.8.9.3. All organic requirements are documented as man-hours or a combination of quantity and man-hours.

4.4.9. TOs.

4.4.9.1. TO requirements are categorized as labor, distribution, or improvements. Official guidance on funding technical data requirements is found in AFMAN 65-605. Policy direction for TOs is provided in AFI 63-101/20-101 and APFD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*. Generally, the funding

- used to acquire, modify or sustain the end item of equipment or system determines the funding used to procure and print technical data in accordance with AFMAN 65-605.
- 4.4.9.2. CAM funds are used for TOs on fielded systems and equipment originally procured with procurement appropriations such as 3010, 3011, 3020, 3080, or equivalent USSF appropriation(s). Requirements include activities such as converting source data to standard AF formats (e.g., S1000D), preparing change, complete revisions, and printing TOs on traditional paper. Printing TOs on traditional paper must meet the exemption(s) as stated in TO 00-05-03, *Air Force Technical Order Life Cycle Management*.
- 4.4.9.3. Air Mobility Command (AMC) supports selected weapon system TOs in the TWCF. Affected programs are provided specific instructions by AMC regarding the use of these funds. Obligation and expenditure of TWCF funds must be in the appropriated FY.
- 4.4.9.4. Foreign Military Sales use of AF TOs results in costs to the AF. Costs associated with Foreign Military Sales are not included in LRDP requirements.
- 4.4.9.5. The Deputy Chief of Staff for Logistics, Engineering, and Force Protection (AF/A4) provides policy direction for TOs.
 - 4.4.9.5.1. The PM should refer questions on funds usage to the local FM organization. The local FM organization can elevate questions as required to the appropriate HQ for resolution.
 - 4.4.9.5.2. Before seeking O&M EEIC 594 funds, the TO Manager determines if a TO supports a National Stock Number (NSN) item managed in the AFWCF CSAG-S.
 - 4.4.9.5.3. The TO manager should contact the appropriate item manager or equipment specialist for the item when there is uncertainty as to whether or not a specific TO should be funded in CSAG-S. The TO manager should also contact the center CSAG-S overhead expense focal point for additional guidance.
- 4.4.9.6. WSS requirements in this risk category may include the shipping of compact discs, digital versatile discs or paper TOs. A viewer for visualization of interactive electronic technical manuals is available from AFLCMC/LZP at no cost for programs utilizing the Air Force Technical Order Authoring and Publishing system.
- 4.4.9.7. MAJCOMs may select a different interactive electronic technical manuals viewer but will be responsible for its procurement and sustainment. Funding of eTools such as electronic flight bags, ruggedized laptop or tablet, or iPad is a MAJCOM responsibility and will not be funded through the WSS portfolio.
- 4.4.9.8. For EEIC 594, post-acquisition or post-modification TO requirements are funded by O&M appropriation or AFWCF, depending on the source which purchased the acquisition or modification of the system or end item and include O&M, AFWCF CSAG-S, and TWCF requirements. EEIC 594 is used for technical data procurement activities, including TOs and is classified under AFEEIC 59451 or 59400.
- 4.4.9.9. File Maintenance requirements.
 - 4.4.9.9.1. Conversion requirements should be identified as a separate requirement.

- 4.4.9.9.2. If a TO Information Sheet is the basis of estimate, attach a Microsoft Excel file to show the basis of estimate or provide a Comprehensive AF TO Plan (CAFTOP) to the respective CAM analyst.
- 4.4.9.9.3. The requirement calculated in the TO Information Sheet should agree with the task requirement.
- 4.4.9.9.4. Regular AF will fund technical order sustainment for the total force of a system when they are an owner and operator of the system. If active-duty AF do not own, operate, or have divest the system, then the majority owner and operator of the system will be responsible for funding the technical order sustainment for the total force.
- 4.4.9.9.5. O&M EEIC 594 requirements for a specific TO use only one PEC and are not split among multiple PECs. Requirements for a specific TO are also not split between O&M and WCFs.
- 4.4.9.9.6. TO task requirements are entered under three categories in the CAM IT system of record: Labor, Distribution, and Improvements.
 - 4.4.9.9.6.1. Labor tasks are for recurring level of effort sustainment work over the FYDP to keep TOs up-to-date by doing via page changes, complete revisions as required by TO policy, or other work as appropriate for electronic media.
 - 4.4.9.9.6.2. Distribution tasks include printing paper products, producing CD or DVDs, or other work as appropriate for electronic media.
 - 4.4.9.9.6.3. Improvement tasks typically are efforts which can be accomplished in one or two years. The PM may enter a single improvement task with a requirement across the FYDP; however, PM must explain and justify the task. (**T-3**).
- 4.4.9.9.7. Comprehensive AF TO Plan (CAFTOP) is the source to evaluate historical usage data and technical requirements to maintain and deliver TOs in formats needed to meet the AF TO program objectives.
 - 4.4.9.9.7.1. CAFTOP applies to all AF programs regardless of support concept and life cycle, or funding source and identifies PM and lead command mutual agreements about sustainment and digitization processes, future plans, etc.
 - 4.4.9.9.7.2. Each CAFTOP is a management plan for a specific list of documents and establishes technical requirements for acquiring, sustaining, and distributing TOs.
 - 4.4.9.9.7.3. CAFTOPs identify current status, and overall health, and provide a future road map for each program's TOs, to including plans, schedules, and progress in converting to appropriate digital formats.
 - 4.4.9.9.7.4. The AF Centralized TO Management committee, chaired by AFMC/A4F, sponsors a CAFTOP Work Group and has a CAFTOP SharePoint® site located at:

https://cs2.eis.af.mil/sites/10792/CENTER_DOCUMENTS/Forms/AllItems.as <u>px</u>.

4.4.9.9.7.5. AFMC/A4F manages the CAFTOP Handbook located on the EIM CAFTOP site.

4.4.10. CLS Management.

- 4.4.10.1. CLS Management is a method of contracting WSS support for a program, system, subsystem, training system, equipment, or item used to provide all or part of the product support elements in direct support of the approved sustainment strategy.
- 4.4.10.2. WSS CLS requirements mirror the types of sustainment requirements found on organically supported programs and should ensure logistics tasks are included (e.g., program management, financial management, engineering, etc.).
- 4.4.10.3. CLS may include sustainment elements not traditionally considered WSS, such as organic FH requirements or partnership work accomplished by the Government for which the weapon system PM is responsible for performance outputs.
- 4.4.10.4. CLS applications include the support of government owned commercial off-the-shelf, aircraft, missiles, and equipment; Research and Development prototypes converted to operational use; and other instances where AFMC organic life-cycle logistics support is planned, available or used. It may include partnership work accomplished by the Government but for which the weapon system PM is responsible for performance outputs.
- 4.4.10.5. Requirements Standardization. The purpose of this effort is to allocate CLS requirements at the task level in a standardized and accepted structure for requirements analysis by organizations, such as AF/A4, the AF Cost Analysis Agency, Deputy Assistant Secretary of the AF for Cost and Economics, and SAF/FMC. AF/A4 will use the allocation information as source data to answer CLS program taskers from Congress, DoD, and AF.
- 4.4.10.6. When defining CLS requirements, it is imperative that PMs ensure that all CLS contracts are written in a manner to provide:
 - 4.4.10.6.1. Flexible provisions to address a range of support requirements, so as to accommodate changes in operational tempo or execution year funding, including surge or contingency requirements to the extent that they can be defined.
 - 4.4.10.6.2. A contract structure reflecting a work breakdown structure that supports assignment of a single CLS AFEEIC to each Contract Line Item Number (CLIN) in the accounting system to facilitate accurately documenting and reporting funds obligated for CLS to the maximum extent possible.
- 4.4.10.7. CLS requirements are classified under AFEEIC 57802 Maintenance Personnel; 57805 Operations Personnel; 57806 Other Mission Personnel; 57815 Contract Maintenance Services; 57817 Intermediate Maintenance Personnel; 57818 Intermediate Other; 57831 System Specific Training; 57835 Program Management; 57841 System Specific Training; 57851 Modification Kit Installation; 57852 Modification Kit Installation; 57873 Installation Support; or 578TV CLS Temporary Duty or Travel.
- 4.4.10.8. File Maintenance Requirements.

- 4.4.10.8.1. Ensure the appropriate SAF/FM AFEEIC 578 shred is used for each task and sub-task in order to capture the predominate type of CLS activity being accomplished and the predominate method of accomplishment per the AFEEIC definitions.
- 4.4.10.8.2. Where applicable, ensure the TAI, FHs, and location numbers are accurate and based on the President's Budget (PB). There should be numbers through the FYDP unless the weapon system is retiring.

4.4.11. CLS Spares.

- 4.4.11.1. This category includes cost of purchasing or repairing depot-level repairable spares used to replace initial spares stock.
 - 4.4.11.1.1. DLRs may include the following: repairable individual parts, assemblies or subassemblies that are required on a recurring basis for the repair of major end items of equipment; consumable repair parts, assemblies, subassemblies, and material consumed in the intermediate maintenance under a three-level maintenance concept; or the repair of a major system, associated support equipment, and unit-level training devices. **Note:** DLRs do not include courseware.
 - 4.4.11.1.2. This also includes the costs incurred to replace equipment that is needed to operate or support an aircraft, missile, other non-flying weapon systems, and other associated support equipment.
 - 4.4.11.1.3. WSS does not fund initial spares procurement.
 - 4.4.11.1.4. Non-WSS CLS spares requirements will continue to be maintained in the CAM IT system of record. Additional guidance for these requirements will be released as determinations are made during the CAM governance meetings.
- 4.4.11.2. CLS requirements are classified under the following AFEEICs: 57816 Intermediate Parts; 57833 Support Equipment Replacement; 57881 Consumable Parts/Repair Parts; 57882 DLR Contract; 57891 Consumable Parts/Repair Parts; and 57892 DLR Organic.
- 4.4.11.3. File Maintenance Requirements.
 - 4.4.11.3.1. Ensure the appropriate SAF/FM AFEEIC 578 shred is used for each task and sub-task in order to capture the predominate type of CLS activity being accomplished and the predominate method of accomplishment per the AFEEIC definitions.
 - 4.4.11.3.2. Where applicable, ensure the TAI, FHs, and location numbers are accurate and based on the President's Budget (PB). There should be numbers through the FYDP unless the weapon system is retiring.

4.4.12. Trainers/Simulators.

4.4.12.1. This category includes costs to provide, operate and maintain on-site or centralized simulator training devices for an aircraft, missile or other non-flying weapon system, associated subsystem or related equipment.

- 4.4.12.2. Applies to material, labor and overhead costs of simulator operations by military personnel, government civilian personnel, via interservice agreement or CLS contractor personnel.
- 4.4.12.3. CLS requirements are classified under AFEEICs 57832 or 57842. These AFEEICs do not apply to courseware or pilot training.
- 4.4.13. Sustaining Engineering (SE).
 - 4.4.13.1. WSS funded SE requirements are those engineering efforts required to review, assess, define, and resolve technical or supportability deficiencies revealed in fielded systems, products, and material.
 - 4.4.13.2. The objective of SE is to sustain the fielded system, product, or material to the approved specification capability. WSS SE efforts may lead to development or production engineering efforts.
 - 4.4.13.3. Examples of WSS funded SE activities include, but are not limited to: engineering to support compliance with environmental protection directives; analysis of system, or materiel deficiencies; diminishing manufacturing sources and material shortages; Environment, Safety, and Occupational Health hazard identification, risk assessment, and mitigation measures; failure analysis; mishap and safety investigations; reverse engineering; engineering studies to identify the depth of, and replacement solutions for, unsupportable sub-systems or components; structural integrity analysis; aging & surveillance testing and analysis of energetic items (e.g., warheads, rocket motors, explosive bolts, etc.); engineering analysis to support Federal Aviation Administration requirements; test articles; and physical computer modeling for the purpose of validating solutions.
 - 4.4.13.4. SE requirements are classified under AFEEICs 57834, 57836, 58300, and 583OR.
 - 4.4.13.5. File Maintenance Requirements.
 - 4.4.13.5.1. The requirement should explain the deficiency in terms of impact, solution, or deliverables as well as the work to fix it to include start and stop dates for the tasks when possible. Requirements should be consistent with start and stop dates.
 - 4.4.13.5.2. Document organic AFEEIC 583OR SE task requirements with hours, not just dollars. When using this AFEEIC, ensure the reference PCN and SOR are identified in the requirement attributes section.

PROGRAM OBJECTIVE MEMORANDUM (POM) PROCESS

5.1. Overview.

- 5.1.1. The CAM WSS POM details the planned funding of WSS requirements and the corresponding risk to the WSS portfolio through the Future Years Defense Program (FYDP). CAM completes this task utilizing AF priorities, risk modeling, and planned force structure changes to develop the WSS budget and submits it to AF corporate structure. Documentation of requirements, funding, and risk is accomplished in the CAM IT system of record. AFMC/A4FE will provide the POM timeline for each POM cycle due to specific dates changing on an annual basis.
- 5.1.2. The WSS POM is submitted at the total force level and includes all Funds Holders (e.g., active-duty AF, ANG, AFRC, Transportation Working Capital Funds (TWCF), Military Augmentation Funding, and their equivalent 3400 O&M WSS funding or equivalent USSF appropriation(s)).
- 5.1.3. An additional output of the WSS POM process is a workload file that provides one of the three inputs into the Requirements Review and Depot Determination (R2D2) used in planning future organic workload at the air logistics complexes.
- 5.1.4. There are four phases to building the POM: Preparation; Development; Review, Validation, and Adjustment; and Approval. **Figure 5.1** documents stakeholders, inputs and major actions, and the approval process.

Review, Validation Development Approval Preparation & Adjustment Stakeholders Stakeholders **PMs** Stakeholders Stakeholders Stakeholders EC Reqmts S/F **Funds** Program Strategic **Points Parades** Review 1 Spread AFMC/FMR PMs PMs Optimal **ESG** Risk? Rates Category Risk Weights Asmts AC Post-Strategic AF/A4PY Lead Cmds Funding Risk Force Program Program Weighting Assessments Structure Weights Parade AC Success/ Changes Charts Operational Pre-Strategic **Funds Holders** Failure Impacts CAM Governance Funding Reviews **Targets** Review Assessments/Impacts Approve the Review Assessments/ Review Success/Failure (Optimize Funding, Weighting, POM Submission with Impacts (Disconnects) (Disconnects) Success/Failure Points) Optimal Risk Considered

Figure 5.1. POM Phases.

5.2. Phase One - Preparation Phase.

5.2.1. The preparation phase consists of using the latest published WSS requirements, adjusting for any force structure changes, and pricing out the requirements from base year (BY) to then year (TY) dollars utilizing the DPEM rates as provided by AFMC/FMR and DoD standard inflation factor. In addition, risk category weights and program weights are

developed to support risk modeling. The Funds Holder uses the accumulation of this information to establish funding targets for each program. Documentation of requirements and funding is accomplished in the CAM IT system of record.

- 5.2.2. The POM begins with the published WSS requirements from the LRDP priced out in BY dollars. BY is the FY value utilized across the FYDP in the development of the WSS requirements. For example, FY20 values are used to price out the FY21 through FY27 requirements, for use in the FY22 POM and FY21 Execution Plan (ExPlan).
- 5.2.3. Using current DPEM rates and factors plus designated current inflation values in order to price out the BY requirement values into TY dollars (e.g., FY22 POM, FY21 ExPlan, and any other financial drills required) using the WSS LRDP requirements.
- 5.2.4. Published requirements may require PMs to adjust requirements based on AF planned force structure changes.
- 5.2.5. Success and failure points published during the LRDP are utilized in the risk model.
- 5.2.6. PMs will establish risk category weights for their respective program groups, which require collaboration from the lead commands. (**T-3**). Program weighting reflects the relative proportional importance or criticality to the overall mission at the risk category level. A higher weighted risk category will indicate higher importance or criticality to the mission and therefore less willingness by the PM to assume risk in WSS funding for that risk category. Each requirement is associated with an Element of Expense/Investment Code (EEIC) that is tied to a risk category and rolls up to an overall risk rating for a program.
- 5.2.7. Each lead command provides weighting of program groups within their respective service core functions and desired program risk level.
- 5.2.8. Utilizing AF priorities, risk modeling, POM technical guidance, lead command desired program risk, and approved force structure changes, the Funds Holder will establish funding targets for each program group within their OAC within the funding targets and guidance provided by Headquarters AF (HAF). (T-1).

5.3. Phase Two - Development Phase.

- 5.3.1. During the development phase, the PM spreads the funding targets provided by the Funds Holder(s), assesses program risk, and builds the program parade charts. Documentation of requirements and funding is accomplished in the CAM IT system of record.
- 5.3.2. Although not required, PMs have the opportunity to realign funding within the funding target during this phase. Realignment should optimize the program's funding and reduce program risk.
- 5.3.3. CAM utilizes a risk model to optimize resources; PMs may use the risk model assessment generated from the CAM IT system of record or provide their own program risk assessment if they disagree with the CAM risk model. If the PM disagrees with the risk model's assessment, the PM will document the justification for the difference within the CAM IT system of record.
- 5.3.4. CAM will provide the POM chart template and training. (**T-3**). The PM will develop POM charts within the CAM IT system of record, meet established timelines, and present

their charts during governance meetings. (**T-1**). Lead commands will provide an operational risk assessment and associated operational impact statements based on the data provided by the PM, which are to be included in the program parade charts. (**T-3**). The better the impact statements, the better the chances of avoiding funding reductions.

5.4. Phase Three - Review, Validation, and Adjustment Phase.

- 5.4.1. During the review, validation and adjustment phase, CAM holds program parades to give the PMs an opportunity to brief program risk based on projected funding for the POM year.
 - 5.4.1.1. All programs will be scheduled for the program parades unless directed otherwise by CAM. CAM will provide a schedule for all programs participating.
 - 5.4.1.2. During the program parades, the PM or designee will brief program risk and advocate for additional funds if required. They may also identify excess funds or any mitigation plans.
 - 5.4.1.3. If a program is identified for strategic review, the PM or PM designee and all primary stakeholders will participate in the discussion during the review. (**T-1**).
- 5.4.2. After the program parades, a strategic review is held to mitigate risk at program, service core function, OAC, and total force level. Primary stakeholders for this phase are PMs, lead commands, Funds Holder, AF/A4PY, AF Logistics Panel Chair, SAF/FMB, and SAF/AQD. Dependent on program priority or special interest, other participants may attend.
 - 5.4.2.1. Programs at failure will be selected for strategic review; other programs may be added per request from lead command, Funds Holder, or AF/A4PY.
 - 5.4.2.2. The PM will document changes from the strategic review in the CAM IT system of record. (**T-1**).

5.5. Phase Four - Approval Phase.

- 5.5.1. During the approval phase, CAM schedules POM briefings through the CAM governance to garner approval of the total force POM submission from AF corporate structure.
 - 5.5.1.1. The PM or PM designee will attend or call into the AC.
 - 5.5.1.2. Lead command will attend or call into all three tiers of the CAM governance. The lead command should be prepared to speak on operational impacts during ESG and EC.
 - 5.5.1.3. The Funds Holder(s) will attend or call into all three tiers of the CAM governance.
 - 5.5.1.4. The AFMC/A4FE will schedule the CAM governance meetings, provide read ahead slides to WSS stakeholders, and host the meetings.
- 5.5.2. Changes from the CAM governance with respect to requirement value, success or failure point, or funding, will be documented and signed in the CAM IT system of record. CAM governance decisions will be incorporated and updated in any CAM exercises such as POM, ExPlan, etc.

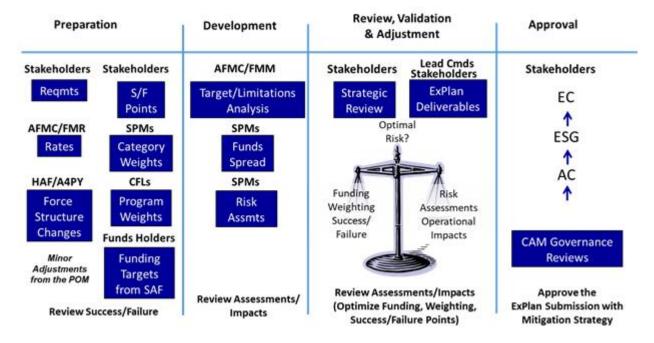
5.5.3. Once changes have been completed and updated, the final product will be submitted to AF corporate structure for senior leader decision making processes. These decisions will be carried forward into future years' final AF WSS budgets (e.g., future POM cycles and the next current year ExPlan).

EXECUTION PLAN (EXPLAN) PROCESS

6.1. Overview.

- 6.1.1. The ExPlan details the planned funding and corresponding risk to requirements for the upcoming FY. CAM completes this task for the WSS budget and submits it to SAF/FMBO. AFMC/FMM will provide the ExPlan for each POM cycle due to specific dates change on an annual basis.
- 6.1.2. The WSS ExPlan is submitted at the total force level which means it includes all Funds Holder (e.g., regular AF, ANG, AFRC, Military Augmentation Funding, and TWCF).
- 6.1.3. AF/A3 and AF/FM are responsible for building the Flying Hour Program (FHP) ExPlan.
- 6.1.4. The four phases to building the ExPlan are: Preparation; Development; Review, Validation, and Adjustment; and Approval. **Figure 6.1** documents stakeholders, inputs and major actions, and the approval process.

Figure 6.1. ExPlan Process.



6.2. Phase One - Preparation Phase.

6.2.1. The latest WSS Requirement position for each program, as well as success and failure points and risk category weights, are the starting points for minor adjustments in the ExPlan. The FH and Working Capital Fund (WCF) depot rates along with the established Force Structure plans remain unchanged during the POM.

- 6.2.2. Requirements. Except in very rare circumstances, AFMC/FMM anticipates no changes to requirements since requirements and success and failure points were recently vetted through the POM process.
 - 6.2.2.1. Updates should be limited to fluctuations in requirements due to factors outside the control of the PM and lead command, and which have a significant dollar or percent change to the program. AFMC/FMM will task out the opportunity to make changes during the ExPlan.
 - 6.2.2.2. No promise of funding for new requirements will be made since new requirements were not included in the POM from which funding was programmed.
 - 6.2.2.3. The PM is able to update the requirement during the preparation phase at the approval of the Funds Holder. After the completion of the preparation phase, the PM's next opportunity to update a requirement is when the execution year begins.
- 6.2.3. Rates and Force Structure Changes.
 - 6.2.3.1. AFMC/FMM will use rates and Force Structure changes to set the baseline position for Initial Distribution.
 - 6.2.3.2. The Working Capital Funds Division (AFMC/FMR) provides the rates and Resource Integration (AF/A4PY) provides any anticipated force structure changes. These rates and force structure changes are usually made during the PB and are not modified during the ExPlan.
- 6.2.4. Success and Failure Points and Weighting.
 - 6.2.4.1. The Stakeholders, in conjunction with the lead commands, review and change the program success or failure point, and the weighting by task as necessary. CAM applies funding based on success and failure points and Weighting.
 - 6.2.4.2. If requirements change during the ExPlan, the PM ensures success and failure points are also adjusted. During the ExPlan, CAM will continue to use the latest lead command-approved weights provided in the POM cycle.
 - 6.2.4.3. Program weighting reflects the relative proportional importance or criticality to the overall mission at the risk category level. A higher weighted risk category will indicate higher importance or criticality to the mission and therefore less willingness by the PM to assume risk in WSS funding for that risk category.
 - 6.2.4.4. Each requirement is associated with an EEIC that is tied to a risk category and rolls up to an overall risk rating for a program. Each lead command provides weights for the programs within each service core function.
- 6.2.5. Funding Targets from SAF. The Funds Holder receives a budget outlay governing execution year file from SAF/FMBO that is pulled from the Financial Management Suite and has the initial breakout of the funding by financial limitations (e.g., sub-activity group, military intelligence program, emergency special program code, etc.).

6.3. Phase Two - Development Phase.

6.3.1. The development phase directly builds off the preparation phase. The Funds Holder utilizes the success and failure points and weighting to complete the spread of funding.

- 6.3.2. Target and Limitation Analysis. Once CAM uploads the initial budget outlay governing execution year file into the approved system, the Funds Holder must determine how to best minimize risk across the portfolio while optimizing funding on AF priorities. (**T-1**). CAM adheres to fiscal limitations such as: sub-activity group, Overseas Contingency Operations funding versus peace funding, and Military Intelligence Program funding.
- 6.3.3. PM Funds Spread and Risk Assessments. Once CAM completes the initial spread of the funding, the PM reviews the funds spread and has the opportunity, within CAM business rules, to re-spread funds to more accurately align with program requirements. PMs have the opportunity to provide an independent risk assessment along with reasoning if different from the CAM risk model assessment. PMs provide an overall risk assessment based on the funding level. Risk levels include low, moderate, significant, high and failure.

6.4. Phase Three - Review, Validation & Adjustment Phase.

- 6.4.1. During this phase, the funding spread and risk assessments completed in the first two phases are used to evaluate the risk levels of the programs.
- 6.4.2. Pre-Strategic Reviews between the lead command, AF/A4PY, SAF/FMBOO, PM and CAM look at programs at high risk levels based on either the risk model or the PM's assessments along with disconnects between the two assessments. The reviews finalize where to take risk, collaborating to develop justification in preparation for briefing CAM governance.
- 6.4.3. ExPlan Chart Submission. CAM may request additional information from PMs to help determine where to best realign funding one last time during Strategic Reviews. Requested deliverables give programs the opportunity to highlight major issues and programmatic and operational impacts on the overall health of the WSS portion of the program due to unfunded requirements. The ExPlan charts gives decision makers an overall program health assessment for the upcoming FY.
- 6.4.4. The ExPlan charts are reviewed during the strategic reviews. The charts are forwarded to SAF for further consideration by AF.
- 6.4.5. Strategic Review. AFMC/FMM organizes strategic reviews to provide lead commands with the results of the funds spread and the risk assessments for each program within the command. During the strategic review, the Funds Holder, lead command, and CAM discuss the recommended way forward and propose resource allocation changes to reduce risk and maximize readiness within available funding limits. If there are unfunded requirements the lead command feels must be funded, the lead command will review the portfolio to find trade space. (T-3). Priorities which cannot be funded within the lead command portfolio are considered for review across the entire CAM portfolio. The ultimate goal of the strategic review is to allocate funding across the CAM portfolio to maximize warfighter capability and minimize risk.
- **6.5. Phase Four Approval Phase.** The final phase of the ExPlan process involves submission of the approved ExPlan through the CAM governance structure. The completed, collaborated risk assessments are briefed by program through the CAM governance. The EC gives final approval to the total force WSS ExPlan to be submitted to SAF. There may be programs or requirements at failure at the approval of the ExPlan that will be addressed during the unfunded requirements process in the year of execution.

6.6. Post-Approval Activities. Once the EC approves the ExPlan, AFMC/FMM tasks the PMs to provide a monthly obligation forecast by requirement in the CAM IT system of record, which then forms the baseline obligation forecast for the upcoming FY. No changes are made to the baseline obligation forecast. Variances to the baseline obligation forecast are tracked by CAM and programs are required to explain the deviations throughout the execution year.

EXECUTION PROCESS

7.1. Overview.

- 7.1.1. The CAM Execution process includes WSS and the CPFH programs. In the year of execution, CAM is responsible for execution of all funding budgeted for active-duty AF WSS and CPFH requirements.
- 7.1.2. CAM monitors, manages, and reports on the Congressional fiscal limitations set forth in the annual National Defense Authorization Act. CAM oversees the active-duty AF CPFH program to include funding of the DWCF, DLRs and consumable bill, and the reimbursement process.
- 7.1.3. Based on specific guidance and direction received from Air Staff each fiscal year (FY), AFMC/FMM will issue updated execution year guidance for WSS and CPFH. Execution year activities begin on 1 October and end 30 September of each FY in accordance with **Figure 7.1** below.

Figure 7.1. Execution Activities Timeline.



7.2. Weapon System Sustainment Requirements.

- 7.2.1. The PM will ensure the requirements are current, executable, and maintained in the CAM IT system of record to reflect mission needs. (T-1).
- 7.2.2. The PM will update any current year requirements that were deferred from a previous year to show the requirement increased. (**T-1**).
- 7.2.3. The PM will make necessary adjustments to any current year requirements that were funded as a buy down in the previous FY. (T-1).
- 7.2.4. The PM will follow the OOC process documented in **paragraph 7.5** for any OOCs created due to requirement changes. **(T-1).**
- 7.2.5. Monthly Obligations. The PM will ensure the requirement funding values in the CAM IT system of record matches the end of month position in the official AF Accounting System no later than the fifteenth business day after the end of the month. (**T-1**). This includes

approved funding, obligations, processing OOCs, and updating the unfunded requirements list.

7.2.6. End of Year Obligations. The PM will ensure the requirement funding values in the CAM IT system of record matches the end of year position in the official AF Accounting System no later than the fifth business day after the end of the FY. (T-1). This includes approved funding, obligations, and contingent liabilities.

7.3. Funding.

- 7.3.1. For CAM active-duty AF (OAC 87) WSS requirements, funding is distributed based on Congressional language and AF Execution guidance priorities.
- 7.3.2. The PM is required to update all funding realignments, additional funding requests, and identification of excess funding in the CAM IT system of record no later than the 15th workday of each month. (**T-1**). For all other WSS Funds Holder requirements (e.g., ANG, AFRC, TWCF, and AFSOC), the process will be in accordance with the individual Funds Holder's procedures.
- 7.3.3. AFMC/FMM will provide overarching FY execution guidance for major activities that impact WSS execution and funding at the PM, lead command, and portfolio level. The Funds Holder may issue additional FY guidance based on their respective appropriations. Different processes exist for managing and allocating funds during the following:
 - 7.3.3.1. Continuing Resolution. Minimal funding to continue operations until a budget is passed, typically 3-6 months.
 - 7.3.3.2. Initial Distribution. Annual authority provided to programs aligned with the current Execution Plan (ExPlan). Any Congressional marks or directives could potentially impact the annual authority allotted during the ExPlan.
 - 7.3.3.3. Total Force Mid-Year Reviews. Tracks weapon system funds execution to forecast, identifies excess funding and unfunded requirements, highlights canceled year funding and major program concerns, and reviews overall portfolio progress meeting statutory limitations of the 80/20 rule (i.e., not more than 20% of one year appropriations may be obligated during the last two months of the fiscal year).
 - 7.3.3.4. Total Force ExPlan. Details the planned funding and corresponding risk to requirements for the upcoming FY with the intent to balance operational need(s) with funding.
 - 7.3.3.5. Unfunded Requirements List. Prioritization of remaining unfunded and executable requirements in preparation for annual close out.
 - 7.3.3.6. Close out. Management and re-distribution of remaining unobligated balances for obligation by 30 September of current-FY. AFMC/FMM provides close out guidance each year.

7.4. Forecast and Actual Obligation Updates.

7.4.1. The PM will update actual and projected monthly obligations for WSS requirements in the CAM IT system of record at the web system control number (requirement) level no later than the 15th of each month. (**T-1**). Stakeholders rely upon this data to respond to execution year taskers and real-time decisions. These updates provide historical execution for

- each requirement, which is used for justification of requirements and failure points for future POM cycles.
- 7.4.2. Upon approval of Upward Obligation Authority, requirement and funding values will be updated in the applicable fiscal year's version of the CAM IT system of record. This may cause an OOC that needs to be processed.
- 7.4.3. Deferral Reporting. The PM will identify deferrals by following the OOC process documented below to support deferral reporting. (**T-1**). AFMC/A4F is required to provide AF/A4P the projected deferral report mid-FY and final deferral report at FY end.

7.5. Out Of Cycle (OOC) Process.

- 7.5.1. The OOC process is used in the CAM IT system of record to identify, validate, coordinate, document, amend, and approve changes to WSS requirements outside the normal requirements determination cycle. Specifically, OOCs are created to document fact of life changes in the current execution year for either new requirements not previously documented in the CAM IT system of record or existing requirements within the CAM IT system of record.
- 7.5.2. The PM will initiate an OOC as soon as the change in requirement is identified. (**T-3**). The PM shall not obligate on a requirement until an OOC has been completely approved at all levels within the CAM IT system of record. (**T-1**).
- 7.5.3. Each Funds Holder has their own thresholds set up in the CAM IT system of record that determines whether the OOC is automatically approved or requires processing for approval. See **Attachment 4** for the current approval threshold by OOC type.

7.5.4. OOC Process.

- 7.5.4.1. The PM shall coordinate the OOC through the necessary approval chain within five business days of OOC initiation. (**T-3**).
- 7.5.4.2. When accomplishing an OOC for organic depot workload, the PM must attach concurrence documentation, such as an email, from the Air Logistics Complex Business Office to validate agreement for the change. (T-3).
- 7.5.4.3. The PM will provide the correct OOC type, funding need by date, requirements the funds will be moved to or from, OOC justification, source of funding, OOC description, mission impact, and whether the OOC is unfunded or not. (**T-3**).
- 7.5.4.4. AFMC/A4F will use the deferral type OOCs to provide AF/A4P the projected deferral report mid-FY and final deferral report at FY end. (**T-3**).

7.5.4.5. OOC Types and Definitions:

- 7.5.4.5.1. Buy Down. The requirement for the current execution year did not change but is being increased to buy down future work. This will apply existing funds for requirements planned in future years. Buy downs will always be increases to current year requirements and decrease future year or next FY requirement.
- 7.5.4.5.2. Contract Price Change. The contracted volume of work or scope of the requirement did not change but the price increased or decreased due to negotiated contract values.

- 7.5.4.5.3. Deferral. The requirement is valid but the maintenance or repair requirements that were planned were not accomplished and will have to be budgeted or programmed for in the future, causing the existing requirement for the future year to increase.
 - 7.5.4.5.3.1. This does not include any requirement that was underestimated, will not generate, or will not increase a future year WSS requirement.
 - 7.5.4.5.3.2. This type OOC will always be a requirement decrease.
- 7.5.4.5.4. Prior Buy Down. The offsetting OOC type for a requirement that was bought down in the previous FY. This will always be a requirement decrease and should not exceed the amount or quantity bought down in the previous FY.
- 7.5.4.5.5. Prior Deferral. The offsetting OOC type for a requirement that was previously deferred in a prior FY. This will always be a requirement increase and should not exceed the amount or quantity deferred in a previous FY.
- 7.5.4.5.6. Scope Change. The volume of work increased or decreased.
- 7.5.4.5.7. Unexecutable. This represents a valid requirement that could not be executed due to funding restraints, schedule changes, etc. and resulted in a missed opportunity in the year of execution. This requirement will not defer to another year and will always be a decrease to the requirement
- 7.5.4.5.8. Unpublished Requirement. Any task or requirement that is brand new, had been previously archived or published as zero dollars, or was published with a different AFEEIC.

7.6. Unfunded Requirement Requests.

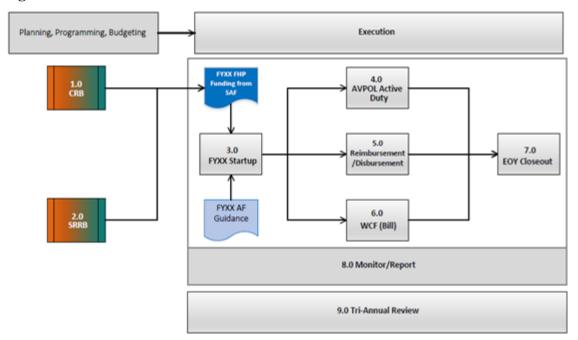
- 7.6.1. Emerging WSS requirements are a fact of life which may lead to unfunded requirements. Funding decisions are limited to Budget Activity Codes, statutory floors, and 50/50 considerations.
- 7.6.2. The PM, in conjunction with the applicable stakeholders, shall look internally to resolve funding deficiencies. (**T-3**). Procedures may be adapted in the year of execution due to budgetary restraints.
- 7.6.3. Up until mid-year review, if the funding disparity cannot be resolved at the PM level, the PM shall seek lead command support to reallocate funding within their WSS portfolio. **(T-3).**
- 7.6.4. After mid-year review, if funding is unable to be realigned within the portfolio, the PM will identify the need for an unfunded request to the applicable CAM Service Core Team members. (**T-3**). At a minimum, the unfunded request should have a corresponding OOC, document the requirement that funds are being requested for, and the operational and programmatic impacts of funding the addition to the requirement.
- 7.6.5. In the event CAM is unable to realign funding across the portfolio, CAM will request assistance at the AF level. (**T-3**).

COST PER FLYING HOUR (CPFH) PROGRAM

8.1. Overview.

- 8.1.1. This chapter outlines the process to develop, review, validate, and approve authorized CPFH DLR and consumable supplies and explains the role of the CAM CPFH program as it relates to AvPOL requirements for active-duty AF.
- 8.1.2. The Government Purchase Card is not part of CAM CPFH program; MAJCOM financial managers retain oversight.
- 8.1.3. Other CPFH Funds Holders (e.g., ANG, AFRC, TWCF, AFSOC, AFMC, and USSF) are responsible for developing their CPFH supply programs and AvPOL requirements.
- 8.1.4. **Figure 8.1** below shows the top level process map for the execution of the CPFH program within CAM.

Figure 8.1. CPFH Execution Process.



8.2. Authorized CAM CPFH Supplies.

8.2.1. **Table 8.1** displays the criteria for authorized CPFH Supplies supported by the CAM CPFH Program.

ILS-S Type Org Code	Budget Code (BC)	AF ERRC	DLA ERRC	ILS-S, BC, and ERRC combination (left) assigns an EEIC of	
3	8	XB3	N	644	
		XF3	P		
		XD2	T		
	9	XB3	N	605	
		XF3	P		

Table 8.1. Authorized CPFH Supplies.

- 8.2.2. There are some exclusions to the BC 9 policy based on federal stock group. Questions regarding exclusions will be addressed to AF/A4P through CAM for final determination.
- 8.2.3. DLRs and Consumables are Consolidated Sustainment Activity Group-Supply (CSAG-S) items with a BC of 8 and an EEIC of 644.
- 8.2.4. Consumable Requirements are CSAG-Retail (CSAG-R) items with a BC of 9 and an EEIC of 605.
- 8.2.5. Customers, such as aircraft maintenance shops within maintenance groups to include flight line, back shops, aerospace ground equipment, as well as Operations Aircrew Flight Equipment, may establish and utilize a CPFH account to order authorized supplies.

8.3. Baseline Validation for Authorized CPFH Supplies.

- 8.3.1. CAM CPFH consumption data is downloaded from the AF Total Ownership Cost (AFTOC) website. Baseline consumption is determined in accordance with AFMAN 23-120.
- 8.3.2. MAJCOMs and their respective bases will assist CAM or the applicable Funds Holder with validation and maintenance of base-level CPFH supply account information such as organization data, Stock Record Account Numbers, supply cost, and consumption data.
- 8.3.3. The FHs used in the BC 8 and 9 requirements process are provided by AF/A3.

8.4. Requirements Process for CPFH Supplies.

- 8.4.1. The call letter requesting validation of consumption data for BC 9 items comes from SAF/FMC.
- 8.4.2. The responsibility to develop the BC 9 CPFH rate is with SAF/FMC.
- 8.4.3. SAF/FMC builds the BC 9 CPFH rates based upon historical baseline and known adjustments. SAF/FMB validates the rate.
- 8.4.4. The requirements process for authorized BC 8 CPFH supplies begins upon the receipt of a call letter, and the requirements are calculated using the SRRB process in accordance with AFMAN 23-120.
- 8.4.5. The SRRB process Guide, located online in the software SRRB tool listed under "User Guides", outlines the requirements process. The process calculates a requirement based upon historical consumption at the National Stock Numbers (NSN), or eaches, level by

Mission Design Series (MDS) and adjusted by known changes. Documented changes are templates on the SRRB Input and Retrieval Tool.

8.4.6. CPFH Rates are developed by pricing out SRRB eaches (i.e., the projected quantity for each NSN), totaling the cost at the MDS level, and then dividing by the projected FHs.

8.5. Finalize CPFH Supply Requirements.

- 8.5.1. BC 8 Rates are submitted to AF/A4P then passed to the Cost Review Board (CRB) for use in budgeting the FHP.
- 8.5.2. BC 9 Rates are approved by the MAJCOM/Funds Holder after the final Executive CRB is completed.

8.6. Building and Managing AvPOL Requirements.

- 8.6.1. Each Funds Holder works with SAF/FM to develop their AvPOL Requirements (e.g., EEIC 699 & 693).
- 8.6.2. CAM and MAJCOMs are provided the approved FH program rates, force structure, CRB rates, and any updates from SAF/FM with AF/A3 and OSD coordination.
- 8.6.3. AF Cost Accounting Agency, with coordination from SAF/FM, calculates aircraft internal burn rates using actual gallons consumed per AFTOC data divided by actual FHs flown from the AF/A3 FH reports or an approved substitute. Those rates will be used to calculate the CPFH CRB rates for each MDS using AFTOC fuel consumption data from the Enterprise Business System and the FHs from the AF/A3 FH report or approved substitute.
- 8.6.4. AF/A3 identifies approved programmed FHs to each MAJCOM for use in development of a Strategic FH Plan.
- 8.6.5. Based on these inputs and coordination with AF/A3, SAF/FMB provides funding planning numbers to CAM prior to the beginning of each FY. The goal is to have planning numbers from SAF/FMB in early August.
- 8.6.6. AF/A3 and SAF/FMB provides CAM-approved execution plans utilizing FHs, CPFH and any updates through the year based on communications with the MAJCOMs.
- 8.6.7. SAF/FMB notifies CAM prior of any MDS movements to allow CAM to coordinate appropriate fuel line of accounting changes with the AF Petroleum Agency.
- 8.6.8. CAM monitors funds control, execution, and addresses execution year changes within available resources to the fullest extent possible. Additional resource requests will be handled through the funds distribution process.
- 8.6.9. MAJCOM Agency Program Coordinators (APC) coordinate activities with Wing POCs to assist in identifying and explaining AvPOL variance drivers to resolve issues.
- 8.6.10. MAJCOM APC support may be required to answer questions resulting from execution analysis and will work closely with their wing refueling document control office in accordance with AFI 11-253, *Managing Off-Station Purchases of Aviation Fuel and Ground Services*.
- 8.6.11. CAM and other Funds Holders will establish and execute AvPOL related fuel miscellaneous obligation reimbursement document(s) for their respective appropriation as

required during the end of year budgetary process, thereby ensuring sufficient funds remain in place to source unbilled and anticipated aviation fuel charges through fiscal year-end (i.e., 30 September; annually). (**T-3**). AF/A3 and MAJCOM APCs must provide unbilled charges accumulated and anticipated fuel bills from the wing refueling document control offices no later than 15 September annually to assist CAM and Funds Holders in providing substantiating and auditable documents in support of establishing end of fiscal year fuel miscellaneous obligation reimbursement document. (**T-3**).

8.7. Depot Working Capital Fund (DWCF) Bill.

- 8.7.1. For every hour flown, there is a corresponding expense per MDS which the SAF-published CRB rates capture.
- 8.7.2. By the 15th of each month, MAJCOM flying hour managers consolidate and validate hours flown in the previous month for their commands and submit these reports to AF/A3 and CAM.
- 8.7.3. CAM compiles each report and inputs the hours for each command by MDS or mission and Command.
- 8.7.4. CAM calculates the DWCF Bill each month to provide reimbursement of authorized CPFH expenses to the DWCF.
- 8.7.5. CAM provides the consolidated report to AFMC/FMR no later than the 20th of each month and the report is used by DWCF to issue a bill for reimbursement from many agencies such as CAM, USAFR, ANG, etc.

8.8. Disbursements and Reimbursements.

- 8.8.1. The CAM CPFH Program supports the AF Reimbursable Budget Authority & Execution as part of the overall total force.
- 8.8.2. To be compliant with the Reimbursable Budget Authority & Execution processes, monthly hours executed are validated by the user, received and reconciled with the current-FY aviation fuel factor set reimbursement rate which is validated for each MDS Aircraft flown.
- 8.8.3. CAM FHP also provides disbursements to agencies that fly in support of approved active-duty AF missions.

William B. Roper, JR.
Assistant Secretary of the Air Force
(Acquisition, Technology & Logistics)

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DAFPD 11-1, Flying Hour Program, 8 December 2020

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

AFPD 63-1/20-1, Integrated Life Cycle Management, 7 August 2018

AFPD 90-6, Air Force Strategy, Planning, Programming, Budgeting, and Execution (SPPBE) Process, 26 June 2019

DAFI 33-360, Publications and Forms Management, 7 August 2020

DAFI 63-140, Aircraft Structural Integrity Program Program and Air and Space Equipment Structural Management, 6 August 2020

AFI 11-253, Managing Off-Station Purchases of Aviation Fuel and Ground Services, 19 August 2013

AFI 16-402, Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination, 27 September 2019

AFI 23-101, Materiel Management Policy, 22 October 2020

AFI 33-322, Records Management and Information Governance Program, 23 March 2020

AFI 63-101/20-101, Integrated Life Cycle Management, 30 June 2020

AFI 65-503, US Air Force Cost and Planning Factors, 13 July 2018

AFMAN 20-116, Propulsion Life Cycle Management for Aerial Vehicles, 28 August 2017

AFMAN 23-120, Spares Requirements Review Board (SRRB), 27 November 2019

AFMAN 65-605, Vol. 1, Budget Guidance and Technical Procedures, 17 November 2020

AFMCMAN 20-102, Maintenance Planning and Execution System (MP&E)(D363), 17 November 2017

AFMCI 21-100, Depot Maintenance Management, 1 April 2020

AFMCI 21-102, Analytical Condition Inspection (ACI) Programs, 20 November 2019

AFMCI 21-103, Reliability-Centered Maintenance (RCM) Programs, 3 November 2017

AFMCI 21-104, Controlled Interval Extension (CIE) Programs, 20 November 2019

AFMCI 21-118, Aircraft Maintenance Production/Compression Report 1.2, 1 November 2017

AFMCI 23-105, Planning for DLA Managed Consumables (PDMC), 7 May 2019

TO 00-05-03, Air Force Technical Order Life Cycle Management, 15 February 2019

TO 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment, 1 July 2020

AFTO 00-25-107, Maintenance Assistance, 1 October 2015

AFTO 1-1-686, Desert Storage, Preservation and Process MNL for Acft, Acft Engs, and Acft Aux Power Unit Engs, 24 March 2020

MIL-STD-1530D, DoD Standard Practice: Aircraft Structural Integrity Program (ASIP), 13 October 2016

TO 00-25-108, Communications-Electronics (C-E) Depot Support, 7 August 2012

Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs, January 2017

Prescribed Forms

None

Adopted Forms

AFMC Form 202, Nonconforming Technical Assistance Request and Reply

AFMC Form 800, Item Manager Workload Projection Summary

AFTO Form 103, Aircraft/Missile Condition Data

AFTO Form 252, Technical Order Publication Change Request

AFTO 781A, Maintenance Discrepancy and Work Document, 17 June 2017

AF Form 847, Recommendation for Change of Publication

Abbreviations and Acronyms

448 SCMW—Supply Chain Management Wing

A/B/M—Area Support/Base Support/Local Manufacturing

A4—Directorate of Logistics

AC—Advisory Council

ACC—Air Combat Command

ACI—Analytical Condition Inspection

AETC—Air Education and Training Command

AF—Air Force

AFEEIC—AF Element of Expense/Investment Code

AFGSC—AF Global Strike Command

AFI—AF Instruction

AFMAN—AF Manual

AFMC—AF Materiel Command

AFMC/A4F—Product Support Division

AFMC/FM—AFMC Financial Management Directorate

AFMC/FMM—Centralized Asset Management Financial Division

AFMC/FMR—AF Materiel Command Financial Management Regulation Working Capital Funds Division

AFMCI—F Policy Directive

AFRC—AF Reserve Command

AFSC—AF Sustainment Center

AFSOC—AF Special Operations Command

AFTO—AF Technical Order

AFTOC—Air Force Total Ownership Cost

AFWCF—AF Working Capital Fund

ALC—Air Logistics Complex

AMARG—Aerospace Maintenance and Regeneration Group

AMC—Air Mobility Command

AMR—Aircraft and Missile Requirements

ANG—Air National Guard

APC—Agency Program Coordinators

ASIP—Aircraft Structural Integrity Program

AvPOL—Aviation Petroleum, Oil, and Lubricants

BC—Budget Code

BOW—Bill of Work

BY—Base Year

CAFTOP—Comprehensive Air Force Technical Order Plan

CAGE—Commercial and Government Entity

CAM—Centralized Asset Management

CAM IT—Centralized Asset Management Information Technology

CES—Cost Element Structure

CIE—Controlled Interval Extension

CFT—Contract Field Team

CLS—Contractor Logistics Support

CPFH—Cost Per Flying Hour

CRB—Cost Review Board

CSAG-M—Consolidated Sustainment Activity Group-Maintenance

CSAG-R—Consolidated Sustainment Activity Group-Retail

CSAG-S—Consolidated Sustainment Activity Group-Supply

DCWA—Depot Customer Workload Agreement

DEV PAC—Development Packet

DFT—Depot Field Team

DLA—Defense Logistics Agency

DLR—Depot Level Reparables

DMISA—Depot Maintenance Interservice Agreement

DoD—Department of Defense

DPEM—Depot Purchased Equipment Maintenance

DPSH—Direct Product Standard Hours

DQS—Data Quality System

DSOR—Depot Source of Repair

DWCF—Depot Working Capital Fund

EC—Executive Committee

EEIC—Element of Expense/Investment Code

ERR—Engineering Requirements Review

ERRC—Expendability, Reparability, Recoverability, Code

ERRP—Engineering Requirements Review Process

ESG—Executive Steering Group

ExPlan—Execution Plan

FH—Flying Hour

FHP—Flying Hour Program

FM—Financial Management

FPWS—Fixed Price Worksheet

FYDP—Future Years Defense Program

FY—Fiscal Year

HAF—Headquarters AF

HAZMAT—Hazardous Material

HQ AFMC—Headquarters AF Materiel Command

HQ—Headquarters

ICBM—Intercontinental Ballistic Missile

JON—Job Order Number

LOM—List of Materials

LRDP—Logistics Requirements Determination Process

LRM—Lower Range Mean

MAJCOM—Major Command

MDS—Mission Design Series

MP&E—Maintenance Planning and Execution

MRSP—Maintenance Requirements Supportability Process

NGB—National Guard Bureau

NSN—National Stock Number

NSS—National Security Software

O&A—Over and Above

O&M—Operation and Maintenance

OAC—Operating Agency Code

OMEI—Other Major End Item

OOC—Out of Cycle

OPR—Office of Primary Responsibility

OSD—Office of the Secretary of Defense

P&S—Planning and Support

PACAF—Pacific Air Force

PB—President's Budget

PCN—Program Control Number

PDMC—Planning for DLA Managed Consumables

PDM—Programmed Depot Maintenance

PEC—Program Execution Code

PEO—Program Executive Officer

PM—Program Manager

PMA—Program Management Administration

PMS—Production Management Specialist

POC—Point of Contact

POM—Program Objective Memorandum

PPB&E—Planning, Programming, Budgeting and Execution

R2D2—Requirements Review and Depot Determination

RCM—Reliability-Centered Maintenance

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

RGC—Repair Group Category

SAF/AQ—Secretary of the AF for Acquisition

SAF/FMC—Deputy Assistant Secretary of the AF for Cost and Economics

SCR—Software Change Request

SE—Sustaining Engineering

SOR—Source of Repair

SRRB—Spares Requirement Review Board

TAI—Total Aircraft Inventory

TCTO—Time Compliance Technical Order

TO—Technical Order

TPS—Test Program Set

TSRT—Tactical Shelters, Radomes, and Towers

TWCF—Transportation Working Capital Fund

TY—Then year

UDLM—Unscheduled Depot Level Maintenance

AF/A4P—Resource Integration Division

USAF—United States AF

USAFR—United States AF Reserves

USSF—United States Space Force

UUT—Unit Under Test

WCF—Working Capital Fund

WSS—Weapon System Sustainment

Terms

1 to N—Represents the sequential numbering of requirements within a program group, program, or service core function with 1 being the highest priority requirement.

Accurate—Individual tasks defined in sufficient detail to represent all known sustainment requirements, properly categorized by type of funds, and properly sized in terms of units of measure (e.g., dollars, hours, or quantities quantities).

Accurately Captured—Represents all known sustainment requirements, properly categorized by type of funds, properly sized in terms of units of measure (e.g., dollars, hours, or quantities), and logistically supportable for the year(s) requested.

Actual Hours—Used in trend analysis during the AMR process; the actual amount of hours it takes to complete a task.

Annual Review—A forum to discuss any engineering issues affecting the maintenance of AF weapon systems that may adversely or positively affect airworthiness of the systems during the Engineering Requirements Review Process (ERRP).

Approved—Formal sanction by PM or recognized authority.

AMR Brochure—An electronic document used to document depot tasks and associated task hours.

Base Year—A reference period which determines a fixed price level for comparison in economic escalation calculations and cost estimates. The price level index for the base year is 1.000.

Budget Outlay Governing Execution Year—The estimate of what will eventually be in the appropriation bill passed by Congress. After the bill is passed, dollars are issued to the Office of the Secretary of Defense to apportion to the service. The service allocates to organizations to execute dollars against their specific requirements to meet mission intent and need as requested during the budgeting process to include the POM and ExPlan.

Buy Down—The requirement for the current execution year did not change but is being increased to buy down future work. This will apply existing funds for requirements planned in future years. Buy downs will always be increases to current year requirements and decrease future year or next FY requirement.

Canceled Year Funding—Funding that is no longer available for obligation or expenditure for any purpose.

Certifications—Any special certifications such as nuclear.

Close Out—Documentation and reconciliation of all activities involved with contractor's completion of overall tasks.

Commodity—A segmentable category of goods or services. CAM utilizes AFEEICs to establish WSS commodities.

Contractor Logistics Support (CLS)—A method of contract support for a program, system, subsystem, training system, equipment, or end item used to provide all or part of the sustainment elements in direct support of the approved sustainment strategy. It may include work managed or accomplished by the Government but for which the contracted communities are responsible for performance output.

Consolidated Sustainment Activity Group-Maintenance (CSAG-M)—The CSAG-M provides major overhaul and repair of systems and spare parts while striving to meet or exceed required standards for quality, timeliness, and cost. In peacetime, readiness is enhanced by efficiently and economically repairing, overhauling, and modifying aircraft, engines, missiles, components, and software to meet customer demands. During wartime or contingencies, repair operations surge and capacity is realigned to support the warfighters' immediate needs. Repair and overhaul is accomplished through both the AFMC depots and contract operations. Customers' funds are obligated for engine repair when an engine is inducted into the depot-level repair facility, organic or contractor. Depot maintenance operates on the funds received through

sales of its products and services. CSAG-M organic services are provided by the three AFMC ALCs, AMARG at Davis-Monthan Air Force Base, Arizona, and other Services' depots.

Consolidated Sustainment Activity Group—Supply (CSAG-S)—The mission of the CSAG-S is to provide policy, guidance, and resources to meet AF needs for spare parts during war and peace. The CSAG-S manages approximately two million items, including weapon system spare parts, medical and dental supplies and equipment, and items used for non-weapon system applications. Materiel is procured from vendors and held in inventory for sale to authorized customers. CSAG-S consists of these divisions: the Consolidated Sustainment Activity Group-Supply (CSAG-S), Consolidated Sustainment Activity Group-Retail (CSAG-R), Fuels Division, Medical and Dental Division, and AF Academy Cadet Issue Division. AFMC manages the CSAG-S, and CSAG-R. HQ USAF manages the Medical and Dental and AF Academy Cadet Issue divisions.

Customers—Any entity that inputs or utilizes information during the CAM processes and procedures.

Define Requirements—PMs will identify and update all program requirements within the CAM IT system of record. Program requirements will include force structure changes, operational tempo, historical trends, programmed DM schedules, engine overhaul projections, and any other major programmatic changes through the FYDP as provided from HQ AF and lead commands.

Depot Maintenance—Material, software maintenance, or repair requiring the overhaul, upgrade or rebuild of parts, assemblies, subassemblies or software programs, regardless of source of funds, location, or if accomplished organically or commercially. The term does not include procurement of modifications for performance improvement. It does include testing, installation of parts for modifications, and reclamation of materiel. Reference Title 10, United States Code, Section 2460.

Depot Purchased Equipment Maintenance (DPEM)—Covers the method for procuring depot maintenance services from organic or contractor depot maintenance resources. This involves customer management to determine requirements, obtain financial Obligation Authority, and provide programming authority for ordering work from depot maintenance including aircraft PDM, engine overhauls, software, etc.

Direct Product Standard Hour (DPSH)—The time it should take a trained direct labor employee or a group of trained direct labor employees, working at a normal pace, to produce a described unit of work of an accepted quality according to a specified method under specified working conditions.

Driving Record—The task group that is driving the aircraft or missile into the depot.

Driving Workload—The requirement that is the primary reason an aircraft is scheduled into a repair facility.

Eaches—Term used to describe the count (quantity) of individual parts per National Stock Number.

Earned Hours—The amount of hours to complete a task as documented within the Fixed Price Worksheet.

Executable—Individual tasks logistically supportable for the year(s) requested.

Execution Year—The year in which there is a bona fide need. PMs seek funds in the execution year's budget to finance the need. This funding is in then year (TY) dollars.

Financial Management Data Quality Service—The AF Financial Management Data Quality Service (DQS) is the Authoritative Data Source (ADS) for Air Force financial programming, execution, reporting data element code values, titles, descriptions, and period of availability. Access DQS at the following website: https://fmdqs.cce.af.mil/.

File Maintain—The physical act of entering or updating data in the CAM IT system of record.

Funds Holder—The organization with authority to commit funds and issue a project order or other funding document directing depot maintenance to perform a repair action.

Ground, Flight, and Life Fire Test—This is testing of the software during ground or flight operations and includes temporary duty to support ground and flight test, the cost for test preparation, test support back at home base and on site, test analysis and reporting.

Independent Verification &Validation—This is performed by an outside organization and is done prior to field testing, which may also be called field service evaluation.

Job Order Number (JON)—The JON refers to an alpha numeric designation assigned to a project to identify a specific entity (resource) or work effort.

Lead Command—The command that serves as the operators' interface with the PM for a system as defined by AFPD 10-9.

Live Fire Testing—This is the part of flight test that requires actual live firing of on-board weapons.

Logistics Requirements Determination Process (LRDP)—Simplified, standard, repeatable and consistent process to determine and prioritize weapon system requirements across the entire AF to optimally sustain weapon systems within requisite resource constraints.

LRDP Published Schedule—A calendar year schedule providing due dates for the major phases of the LRDP. The LRDP schedule will be distributed annually by means of Power Point slides, emails, and through The CAM IT system of record by CAM to the start of the process.

Major Command (MAJCOM)—A major subdivision of the AF that is assigned a major part of the AF mission. A MAJCOM is directly subordinate to Headquarters Air Force. Most MAJCOMs have the word Command as part of their designation; MAJCOM headquarters are management headquarters and thus have the full range of functional staff.

Maintenance Group—In the United States AF, a wing is normally the organizational tier below a Numbered AF. USAF wings are structured to fulfill a mission from a specific base, and contain a headquarters and four groups: an operations group, a maintenance group, a medical group and a mission support group. Maintenance groups support all maintenance operations.

Mission Design Series—The system by which military aerospace vehicles are identified.

Mission Planning Software—Covers changes to the weapon system specific mission planning software driven by the software change to the operational flight program software.

Mobile Depot Maintenance—The action of a depot maintenance field team traveling to a unit, or base, geographically separated from the depot, to perform depot-level maintenance on an approved asset.

Modification—A change in form, fit, or function to an airframe component, end item, piece of equipment, or software that affects the performance, ability to perform the intended mission, flight safety, production, or maintenance. Such modifications are generally accomplished to add a new capability or function to a system or component, or to enhance the existing technical performance or operational effectiveness of the asset.

Negotiated Hours—Negotiated hours are utilized when a new task or action occurs that does not have developed hours and are only for O&A or non-standard tasks. Negotiated hours are not part of the original task for maintenance and are outside of captured maintenance tasks within the AMR brochure.

Non-trended task—Aircraft and Missile Requirement depot tasks that have a set number of hours needed to accomplish the task.

Over & Above (O&A)—Work or tasks discovered during the course of performing overhaul, maintenance, and repair efforts that is/are (1) not within the general scope of the AMR work specification, program Project Directive (PD) or contract, (2) not covered by the line item(s) for the basic work under the AMR work specification, PD or contract, and (3) necessary in order to satisfactorily release the aircraft.

Occurrence Tasks—Occurrence tasks are depot tasks that are accomplished on a percentage of aircraft and missiles undergoing depot maintenance. Depot tasks are not accomplished on 100% of aircraft or missiles if assigned an occurrence factor for budgetary purposes. Depot tasks that are assigned an occurrence factor are considered occurrence tasks.

Organic—Logistics support provided by Government-owned material, equipment, or facilities and Government personnel.

Organic Depot—Depot maintenance facility where actions are performed by a military service under military control using government owned or controlled facilities, tools, test equipment, spares, repair parts, and military or government civilian personnel.

Out Year—Any year beyond the budget year for which projections of spending are made.

Planning, Programming, Budgeting, and Execution (PPB&E)—The PPB&E (Ref. AFPD 90-6) consists of two major programming and budgeting exercises, the President's baseline review, and the PB. It is a continuous cycle with the PPB&E segments in any given year overlapping segments of a number of other years. Programming links mission requirements to the financial resources required. The result of this linkage is that resources can be allocated in a systematic way with direct relationship to the roles and missions of the AF and Department of Defense (DoD or DD when referring to forms). The process also provides the information AF senior leaders need to balance all the Service's fiscal needs. The Whole Engine Repair Requirements process is linked to the PPB&E via the HQ AFMC LRDP, which provides the depot-level whole engine repair requirements input to the POM to ensure the proper funding and resources be available to overhaul AF engines. Requirements are first identified in the POM, the first phase of the PPB&E. It is the place to bring forward all requirements to be funded across the FYDP so the AF can identify funds needed to accomplish the work. The POM forecasts AF requirements five to six years into the future to accomplish long-term planning and secure funding. The PB ultimately results in funding authorized and appropriated by Congress to the AF for the execution year and sets the rates for the AFWCF.

Prepare Requirements—Identify new emerging requirements and validate existing requirements.

Prioritization—Sorting of requirements according to their relative importance by weapon system, applicable end-items, commodity, or common process.

Prioritized—Requirements sorted according to their relative importance using approved criteria and methodology.

Prioritize Requirements—Once validated, the PM, with assistance from lead commands and supported commands, will prioritize requirements according to their relative importance in meeting AF priorities (weapon system availability, capability, pilot throughput, etc.).

Program Control Number (PCN)—A six-position alphanumeric code used by customers of the CSAG-M to identify a specific customer order to be negotiated. The first character identifies the customer of the Maintenance Division. The second character provides the RGC, and the third character represents the managing ALC for customer orders. The last three characters are assigned by the ALC MP&E OPR for local identification and control of a specific order. The last four characters of the PCN are also referred to as the Pseudo Code.

Program Executive Officer (PEO)—The individual dedicated to executive management and supervision of a portfolio of mission-related acquisition category (ACAT) and selected programs. The PEO is accountable to the Service Acquisition Executive.

Program Group—A CAM unique term that's used extensively throughout the WSS process. In most cases the program group is synonymous with a weapon system PM. All WSS requirements are grouped into specific program groups with each having a PM, typically a 0- 6/GS-15 who validates and publishes those requirements annually.

Program Manager—The designated individual with responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs for their assigned weapon system. The PM for programs are accountable for credible cost, schedule, performance, and materiel readiness.

Programmed Depot Maintenance (PDM)—Depot modification and maintenance of all scheduled depot requirements accomplished normally on a calendar time cycle.

Program Office—This office is generally at the program group level and may consist of a PM, item manager, production management specialist, equipment specialist and financial manager.

Properly Documented—All required data fields are populated and file maintained in the CAM IT system of record.

Publish Requirements—Requirements are electronically signed by the PM or designee and published in the CAM IT system of record. Each program office will produce a standardized electronic report documenting the validated and prioritized requirements for each program.

Represervation—The represervation process occurs every four years and pertains to aircraft in Type 1000 storage. Represervation reverses the induction process and begins with the removal of the protective coating from the aircraft. The aircraft is inspected and treated for corrosion, greased or lubed, and washed. The aircraft is refueled and engine is run with all systems operating. The aircraft is then put through the induction procedures again and towed back to the storage area for another four years.

Research, Development, Test, and Evaluation (RDT&E)—The type of funding, appropriation (3600) intended for RDT&E efforts. The term research and development (R&D) broadly covers the work performed by a government agency or the private sector. Research is the systematic study directed toward gaining scientific knowledge or understanding of a subject area. Development is the systematic use of the knowledge and understanding gained from research for the production of useful materials, devices, systems, or methods. RDT&E includes all supporting test and evaluation activities.

Reliable—Individual tasks developed using a repeatable process that provides a consistent value.

Requirement—A depot maintenance workload task to assure operational safety, suitability & effectiveness of a weapon system or commodity, or a validated need satisfied by a buy or repair action required to assure the preservation of baseline characteristics of systems or end-items.

Repair Group Category (RGC—A single-position, alpha or numeric code that identifies specific commodity or effort groupings of AFMC maintenance work requirements

R-Squared value—In statistics, the coefficient of determination, denoted R² and pronounced R-Squared, is used in the context of statistical models whose main purpose is the prediction of future outcomes on the basis of other related information.

Software Maintenance—Those activities necessary to correct errors in the software; add incremental capability improvements (or delete unneeded features) through software changes; and adapt software to retain compatibility with hardware or with other systems with which the software interfaces. Software maintenance comprises software maintenance performed on military materiel (e.g., weapon systems and their components, space control systems and their components, automated test equipment and test package sets, and systems integration laboratories).

Software Project or Block Cycle—Effort to address one or more software updates resulting in an executable resolution. Effort will include all elements of performing block cycle updates to include planning, coding and design, test and integration, software tool updates, and documentation updates.

Software Reproduction and Distribution—This includes any cost for reproducing and distributing or fielding of the software.

Software Tools—Simulation software, compilers, assemblers, interpreters, emulators, and translators that enable other NSS to be designed and tested.

Source of Repair (SOR)—An industrial complex (organic, commercial contract, or interservice facility) with required technical capabilities to accomplish repair, overhaul, modification, or restoration of specific types of military hardware or software.

Stakeholders—For the purposes of this publication, a stakeholder is an individual or organizational entities (users, developers, acquirers, technologists, testers, budget analysts, sustainers, and industry) that are, or will be, associated with implementing and supporting the associated system, subsystem, or end-item capability requirements.

Standard Hours—Standard hours are based on approved data, group timing, work sampling, technical estimates, or trend analysis, and maintained in a project workload planning system. Where feasible, three years of data should be considered.

Storage Maintenance—This requirement includes: maintain-in, represervation, and other miscellaneous requirements for most AF owned assets that are not part of a MAJCOM's active inventory. The PM involved funds input to and removal from storage.

Supportability—The degree to which the planned logistics support allows the system to meet its availability and wartime usage requirements. Planned logistics support includes the following: test, measurement, and diagnostic equipment; spare and repair parts; technical data; support facilities; transportation requirements; training; manpower; and software.

Supported Command—AF Organizations that share a system with a lead command, other AF organizations, units of the AFRC, or the NGB.

Sustaining Engineering (SE)—Technical tasks to ensure continued operation and maintenance of a system with managed known risk. SE involves the identification, review, assessment, and resolution of deficiencies throughout a system's life cycle. SE both returns a system to its baselined configuration and capability, and identifies opportunities for performance and capability enhancement. It includes the measurement, identification and verification of system technical and supportability deficiencies, associated root cause analyses, evaluation of the potential for deficiency correction and the development of a range of corrective action options.

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

Tactical Missiles—The requirement consists of hardware repair and testing of whole missiles captured under EEIC 542, missile components and containers captured under EEIC 545 that are not the responsibility of CSAG-S, or missile support equipment which is usually captured under EEIC 545, but may also be EEIC 544. This also includes changes to operational NSS captured under EEIC 540, if the missile or support equipment is programmable. It includes changes to operational UUT TPSs, when the UUT is not the responsibility of CSAG-S. Guided Bomb Units-15 component items are also included.

Technical Data—A general term used when referring to any or all technical publications as a whole or separately, and without reference to any one specific type of publication, such as technical manuals, technical orders, composition, artwork, engineering data, engineering drawings, master layout drawing, un-dimensioned drawings, specifications, parts list, automatic equipment program master tapes or cards, microfilm, printed copies, commercial manuals, film, sound tracks, or any other media used primarily for conveying technical information. The term technical data also applies to the reproducible copy from which multiple copies of technical data are reproduced.

Technical Order (TO)—A publication that gives specific technical directions and information in regards to: inspections, storage, operations, modifications, and maintenance of AF equipment. The various types of technical orders include technical manuals, TCTOs, methods and procedures technical orders, automation type TOs (e.g., tapes and cards that are TO data in digital, magnetic, film, or sound form), index type TOs, and abbreviated TOs.

Then Year—Refers to obligations (or dollars which will be spent over time).

Timely—Individual tasks identified at the appropriate time to support the requirements development process schedule.

Tool crib—Used to house the hand tools and equipment used for maintenance.

Trainers/Simulators—Covers changes to the trainers/simulators that are driven by the software change to the operational flight program software.

Trend Analysis—A process used to analyze the historical hours and occurrence rates for unpredictable Aircraft and Missile maintenance tasks in order to estimate future hour and occurrence rates. Trend Analysis is based on a principle of data analysis whereby a trend line is fitted to a set of data.

True Cost—The approved contract value set within the period of performance.

Unit Under Test Software—UUT software changes on test equipment that is managed solely by DM is generally funded by CSAG-M. An exception is in **paragraph a**. There are three customers responsible for changes to TPS software that tests UUTs on equipment that is fielded.

- a. CSAG-S pays for TPS changes associated with CSAG-S items. If a TPS change is managed by the item manager rather than by the test equipment manager, CSAG-S pays for it, even if the equipment is managed solely by CSAG-M.
- b. PMs pay for TPS changes on the following:
- i. Associated with strategic missiles, unless the item is a CSAG-S item. This might include the missile system, any of its components, or supporting hardware.
- ii. Associated with tactical missiles, unless the item is a CSAG-S item. This might include the missile system, any of its components, or supporting hardware.
- iii. Not assigned to depot maintenance when the UUT is not a CSAG-S item or a strategic or tactical missile system item.

Validate Requirements—PMs, in conjunction with lead command POCs, Funds Holder POCs, with assistance from supported command POCs, will conduct an annual review of requirements as documented within the CAM IT system of record by the applicable PM. These collaborative reviews will ensure requirements are accurate, reliable, timely, properly formatted, and documented and file maintained in the CAM IT system of record.

Validated—Confirmation that requirements were accurately captured, rigorously supported, and properly documented.

Validation—The PM and customer approval of WSS requirements.

Weapon System—A combination of elements that function together to produce the capabilities required for fulfilling a mission need, including hardware, equipment, software, and all performance based logistics sustainment elements, but excluding construction or other improvements to real property.

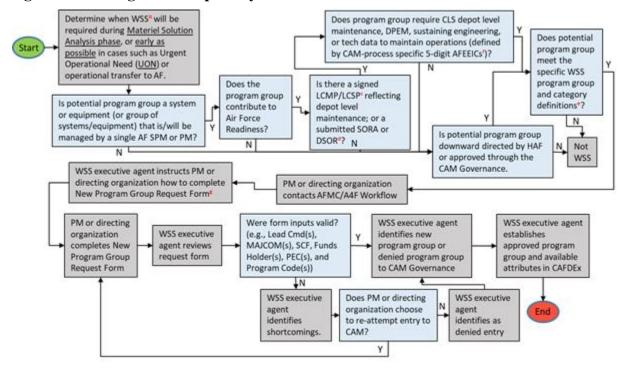
Weapon System Sustainment (WSS)—The continuous support of the weapon system during the Operations and Sustainment phase. There are four business process areas managed as part of CAM WSS: DPEM, CLS, SE, and TOs.

Workload—Requirements that will generate on a periodic schedule demanding test, fault isolation, disassembly, repair or modification, reassembly, inspection, and final test. Workload is expressed in DPSH and represents the unit of measure to posture the Command.

Attachment 2

PROGRAM GROUP ENTRY TO WSS DECISION TREE

Figure A2.1. Program Group Entry to WSS Decision Tree.



A2.1. Decision Tree Terms.

- A2.1.1. Program Group. The term Program Group is a CAM unique term that's used extensively throughout the WSS process. In most cases, the program group is synonymous with a weapon system PM. All WSS requirements are grouped into specific program groups with each having a PM, typically an O-6/GS-15, who validates and publishes those requirements annually.
- A2.1.2. Weapon System Sustainment. WSS is a subset of Readiness and O&S funding that includes CLS, DPEM, SE, TOs, and organic maintenance, repair and overhaul.
- A2.1.3. Life Cycle Management Plan (LCMP) or Life Cycle Sustainment Plan (LCSP). The LCMP or LCSP is an official document that describes overall acquisition and program management strategies, as well as the life cycle sustainment support strategy. The PM ensures that the LCMP meets the information and coordination requirements of the existing requirements of the AS and LCSP as specified in AFI 63-101/20-101.
- A2.1.4. Depot Source of Repair (DSOR). DSOR is the method by which the DoD postures its depot-level maintenance workloads organic, contract, or a combination of both. The PM collaborates with AFMC to determine the core depot-level maintenance and repair requirements. This analysis is completed prior to milestone A, and the results of the analysis are also documented in the Core Logistics Analysis Annex to the LCSP. The DSOR is completed by MS B, and it identifies sources of repair for each depot-level reparable at the system and sub-system level at a minimum. When the DSOR is completed, the PM

- documents the DSOR in the LCSP. The Source of Repair Assignment (SORA) precedes the DSOR.
- **A2.2. Program Group Category Definitions.** The below Program Group Category Definitions are dependent upon guidance released from the CAM WSS Boundaries Integrated Product Team. The below information is current as of the publication of this AFMAN:
 - A2.2.1. Flying System: A manned or unmanned aircraft, including aerial targets (e.g., B-1, C-17, E-3, F-22, KC-46, T-1, UH-1N, MQ-9, and Aerial Targets); a system or equipment that is physically part of the aircraft (e.g., ski-equipped landing gear for C-130, joint surveillance target attack radar system for E-8, retractable in-flight refueling probe for HH-60G); platform specific aircrew training system or maintenance training system; or a system or equipment specifically required to operate the aircraft, such as a controller for an unmanned aircraft.
 - A2.2.2. Munitions Systems: A munition (e.g., bomb, missile, flare) requiring depot-level maintenance, likely in the form of periodic inspections and refurbishment, or a munitions system or equipment specifically required to operate the munition or system (e.g., bomb rack, guns, munitions release system).
 - A2.2.3. Space Program: A system or equipment that provides Space capabilities that integrate with the Joint Force to hold at risk, deter, and when directed, defeat a potential adversary; including satellite constellations and associated ground and user equipment, the satellite control network, and space lift capability.
 - A2.2.4. Terrestrial Monitoring Equipment or System: An earthbound system or equipment independent of space capabilities or which utilizes space systems' assistance for monitoring of physical intents, such as threat detection, surveillance, or weather (includes radars, antennas, and transportable facilities and equipment; not real property supporting or housing such systems, nor secondary equipment or systems interfacing with the primary terrestrial monitoring equipment or system).
 - A2.2.5. Cyber Program: A system or equipment that provides and secures Cyberspace as a mission enabler: Command & Control of AF Cyber Forces; defense of both fixed and mobile AF and Joint Networks; and delivery of offensive cyber effects for the warfighter.
 - A2.2.6. Communication Equipment or System: A system or equipment for non-cyber communication that is common to multiple space or aircraft or specific to AF offensive or defensive mission-based activities; not general use installation-based non-cyber communications or telecommunications.
 - A2.2.7. Training Equipment or System: A system or equipment used for training (e.g., universal training device, human flight simulator) that is not specific to training requirements of one weapon system.
 - A2.2.8. Aircraft Common Equipment or System: A system or equipment that is physically part of (common to) aircraft systems (e.g., targeting pods, electronic warfare, and propulsion systems), and includes roll-on equipment that interfaces with aircraft.
 - A2.2.9. Ground Equipment or System: An AF mission-based mobile or transportable ground-based system or equipment (i.e, not part of real property), which can include ground-based weapons, support equipment, automatic test systems, aircraft cargo loaders, rocket

launchers, cargo nets and pallets, noise and fire suppression systems, Base Expeditionary Airfield Resources (BEAR) power units, Mine-Resistant Ambush Protected (MRAP) and depot eligible vehicles (e.g., flight line firetrucks and refuelers).

- **A2.3. AFEEICs.** The AFEEICs for consideration into the CAM portfolio are: 540XX, 541XX, 542XX, 543XX, 544XX, 545XX, 546XX, 548XX, 560XX, 578XX, 583XX, or 594XX.
- **A2.4. New Program Group Request Form.** Upon determining a program group should be included into CAM WSS, the PM follows the direction in **paragraph 1.6** of this instruction.

Attachment 3

FAILURE POINT DEFINITIONS BY RISK CATEGORY

Table A3.1. Failure Point Definitions by Risk Category.

Risk Category	Failure Definition		
Area Support/Base	The point where unable to meet the minimum operational needs (i.e.,		
Support/Local	consider aircraft availability, operational availability, mission capable		
Manufacturing	rate, etc.). Each program/situation must be analyzed to determine true		
(A/B/M)	failure point.		
Aircraft Depot/	Depot-level maintenance threshold that will not achieve minimum		
Heavy Maintenance	operational requirements or mission capability rates, availability or A maintenance down time, etc.		
CLS Mgmt Support	Does not meet contractually defined programmed and/or scheduled hours, performance objectives, or required minimal level of effort; less than defined contractual programmed and/or scheduled FHs and/or operational requirements.		
CLS Spares	Does not meet contractually defined programmed and/or scheduled hours, performance objectives, or required minimal level of effort; less than defined contractual programmed and/or scheduled FHs and/or operational requirements.		
Exchangeables	The computed number of depot-level repairs which would cause Availability/Mission Capable/Operational Rate to drop below a system's/program's minimum operational availability standard.		
Engines	Reduces depot/contractor production to a War Readiness Engine level of red; unable to meet most units surge capabilities; aircraft engine holes are imminent.		
Missiles	Depot-level maintenance threshold that will not achieve minimum operational requirements such as mission capability rates, availability or A_0 , maintenance down time, etc.		
Other Major End Items (OMEI)	Occurs when OMEI repair(s) falls below program's or system's minimal operational availability standard and/or falls below operational requirement to meet mission needs. Each program or situation must be analyzed to determine true failure point.		
Software	Inability to maintain core capability sufficient to correct urgent and emergency software updates which may include but not limited to: specialized skills and expertise; data; infrastructure (e.g., software lab); information assurance (e.g., authority to operate); the inability to fix CAT I deficiencies; includes safety, mandates (e.g., cyber security), and mission critical.		
Sustaining Engineering (SE)	The inability to support engineering efforts required to meet defined minimal performance objectives and to ensure the mandatory requirements of Operational, Safety, Suitability, & Effectiveness and work all safety of flight deficiency report investigations.		
Technical Orders (TOs)	Cannot produce and distribute emergency or urgent TO change requests.		

Training	The point where the program is unable to meet minimum requirements
	(e.g., readiness, relevance, realism, etc.) which will result in failure to
	meet minimum availability and minimum student production. Each
	program or situation must be analyzed to determine true failure point.
Storage	Inability to maintain AF-owned assets that are inducted into storage,
	storage maintenance, withdrawal or regeneration, and HAZMAT
	handling.

Attachment 4

OUT OF CYCLE THRESHOLD AND APPROVAL CRITERIA

Table A4.1. Out of Cycle Threshold and Approval Criteria.

00C T	Role Threshold	OOC Criteria		
OOC Type	Role Threshold	% and \$K	or \$K	
Buy Down	Program Approval			
	OAC Chief	No threshold (100% review)		
	OAC FM Analyst			
	OAC WSM			
	LC WSM			
	Program Approval	15% and \$200 (min)	\$500	
	OAC Chief	15% and \$200 (min)	\$500	
Contract Price	OAC FM Analyst	15% and \$200 (min)	\$500	
Change	OAC WSM	15% and \$200 (min)	\$500	
	LC WSM	15% and \$200 (min)	\$500	
	Program Approval			
Deferral	OAC Chief			
	OAC FM Analyst	No threshold (100% review)		
	OAC WSM			
	LC WSM			
	Program Approval	15% and \$200 (min)	\$500	
	OAC Chief	15% and \$200 (min)	\$500	
Scope Change	OAC FM Analyst	15% and \$200 (min)	\$500	
	OAC WSM	15% and \$200 (min)	\$500	
	LC WSM	15% and \$200 (min)	\$500	
	Program Approval	15% and \$200 (min)	\$500	
	OAC Chief	15% and \$200 (min)	\$500	
Unexecutable	OAC FM Analyst	15% and \$200 (min)	\$500	
	OAC WSM	15% and \$200 (min)	\$500	
	LC WSM	15% and \$200 (min)	\$500	
	Program Approval			
Unpublished	OAC Chief	No threshold (100% review)		
	OAC FM Analyst			
	OAC WSM	7		
	LC WSM			
Previous Buy	Program Approval	No threshold (100% review)		
Down	OAC Chief			

	OAC FM Analyst	
	OAC WSM	
	LC WSM	
Previous Deferral	Program Approval	
	OAC Chief	
	OAC FM Analyst	No threshold (100% review)
	OAC WSM	
	LC WSM	