

**BY ORDER OF THE COMMANDER
OGDEN AIR LOGISTICS COMPLEX**

**OGDEN AIR LOGISTICS COMPLEX
INSTRUCTION 21-110**



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DEPOT FACILITY MANAGEMENT

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(Mr. Harry Briesmaster III)

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This instruction outlines policies, responsibilities and procedures for the coordination and management of Ogden Air Logistics Complex (OO-ALC) facilities. It provides guidance and assigned responsibilities to OO-ALC organizations and personnel. The information contained herein is in accordance with (IAW) the directives outlined Air Force Sustainment Center Manual (AFSCMAN) 21-102, *Depot Maintenance Management*. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed of in accordance with the Air Force (AF) Records Disposition Schedule which is located in the AF Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of the Air Force (DAF) Form 847, Recommendation for Change of Publication; route DAF Forms 847 from the field through the appropriate functional chain of command. This document also captures the recent changes made to the Depot Facility Management plan in accordance with Art of the Possible (AoP) principles and OO-ALC strategic planning initiatives. It is fully expected that additional changes will be forthcoming in future publications as the Depot Facility Management Plan evolves and improves. All changes will be tracked, discussed and implemented through the OO-ALC Infrastructure Governance Process that will be described and discussed in the following sections.

SUMMARY OF CHANGES

Changed references of OO-ALCI 32-105 to OO-ALCI 32-1005 and references of **Attachment 1**. Added Energy Champions for Significant Energy Use (SEU) information beginning with

paragraph 9.4.9, updated **Figure 8**., OO-ALC Energy Communication Process, updated EnMS Manager guidance in paragraphs **9.5.3.3 through 9.5.4**, and removed non-conformities information (previously subparagraphs **9.8.1.4 through 9.8.1.4.8**).

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1. Ogden Air Logistics Complex Commander/Director Responsibilities.

1.1. Under the authority, and at the direction of the Air Force Sustainment Center (AFSC) Commander, OO-ALC Commander/Director develops, operates, maintains and controls the use of the OO-ALC-assigned AF facilities in compliance with all applicable Department of Defense (DoD) and AF policies and procedures. Consistent with the OO-ALC organizational plan and structure, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309th Maintenance Support Group (309 MXSG) Civilian Leader (CL). These facilities programs include (but are not limited to): Industrial Area Development Planning (IADP), Maintenance and Repair (M&R), minor construction (in conjunction with OO-ALC Business Office [OB]), Space Utilization, Space Leasing, Military Construction (MILCON), Energy Management Systems (EnMS), Electrical Preventive Maintenance Program (EPM), and Depot Capacity Measurement and Analysis.

2. OO-ALC Group Commander/Director Responsibilities.

2.1. Preside over the development of a Facilities Strategic Deployment Plan (FSDP) for their group. Ensure the group plan is consistent with the OO-ALC overall business and facility objectives as outlined in the complex IADP. The FSDP should be an ongoing effort and conversation within the facilities engineering team, process engineering team, and the group new business office to capture, identify and plan future workloads as they develop. This effort should also include ongoing requirements to existing workloads, Continuous Process Improvement projects and AoP initiatives.

2.1.1. Resolve conflicts when they arise and ensure the FSDP is shared and communicated throughout their organization.

2.2. Oversee the facilities space request process for their group to ensure requirements are collected, coordinated and investigated.

2.2.1. Ensure the group's Facility Engineering Flight is engaged in group facilities planning process. Ensure any changes to group facilities, i.e., vacated space, changes in workload, Civil Engineering (CE) category code and square footage are communicated formally through the Facility Working Group to the OO-ALC functional and configuration manager for the OO-ALC facility baseline 309 MXSG/MXDEI.

2.2.2. Coordinate all new workload plans with the 309 MXSG Facility & Reliability Centered Maintenance Engineering function. Do this early in the process, so that needed facility accommodations can be planned, approved and executed through the Base Civil Engineer (BCE).

2.3. Work with the applicable 309 MXSG facility engineering function to prepare, review and brief M&R budget requests via the OO-ALC Infrastructure Governance Process.

2.3.1. Develop firm facility M&R projects up to 2 years in advance of needed completion date. This is required to meet BCE and contracting timelines.

2.3.2. Approve prioritization and funding of M&R projects annually.

2.3.3. Ensure funding process of M&R projects are efficient and timely.

2.3.4. Ensure group M&R requirements are communicated through the Facilities Working Group (FWG) and vetted in the Infrastructure Governance Process.

2.4. Ensure squadron directors appoint (and maintain current) primary and alternate Facility Managers (FM).

2.4.1. Within each group, squadron directors are responsible for appointing one primary and up to five alternate FMs (in writing) for every facility under their control. Squadron directors will forward a signed copy of the FMs appointment letter to the 309 MXSG/CL, with a courtesy copy to the 309 MXSG/EN complex-level Programs Section (309 MXSG/MXDEI) (Attn: Complex Space Utilization Program Manager) within 5 business days of an FM's appointment or replacement. In the case of joint occupancy facilities, affected squadron directors will work together to allocate FM responsibilities. This allocation should be consistent with primary occupancy (largest user) or distinct bay/bays circumstances.

2.4.2. Group directors may choose to appoint a group-level facility program coordinator to aid these efforts.

2.4.3. So as not to impact their different responsibilities, facility engineering personnel should not be assigned as primary or alternate FMs.

2.5. Ensure group is fully engaged in the OO-ALC Infrastructure Governance Process, is a voting member of the Infrastructure Governance Committee (IGC) and ensures appropriate representations to the Infrastructure Governance Board (IGB) (group deputy/MXDS/MXDE) and FWG (group MXDE facility Engineering Chief).

2.5.1. Represent their group interests with respect to space utilization, energy management, M&R, MILCON, depot capacity, minor construction and the IADP programs.

3. 309MXSG Director (MXSG/CL) Additional Responsibilities.

3.1. As stated in [paragraph 1.1](#), the OO-ALC Commander/Director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include, but are not limited to: energy management, IADP, M&R, minor construction (in conjunction with OO-ALC/OB), space utilization and MILCON. In his/her capacity as the complex facilities lead, the 309 MXSG/CL:

3.1.1. Serves as recorder for the IGC and serves as chair for the IGB.

3.1.2. Serves as the OO-ALC voting member on the 75th Air Base Wing (75 ABW), 75th Civil Engineer Group (75 CEG) Facilities Planning Committee (FPC).

3.1.3. Advises the OO-ALC Commander/Director regarding his/her participation in the 75 ABW Facilities Board (FB) process. Serves as an alternate FB voting member in the event the OO-ALC Commander/Director is unavailable.

3.1.4. Ensures Facilities Annual Improvement Plans (FAIP) are developed to support the production groups' 309 MXSG FSDPs.

3.1.5. Establishes and operates a service call center in support of base CSAG-M customers. This service call center will receive and coordinate with 75 CEG (as appropriate) on industrial plant equipment and real property/facilities-related work requests.

4. 309 MXSG/EN Chief Responsibilities.

- 4.1. Manages, oversees and coordinates OO-ALC facilities programs to include: energy management, IADP, M&R, space utilization and MILCON. The 309 MXSG/EN works with the OO-ALC/OB as necessary, to address the Capital Investment Program (CIP) minor construction issues that impact OO-ALC facilities and equipment maintainability.
- 4.2. Chairs the OO-ALC FWG and supports the OO-ALC Infrastructure Governance Process.
- 4.3. Supervises and directs 309 MXSG/MXDEI charged to provide facilities engineering functional support to the OO-ALC production groups.
- 4.4. Supervises the 309 MXSG/MXDEI charged to provide program management for the energy management, IADP, M&R Program, Space Utilization Program, Capacity Measurement Program, Facilities Leasing Program, Unspecified Minor Military Construction (UMMC) and MILCON programs.
- 4.5. Ensures 309 MXSG/MXDEI delegate(s) provide briefings as required to the OO-ALC management teams regarding facility projects and space issues. This activity is an integral part of the OO-ALC Infrastructure Governance Process.

5. 309 MXSG/EN Engineering Flight Functional Responsibilities (MXDEJ, MXDEQ, MXDEU, MXDEZ, MXDEI).

- 5.1. MXDEI is the OO-ALC office of primary responsibility for all things facilities, especially M&R, space management, depot capacity, facility engineering functional, minor construction, MILCON, off-base leasing and service contracts and IADP. These supporting activities often affect the other facilities efforts that are the primary responsibility of MXDEI.
- 5.2. Assist with the development of group FSDPs. Build and execute tactical-level FAIPs in accordance with the production group's identified needs and requirements, to achieve long-term goals and objectives contained in the FSDPs.
- 5.3. With regards to facilities and facilities supporting activities. Many of the following identified roles and responsibilities will affect facilities and infrastructure. Those activities' needs are to be identified so that the appropriate actions may be maintained concerning establishing and maintaining a facility and infrastructure base line.
- 5.4. 309 MXSG/MXDEJ - Project Engineering Roles and Responsibilities.
 - 5.4.1. Establish a project queue for request projects. Prioritize the list of projects according to mission impact and critical relevance to the requesting organization.
 - 5.4.2. Assign a project engineer to work with the requesting organization to determine requirements, need date and potential impact to their specific production machine.
 - 5.4.3. Establish, complete and document the Statement of Work (SOW) and project drawings for implementation.
 - 5.4.4. Establish, complete and document the project Bill of Materials and submit in the Facility and Equipment Management System for project completion.
 - 5.4.5. Establish cost estimates for each specific project.

- 5.4.6. Gain approval from requesting organization requestor to proceed with project plan and estimated cost.
 - 5.4.7. Order required materials. Receive and inspect incoming materials for accuracy and quality.
 - 5.4.8. Ensure customer has an approved AF Form 332, *Base Civil Engineer Work Request, or TRIRIGA Work Request*, for all facility modifications, additions and repairs requested by their group(s) if not, work with the customer and CE to obtain project approval.
 - 5.4.9. Schedule the project for completion with the installation shops or establish a contract for completion when capacity or required skills/equipment within the installation shops does not meet the requesters need date or requirements.
 - 5.4.10. Oversee project implementation, ensuring that the project requirements are met and validated. Resolve technical issues and concerns if/when identified.
 - 5.4.11. Electronically maintain and update group building layouts for space information and notify the 309 MXSG/MXDEI Facility/Space Utilization Program Manager of any changes.
 - 5.4.12. Close project and report on completion.
- 5.5. 309 MXSG/MXDEQ - Reliability Engineering Roles and Responsibilities.
- 5.5.1. Identify critical production process and equipment that are prone to failure, identify root causes and provide resolution.
 - 5.5.2. Act as the point of contact for critical facilities infrastructure requirements, such as electrical power, compressed air, hydraulics systems, etc.
 - 5.5.3. Act as the focal point for the OO-ALC EPM. Assign resources as necessary.
 - 5.5.4. Conduct Failure Mode and Effects Analysis (FMEA) on existing equipment and new production equipment as requested and required. It is recommended that as new equipment requirements are identified, that the MXDEQ team is involved in the purchase requirements before the contract is finalized for processing.
- 5.6. 309 MXSG/MXDEU - Environmental Engineering Roles and Responsibilities.
- 5.6.1. Identify all local, state, and federal environmental requirements and standards for compliance.
 - 5.6.2. Become the subject matter experts of all environmental issues with regard to OO-ALC.
 - 5.6.3. Develop environmental projects and programs to ensure current and future requirements have been identified and facilitated.
 - 5.6.4. Deeply integrated with 75 CEG/CEIE. 309 MXSG/MXDEU is involved with environmental program change decisions. When program changes are promulgated by 75 CEG/CEIE, 309 MXSG/MXDEU complies with the changes.
 - 5.6.5. Provide environmental services to our customers in OO-ALC.
 - 5.6.6. Integrate environmental strategies in OO-ALC business practices.

5.6.7. Develop and brief environmental standards for compliance. Assist supervisors in training their personnel in environmental compliance.

5.6.8. Implement pollution prevention programs.

5.7. 309 MXSG/MXDEZ - Production Engineering Roles and Responsibilities.

5.7.1. Production engineer activities assigned to 309 MXSG/MXDEZ are in support of the 709th Maintenance Support Squadron (MXSS). 309 MXSG provide process support for paint, blast, and nondestructive inspection (NDI) operations for the majority of the Mx groups with the exception of the 309th Aircraft Maintenance Group paint and blast.

5.7.2. Write process orders (PO) in support of the required paint and blast operations.

5.7.3. Design, develop and procure tooling and equipment in support of those processes. Submit and coordinate in accordance with AFSCMAN 21-102.

5.7.4. Conduct risk assessment activities on processes, report root cause and develop mitigation strategies for implementation.

5.7.5. Ensure regulatory compliance of equipment and processes in conjunction with the safety, bio, environmental groups, using feasibility studies to document results as required.

5.7.6. Research new processes, equipment, and products to improve quality and safety of 709 MXSS processes.

6. OO-ALC Mx Facility Engineering Roles and Responsibilities. Mx group Facilities Engineers have a tremendous impact and role to assist the many OO-ALC initiatives with regard to facilities and infrastructure. Without their continued support many of these critical initiatives would suffer. The following list captures the support required to meet these complex-level program needs.

6.1. OO-ALC Maintenance and Repair Program - Mx Facility Engineering Responsibilities. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the M&R Program, which will be administered through the OO-ALC M&R Program Manager resident in 309 MXDEI.

6.1.1. Facilities engineers will develop and provide a list of needed and necessary projects within the Mx group. This list will include the CE task number, building number, project title, estimated need date, requesting engineer and initial estimated cost. This list is to be provided to the facilities engineering chief within the Mx group.

6.1.1.1. M&R Project Naming Conventions - 75 CEG latest guidance on project guidance. 75 CEG follows this for non-MILCON projects over \$5 million (M) and should for smaller projects where feasible. The plan is to use this for all projects and share a common naming convention between 75 CEG/CENPD and 309 MXSG/MXDEI (<descriptive verb><facility name/descriptor><facility number><phase>).

- 6.1.1.2. Descriptive Verb. The first word of the title must be “Convert”, “Maintain”, “Repair”, “Renovate”, “Construct”, “Add”, “Consolidate”, or “Demolish.” The descriptive verb must allow the reviewer to quickly understand the overall action taking place in the project and provide insight into the primary work classification. It is not necessarily the work being done (e.g., it is not mill/overlay). The title can include multiple descriptive verbs. Do not use abbreviations in the title unless absolutely necessary. Abbreviated names of units are acceptable (e.g., ABW for Air Base Wing).
- 6.1.1.3. Facility Name/Descriptor. Include the name of the facility to allow reviewers to understand the use of the facility. If the project is associated with a bed down, include a reference to the weapon system in the <facility name/descriptor> field.
- 6.1.1.4. Facility Number. The facility number should start with “B” to allow the reviewer to understand more easily that the attendant number is a facility number. If programming similar work in multiple facilities, use “Multi” in place of the facility number.
- 6.1.2. The facilities engineering chief will collect, tabulate and provide an initial project ranking for projects to move forward to the OO-ALC M&R 1-n list.
- 6.1.3. The facilities engineering chief will review the prioritized list with the Mx group senior leadership and OB office to ensure that the needs have been properly identified and impact on the individual group budgets is understood.
- 6.1.4. The facilities engineering chief will forward the approved Mx group M&R list to the OO-ALC M&R Program Manager (309 MXSG/MXDEI). This list may be uploaded into the respective M&R SharePoint site or other relevant data collection repository as the M&R Program develops along AoP guidelines.
- 6.1.5. The facilities engineering chief will update the Mx group M&R list quarterly as additional needs are identified and ranked within the specific Mx group facilities and infrastructure priority list.
- 6.1.6. The facilities engineering chief, in conjunction with their respective Mx group OB office, will need to track project expenditures to ensure they maintain the group expenses within their allotted M&R budget and in accordance with the projects they have submitted and recorded in the OO-ALC M&R 1-n list that was approved for that fiscal year.
- 6.1.7. For projects and requirements that are identified after the 1-n list has been approved and the OO-ALC M&R budget has been allotted, the facilities engineering chief will submit changes to their respective Mx group’s internal 1-n priority list to the OO-ALC M&R Program Manager (309 MXSG/MXDEI), which will then be reviewed at the next FWG and presented at the following IGB. Changes to the individual group’s project list and priority are the purview of the Mx CL/DD as long as the projects are within the allotted budget assigned to the Mx group.
- 6.1.8. For projects and requirements that exceed the Mx production group’s allotted M&R budget, and need to be executed within the fiscal year, the facilities engineering chief will need to submit an out-of-cycle unbudgeted funds request. The request will need to be reviewed by the FWG and approved at the IGB for consideration and final approval at the IGC.

6.1.9. The out-of-cycle unbudgeted funds request will need to use the form provided for capturing the request, which will need to include the following information:

- 6.1.9.1. Name/Description
- 6.1.9.2. Organization
- 6.1.9.3. Cost
- 6.1.9.4. Expense this year
- 6.1.9.5. Future year expense
- 6.1.9.6. Partially budgeted
- 6.1.9.7. Offset
- 6.1.9.8. Acquisition strategy
- 6.1.9.9. Service or commodity
- 6.1.9.10. Period of performance
- 6.1.9.11. Justification/impact if not funded

6.2. OO-ALC Space Management Program - Mx Facility Engineering Responsibilities. Facility space is a constrained resource for OO-ALC, and every effort needs to be made to ensure that we use the current available space to the best of our ability. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the Space Utilization Program, which will be administered through the OO-ALC Space Utilization Program Manager resident in 309 MXSG/MXDEI.

6.2.1. In the event an OO-ALC unit wishes to move an office within their unit, or swap areas with another unit, the unit commander/director must notify the 309 MXSG/MXDEI Space Utilization Program Manager. This must be done before any moves are started, because the move must be approved through the OO-ALC Infrastructure Governance Process. This approval is necessary because of the actual and potential impacts such moves may have on 75 ABW DoD-directed reporting, utilities billing, etc.

6.2.2. Internal moves within an organization that will change the currently assigned fund code, or the category code must be coordinated through 309 MXSG/MXDEI Space Utilization Program Manager and 75 CEG to ensure CE accountable records reflect both current and actual utilization of space.

6.2.3. When assigned space is no longer required by a using OO-ALC organization, that organization must notify the 309 MXSG/CL (courtesy copy to: 309 MXSG/MXDEI, Attn: Space Utilization Program Manager). Organizations do not have the authority to give their space to other organizations. The OO-ALC IGC is the sole authority for internal complex space reallocation.

6.2.4. Any organization or entity that desires to obtain facility space will complete a Hill Air Force Base (AFB) Form 565, *Space Allocation Request*. The initiator will complete the form and forward the form, any recommended course of actions, and the due diligence checklist to the 309 MXSG/MXDEI Space Utilization Program Manager (SUPM) for review and signature, prior to the requesting unit's commander/direct (deputy if the commander/director is not available) approval. After review and approval from the 309 MXSG/MXDEI SUPM, the Hill AFB Form 565 will be returned to the requester to obtain the remaining approval signatures.

6.2.5. To help produce an accurate space request, a standardized checklist relating to process and infrastructure (space) capacity characterization has been developed. It is imperative the requesting organization, represented by the Mx group facility engineers work through the checklist and process so we can adequately assess the needs of the organization and provide the resources necessary to meet mission requirements. This checklist ensures a standardized approach and due diligence effort to producing legitimate infrastructure (space) requests.

6.2.6. Facilities engineers will identify space-related production requirements for existing, new and developing workloads. In using Hill AFB Form 565 referenced above, the following critical requirements will be captured:

6.2.6.1. The name and contact information for the project officer or point of contact (POC). This project officer/POC must be the individual who will work with the OO-ALC Space Utilization Program Manager and CE on that particular space request.

6.2.6.2. Identify the need date/timeline of the requirement.

6.2.6.3. Identify the fund source for the proposed function.

6.2.6.4. Full identification of the space requirement, i.e., new mission or reason additional space is required. Thorough justification and explanation of the requirement will speed the staffing process.

6.2.6.5. Identify the scope (square feet) and type of space (administrative, storage, etc.) that is required.

6.2.6.6. The number of people (authorized/assigned including contractors) requiring the space requested.

6.2.6.7. Identify any special requirements, information technology, hard wall offices, overhead doors, loading dock, product staging requirements, tool storage requirements, safety requirements, security requirements, equipment requirements, etc.

6.2.6.8. Energy requirements to include, electricity, steam, compressed air, hydraulics, waste stream, environmental, noise, and particle count (possible clean booth requirements), etc.

6.2.6.9. Provide current and proposed diagram/layout of space utilization.

6.2.7. Identification of current open space options. Once the initial estimation of necessary requirements have been identified, determine if space exists within the current assigned footprint.

- 6.2.7.1. Expectation. Facility, Process Engineering and Production Planning will evaluate and monitor existing production machines to determine if existing process route capacity exists or if unused space capacity options exist to meet the identified requirements.
- 6.2.7.2. Validation. Review, report/analyses of existing process and space capacity utilization status on a regular basis.
- 6.2.8. Identification of re-rationalized workload options (re-rationalization refers to reviewing all current workloads relative to their alignment and support of the OO-ALC strategic vectors and objectives Mission-Essential Tasks [MET] within the context of finite space allocation and capacity considerations).
- 6.2.8.1. Expectation. Review of current workloads. Conduct workload rationalization analysis to validate MET vs non-MET workloads.
- 6.2.8.2. Validation. Report demonstrating current workloads and MET vs non-MET workloads and their alignment to the AFSC and OO-ALC strategic plan.
- 6.2.9. Identification of current workload consolidation options. Determine if there are opportunities to consolidate current workloads and/or space requirements using AoP principles and lean tools. The intent is to create infrastructure (space) options within the existing facility footprint. This option maybe executed concurrently with the re-rationalization of existing workload.
- 6.2.9.1. Expectation. Identify potential consolidation options via application of Lean, AoP, etc., that can streamline processes and reduce required operational footprint.
- 6.2.9.2. Validation. Analyses demonstrating that layout and process flows for existing workloads are optimized or a business case as to why consolidation is prohibitive.
- 6.2.10. Identification of storage space/non-production location, re-allocation options. Creates infrastructure (space) options within existing facility footprints by identifying, moving and modifying space that is currently used for non-production processes.
- 6.2.10.1. Expectation. Identify space that can be used for production that is currently occupied by storage/inventory or other non-production operations.
- 6.2.10.2. Validation. Report/analysis demonstrating potential production space options or analyses justifying the use of that space for non-production operations.
- 6.2.11. Temporary Facility, Internal/External Lease/Enhance Use Lease (EUL) options. Last option before pure MILCON to consider helping create production or swing space capacity. (See section below on leasing options, requirements and documentation.)
- 6.2.11.1. Expectation. - Identify potential lease space solution. May be in conjunction with workload re-rationalization, consolidation of elimination of non-production processes.
- 6.2.11.2. Validation. Report or analysis demonstrating that A-C are not viable or that this is in conjunction with workload re-rationalization, consolidation of elimination of non-production processes.

6.2.12. MILCON. Last available infrastructure (space) option to consider. (See section below on MILCON, requirements and documentation).

6.2.12.1. Expectation. This option is exercised when all above options have been exhausted or are not viable. Documentation needs to be collected and a gap analysis completed showing disparity between requirements and availability.

6.2.12.2. Validation. Report or analysis demonstrating that all other options are not viable or that this request is in conjunction with the development or implementation of the other options listed above.

6.3. OO-ALC Depot Maintenance Capacity Measurement Program, Mx Facility Engineering Responsibilities.

6.3.1. It is a requirement to provide yearly accountability and visibility of DoD organic depot maintenance activities that perform depot-level maintenance on military materials and weapon systems.

6.3.2. Consistent with the OO-ALC organizational plan and structure as defined in **paragraph 1**, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the Depot Capacity Measurement Program, which will be administered through the OO-ALC Depot Capacity Measurement Program Manager resident in 309 MXSG/MXDEI.

Figure 1. Space Decision Methodology Matrix.

Order	Validation Activity	Rationale	Value (Pros)	Cons	Expectation	Objective Evidence
A	Identification of current open space options	<ul style="list-style-type: none"> Effectively use available infrastructure (space) capacity first before considering other options 	<ul style="list-style-type: none"> Verification that we are rationalizing all available infrastructure (space) capacity as the first option 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Facility, Process Engineering and Planning to monitor and determine if existing process route capacity exists or if unused space capacity options exist (FWG vehicle) 	<ul style="list-style-type: none"> Report/analyses of existing process and space capacity utilization status on a regular basis
B ₁	Identification of re-rationalized workload options	<ul style="list-style-type: none"> Review of current workloads Validate alignment to strategic vectors of AFSC and OO-ALC 	<ul style="list-style-type: none"> Identifies outlier workloads (non-mission critical) Identifies infrastructure options for mission critical workload 	<ul style="list-style-type: none"> Workload removal / shutdown not a popular option Process alleged to have a significant timeline 	<ul style="list-style-type: none"> Conduct workload rationalization analysis to validate MET vs non-MET workloads 	<ul style="list-style-type: none"> Report demonstrating current workloads and MET vs non-MET workloads and their alignment to the AFSC & OO-ALC strategic plan
B ₂	Identification of current workload consolidation options	<ul style="list-style-type: none"> Possibly executed concurrently with B₁ Creates infrastructure (space) options within existing facility footprints 	<ul style="list-style-type: none"> Most times more cost effective than leasing or building Demonstrates that OO-ALC is embracing "doing more with less" 	<ul style="list-style-type: none"> Associated costs Varying timelines for execution 	<ul style="list-style-type: none"> Identify potential consolidation options via application of Lean, AoP, etc. that can streamline processes and reduce required operational footprint 	<ul style="list-style-type: none"> Analyses demonstrating that layout and process flows for existing workloads are optimized or a business case as to why consolidation is prohibitive
C	Identification of storage space / non-production location re-allocation options	<ul style="list-style-type: none"> Creates infrastructure (space) options within existing facility footprints 	<ul style="list-style-type: none"> Most times more cost effective than leasing or building Identifies underutilized or sub-optimized infrastructure (space) capacity 	<ul style="list-style-type: none"> Associated costs Varying timelines for execution 	<ul style="list-style-type: none"> Identify space that can be used for production that is currently occupied by storage/inventory or other non-production operations 	<ul style="list-style-type: none"> Report/analysis demonstrating potential production space options or analyses justifying the use of that space for non-production operations
D	Temporary Facility, Internal / External Lease / EUL options	<ul style="list-style-type: none"> Last option before pure MILCON to consider to help create production or swing space capacity 	<ul style="list-style-type: none"> More cost effective than MILCON alternative Swing space option for MILCON timing 	<ul style="list-style-type: none"> Associated costs Varying timelines for execution 	<ul style="list-style-type: none"> Identify potential lease space solution May be in conjunction with B₁, B₂, or C above or not 	<ul style="list-style-type: none"> Report or analysis demonstrating that A-C are not viable or that this is in conjunction with B₁, B₂, or C
E	MILCON	<ul style="list-style-type: none"> Last available infrastructure (space) option to consider 	<ul style="list-style-type: none"> Last available option after all other available options have been considered and exhausted 	<ul style="list-style-type: none"> Very costly Extremely long lead times (years) Not guaranteed 	<ul style="list-style-type: none"> This option exercised when all above options have been exhausted or are not viable 	<ul style="list-style-type: none"> Report or analysis demonstrating that A-D are not viable or that this is in conjunction with B₁, B₂, C or D

6.3.3. In accordance with policies, responsibilities and procedures for measuring and reporting capacity and utilization of organic depot maintenance operations, the following instructions augment the procedures and guidance IAW directives outlined in DoD 4151.18-H, *Depot Maintenance Capacity and Utilization Measurement Handbook*. (See also Ogden Air Logistics Complex Instruction (OO-ALCI) 21-112, *Depot Maintenance Capacity and Utilization Measurement*), and AFSCMAN 21-102, Chapter 16, **Figure 16.1**.

6.3.4. Each Mx Engineering Director (EN) will appoint a POC for their specific production group to collect, organize and provide the necessary data to support the required process defined in DoD 4151.18-H.

6.3.4.1. Those appointed will act as the liaison between their specific groups and the 309 MXSG/MXDEI OPR for collecting, tabulating and presenting the data as required.

6.3.5. Roles and responsibilities of group Mx representatives.

6.3.5.1. Complete training located at Defense Acquisition University (Continuous Learning Course # CLL026).

6.3.5.2. Collect and report capacity data for each Resource Cost Center (RCC) code and facility code.

- 6.3.5.3. Obtain and maintain copies of current shop drawings that clearly depict workstations, work positions within the workstations, and support equipment layouts at the RCC level.
- 6.3.5.4. Obtain a complete list of current/valid RCCs from group manager.
- 6.3.5.5. Each RCC will be further defined using the appropriate Work Breakdown Structure (WBS) in both DoD 4151.18-H, Appendix 5, and AFSCMAN 21-102, Chapter 16, **Figure 16.1**.
- 6.3.5.6. Follow techniques defined in DoD 4151.18-H, paragraph C3.2, Baseline Capacity Index, to compute the capacity for all production shops that perform direct work within their group/squadron. The results of these computations will be provided to the Wing Capacity Lead (WCL).
- 6.3.5.7. Shop drawings of each shop at the RCC level will be annotated using the formats prescribed by the Complex Capacity Lead (CCL).
- 6.3.5.8. Provide results computations to the CCL.
- 6.3.5.9. Finished capacity analysis will be reviewed at the group director level.
- 6.4. OO-ALC MILCON Program Mx Facility Engineering Responsibilities. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the MILCON Program, which will be administered through the OO-ALC MILCON Program Manager resident in 309 MXSG/MXDEI.
- 6.4.1. OO-ALC MILCON Program/Process. The term MILCON refers to construction projects costing more than \$750,000 or large M&R projects costing \$5M or greater. Projects meeting these criteria are funded by Congress (on a case-by-case basis) through the MILCON Program.
- 6.4.2. Before a MILCON project can be approved, the requirement must be verified and justified. Congress approves MILCON construction by line item; therefore, justification for a MILCON must be adequate to convince Congress to set aside the needed funds. NOTE: The MILCON approval process is lengthy; often taking several years just to get approval, then several more for actual construction. Preplanning is essential to be effective in this process.
- 6.4.3. The goal of the DoD and Air Force Materiel Command is to right size ownership of industrial facilities while ensuring essential defense production for both peacetime and wartime requirements. This is accomplished through utilization of MILCON, minor construction, M&R, emergency funds and Operations and Maintenance (O&M) programs.
- 6.4.4. With regard to MILCON and minor construction program development responsibilities, the Mx Facilities Engineers shall:
- 6.4.4.1. Identify space-related production requirements for existing, new and developing workloads. These identified requirements will need to cover the same requirements checklist and process as identified in the Space Management Program section described above (section 6.2).

- 6.4.4.2. The Mx Engineering Chief (EN) will assign a single POC to organize requirements, facilitate internal meetings and provide information to the 309 MXSG/MXDEI MILCON Program Manager.
- 6.4.4.3. The Mx group POC will ensure MILCON projects from their supported group(s) are fully developed, with regard to requirements, impact, risk, and need date.
- 6.4.4.4. The Mx group POC shall complete the CE questionnaire and funding for Programing Charrette Report (PCR) 1, Architectural and Engineering (A&E) support via CE Indefinite Delivery/Indefinite Quantity (IDIQ) for MILCONs, and will submit all required documents to the OO-ALC MILCON Program Manager resident in 309 MXSG/MXDEI who will review and submit to 75 CEG. This prior review is necessary to ensure continuity of the requirements with the OO-ALC IADP.
- 6.4.4.5. After review and approval of the OO-ALC MILCON Program Manager, the Mx group POC shall submit AF Form 813, *Request for Environmental Impact Analysis*, to Environmental Management (75CEG.CEVP.AllPersonnel@us.af.mil). AF Form 813 is used for evaluating the need for an environmental assessment. NOTE: Assessments could take up to 18 months and begin when approved by 75 ABW/FB.
- 6.4.4.6. The Mx group POC shall complete the project questionnaire (CE determines if the project is a MILCON).
- 6.4.4.7. The Mx group POC shall submit and provide input to the OO-ALC MILCON Program Manager, 309 MXSG/MXDEI, for the development of the DD Form 1391, *Fiscal Year Military Construction Project Data*, SOW for A&E support via CE IDIQ for MILCONs, and the economic analysis, i.e., Deficiency Detailed Data Sheet, Certificate of Compliance, facility drawings and other pertinent information. The economic analysis is usually performed by OO-ALC/OB in conjunction with CE.
- 6.4.4.8. The Mx group POC shall submit and ensure any CIP equipment requirements are budgeted for the same year as MILCON. Assure budget submittal includes all/any communications requirements, office equipment/furniture, tools, vehicles/forklifts, Initial Operating Equipment (IOE), etc. It is recommended that the Mx group POC utilize project and program management principles to ensure that the requirements are married in the appropriate period.
- 6.4.4.9. All CSAG-M MILCON projects will have a project brochure prepared. Preparation of this brochure is the responsibility of the OO-ALC group OPR for each individual MILCON requirement. To facilitate the process, minimize oversight and to ensure accuracy and completeness, the OPR for the MILCON will regularly coordinate his/her draft brochure through the OO-ALC MILCON Program Manager (309 MXSG/MXDEI). The MILCON brochure will be used to describe the project, mission impact, estimated costs associated with the project, proposed location if known, and any supporting statements that provide advocacy for the project. This brochure will be the initial requirements document to initiate the project, gain advocacy and brief OO-ALC leadership.
- 6.4.5. With regard to MILCON and minor construction program meeting and briefing responsibilities, the Mx Facilities Engineers shall:

- 6.4.5.1. Submit all group MILCON and minor construction projects to the OO-ALC MILCON Program Manager 309 MXSG/MXDE.
 - 6.4.5.2. Provide input to the OO-ALC Infrastructure Governance Process to enable prioritization of OO-ALC MILCON and minor construction projects.
 - 6.4.5.3. Attend the OO-ALC FWG and OO-ALC Infrastructure Governance meetings (IGB and IGC) as an advisory/non-voting member.
 - 6.4.5.4. Attend the 75 ABW FWG, FPC and FB meetings as required by the OO-ALC MILCON Program Manager, 309 MXSG/MXDE.
- 6.4.6. With regard to MILCON and minor construction program meeting and briefing responsibilities, the OO-ALC MILCON Program Manager, 309 MXSG/MXDE shall:
- 6.4.6.1. Submit, brief/coordinate all group MILCON and minor construction projects through the OO-ALC Infrastructure Governance Process.
 - 6.4.6.2. Submit, brief/coordinate all group MILCON and minor construction projects to CE for the development of DD Form 1391, SOW for A&E support via CE IDIQ for MILCONs Course of Action (COA), determination of siting and infrastructure costs.
- 6.5. OO-ALC Minor Construction (UMMC) - Mx Facility Engineering Responsibilities. The goal of the DoD and Air Force Materiel Command (AFMC) is to right-size ownership of industrial facilities while ensuring essential defense production for both peacetime and wartime requirements. This is accomplished through utilization of MILCON, minor construction, M&R, emergency funds and O&M programs. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the minor construction (UMMC) program, which will be administered through the OO-ALC MILCON Program Manager resident in 309 MXSG/MXDEI.
- 6.5.1. Critical Definitions - Unspecified minor construction is available for any project with a cost between \$0.75M and \$1.5M (between \$1.5M and \$3M if intended solely to correct life, health, or safety deficiencies). The unspecified minor construction limit was just raised by Congress in the FY23 NDAA in section 2801 to \$9M, and the threshold according to 10 USC (United States Code) 2805 is still anything over \$750K. Each military department receives an appropriation for minor construction. The Secretary of the AF controls expenditure of these funds. The Secretary must also notify Congress and wait 30 days before work begins. Congress must object within 30 days. Expenditure of these funds is controlled by the Major Commands (MAJCOM), unless approval authority is delegated to the installation commander.
 - 6.5.1.1. Minor Construction. New facility construction or alteration of existing facilities up to \$1.0M and meeting the definition of minor construction as provided in AFI 32-1020, *Planning and Programming Built Infrastructure Projects*. The minor construction includes replacement, productivity, environmental or new mission projects.

- 6.5.1.2. Real Property. Any government-owned, leased or controlled property used to fulfill government research, development, test, evaluation, production, maintenance/modification or for the storage of supporting production machinery and equipment. This includes land, buildings, structures, utility systems and improvements. It also includes equipment attached to and part of buildings and structures (such as heating systems), but not movable equipment (such as plant equipment).
- 6.5.1.3. OO-ALC CIP and Minor Construction. Congress authorized the establishment of the CIP to provide a responsive avenue for the modernization of the DoD depot maintenance industrial base.
- 6.5.1.4. Minor construction includes replacement, productivity, environmental or new mission projects, new facility construction or alteration of existing facility up to \$1.5M and meeting the definition of minor construction as provided in AFI 32-1020, Chapter 3, *Maintenance and Repair Projects*.
- 6.5.1.5. Modernization includes alteration of facilities, solely to implement new or higher standards (including regulatory changes) to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural members). Projects in this category are classified as repair and/or minor construction.
- 6.5.2. Minor construction funding pitfalls:
- 6.5.2.1. Projects may not be split into separate segments (commonly called "project splitting") to avoid funding limitations. For instance, it is improper to split a proposed \$1.25M building into two \$625,000 projects funded with O&M funds to avoid the \$1.0M limitation.
- 6.5.2.2. Projects may not be completed in phases (commonly called "phasing") in order to avoid funding limits. For instance, it is improper to build a project for \$650,000 in one fiscal year (FY) and another project for \$350,000 in the next FY resulting in an \$800,000 building, in order to avoid the \$1.0M O&M limit.
- 6.5.3. The OO-ALC Financial Management Office has overall financial management responsibilities and is the designated OPR for equipment, Automated Data Processing Equipment (ADPE) and minor construction for CSAG-M designated as CIP. Group CIP managers will be responsible for the CIPs and projects within their groups. For additional information on OO-ALC CIP, refer to AFSCMAN 21-102_OO-ALCSUP, Chapter 4, Capital Investment Program.
- 6.5.4. With regard to MILCON and minor construction program development responsibilities the Mx Facilities Engineers shall provide all minor construction project documents to the OO-ALC MILCON Program Manager.

- 6.5.4.1. For both minor construction and M&R, the facility engineer will normally initiate the project by submitting an electronic TRIRIGA work request for each instance. Each electronic AF Form 332 must be properly coordinated through the Fire Protection, Safety, Environmental, Bio-Environmental and the Communications squadron. Air Force Policy Directive (AFPD) 32-10, *Installations and Facilities*, provides guidance and instruction for planning and programming projects for real property classified as M&R, unspecified minor MILCON and facilities for operational requirements using O&M funds.
- 6.5.4.2. Facilities engineers will identify space-related production requirements for existing, new and developing workloads. These identified requirements will need to cover the same requirements checklist and process as identified in the Space Management Program section described above (section 8.2).
- 6.5.4.3. The Mx Engineering Chief (EN) will assign a single POC to organize requirements, facilitate internal meetings and provide information to the 309 MXSG/MXDEI MILCON Program Manager.
- 6.5.4.4. The Mx group POC will ensure UMMC projects from their supported group(s) are fully developed, with regard to requirements, impact, risk, and need date.
- 6.5.4.5. The Mx group POC shall submit the CE questionnaire, SOW and funding for PCR1 A&E support via CE IDIQ for MILCONs, through the 309 MXSG/MXDEI MILCON Program Manager.
- 6.5.4.6. The Mx group POC shall submit AF Form 813 to Environmental Management (75CEG.CEVP.AllPersonnel@us.af.mil). AF Form 813 is used for evaluating the need for environmental assessment. NOTE: Assessments could take up to 18 months and begin when approved by 75 ABW FB.
- 6.5.4.7. The Mx group POC shall complete the project questionnaire (CE determines if the project is a MILCON).
- 6.5.4.8. The Mx group POC shall submit input to the OO-ALC MILCON Program Manager, 309 MXSG/MXDEI, for the development of the DD Form 1391 and the economic analysis, i.e., Deficiency Detailed Data Sheet, Certificate of Compliance, facility drawings and other pertinent information.
- 6.5.4.9. The Mx group POC shall ensure any CIP equipment requirements are budgeted for the same year as the UMMC is projected to be completed, if necessary. Assure budget submittal includes all/any communications requirements, office equipment/furniture, tools, vehicles/forklifts, IOE, etc.
- 6.5.5. With regard to MILCON and minor construction program meeting and briefing responsibilities, the Mx Facilities Engineers shall:
- 6.5.5.1. Submit, all group MILCON and minor construction projects to the OO-ALC MILCON Program Manager, 309 MXSG/MXDEI.
- 6.5.5.2. Provide input to the OO-ALC Infrastructure Governance Process to enable prioritization of OO-ALC MILCON and minor construction projects.

- 6.5.5.3. Attend the OO-ALC FWG and OO-ALC Infrastructure Governance meetings (IGB and IGC) as an advisory/non-voting member as needed to support the project.
- 6.5.5.4. Attend 75 ABW FWG, FPC and FB meetings as required by the OO-ALC MILCON Program Manager 309 MXSG/MXDE.
- 6.5.6. With regard to MILCON and minor construction program meeting and briefing responsibilities, the OO-ALC MILCON Program Manager, 309 MXSG/MXDE, shall:
- 6.5.6.1. Submit, brief/coordinate all group MILCON and minor construction projects through the OO-ALC Infrastructure Governance Process.
- 6.5.6.2. Submit, brief/coordinate all group MILCON and minor construction projects to CE for the development of the DD Form 1391, SOW for A&E support via CE IDIQ for MILCONs COAs, determination of siting and infrastructure costs.
- 6.5.7. National Defense Authorization Act (NDAA).
- 6.5.7.1. Conference notes suggest that FY19 NDAA intended to increase Working Capital Fund (WCF) minor construction limits from \$2M to \$6M.
- 6.5.7.2. Statutory language does not currently specifically state the intent of the conference intent to raise the limit to \$6M.
- 6.5.7.2.1. 10 USC 2208 (for WCF minor construction) refers to 10 USC 2805 for funding limits.
- 6.5.7.2.2. Prior Office of the Secretary of Defense/Secretary of the Air Force (OSD/SAF) guidance: WCF limits follow O&M limits (\$2M).
- 6.5.7.2.3. OSD & SAF/FM believes prior precedence/guidance still applies (i.e., WCF limit remains at \$2M).
- 6.5.7.3. Current developments allow for the Navy-directed memorandum to be applied to all service WCF activities.
- 6.5.7.3.1. OSD policy for using WCF for UMMC < \$6M.
- 6.5.7.3.2. Navy and AFMC/JA opinion and OSD; sufficient legal basis.
- 6.5.7.4. NDAA considerations and potential pitfalls. Project of this nature will come from the CIP pool of WCF, which was intended to support equipment replacement needs. To use this funding path and proposed upper limits should be done very judiciously as to avoid diluting the available funds. Depredation schedules for UMMC minor construction projects are longer than equipment depreciation schedules. This concern needs to be taken into account at the enterprise level when considering the utilization of this new upper funding limit.
- 6.6. OO-ALC Leasing Program - Mx Facility Engineering Responsibilities. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the Space Utilization and Space Leasing Program which will be administered through the OO-ALC Space Utilization Program Manager resident in 309 MXSG/MXDEI.

6.6.1. Facilities engineers will identify space-related production requirements for existing, new and developing workloads that would be candidates for leasing options. Leasing should be considered only after all other options have been exhausted per section 6.2, OO-ALC Mx Facility Engineering Responsibilities - Space Management Program.

6.6.2. The Mx Engineering Chief (EN) will assign a single POC to organize requirements, facilitate internal meetings and provide information to the 309 MXSG/MXDEI Space Program Manager.

6.6.3. The Mx group POC will ensure all leasing project requests are fully developed, with regard to requirements, impact, risk, and need date.

6.6.4. The Mx group POC will be responsible for developing and preparing the space leasing request memorandum per the template provided by 309 MXSG/MXDEI. The following information will need to be gathered prior to submission to 75 CEG for implementation.

6.6.4.1. A formal request for assistance to 75 CEG/CEIAP in leasing space outside of Hill AFB. At a minimum the following requirements should be identified and articulated.

6.6.4.1.1. Administrative Space: [Enter Requirement] square feet

6.6.4.1.2. Production Space: [Enter Requirement] square feet

6.6.4.1.3. Kit Prep and Storage: [Enter Requirement] square feet

6.6.4.1.4. Personnel Impacted: [Enter Requirement] Government Employees

6.6.4.1.5. Enter other requirements.

6.6.4.2. Justification for the space to include a mission statement and impact if not approved.

6.6.4.2.1. Justification

6.6.4.2.2. Impact if not approved

6.6.4.3. Statement of non-availability: No government space within a 50-mile radius fulfills Air Force requirements.

6.6.4.4. Statement of security needs applicable to the organization:

6.6.4.4.1. Secured facility with fencing and security system, Yes/No

6.6.4.4.2. Vindicator access to be installed, Yes/No

6.6.4.4.3. UFC4-010-01 "DoD Minimum Anti-Terrorism Standards for Building", Yes/No

6.6.4.4.4. Enter Other Requirements

6.6.4.5. What utilities are needed to support (power, air, water, etc.):

6.6.4.5.1. Power

6.6.4.5.2. Water

6.6.4.5.3. Air

6.6.4.5.4. Concrete

6.6.4.5.5. Other

6.6.4.6. Impact if disapproved: How will the mission be accomplished without leased space.

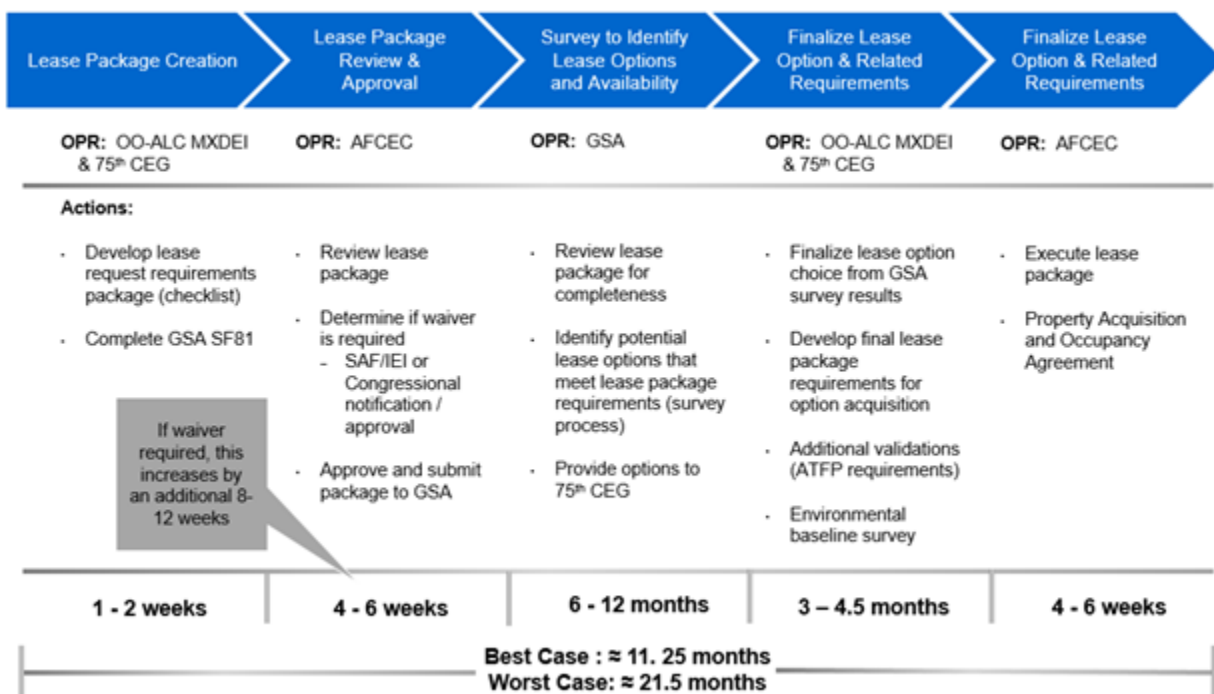
6.6.4.7. List of options considered, mission impact of each option and an estimated cost of each option (these figures may be used in the required economic analysis so try to make them as defensible as possible).

6.6.4.8. Statement of funding availability.

6.6.4.9. Signature Block of Director or equivalent.

6.6.5. Once the space leasing requirements have been identified, the request will need to be presented through the Infrastructure Governance Process, starting with the FWG and then presented to the IGB and IGC for final discussion and approval. This approval initiates the process described below in the attached graphic.

Figure 2. Infrastructure Governance Process.



6.7. OO-ALC IADP - Mx Facility Engineering Responsibilities.

6.7.1. OO-ALC IADP Program/Process. The complicated/competitive nature of DoD depot maintenance, workload projection and government funding requires a flexible approach for addressing future infrastructure needs. The IADP is not a traditional AF (deliberate) plan. Instead, it's an adaptive, strategic planning process that attempts to pull together OO-ALC facilities, infrastructure and resource information to facilitate future business planning and to assist senior leadership with decision making.

6.7.2. It is recommended that the Mx Group Engineering Chief and associated teams start developing their plans and projections in an ideal state, unconstrained state, and work backwards from there. Current state should not be used as a constraint in identifying and developing opportunities for capturing an optimum solution.

6.7.3. Consistent with the OO-ALC organizational plan and structure as defined in **paragraph 1**, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include the IADP Program which will be administered through the IADP Program Manager resident in 309 MXSG/MXDEI.

6.7.3.1. Each Mx Group Engineering Chief (EN) will appoint an IADP Program Manager within the Mx production group facilities engineering team to collect and coordinate the requirements for developing and future workloads.

6.7.3.2. The assigned IADP Program Manager serves as the Mx group focal point and OPR for IADP.

6.7.3.3. The assigned IADP Program Manager will work with their specific OB office and OO-ALC/OBW to identify/address/plan for workload, CIP and any other issues that could ultimately affect OO-ALC facility needs.

6.7.3.4. The assigned IADP Program Manager will provide the Mx group requirements to the OO-ALC IADP Program Manager (309 MXSG/MXDEI) for inclusion into the OO-ALC IADP Program.

6.7.3.5. The OO-ALC IADP Program Manager (309 MXSG/MXDEI) will introduce and present IADP issues (as appropriate) into the OO-ALC Infrastructure Governance Process.

7. 309 MXSG/MXDEI - Complex-Level Programs Section Chief Responsibilities.

7.1. Consistent with the OO-ALC organizational plan and structure as defined in **paragraph 1**, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include (but are not limited to): IADP, M&R, minor construction (in conjunction with OO-ALC Business Office [OB]), Space Utilization, Space Leasing, MILCON, EnMS, EPM, and Depot Capacity Measurement and Analysis.

7.1.1. Provide direct supervision to program managers responsible for complex-level programs to include: energy management, IADP, M&R, minor construction (in conjunction with OO-ALC/OB), space utilization and MILCON.

7.1.2. Serve as an advisory/non-voting member on the OO-ALC Infrastructure Governance Process.

7.1.3. Facilitates the FWG and M&R Working Group (MRWG) meetings.

7.1.3.1. With the 309 MXSG/MXDEI team, gathers, tabulates and organizes the data from the specific OO-ALC program needs relative to facilities infrastructure requirements. Sets the meeting agenda, schedules the meeting and distributes the briefing slides, tables and information prior to the meeting.

7.1.4. Provides briefing slides and information relative to the facilities infrastructure FB requirements into the infrastructure governance process.

8. OO-ALC M&R Program – OO-ALC M&R Program Manager Roles and Responsibilities.

8.1. OO-ALC M&R Program/Process. M&R is Maintenance and Repair that is similar to O&M's funding category of Facility Sustainment, Restoration, and Modernization M&R is funded by WCF in the Air Logistics Complex facility maintenance expense budget category for all facilities owned by the depot. The MAJCOM AFMC approval authority for maintenance is unlimited. However, repair approval authority is limited to \$5M per facility as long as the combined cost of all repairs proposed for a facility does not exceed 70 percent of the building's replacement value. These limits are per building per year, not per project. M&R does not change the nature of a facility; it simply ensures the facility can continue to be used effectively. Repair does not normally increase the volume or footprint of a building, although it may result in greater usable floor space due to reconfiguration of the interior. NOTE: Conjunctive projects combining minor construction and M&R are possible, but the minor construction portion must be identified separately. For both minor construction and M&R, the facility engineer will normally initiate the project by submitting a project request in TRIRIGA or an electronic AF Form 332 work request for each instance. Each electronic AF Form 332 must be properly coordinated through the Fire Protection, Safety, Environmental, Bio-Environmental and the communications squadron. AFPD 32-10, *Installations and Facilities*, provides guidance and instruction for planning and programming projects for real property classified as M&R, unspecified minor MILCON and facilities for operational requirements using O&M funds.

8.1.1. Will work with production groups to develop, prioritize and execute annual M&R requirements. Solicit priorities from the appropriate group commander(s)/director(s) and provide input to the OO-ALC FWG for submittal of current and future year OO-ALC M&R projects. Will update these priorities when changes occur.

8.1.2. Maintain projects submitted from the Mx groups in the OO-ALC M&R 1-n program list.

8.1.3. Provide initial prioritization ranking on projects per the M&R Program prioritization matrix.

Figure 3. M&R Program Prioritization Matrix.

This M&R Prioritization Matrix Methodology provides a quantitative basis for matching available M&R funds with the best strategic and business decision based projects

Rank	Variable	Attribute (Scoring)			Weighting (%)
		5	3	1	
1	Mission Dependency Index (MDI) ²	100 ≤ and > 90	90 ≤ and > 80	≤ 80	35%
2	Environmental, Safety & Occupational Health (ESOH) ²	(Severity, Probability) or (RHSC, IPC) (I.A), (II.A), (I.B)	(Severity, Probability) or (RHSC, IPC) (II.A), (II.B), (I.C)	(Severity, Probability) or (RHSC, IPC) All others	35%
3	Workload or Demand Timing (required activation date, IOC etc.)	<1 year	1-3 years	> 3 years	10%
4	Workload or Demand Duration (from date of request)	> 10 years	5-10 years	< 5 years	10%
5	Overall Cost ⁴	Low (<\$750k)	Medium (\$750k-\$2M)	High (>\$2M)	10%

Highest Priority M&R Funds application

M&R Funds will be based predominantly on MDI and ESOH demand requirement elements; this will ensure that the Complex is making the best allocation decisions relative to the most important projects

8.1.4. 309 MXSG/MXDEI will host and facilitate an MRWG for discussion of OO-ALC M&R priorities.

8.1.5. The MRWG will:

- 8.1.5.1. Establish recommended budget limits for each group based on prioritization.
- 8.1.5.2. Evaluate tradeoffs and risk associated with project prioritization.
- 8.1.5.3. Provide updates on current fiscal year projects.
- 8.1.5.4. Resolve conflicts between projects when necessary.
- 8.1.5.5. Make recommendations to the IGB and IGC on M&R-related issues and concerns.

8.1.6. The MRWG data requirements. The following information and data will need to be collected prior to the meeting for discussion and action within the MRWG.

- 8.1.6.1. Projects to execute in the current FY, as well as carryover.
- 8.1.6.2. Prioritization for current FY and out years.
- 8.1.6.3. What is currently being worked in CE and what is planning to be worked in the out years?
- 8.1.6.4. How much each group has expensed for the year, and what they are expecting to expense.
 - 8.1.6.4.1. When their projects were sent to CE.
 - 8.1.6.4.2. When a line of accounting is issued for every project.
 - 8.1.6.4.3. What is the period of performance for the project.

8.1.7. The MRWG participants will be the Mx group engineering chiefs, their designated facilities chiefs, and the 309 MXSG/MXDEI M&R team.

8.1.8. The M&R Program Manager will tabulate results from the FWG and MRWG and provide the update 1-n list, discussion slides and supporting materials to the IGB and IGC for consideration, approval and implementation.

8.2. OO-ALC Space Management Program – OO-ALC Space Utilization Program Manager Roles and Responsibilities.

8.2.1. With regard to space utilization the OO-ALC Space Utilization Program Manager (309 MXSG/MXDEI) will work closely with and assist production group commander(s)/director(s) with space request submissions.

8.2.2. On behalf of the production group commander(s)/director(s), the 309 MXSS Space Utilization Program Manager will collect, organize, facilitate and publicize any changes to group facilities, i.e., vacated space, change in workload, equipment moves, modifications, replacements, or removals, CE category code, and square footage. This information will be provided in the FWG, IGB and IGC.

8.2.3. In the event an OO-ALC unit wishes to move an office within their unit, or swap areas with another unit, the unit commander/director must notify the 309 MXSS Space Utilization Program Manager, who will collect the requirements, provide guidance and when necessary, assist in the development of a Memorandum of Agreement between the unit commanders or their designated representatives.

8.2.3.1. This must be done before any moves are started, and the changes will then need to be reviewed and approved through the OO-ALC Infrastructure Governance process. This approval is necessary because of the actual and potential impacts such moves may have on 75 ABW DoD-directed reporting, utilities billing, etc.

8.2.4. Internal moves within an organization that will change the currently assigned fund code, or the category code must be coordinated through 309 MXSG/MXDEI Space Utilization Program Manager and 75 CEG to ensure CE accountable records reflect both current and actual utilization of space.

8.2.5. When assigned space is no longer required by a using OO-ALC organization, that organization must notify the 309 MXSG/CL (courtesy copy to: 309 MXSG/MXDEI, Attn: Space Utilization Program Manager). Organizations do not have the authority to give their space to other organizations. The OO-ALC IGC is the sole authority for internal complex space reallocation.

8.2.6. Any organization or entity that desires to obtain facility space will provide a written request to the 309 MXSG/CL through the 309 MXSG/MXDEI Space Utilization Program Manager. This request must be signed by the requestor's commander/director (deputy if the commander/director is not available).

8.2.7. The 309 MXSG/MXDEI Space Utilization Program Manager will:

8.2.7.1. Review the information provided from the requesting organization as described in sections 6.6.2 above.

8.2.7.2. Review and facilitate recommendations for all internal space requirements submitted by the OO-ALC groups to include space required to support maintenance operations and sustainment of equipment.

8.2.7.3. Serve as an advisory/non-voting member on the OO-ALC Infrastructure Governing process with preparing presentations, tables and recommendations to the FWG, IGB and IGC.

8.2.7.4. Introduce and present space utilization issues (as appropriate) into the OO-ALC Infrastructure Governing process.

8.2.7.5. Coordinate with the 75 CEG Space Utilization Program office and represent the OO-ALC with regard to OO-ALC space utilization issues.

8.2.7.6. Maintain an OO-ALC facility list and serve as the OO-ALC liaison to the CE Base Real Estate Office for the management of real property records.

8.2.7.7. Serve as the OO-ALC liaison to the 75 CEG for the FM appointment process.

8.2.7.8. Prepare and submit (to CE) facility space allocation requests for all real property changes between the OO-ALC and other base organizations. Visit areas and work in close conjunction with the requestor to develop recommendations.

8.2.7.9. Provide an initial recommendation to the requestor within 30 days via the OO-ALC Infrastructure Governing process.

8.2.7.10. After OO-ALC IGB/IGC approval, the 309 MXSG/MXDEI Space Utilization Program Manager will engage with CE to ensure that custodial service, CE customer service and the inter- service support agreement monitor are provided updated information pertaining to approved space reallocations.

8.2.7.11. Work with 75 CEG to assist in identifying the category code for the proposed use/function (IAW Department of the Air Force [DAFMAN] 32-1084, *Standard Facility Requirements*). If more than one category code applies, identify each code by square footage.

8.2.7.12. After OO-ALC or center IGB/IGC approval, work with CE to ensure real property records are updated to reflect approved reallocations of space.

8.2.7.13. Assist supported group(s) with FM appointment letter updates as required.

8.3. OO-ALC Capacity Measurement Program - Complex Capacity Lead (CCL) Responsibilities.

8.3.1. In accordance with policies, responsibilities and procedures for measuring and reporting capacity and utilization of organic depot maintenance operations. The following instructions augments the procedures and guidance IAW directives outlined in DoD 4151.18-H, *Depot Maintenance Capacity and Utilization Measurement Handbook*. (see also OO-ALCI 21-112), and AFSCMAN 21-102, Chapter 16, **Figure 16.1**.

8.3.2. Maintain of list of Mx group-appointed capacity leads.

8.3.3. Collect and keep on file a copy of the Defense Acquisition University Capacity Training certificates (Continuous Learning Course # CLL026).

8.3.4. Schedule and facilitate capacity working group meetings as required.

8.3.5. Collect and Report Capacity Data for each RCC code and facility code as provided by each Mx capacity group lead.

8.3.6. Collect and maintain copies of current shop drawings that clearly depict workstations, work positions within the workstations, and support equipment layouts at the RCC/FC level as provided by each Mx capacity group lead. Maintain shop drawings in a designated folder for further review and analysis.

8.3.7. Collect, review and validate RCC data that has been further defined using the appropriate WBS in both DoD 4151.18-H, Appendix 5, and AFSCMAN 21-102, Chapter 16, **Figure 16.1**. Maintain provided WBS and data in a designated folder for further review and analysis as needed.

8.3.8. Tabulate data provided by the Mx groups and OO-ALC/OB into the required Data Call Workbook provided yearly by Headquarters (HQ) AFMC/A4DM. The workbook format is usually standardized but occasional changes in format may be required from year-to-year and the CCL will need to be sensitive to the changing requirements as they develop.

8.3.9. Will provide the finished capacity analysis, in the formats required by HQ AFMC/A4DM, for review at the group director level and final approval at the complex level, prior to releasing the data call to HQ AFMC/A4DM.

8.4. OO-ALC MILCON Program – OO-ALC MILCON Program Manger Roles and Responsibilities.

8.4.1. Consistent with the OO-ALC organizational plan and structure, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include MILCON and minor construction (UMMC).

8.4.1.1. The OO-ALC MILCON Program Manager (MXDEI) will serve as the OO-ALC focal point and OPR for all MILCON and minor construction (UMMC).

8.4.1.2. The OO-ALC MILCON Program Manager will champion OO-ALC MILCONs with BCE, 75 ABW and HQ AFMC. The MILCON Program Manager will be the ALC liaison to CE. All coordination with BCE, 75 ABW will be reviewed and approved thru the MILCON Program Manager.

8.4.1.3. The OO-ALC MILCON Program Manager will work closely with the Mx groups and OO-ALC/OB as they identify needs associated with current and developing workloads.

8.4.1.4. The OO-ALC MILCON Program Manager will collect the requirements identified from the Mx groups and OO-ALC/OB, validate that the requirements identification process has followed the same requirements checklist and process as identified in the Space Management Program section described above (section 6.2).

8.4.1.5. The OO-ALC MILCON Program Manager all prepare and brief/coordinate all group MILCON and minor construction projects through the OO-ALC Infrastructure Governance Process.

8.4.1.6. The OO-ALC MILCON Program Manager will provide input to the OO-ALC Infrastructure Governance Process to enable prioritization of OO-ALC MILCON and minor construction projects.

8.4.1.7. The OO-ALC MILCON Program Manager will attend the OO-ALC FWG and scheduled Infrastructure Governance meetings as an advisory/non-voting member.

8.4.1.8. The OO-ALC MILCON Program Manager will ensure MILCON projects from their supported group(s) are fully developed.

8.4.1.9. The OO-ALC MILCON Program Manager will work with the Mx group assigned POC to ensure the project questionnaire and checklist is completed, and captures the requirements as identified with regard to facility and process requirements, impact, risk, and need date. (CE determines if the project is a MILCON).

8.4.1.10. The OO-ALC MILCON Program Manager will assist assigned MILCON OPRs with MILCON brochure preparation and routing. Ensure all regulatory requirements are met, and that brochures are properly prepared, vetted and routed for action.

8.4.1.11. The OO-ALC MILCON Program Manager will work with the Mx group assigned POC to provide all input to CE for the development of the DD Form 1391 and PCR1, to include but not limited to: approval of A&E SOW documents, coordinate A&E PCR meetings and attendees, fiscal year military construction project data, and the economic analysis; i.e., Deficiency Detailed Data Sheet, Certificate of Compliance, facility drawings and other pertinent information.

8.4.1.12. The OO-ALC MILCON Program Manager will maintain a SharePoint site or equivalent data storage file to capture, maintain, record and archive all documents generated and collected in support of the individual MILCON projects. In addition the OO-ALC MILCON Program Manager will utilize their unit's electronic records manager to capture, maintain, record and archive all records generated and collected in support of the individual major and/or minor construction projects.

8.5. OO-ALC Minor Construction (UMMC) – OO-ALC Program Manager Roles and Responsibilities.

8.5.1. As mentioned previously, consistent with the OO-ALC organizational plan and structure, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include MILCON and minor construction (UMMC).

8.5.1.1. Critical definitions - unspecified minor construction is available for any project with a cost between \$1.0M and \$1.5M (between \$1.5M and \$3M if intended solely to correct life, health, or safety deficiencies).

8.5.1.2. The OO-ALC MILCON Program Manager will ensure that the project meets the minor construction definitions and thresholds as defined. The unspecified minor construction limit was just raised by Congress in the FY23 NDAA in section 2801 to \$9M, and the threshold according to 10 USC 2805 is still anything over \$750K. The minor construction includes replacement, productivity, environmental or new mission projects.

8.5.1.3. Minor construction includes replacement, productivity, environmental or new mission projects, new facility construction or alteration of existing facility up to \$1.0M and meeting the definition of minor construction as provided in AFI 32-1020, Chapter 3, *Maintenance and Repair Projects*.

8.5.1.4. Modernization includes alteration of facilities, solely to implement new or higher standards (including regulatory changes) to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural members). Projects in this category are classified as repair and/or minor construction.

8.5.1.5. The OO-ALC MILCON Program Manager will review and validate that the project plan provided by the Mx group assigned POC does not include project splitting and/or project phasing as defined in sections 6.5.2.1 and 6.5.2.2 above.

8.5.1.6. The OO-ALC MILCON Program Manager will collect the requirements identified from the Mx groups and OO-ALC/OB, validate that the requirements identification process has followed the same requirements checklist and process as identified in the Space Management Program section described above (section 6.2).

8.5.1.7. The OO-ALC MILCON Program Manager prepare and brief/coordinate all group minor construction projects through the OO-ALC Infrastructure Governance Process.

8.5.1.8. The OO-ALC MILCON Program Manager will provide input to the OO-ALC Infrastructure Governance Process to enable prioritization of minor construction projects.

8.5.1.9. The OO-ALC MILCON Program Manager will attend the OO-ALC FWG and scheduled Infrastructure Governance meetings as an advisory/non-voting member.

8.5.1.10. The OO-ALC MILCON Program Manager will ensure all minor construction projects from their supported group(s) are fully developed.

8.5.1.11. The OO-ALC MILCON Program Manager will work with the Mx group assigned POC to ensure the project questionnaire and checklist are completed, and captures the requirements as identified with regard to facility and process requirements, impact, risk, and need date. (CE determines if the project is a minor construction project).

8.5.1.12. The OO-ALC MILCON Program Manager will assist assigned minor construction projects OPRs with MILCON brochure preparation and routing. Ensure all regulatory requirements are met, and that brochures are properly prepared, vetted and routed for action.

8.5.1.13. The OO-ALC MILCON Program Manager will work with the Mx group assigned POC to provide all input to CE for the development of the DD Form 1391 and PCR1, to include but not limited to: approval of A&E SOW documents, coordinate A&E PCR meetings and attendees, fiscal year military construction project data, and the economic analysis; i.e., Deficiency Detailed Data Sheet, Certificate of Compliance, facility drawings and other pertinent information.

8.5.1.14. The OO-ALC MILCON Program Manager will maintain a SharePoint site or equivalent data storage file to capture, maintain, record and archive all documents generated and collected in support of the individual minor construction projects. In addition the OO-ALC MILCON Program Manager will utilize their unit's electronic records manager to capture, maintain, record and archive all records generated and collected in support of the individual major and/or minor construction projects.

8.6. OO-ALC Leasing Program – OO-ALC Program Manager Roles and Responsibilities.

8.6.1. As mentioned previously, consistent with the OO-ALC organizational plan and structure, the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include Space Utilization and Space Leasing.

8.6.1.1. The OO-ALC Space Utilization Program Manager (MXDEI) will be the sole point of contact for all leasing activities within OO-ALC and will coordinate the requirements, needs and expectations of the ALC to the 75 ABW/CEG to support those required leasing activities.

8.6.1.2. Leasing should be considered only after all other options have been exhausted per section 6.2 OO-ALC Mx Facility Engineering Responsibilities - Space Management Program.

8.6.1.3. The OO-ALC Space Utilization Program Manager will work with the Mx group project POC as assigned to ensure all leasing project requests are fully developed, with regard to requirements, impact, risk, and need date.

8.6.1.4. The OO-ALC Space Utilization Program Manager will work with the Mx group project POC to ensure that the space leasing request memorandum is fully developed with the required information, approvals and signatures per section 6.6.4.

8.6.1.5. The OO-ALC Space Utilization Program Manager will then present the request through the Infrastructure Governance Process, starting with the FWG and then presented to the IGB and IGC for final discussion and approval.

8.6.1.6. After IGC approval, the OO-ALC Space Utilization Program Manager will submit the formal request and required documentation to 75 ABW/CEG for action.

8.6.1.7. After submission to 75 CEG the OO-ALC Space Utilization Program Manager, will support, track and report on status of the leasing request through the gated process required by 75 CEG.

8.7. OO-ALC IADP – OO-ALC IADP Program Manager Roles and Responsibilities.

8.7.1. OO-ALC IADP Program/Process. The IADP is not a traditional AF (deliberate) plan. Instead, it's an adaptive, strategic planning process that attempts to pull together OO-ALC facilities, infrastructure and resource information to facilitate future business planning and to assist senior leadership with decision making.

8.7.1.1. It is recommended that this effort start with developing the OO-ALC IADP plan in an ideal state, unconstrained state, and work backwards from there. Current state should not be used as a constraint in identifying and developing opportunities for capturing an optimum solution.

8.7.2. The OO-ALC IADP Program Manager (MXDEI) will facilitate, collect, tabulate and present the identified IDAP requirements as defined and presented by the Mx groups. It is recommended that OO-ALC IADP Program Manager facilitate a yearly or bi-yearly workshop to collect and update the requirements from the Mx groups.

8.7.3. The OO-ALC IADP Program Manager (309 MXSG/MXDEI) will introduce and present IADP issues (as appropriate) into the OO-ALC Infrastructure Governance Process.

8.7.4. The OO-ALC IADP Program Manager (309 MXSG/MXDEI) will provide IADP recommendations and future requirements to the 75 ABW for inclusion into the master Hill AFB Industrial Area Development Plan.

8.7.5. The OO-ALC IADP Program Manager (309 MXSG/MXDEI) track manage and report on the Hill AFB Industrial Area Development Plan as developed by the 75 ABW to the OO-ALC Infrastructure Governance council and subordinate bodies.

9. OO-ALC Energy Management System. The overarching goal of AF energy is to, “Enhance Mission Assurance through Energy Assurance.” OO-ALC EnMS will utilize best practices established by the International Standard for Organization (ISO)-50001 standard to follow a systematic, data-driven, and facts-based approach to achieve continual improvement of its energy resilience and performance through the Plan–Do–Check–Act framework. See figure below. OO-ALC is Hill AFB’s largest energy consumer and takes a lead role in developing energy strategies to improve energy assurance to more effectively meet the warfighter’s needs.

Figure 4. ISO-50001 Continuous Process Improvement; Plan-Do-Check-Act.



9.1. Scope and Boundary of OO-ALC EnMS. The scope of the OO-ALC EnMS applies to the entire OO-ALC organization and operations within Hill AFB. Within these boundaries, OO-ALC shall not exclude an energy type and shall ensure that it has authority to control its energy efficiency, energy use, and energy consumption.

9.2. Energy Policy. OO-ALC shall establish an energy aware culture to improve energy resiliency, optimize demand, and assure supply to meet mission requirements effectively in support of the warfighter.

9.2.1. OO-ALC management will take the following steps to support this energy policy:

9.2.1.1. Improve energy security and resilience.

9.2.1.2. Secure reliable energy supply.

9.2.1.3. Continuously improve energy performance and the energy management system.

9.2.1.4. Include energy optimization in design and procurement activities of equipment, process, and facility improvements.

9.2.1.5. Ensure availability of information and resources to pursue cost-effective measures to meet or exceed energy objectives and goals.

9.2.1.6. Comply with applicable legal and other requirements related to energy use, consumption, and efficiency.

9.2.1.7. Empower employees to foster a culture of energy efficiency by education and training personnel in valuing energy as a mission-essential resource.

9.2.1.8. Maintain regular senior leadership review of its energy program, energy management system, and energy objective and targets.

9.3. Leadership and Commitment. Top management shall demonstrate leadership and commitment in regard to continual improvement of OO-ALC energy performance and EnMS effectiveness. Top management shall delegate certain EnMS responsibilities to an energy management representative and to an energy manager, while maintaining certain responsibilities to ensure continual EnMS effectiveness and energy performance. Top management shall assign and communicate the responsibilities and authorities for these and other relevant roles within the organization.

9.3.1. Top management for OO-ALC is the Commander (OO-ALC/CC), Vice Director (OO-ALC/DV), Vice Commander (OO-ALC/CV), and Mobilization Assistant (OO-ALC/CR). Any one of these individuals, of the top management, have full authority to fully represent OO-ALC top management with regard to the OO-ALC EnMS. While each have assigned roles, their roles may be adjusted with each new commander.

9.3.1.1. Roles, Responsibilities, and Authorities. OO-ALC top management shall assign the responsibility and authority to the energy management team for:

9.3.1.1.1. Ensuring that the EnMS is established, implemented, maintained and continually improved.

9.3.1.1.2. Ensuring that the EnMS conforms to the requirements of this document.

9.3.1.1.3. Implementing action plans to continually improve energy performance.

9.3.1.1.4. Reporting on the performance of the EnMS and improvement of energy performance to top management at determined intervals.

9.3.1.1.5. Establishing criteria and methods needed to ensure that the operation and control of the EnMS are effective.

9.3.1.2. Even though OO-ALC top management is ultimately responsible for the success of the EnMS, the following figure clarifies delegation and ownership of different aspects of the OO-ALC EnMS.

Figure 5. Leadership Commitment Roles and Responsibilities.

REQUIREMENT	TM	MR	EM
5.1 LEADERSHIP & COMMITMENT			
ensuring that the EnMS scope and boundaries are established	X	D	
ensuring that the energy policy, objectives and energy targets are established and are compatible with the strategic direction of the organization	X		D
ensuring the integration of the EnMS requirements into the organization’s business processes;	X	D	
ensuring that action plans are approved and implemented	X		D
ensuring that the resources needed for the EnMS are available	X	D	
communicating the importance of effective energy management and of conforming to the EnMS requirements	X		
ensuring that the EnMS achieves its intended outcome(s);	X		D
promoting continual improvement of energy performance and the EnMS	X		
ensuring the formation of an energy management team	X	D	
directing and supporting persons to contribute to the effectiveness of the EnMS and to energy performance improvement	X	D	
supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility	X	D	
ensuring that the Energy Performance Indicators (EnPI) appropriately represent(s) energy performance	X		D
ensuring that processes are established and implemented to identify and address changes affecting the EnMS and energy performance within the scope and boundary of the EnMS	X		D
5.3 ORGANIZATION ROLES, RESPONSIBILITIES, AND AUTHORITIES	X		
ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organization	X		
ensuring that the EnMS is established, implemented, maintained and continually improved	X		
ensuring that the EnMS conforms to the requirements of this document	X		D
implementing action plans to continually improve energy performance	X		D
reporting on the performance of the EnMS and improvement of energy performance to top management at determined intervals	X		D
establishing criteria and methods needed to ensure that the operation and control of the EnMS are effective.	X		D
<p>NOTE: ALL requirements remain the responsibility of Top Management (X). This table shows the lowest levels of delegation (D).</p> <p>TM = Top Management MR = Management Representative EM = Energy Manager</p>			

9.3.2. Management Representative. OO-ALC top management appoints the 309 MXSG Director (309 MXSG/CL) as the OO-ALC EnMS representative to ensure continual improvement of the OO-ALC EnMS. EnMS management representative duties will include, but are not limited to:

- 9.3.2.1. Ensuring that the EnMS scope and boundaries are established.
- 9.3.2.2. Ensuring the integration of the EnMS requirements into the organization's business processes.
- 9.3.2.3. Ensuring that the resources needed for the EnMS are available.
- 9.3.2.4. Ensuring the formation of an energy management team.
- 9.3.2.5. Directing and supporting persons to contribute to the effectiveness of the EnMS and to energy performance improvement.
- 9.3.2.6. Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

9.3.3. EnMS Manager: OO-ALC top management appoints an Energy Program Technical manager(s) as its EnMS manager(s). The EnMS manager(s) duties will include, but are not limited to the following:

- 9.3.3.1. Ensuring that the energy policy, objectives and energy targets are established and are compatible with the strategic direction of the organization.
- 9.3.3.2. Ensuring that action plans are approved and implemented.
- 9.3.3.3. Ensuring that the EnMS achieves its intended outcome(s).
- 9.3.3.4. Ensuring that the Energy Performance Indicators (EnPI) appropriately represent(s) energy performance.
- 9.3.3.5. Ensuring that processes are established and implemented to identify and address changes affecting the EnMS and energy performance within the scope and boundary of the EnMS.
- 9.3.3.6. Ensuring that the EnMS conforms to the requirements of this document.
- 9.3.3.7. Implementing action plans to continually improve energy performance.
- 9.3.3.8. Reporting on the performance of the EnMS and improvement of energy performance to top management at determined intervals.
- 9.3.3.9. Establishing criteria and methods needed to ensure that the operation and control of the EnMS are effective.

9.3.4. Energy Group Representatives: Each OO-ALC group (309th Aircraft Maintenance Group, 309th Commodities Maintenance Group, 309th Electronics Maintenance Group, 309th Missiles Maintenance Group, 309th Maintenance Support Group, and 309th Software Engineering Group) shall appoint an energy representative to support energy conservation and energy assurance activities within their group. The representative is expected to attend monthly energy meetings and keep their group's leadership aware of any relevant information. The group energy representative shall be considered part of the OO-ALC energy team and will support energy initiatives as needed.

9.3.5. Significant Energy Use Teams: OO-ALC leadership shall support the formation of significant energy use (SEU) teams. The team members will be made up of staff that have significant impact on energy use and consumption of the SEU. A member of the team will be appointed as SEU team lead. The SEU team lead will:

9.3.5.1. Work with leadership to assemble an SEU energy team.

9.3.5.2. Work with team to establish fiscal year energy objectives and targets.

9.3.5.3. Work with team to establish a list of energy conservation opportunities (preferably no/low cost).

9.3.5.4. Work with team to develop and accomplish energy action plans.

9.3.5.5. Update energy data, action plans, and opportunity list.

9.3.5.6. Lead SEU team to overcome roadblocks to achieve objectives and targets.

9.3.6. OO-ALC Energy Team: The OO-ALC Energy Team is comprised of EnMS management representative(s), EnMS manager(s), group energy representatives, and significant energy user teams. The reference of energy team can also include other individuals contributing to the OO-ALC EnMS.

9.4. Energy Planning. The EnMS Manager shall conduct and document its energy planning process to achieve continual energy performance improvement in accordance with the OO-ALC Energy Policy and ISO-50001 standard.

9.4.1. OO-ALC Energy Planning Process: OO-ALC managers shall put together a team to consider the energy expectations and requirements from interested parties. It then analyzes strengths, weaknesses, opportunities, and threats. It uses the result from this analysis to identify and prioritize strategies as it develops plans going forward. See figure below.

Figure 6. OO-ALC Energy Planning Process.



9.4.1.1. Identify interested parties. The energy team shall determine relevant external and internal parties and issues that affect the organization's ability to achieve the intended EnMS outcomes and energy performance improvement.

9.4.1.2. Identify needs and expectations of interested parties.

9.4.1.2.1. The energy team shall determine the needs and expectations of interested parties.

9.4.1.2.1.1. The interested parties that are relevant to energy performance and the EnMS.

9.4.1.2.1.2. The relevant requirements of these interested parties.

9.4.1.2.1.3. Which of the identified needs and expectations the organization addresses through its EnMS.

9.4.1.2.2. OO-ALC shall also:

9.4.1.2.2.1. Ensure that it has access to the applicable legal requirements and other requirements related to its energy efficiency, energy use and energy consumption.

9.4.1.2.2.2. Determine how these requirements apply to its energy efficiency, energy use and energy consumption.

9.4.1.2.2.3. Ensure that these requirements are taken into account.

9.4.1.2.2.4. Review annually its legal requirements and other requirements.

9.4.1.3. Analyze EnMS Strengths, Weaknesses, Opportunities, and Threats (SWOT): The energy team shall determine what are the strengths, weaknesses, opportunities, and threats of the EnMS. The energy team shall analyze this information to determine risks and opportunities to the success of the EnMS.

Figure 7. SWOT Analysis Determination.

<p>Strengths What do you do well? What unique resources can you draw on? What do others see as your strengths?</p>	<p>Weaknesses What could you improve? Where do you have fewer resources than others? What are others likely to see as weaknesses?</p>
<p>Opportunities What opportunities are open to you? What trends could you take advantage of? How can you turn your strengths into opportunities?</p>	<p>Threats What threats could harm you? What is your competition doing? What threats do your weaknesses expose to you?</p>

9.4.1.4. Identify strategies. By understanding the organization’s SWOT, the energy team can identify strategies to enable them to better meet their objectives and targets. The team can strategically utilize strengths to leverage opportunities or strengths to counter threats. The team can also consider strategically how opportunities can overcome weaknesses. The team shall strategically work to minimize weaknesses or to avoid threats.

9.4.1.5. Prioritize strategies. The energy team shall prioritize strategies developed from the SWOT analysis. It can be done utilizing a point system considering effectiveness, breadth, resource requirement, and receptiveness. See below for table.

Table 1. Strategy Prioritization Example.

CHARACTERISTIC	SCORE BASED ON ...	SCORING
Effectiveness	Does the strategy have a high or low potential effectiveness?	<ul style="list-style-type: none"> • High effectiveness (5 pts) if strategy has the potential to produce significant improvement in the EnMS or energy performance. • Low effectiveness (1 pt) if strategy is unlikely to produce significant improvement in the EnMS or energy performance.
Breadth	Does the strategy impact elements across the EnMS?	<ul style="list-style-type: none"> • Wide breadth (5 pts) if strategy has broad impact across the EnMS. • Narrow breadth (1 pt) if the strategy has a narrow impact on a single element of the EnMS.
Resource Requirement	Does the strategy require significant time or personnel to produce results?	<ul style="list-style-type: none"> • High Resource Requirement (1 pt) if strategy requires significant time or personnel to produce results. • Low Resource Requirement (5 pts) if strategy does NOT require significant time or personnel to produce results.
Receptiveness	Does the strategy require a receiving party who is open and knowledgeable about the issue being addressed?	<ul style="list-style-type: none"> • High Receptiveness Requirement (1 pt) if the strategy requires a receiving party who is open and knowledgeable about the issue being addressed. • Low Receptiveness Requirement (5 pts) if the strategy does NOT require a receiving party who is open and knowledgeable about the issue being addressed.

9.4.1.6. Develop Plans. The energy team shall build action plans for the top prioritized strategies. These strategies will guide the team to know where to focus their efforts to improve the EnMS. It will also allow the energy team to leverage strategies towards their objectives and targets.

9.4.2. Actions to Address Risks and Opportunities: During the OO-ALC Energy planning process the EnMS manager shall ensure that it is consistent with energy policy that shall lead to actions that result in continual energy performance improvement.

9.4.2.1. The EnMS manager shall determine the risks and opportunities that need to be addressed to:

9.4.2.1.1. Give assurance that the EnMS can achieve its intended outcome(s), including energy performance improvement.

9.4.2.1.2. Prevent or reduce undesired effects.

9.4.2.1.3. Achieve continual improvement of the EnMS and energy performance.

9.4.2.2. The EnMS manager shall plan actions to address these risks and opportunities. The energy shall also plan how to integrate and implement the actions into its EnMS and energy performance processes and evaluate the effectiveness of these actions.

9.4.3. Objectives, Energy Targets and Planning to Achieve Them.

9.4.3.1. The EnMS manager shall establish objectives and targets at relevant functions and levels in line with OO-ALC’s overall purpose. The energy objectives and targets shall:

9.4.3.1.1. Be consistent with the energy policy.

- 9.4.3.1.2. Be measurable (if practicable).
- 9.4.3.1.3. Take into account applicable requirements.
- 9.4.3.1.4. Consider SEUs.
- 9.4.3.1.5. Take into account opportunities to improve energy performance.
- 9.4.3.1.6. Be monitored.
- 9.4.3.1.7. Be communicated.
- 9.4.3.1.8. Be updated as appropriate.

9.4.3.2. The EnMS manager shall establish and maintain action plans to achieve objectives and energy targets. The EnMS manager shall consider how the actions to achieve its objectives and energy targets can be integrated into the OO-ALC's business processes. The action plans shall include:

- 9.4.3.2.1. What will be done.
- 9.4.3.2.2. What resources will be required.
- 9.4.3.2.3. Who will be responsible.
- 9.4.3.2.4. When it will be completed.
- 9.4.3.2.5. How the results will be evaluated, including the method(s) used to verify energy performance improvement.

9.4.3.3. The EnMS manager shall retain documented information on the objectives and energy targets and action plans.

9.4.4. Energy Review. The EnMS manager shall develop, record, and maintain an OO-ALC energy review. The energy review shall be updated every 3 years or in response to major facility, equipment, system, or process changes.

9.4.4.1. To develop the energy review, the EnMS manager shall:

- 9.4.4.1.1. Analyze energy use and consumption based on measurement and other data, i.e.:
 - 9.4.4.1.1.1. Identify current types of energy.
 - 9.4.4.1.1.2. Evaluate past and current energy use(s) and consumption.
- 9.4.4.1.2. Based on the analysis, identify SEUs.
- 9.4.4.1.3. For each SEU:
 - 9.4.4.1.3.1. Determine relevant variables.
 - 9.4.4.1.3.2. Determine current energy performance.
 - 9.4.4.1.3.3. Identify the person(s) doing work under its control that influence or affect the SEUs.
- 9.4.4.1.4. Determine and prioritize opportunities for improving energy performance.

9.4.4.1.5. Estimate future energy use(s) and energy consumption.

9.4.4.2. The EnMS manager shall maintain documented information of the methods and criteria used to develop the energy review along with the results.

9.4.5. Energy Performance Indicators: EnMS manager shall determine EnPIs for monitoring and measuring OO-ALC energy performance that enable OO-ALC to demonstrate energy performance improvement.

9.4.5.1. OO-ALC chosen the EnPI to be the ratio of actual energy consumption divided by the modeled energy consumption for each SEU. The EnPIs shall be monitored monthly for significant deviations. Significant deviations beyond three standard deviations will be investigated to determine root cause and receive adequate response.

9.4.5.2. The EnPI values shall be reviewed and compared to their respective baselines. The EnMS manager shall retain documented information of the EnPI values.

9.4.5.3. The EnMS manager shall pursue the development of an overall EnPI once the organization has adequate metering.

9.4.5.4. The method of determining and updating the EnPIs shall be maintained as documented information. The EnMS manager shall consider and have data indicating that relevant variables significantly affect energy performance.

9.4.6. Energy Baseline (EnB). The EnMS manager shall establish EnBs for each SEU using information from the energy review taking into account a suitable period. The EnMS shall perform normalization of the EnPIs and EnBs where data indicates that relevant variables significantly affect energy performance (i.e., whether, production).

9.4.6.1. EnBs shall be revised in the case of one or more of the following:

9.4.6.1.1. EnPIs no longer reflect the organization's energy performance.

9.4.6.1.2. There have been major changes to the static factors.

9.4.6.1.3. According to a pre-determined method.

9.4.6.2. The EnMS manager shall retain information of the EnBs, relevant variable data and modification to the EnBs as documented information.

9.4.7. Planning for Collection of Energy Data: The EnMS manager shall ensure key characteristics affecting the OO-ALC energy performance are identified, measured, monitored, and analyzed annually. The EnMS manager shall define and implement an energy data collection plan considering the OO-ALC size, complexity, resources, and measurement and monitoring equipment. The plan shall specify the data necessary to monitor key characteristics. The plan shall also specify the frequency of data collection and retention.

9.4.7.1. Data to be collected and retained shall include:

9.4.7.1.1. The relevant variables for SEU.

9.4.7.1.2. Energy consumption related to SEUs and to the organization.

9.4.7.1.3. Operational criteria related to SEUs.

9.4.7.1.4. Static factors, if applicable.

9.4.7.1.5. Data specified in action plans.

9.4.7.2. The energy data collection plan shall be reviewed and updated annually. The EnMS manager shall ensure that the equipment used for measurement of key characteristics provides accurate and repeatable data. The EnMS manager shall retain documented information to establish accuracy and repeatability.

9.4.8. Additional Selection of Significant Energy Users (SEUs): OO-ALC shall achieve continual energy improvement by selecting one or two additional SEUs each year. This will allow OO-ALC to continually improve energy performance in manageable steps. Significant energy use can be equipment, a process, or a facility that has a significant energy usage and opportunity for energy improvement. SEU continued energy improvement effort includes, but are not limited to the following:

9.4.8.1. Baseline energy consumption.

9.4.8.2. Develop regression model with EnPIs.

9.4.8.3. Build SEU team with a team lead.

9.4.8.4. Pursue no/low-cost opportunities.

9.4.8.5. Formulate and prioritize and energy opportunities list.

9.4.8.6. Develop and execute energy action plans.

9.4.8.7. Establish and pursue energy objectives and targets.

9.4.8.8. Track energy progress.

9.4.8.9. Update regression model as needed and repeat.

9.4.9. Energy Champions for SEUs: An Energy Champion shall be appointed by OO-ALC for each OO-ALC business group that has an active SEU. The Energy Champion, typically the group deputy director, has the following major energy roles:

9.4.9.1. Ensure each SEU has an engaged team (production, facility, process, & maintenance representation) and are making/sustaining energy performance improvement.

9.4.9.2. Remove organizational obstacles the teams may encounter.

9.4.9.3. Meet regularly (possibly quarterly) with SEU Team to understand challenges.

9.4.9.4. Maintain team focus, especially in identifying and implementing no-cost/low-cost energy savings actions.

9.4.9.5. Ensure timely completion of projects.

9.4.9.6. Consider visibility, recognition, and rewards for teams achieving energy performance improvement.

9.5. Support.

9.5.1. OO-ALC shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of energy performance and the EnMS.

9.5.1.1. Competence: OO-ALC shall determine the necessary competence of person(s) doing work under its control that affects its energy performance and EnMS. OO-ALC shall:

9.5.1.1.1. Ensure that these persons are competent on the basis of appropriate education, training, skills or experience.

9.5.1.1.2. Where applicable, take actions to acquire the necessary competence and evaluate the effectiveness of the actions taken.

9.5.1.1.3. Retain appropriate documented information as evidence of competence.

9.5.1.2. OO-ALC staff have Production Acceptance Certifications (PAC) to perform their job functions and to stamp their work. These certifications can be located with the respective supervisors within the employee’s PAC records.

9.5.1.3. OO-ALC recognizes four levels of competency required to support the EnMS as outlined below.

Table 2. OO-ALC Energy Competency Levels.

	COMMAND & MANAGEMENT	IMPLEMENTERS	OPERATIONS & MAINTENANCE	WORKFORCE
Definition	<ul style="list-style-type: none"> • Top Management • Management Representative • Group Directors 	<ul style="list-style-type: none"> • Energy Manager • Deputy Energy Manager • SEU Team Leads • Internal Auditors 	<ul style="list-style-type: none"> • Line personnel. 	<ul style="list-style-type: none"> • All other OO-ALC personnel
Required EnMS-Specific Competency	<ul style="list-style-type: none"> • Understanding of the structure and operation of a formal management system • Understanding of the responsibilities required in ISO 50001:2018 Clause 5. 	<ul style="list-style-type: none"> • Competency in the structure and operation of an EnMS. • As per clause 7.3 of ISO 50001:2018. 	<ul style="list-style-type: none"> • Documented competency on the equipment and processes to which they contribute. • As per clause 7.3 of ISO 50001:2018. 	<ul style="list-style-type: none"> • As per clause 7.3 of ISO 50001:2018.
Means to Demonstrate Competency	<ul style="list-style-type: none"> • Briefing on ISO 50001:2018 Clause 5 by Energy Manager AND • Awareness training 	<ul style="list-style-type: none"> • At least 2 years experience supporting an ISO 50001 EnMS OR • Completion of an ISO 50001 introductory or internal auditor workshop. AND • Awareness training 	<ul style="list-style-type: none"> • Formal competency records shall be kept by supervisory personnel at the operation. AND • Awareness training 	<ul style="list-style-type: none"> • Awareness training

9.5.2. Awareness. EnMS manager shall utilize a computer-based course, flyers, posters, e-mail, and other forms of communication to ensure persons performing work under the OO-ALC control shall be aware of:

9.5.2.1. The energy policy.

9.5.2.2. Their contribution to the effectiveness of the EnMS, including achievement of objectives and energy targets, and the benefits of improved energy performance.

9.5.2.3. The impact of their activities or behavior with respect to energy performance.

9.5.2.4. The implications of not conforming with the EnMS requirements.

9.5.3. Communication: OO-ALC shall communicate internally and externally through appropriate paths with regard to its energy performance and EnMS.

9.5.3.1. OO-ALC shall determine the following in an energy communications document:

9.5.3.1.1. On what it will communicate.

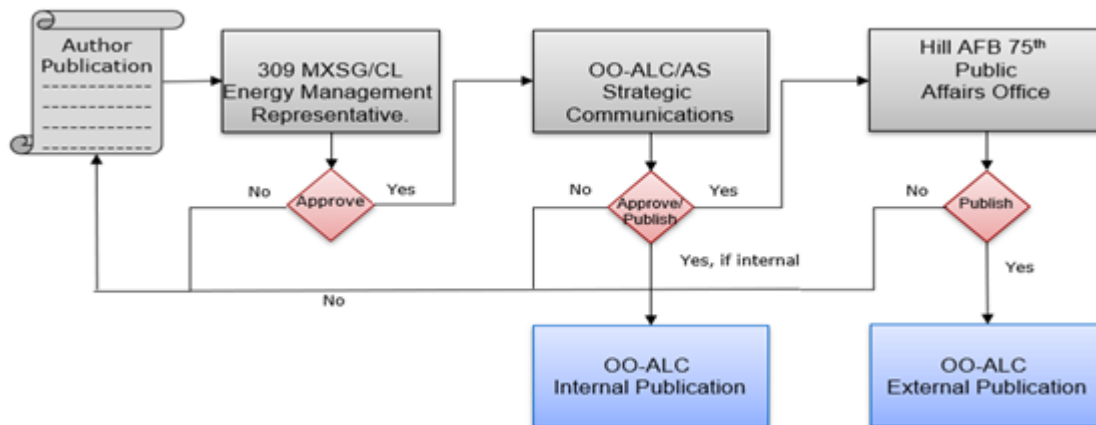
9.5.3.1.2. When to communicate.

9.5.3.1.3. With whom to communicate.

9.5.3.1.4. How to communicate.

9.5.3.1.5. Who communicates.

Figure 8. OO-ALC Official Energy Communication Process.



9.5.3.2. Official internal and external OO-ALC energy communication after review from the EnMS manager shall proceed through the following channels to ensure that the information communicated is dependable and consistent with EnMS, see [Figure 8](#). Typical daily energy communication will be exempt from this process.

9.5.3.3. OO-ALC energy team shall utilize established communication channels to broadcast EnMS details including Hilltop Times, tier meeting announcements, printed media, Twitter, Facebook, etc., as needed.

9.5.3.4. OO-ALC EnMS manager shall elevate the EnMS details for approval or broadcasting to the FWG, IGB, and/or IGC as needed. EnMS manager can utilize other means of elevating EnMS details including but not limited to eSSS, etc., as needed.

9.5.3.5. Energy suggestion improvements from personnel under OO-ALC control can be routed anonymously or named through the OO-ALC by sending them directly to 309 MXSG Workflow. Energy suggestions will be routed to 309 MXSG Energy Team. Alternately, suggestions can be sent directly to the EnMS manager or appropriate EnMS mailbox. OO-ALC shall consider retaining documented information of the suggested improvements where appropriate.

9.5.4. Documented Information: EnMS manager shall include documented information required by the ISO-50001 standard and determined by the organization as being necessary for the effectiveness of the EnMS to demonstrate energy performance improvement. This documentation shall be maintained electronically in the Electronics Records Management (ERM) system in accordance with AFRIMS guidelines. The EnMS manager may also use other established avenues to communicate EnMS documents with the organization. It is the responsibility of the EnMS manager to verify the EnMS documents are properly staged in the ERM prior to internal and external audits.

9.5.4.1. Creating and updating; when creating and updating documented information, OO-ALC shall ensure appropriate:

9.5.4.1.1. Identification and description (e.g., a title, date, author or reference number).

9.5.4.1.2. Format (e.g., language, software version, graphics) and media (e.g., paper, electronic).

9.5.4.1.3. Review and approval for suitability and adequacy.

9.5.4.2. Control of documented information. Documented information required by the EnMS and by this document shall be controlled to ensure:

9.5.4.2.1. It is available and suitable for use, where and when it is needed.

9.5.4.2.2. It is adequately protected (e.g., from loss of confidentiality, improper use, loss of integrity).

9.5.4.3. For the control of documented information, the organization shall address the following activities, as applicable:

9.5.4.3.1. Distribution, access, retrieval and use.

9.5.4.3.2. Storage and preservation, including preservation of legibility.

9.5.4.3.3. Control of changes (e.g., version control).

9.5.4.3.4. Retention and disposition.

9.5.4.4. Documented information of external origin determined by the organization to be necessary for the planning and operation of the EnMS shall be identified, as appropriate, and controlled.

9.6. Operation.

9.6.1. OO-ALC shall identify and plan operations and maintenance activities related to its significant energy uses consistent with energy policy, objectives, targets, and action plans to ensure that they are carried out as planned.

9.6.1.1. Operation Planning and Control: OO-ALC shall plan, implement and control the processes, related to its SEUs, needed to meet requirements and to implement the actions determined by:

9.6.1.1.1. Establishing criteria for the processes, including the effective operation and maintenance of facilities, equipment, systems and energy-using processes, where their absence can lead to a significant deviation from intended energy performance.

9.6.1.1.2. Communicating the criteria to relevant person(s) doing work under the control of the organization.

9.6.1.1.3. Implementing control of the processes in accordance with the criteria, including operating and maintaining facilities, equipment, systems and energy-using processes in accordance with established criteria.

9.6.1.1.4. Keeping documented information to the extent necessary to have confidence that the processes have been carried out as planned.

9.6.1.2. OO-ALC shall control planned changes and review consequences of unintended changes to mitigate any adverse effects. OO-ALC shall also ensure that outsourced SEUs or processes related to SEUs are controlled.

9.6.2. Design. OO-ALC shall consider energy performance improvement opportunities and operational control in the design of new, modified, and renovated facilities, equipment, systems and energy using processes that can have a significant impact on the planned or expected operating lifetime. OO-ALC has defined 'significant impact' potential as any projects with a total budget above \$250,000.

9.6.2.1. For projects with a total budget above \$250,000, the project engineer/manager shall consider and address energy conservation, performance improvement opportunities, and operational control in the design of new, modified, and renovated equipment, systems, processes, and facilities that may provide energy reduction and/or life cycle cost savings.

9.6.2.2. The project engineer/manager must document/record energy options, decision making, and selection process on OO-ALC Form 221, *Engineering Project Checklist (Energy)*. The completed form shall be retained/archived in the project file.

9.6.2.3. OO-ALC engineers and technicians who design, manage, or contribute technical requirements to projects with a total budget above \$250,000, shall complete Energy Consideration in Design training located in Training Scheduling System, on a recurring basis. Annual ISO-50001 audit assessments will be used as an indicator to determine frequency and scope of the required training.

9.6.3. Procurement: OO-ALC shall establish and implement criteria for evaluating energy performance over the planned or expected operating lifetime, when procuring energy using products, equipment and services which are expected to have a significant impact on the organization's energy performance. OO-ALC has defined 'significant impact' potential as any projects with a total budget above \$250,000.

9.6.3.1. When procuring energy using products, equipment and services that have, or can have, an impact on the organization, design engineers are to include energy performance requirements and details in the purchase specification; thereby, informing all potential suppliers of the performance criteria that must be met.

9.6.3.1.1. This paragraph is informative for purchases over \$250,000. All government procurement activities are governed by Federal Acquisition Regulations. There are established procurement procedures for procuring (includes energy using) products, equipment and services over \$250,000 for Depot activities. Procurement packages include detailed specifications which are sent out for competitive bids. Award, with few exceptions, is made to the lowest bid, with the supplier certifying they met the specifications. Larger purchases require the contractor to submit, for government review, details demonstrating how specifications are being met. Both procedures are termed "lowest bid, technically acceptable." Because these purchases are advertised for competitive bid, it is imperative that the purchase specifications are very detailed. This is the way the government ensures that all bidders meet the government's requirements. Consequently, the process followed by the design engineer is to incorporate required energy performance criteria into the purchase specifications. This is done by calling out specific equipment performance criteria and design features in the purchase specifications. In this regard all potential suppliers are notified, in the purchase specifications, that performance criteria (including energy performance) must be met, in order for the bid to be technically acceptable.

9.7. Performance Evaluation. The EnMS manager shall review performance of the OO-ALC EnMS through monitoring, measurement, analysis, and audits to ensure continual improvement of energy performance and of the EnMS.

9.7.1. Monitoring, Measurement, Analysis and Evaluation of Energy Performance and the EnMS. OO-ALC shall evaluate its energy performance and the effectiveness of the EnMS. Improvement in energy performance shall be evaluated by comparing EnPI values against the corresponding EnBs.

9.7.1.1. OO-ALC shall determine for energy performance and the EnMS:

9.7.1.1.1. What needs to be monitored and measured, including at a minimum the following key characteristics:

9.7.1.1.1.1. The effectiveness of the action plans in achieving objectives and energy targets.

9.7.1.1.1.2. EnPIs.

9.7.1.1.1.3. Operation of SEUs.

9.7.1.1.1.4. Actual versus expected energy consumption.

9.7.1.1.2. The methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results.

9.7.1.1.3. When the monitoring and measurement shall be performed.

9.7.1.1.4. When the results from monitoring and measurement shall be analyzed and evaluated.

9.7.1.2. EnMS manager shall develop and utilize regression models to characterize the influence of relevant variables on energy consumption of significant energy uses. The models will be used to quantify savings and monitor performance. The EnPI and its control boundaries will help determine if variations in consumption are the result of efficiency initiatives or simply the influence of varying external relevant variables. The models will be used to evaluate the effectiveness of the achieving action plans on the overall SEU performance and actual vs expected energy consumption.

9.7.1.3. The significant energy use models shall be updated monthly and reviewed by the OO-ALC Energy team.

9.7.1.4. OO-ALC shall periodically review its measurement needs and ensure equipment used in monitoring and measurement of key characteristics provides accurate and repeatable data. Records of calibration and other means of establishing accuracy and repeatability shall be maintained.

9.7.1.5. Any violation of control bounds of the EnPI represents a significant deviation in energy consumption and require an investigation of cause. The results of the investigation will determine if the model needs updating to ensure the model is representative of actual energy usage.

9.7.1.6. OO-ALC shall retain appropriate documentation information on the results from monitoring and measurement.

9.7.2. Evaluation of Compliance with Legal Requirements and Other Requirements. Annually, OO-ALC shall evaluate compliance with legal and other requirements related to its energy efficiency, energy use, energy consumption and the EnMS. OO-ALC shall retain documented information on the results of the evaluation of compliance and any actions taken.

9.7.3. Internal Audit: OO-ALC shall conduct internal audits at least annually to ensure that the EnMS improves energy performance and is effectively implemented and maintained.

9.7.3.1. OO-ALC shall conduct internal audits of the EnMS annually to provide information on whether the EnMS:

9.7.3.1.1. Improves energy performance.

9.7.3.1.2. Conforms to:

9.7.3.1.2.1. The organization's own requirements for its EnMS.

9.7.3.1.2.2. The energy policy (see 9.2), objectives and energy targets (see 9.4.3) established by the organization.

9.7.3.1.2.3. The requirements of this document.

9.7.3.1.3. Is effectively implemented and maintained.

9.7.3.2. OO-ALC shall:

9.7.3.2.1. Plan, establish, implement and maintain an audit program including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned and the results of previous audits.

9.7.3.2.2. Define the audit criteria and scope for each audit.

9.7.3.2.3. Select auditors and conduct audits to ensure objectivity and the impartiality of the audit process.

9.7.3.2.4. Ensure that the results of the audits are reported to relevant management.

9.7.3.2.5. Take appropriate actions.

9.7.3.2.6. Retain documented information as evidence of the implementation of the audit program and the audit results.

9.7.3.2.7. Perform review/audit of internal audit to ensure that it was performed in accordance with the OO-ALC Internal Audit Plan. Results shall be documented and recorded utilizing the ISO-50001 Internal Audit Assessment Tool. This will be done by someone who was not an auditor or auditee during the internal audit.

9.7.4. Management Review: Top management shall review the organization's EnMS, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization.

9.7.4.1. The management review shall include consideration of:

9.7.4.1.1. The status of actions from previous management reviews.

9.7.4.1.2. Changes in external and internal issues and associated risks and opportunities that are relevant to the EnMS.

9.7.4.1.3. Information on the EnMS performance, including trends in:

9.7.4.1.3.1. Nonconformities and corrective actions.

9.7.4.1.3.2. Monitoring and measurement results.

9.7.4.1.3.3. Audit results.

9.7.4.1.3.4. Results of the evaluation of compliance with legal requirements and other requirements.

9.7.4.1.4. Opportunities for continual improvement, including those for competence.

9.7.4.1.5. Energy policy.

9.7.4.2. The energy performance inputs to management review shall include the extent to which objectives and energy targets have been met.

9.7.4.2.1. Energy performance and energy performance improvement based on monitoring and measurement results including the EnPIs.

9.7.4.2.2. Status of the action plans.

9.7.4.3. The outputs of the management review shall include decisions related to continual improvement opportunities and any need for changes to the EnMS, including:

9.7.4.3.1. Opportunities to improve energy performance.

9.7.4.3.2. The energy policy.

9.7.4.3.3. The EnPIs or EnBs.

9.7.4.3.4. Objectives, energy targets, action plans or other elements of the EnMS and actions to be taken if they are not achieved.

9.7.4.3.5. Opportunities to improve integration with business processes.

9.7.4.3.6. The allocation of resources:

9.7.4.3.7. The improvement of competence, awareness and communication.

9.7.4.4. The organization shall retain documented information as evidence of the results of management reviews.

9.8. Improvement. OO-ALC shall continually seek to improve its energy performance and EnMS through resolution of nonconformities and utilizing the plan-do-check-act methodology.

9.8.1. Nonconformities and Corrective Action: OO-ALC shall address actual and potential nonconformities by making the correction, and by taking corrective action and preventive actions as necessary.

9.8.1.1. When a nonconformity is identified, the organization shall:

9.8.1.1.1. React to the nonconformity and, as applicable:

9.8.1.1.1.1. Take action to control and correct it.

9.8.1.1.1.2. Deal with the consequences.

9.8.1.1.2. Evaluate the need for action to eliminate the cause(s) of the nonconformity, in order that it does not recur or occur elsewhere, by:

9.8.1.1.2.1. Reviewing the nonconformity.

9.8.1.1.2.2. Determining the causes of the nonconformity.

9.8.1.1.2.3. Determining if similar nonconformities exist, or can potentially occur.

9.8.1.1.3. Implement any action needed.

9.8.1.1.4. Review the effectiveness of any corrective action taken.

9.8.1.1.5. Make changes to the EnMS, if necessary.

9.8.1.2. Corrective actions shall be appropriate to the effects of the encountered nonconformities.

9.8.1.3. The organization shall retain documented information of:

9.8.1.3.1. The nature of the nonconformities and subsequent actions taken.

9.8.1.3.2. The results of any corrective action.

9.8.2. Continual improvement: OO-ALC shall continually improve the suitability, adequacy and effectiveness of the EnMS. The organization shall demonstrate continual energy performance improvement.

10. OO-ALC Electrical Preventive Maintenance Program. According to the memorandum of understanding between the 75 CEG and the 309 MXSG, 309 MXSG is responsible for maintaining all electrical systems inside the building at 480V and below. The electrical infrastructure needs substantial attention to ensure that OO-ALC is resilient in protecting personnel, equipment and processes. The 309 MXSG/MXDEQ has begun the task of developing a complex-wide EPM program.

10.1. The NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*, is the recommended practice for an EPM program. This document gives extensive guidance and defines the essential elements of an EPM program as follows:

10.1.1. Responsible and qualified personnel.

10.1.2. Survey and analysis of electrical equipment and systems to determine maintenance requirements and priorities.

10.1.3. Regularly scheduled inspection, testing, and servicing of equipment.

10.1.4. Programmed routine inspections and suitable tests.

10.1.5. Accurate analysis of inspection and test reports so that proper corrective measures can be prescribed.

10.1.6. Performance of necessary work.

10.1.7. Concise but complete records.

10.2. Facility Single-Line Diagrams and Electrical Equipment Drawings.

10.2.1. Single-line diagram (SLD) - represents all three-phase and single-phase equipment and their connections via a symbol for each component, and a single line showing how they are connected.

10.2.2. Electrical Drawings (ED) – will show the floor plan for a building and show symbols representing the physical location of electrical equipment in the facility.

10.3. Change Management - Facility managers, facility mayors, or any employee with the capability to modify a facility's electrical distribution systems configuration, shall assist with the EPM effort by making change management part of their facility maintenance process. The primary tool for maintaining and auditing a power system's physical and functional configuration is the SLD and ED. Each building on the priority plan shall develop a hardcopy and an electronic version of the SLD and ED.

10.3.1. The EPM flight shall maintain master copies through a version control system. Facility engineering staff for each building on the priority plan shall have access to a "non-analysis" license of EasyPower and non-master copies of the SLD for their building(s). This access will allow facilities engineering to make updates to the non-master SLD and request analysis of their proposed changes to the EPM Flight Electrical Engineers.

10.3.2. There shall be mandatory preliminary and critical design reviews (PDRs/CDRs) when the power system is modified for any building on the priority plan. Full physical and functional audits should be conducted between the facility engineering/management teams and the EPM flight electrical engineers and technicians.

10.3.3. Training shall be provided to facility engineers who aren't familiar with using EasyPower. Facility engineers who specialize in electrical systems are ideal for modifying and using EasyPower.

10.4. Facility Operators Change Management Responsibilities.

10.4.1. Change management for facilities without an existing SLD and ED. Any employee who intends to modify the electrical infrastructure from branch circuit breakers up to the main distribution panel board shall:

10.4.1.1. Submit AF Form 332 and OO-ALC Form 546, *Engineering Project Request*, for design review of electrical panels and/or transformers to be removed or added to the system.

10.4.1.2. Submit OO-ALC Form 546 for design review of electrical panels, switches, transformers, converters, generators, etc., that will be modified in any way which alters the existing configuration.

10.4.2. When projects add to or modify the existing configuration, EDs shall be created in the latest Air Force-approved version of auto Computer Aided Drafting (CAD) and SLDs shall be created using EasyPower. The drawings will show where equipment is being connected to the existing system using appropriate symbols and shall include a table of equipment descriptions, equipment ID (which reflects the labeling in the field) and clearly show the existing system versus the proposed addition/modifications.

10.4.3. All drawings created shall be sent to GEOBASE for storage and future retrieval. Storing this information will be helpful when the time comes for an SLD or ED to be created for the entire building.

10.4.4. When projects are completed, qualified inspectors shall verify and document that the project was completed properly.

10.4.5. The above requirements apply to organic and contracted work.

10.5. Change Management for Facilities with an existing SLD and ED.

10.5.1. Any employee who intends to modify the electrical infrastructure from branch circuit breakers up to the main distribution panel board shall:

10.5.1.1. Submit AF Form 332 and OO-ALC Form 546, for design review of electrical panels and/or transformers to be removed or added to the system.

10.5.1.2. Submit OO-ALC Form 546 for design review of electrical panels, switches, transformers, converters, generators, etc., that will be modified in any way which alters the existing configuration.

10.5.2. Store completed and up-to-date SLDs and EDs in GEOBASE. When a project modifies the electrical configuration in anyway, a copy of the SLDs and EDs for that building shall be requested from GEOBASE and the proposed changes shall be added to the existing SLDs and EDs. The drawings will show where equipment is being connected to the existing system, using appropriate symbols, and shall include a table of equipment descriptions, equipment ID (which reflects the labeling in the field), and clearly show the existing system versus the proposed addition/modifications.

10.5.3. The SLDs and EDs containing proposed changes shall be sent to the EPM flight electrical engineers for analysis.

10.5.4. If the analysis reveals that the proposed design changes do not cause any deficiencies in system operation, the design will be approved and the EPM office will update the master SLDs and EDs. After approval, a new master version of the SLDs and EDs shall be updated and stored in GEOBASE.

10.5.5. When projects are completed qualified inspectors shall verify and document that the project was completed properly.

10.5.6. The above requirements apply to organic and contracted work. When contracted, a copy of the entire or partial existing SLDs and EDs can be given to the contractor to input their proposed design changes.

10.5.6.1. Disclaimer. The decision of information security shall be determined at the squadron or group level as to the security clearances required by the contractor to receive this infrastructure information.

10.5.7. The contractor shall return the modified SLDs and EDs to the government representative who is managing the contract. The government representative shall then provide the modified SLDs and EDs to the EPM office for review, analysis, and approval/disapproval.

11. OO-ALC Facility Managers Responsibilities. One of the most important functions of organizational commanders/directors is to maintain the care and upkeep of all real property assigned to them. Organizational commanders/directors are responsible for the care, custody and protection of assigned real property. FMs are the commander's/director's representative and the official POC whenever a facility needs industrial services and/or CE work. Upon assignment, new FMs will receive a duties and responsibilities brief from the 75 CEG's facility management focal point.

11.1. All FMs must be appointed by letter. FM appointment letters will be signed by the commander/director of the unit owning the particular facility (or facilities). Appointment letters must include the FMs full name, organization, facility/facilities managed, work phone, home phone, work cell phone and (if already accomplished) the date each newly appointed FM completed their CE FM training.

11.1.1. Primary/alternate FMs must attend CE FM training within 90 days of being assigned FM duties. Failure to attend will result in their removal from the FM listing. As soon as practical, but no later than 15 days after training is complete, report the training completion date to the 309 MXSG/MXDEI Space Utilization Program Manager, (801) 777-8718.

11.1.2. Upon receipt of an FM appointment letter, the 309 MXSG/MXDEI Space Utilization Program Manager will forward a copy of each letter to 75th Civil Engineer Squadron (CES) Operations Support Flight and update the OO-ALC master FM listing. The OO-ALC Space Utilization Program Manager will maintain appointment letters on file until superseded.

11.1.3. While the requirement to maintain a current set of primary and alternate FM appointment letters is a unit commander/director responsibility, to assist commanders/directors in meeting this requirement the 309 MXSG/MXDEI Space Utilization Program Manager will initiate an annual review of the OO-ALC master FM listing every June. This review will be accomplished by providing each group commander/director (or their designated POC) a copy of the current FM listing for update. Updates/corrections to this listing will be due by the last working day of June. To highlight the importance of this program, the 309 MXSG/MXDEI Space Utilization Program Manager will provide the results of this review to the 309 MXSG Director, who will in turn brief OO-ALC leadership on program compliance at the next complex IGB/IGC.

11.2. For basic FM responsibilities, refer to the 75 CEG Hill AFB BCE, Facility Managers Handbook.

11.2.1. This handbook is intended to be a viable tool in outlining FMs responsibilities, and ensuring awareness of facility standards and procedures that are peculiar to Hill AFB. This handbook is not intended to take precedence over any AF or DoD directive or instruction, base facility standard or the Hill AFB comprehensive plan. However, it is intended to complement these publications. Updates to this document will be maintained in the 75 CES Customer Support Unit, building 593 South end, (801) 777-1856, and will be made available to FMs.

11.3. OO-ALC FMs serve as the focal point for reporting and tracking minor facility maintenance issues (trouble calls) for their assigned facility/facilities.

11.4. In the event of a planned leave of absence of either the primary or alternate, the FM will notify the CE service call desk and the 309 MXSS/MXDXAB Trouble Call desk to identify their intended replacement.

11.4.1. To contact the CE Service Call Desk, call (801) 777-1856.

11.4.2. To contact the 309 MXSS/MXDXAB Trouble Call Desk, call (801) 777-8005 or (801) 586-6242.

11.4.3. While facility engineers assigned to their respective Mx groups are responsible for all OO-ALC electronic AF Form 332 submissions, FMs are responsible for informing and assisting facility engineers with electronic AF Form 332 submissions (required in cases where a maintenance issue requires action above and beyond a simple trouble call).

12. OO-ALC IGB/IGC Processes – Infrastructure Governance Process. The following instructions are in accordance with and in support of OO-ALCI 32-1005, *Infrastructure Planning and Programming*.

12.1. To meet infrastructure needs a governance process, that involves all stakeholders, is required to facilitate and execute standardized planning and programming processes to properly plan for and resource current, and future, infrastructure and equipment requirements.

12.2. OO-ALC Infrastructure Planning Framework. For the OO-ALC, a progressive governance structure and process has been developed that advances infrastructure requirements, as proposed by the various OO-ALC working groups. These working groups consider the proposals and develop COAs to be forwarded to the OO-ALC IGB for vetting, prioritization, and selection of a preferred COA. Once vetted and a preferred COA has been selected, the COAs are then forwarded to the OO-ALC IGC who selects the final COA and grants approval for the allocation of resources and execution of the proposal (reference OO-ALCI 32-1005, *Infrastructure Planning and Programming*, section 1.2).

12.3. Policy. All organizations in the OO-ALC who require changes to infrastructure, construction, space planning, renovation, or installation and maintenance of equipment, and the associated expenditures to support their operations, will be required to follow this approval process. All requests for new infrastructure, reallocation of infrastructure, construction, installation and maintenance of equipment shall be evaluated by the various OO-ALC Infrastructure associated working groups who shall develop courses of action for, or make recommendations to, the infrastructure governance process for consideration. Courses of action are further vetted and voted on via the IGB, and a preferred course of action is then considered for approval through the IGC (reference OO-ALCI 32-1005, section 1.6).

12.4. Consistent with the OO-ALC organizational plan and structure as defined in [paragraph 1](#), the commander/director has delegated day-to-day authority to coordinate, manage and direct all OO-ALC facilities programs to the 309 MXSG/CL. These facilities programs include (but are not limited to):

- 12.4.1. Industrial Area Development Planning (IADP)
- 12.4.2. Maintenance and Repair (M&R)
- 12.4.3. Minor construction (in conjunction with OO-ALC/OB)
- 12.4.4. Space Utilization
- 12.4.5. Space Leasing
- 12.4.6. Military Construction (MILCON)
- 12.4.7. Energy Management Systems (EnMS)
- 12.4.8. Electrical Preventive Maintenance Program (EPM)
- 12.4.9. Depot Capacity Measurement and Analysis

12.5. In accordance with the OO-ALC organizational plan and structure, and the day-to-day delegation of authority referenced above, a series of working groups have been established to facilitate the development of infrastructure needs and available courses of action. Prominent among these required working groups are the FWG, the MRWG, Equipment Working Group (EWG), and the Energy Management Working Group.

12.6. These associated working groups will discuss requirements, identify COAs, make recommendations and provide the necessary data and documentation into the Infrastructure Governance Process described in OO-ALCI 32-1005.

RICHARD W. GIBBS, Brigadier General, USAF
Commander, Ogden Air Logistics Complex

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

DoD 4151.18-H, *Depot Maintenance Capacity and Utilization Measurement Handbook*, 10 March 2007

AFPD 10-24, *Mission Assurance*, 5 November 2019

AFPD 32-10, *Installations and Facilities*, 20 July 2020

AFI 32-1001, *Civil Engineer Operations*, 4 October 2019

AFI 32-1015, *Integrated Installation Planning*, 30 July 2019

AFI 32-1020, *Planning and Programming Built Infrastructure Projects*, 18 December 2019

AFMAN 32-1067, *Water and Fuel Systems*, 4 August 2020

DAFMAN 32-1084, *Standard Facility Requirements*, 15 January 2020

DAFPD 32-90, *Real Property Management*, 20 April 2021

AFI 32-9001, *Acquisition of Real Property*, 28 September 2017

AFI 32-9002, *Management of Real Property*, 18 December 2020

DAFI 32-9005, *Real Property Accountability*, 14 September 2022

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

DAFI 65-601, *Volume 1, Budget Guidance and Procedures*, 22 June 2022

AFMCI 21-100, *Depot Maintenance Management*, 7 June 2022

AFSCMAN 21-102, *Depot Maintenance Management*, 5 April 2021

AFSCMAN 21-102, OO-ALCSUP, *Depot Maintenance Management*, 24 August 2021

AFSCH 60-101, *Art of the Possible Handbook*, 28 December 2021

OO-ALCI 21-112, *Depot Maintenance Capacity and Utilization Measurement*, 24 July 2020

OO-ALCI 21-115, *Workload Authorizations*, 19 March 2019

OO-ALCI 32-1005, *Infrastructure Planning and Programming*, 2 February 2021

OO-ALCI 63-101, *Integrated Life Cycle Management*, 14 December 2020

EO 12411, *Government Work Space Management Reforms*, 29 March 1983

Hill AFB BCE, *Facility Manager's Handbook*, 1 December 2009

309 MXSG/75 CEG, *Memorandum of Understanding*, 22 July 2019

Prescribed Forms

OO-ALC Form 221, *Engineering Project Checklist (Energy)*

Adopted Forms

AF Form 332, *Base Civil Engineer Work Request*

AF Form 813, *Request for Environmental Impact Analysis*

DAF Form 847, *Recommendation for Change of Publication*

DD Form 1391, *Fiscal Year Military Construction Project Data*

OO-ALC Form 546, *Engineering Project Request*

HILL AFB Form 565, *Space Allocation Request*

Abbreviations and Acronyms

ACES-RP—Automated Civil Engineering System - Real Property

ADPE—Automated Data Processing Equipment

A&E—Architectural and Engineering

AF—Air Force

AFB—Air Force Base

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFMCSUP—Air Force Materiel Command Supplement

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Sustainment Center

AFSCMAN—Air Force Sustainment Center Manual

AoP—Art of the Possible

BCE—Base Civil Engineer

CC—Commander

CCL—Complex Capacity Lead

CE—Civil Engineering

CEG—Civil Engineering Group

CES—Civil Engineering Squadron

CIP—Capital Investment Program

CL—Civilian Leader

COA—Course of Action

CSAG-M—Consolidated Sustainment Activity Group – Maintenance

DAFI—Department of the Air Force Instruction

DAFM—Department of the Air Force Manual

DoD—Department of Defense

DIFMS—Defense Industrial Financial Management System

DWCF—Defense Working Capital Fund

ED—Electrical Drawings

EEIC—Element of Expense/Investment Code

EMSG—Energy Management Steering Group

EnB—Energy Baseline

EnMS—Energy Management Systems

EnPI—Energy Performance Indicators

EPM—Electrical Preventive Maintenance

ERM—Electronic Records Management

FAIP—Facilities Annual Improvement Plan

FB—Facilities Board (Now referred to as the IGB/IGC process within the Infrastructure Governance Process)

FM—Facility Manager

FPC—Facilities Planning Committee

FRP—Facility Requirement Plan

FSDP—Facilities Strategic Deployment Plan

FWG—Facilities Working Group

FY—Fiscal Year

HQ—Headquarters

IADP—Industrial Area Development Planning

IAW—In Accordance With

IDIQ—Indefinite Delivery/Indefinite Quantity

IGC—Infrastructure Governance Committee

IGB—Infrastructure Governance Board

IOE—Initial Operating Equipment

ISO—International Standard for Organization

MET—Mission Essential Task

M&R—Maintenance and Repair

MRWG—Maintenance and Repair Working Group

MAJCOM—Major Command

MILCON—Military Construction

M—**Million**—**MSD**—Materiel Support Division

Mx—Maintenance

MXSS—Maintenance Support Squadron

NDA—National Defense Authorization Act

O&M—Operations and Maintenance

OB—Business Office

OBF—Business Operations Office

OO-ALC—Ogden Air Logistics Complex

OPR—Office of Primary Responsibility

OSD—Office of the Secretary of Defense

PCR—Programing Charrette Report

POC—Point of Contact

RCC—Resource Cost Center

R&M—Restoration and Modernization

SAF—Secretary of the Air Force

SLD—Single-Line Diagram

SOW—Statement of Work

UMMC—Unspecified Minor Military Construction

USC—United States Code

WBS—Work Breakdown Structure

WCF—Working Capital Fund

309 MXSG—Maintenance Support Group

309 MXSG/EN—Maintenance Support Group Engineering Flight Facility Engineering Function

309 MXSG/MXDEI—**309th Maintenance Support Group and complex**—level Programs Section

75 ABW—75th Air Base Wing

75 CEG—75th Civil Engineer Group

Terms

Air Logistics Center—An AFMC depot operational activity charged with organically accomplishing repair and modification tasks; contracting with industry for manufacture or repair, as directed by the system program manager and/or material manager for assigned weapon systems, equipment or items of supply; providing worldwide technical and logistics support for AF operational units, other services/agencies and foreign military customers.

Automated Civil Engineering System—Real Property (TRIRIGA)—The AF currently reports real property inventory in the **TRIRIGA** database. This database integrates four other databases involved in collecting real property data.

Building Manager—See Facility Manager.

Capital Investment Includes, but is not limited to—constructing new energy-efficient facilities, replacing inefficient facilities and retrofitting existing facilities.

Capital Investment Program—CIP was devised to provide a responsive avenue for the modernization of DoD depot maintenance industrial base. CIP allows the CSAG-M to include capital depreciation in customer sales rates, as one means of financing the replacement of capital assets. This concept places CSAG-M operations in a more business-like posture, and allows business-like investments for transforming depot maintenance, replacing unserviceable or technologically obsolete capital assets and providing for productivity enhancements and environmental improvements. The organic depot maintenance portion of the working capital fund (WCF) is authorized to fund the acquisition of certain capital purchases through the CIP. CIP acquisitions differ significantly from other organic depot maintenance expenditures in the methods used for accounting, budgeting and processing requests. CIP cannot obligate more than what is authorized on the annual operating budget and approved by Congress. CIP requirements must be planned, programmed, managed, obligated, executed and reported in one of the following six categories: weapon system sustainment, test and inspection equipment, minor construction, ADPE and telecommunications equipment, software development or depot maintenance transformation.

Condition—The physical ability of a facility to house a specific organization or function.

Construction Funding—Specified MILCON applies to any project that exceeds \$750,000. MILCON requires Congressional line-item authorization. Unspecified minor construction is available for any project with a cost between \$750,000 and \$1.5M (between \$1.5M and \$3M if intended solely to correct life, health, or safety deficiencies). Each military department receives an appropriation for minor construction. The Secretary of the AF controls expenditure of these funds. The Secretary must also notify Congress and wait 30 days before work begins. (Congress must object within 30 days. Expenditure of these funds is controlled by the MAJCOMs, unless approval authority is delegated to the installation commander.)

Defense Working Capital Fund (DWCF)—DWCF is a revolving fund that sells services and supplies to customers. The DWCF is established under the authority of Title 10, United States Code 2208. Within the DWCF, the AF WCF has three activity groups. They are the CSAG-M, the Supply Management Activity Group and the Transportation Activity Group (also known as the Transportation WCF).

Defense Industrial Financial Management System (DIFMS)—DIFMS is a financial management/accounting system supporting AF, Navy and Marine Corps depot maintenance and Navy research and development business areas. DIFMS replaced legacy systems with a migratory system that meets Federal and DoD regulations and requirements.

Depot Level Maintenance—The level of maintenance consisting of those on and off-equipment maintenance tasks performed; using the highly specialized skills, sophisticated shop equipment or special activities of a supporting command at a logistics center, centralized repair facility, contractor repair facility or in some cases at an operating location. Maintenance performed at a depot, may also include organizational and intermediate-level tasks as negotiated between operating and supporting commands.

CSAG-M—The AFMC depot maintenance function is financed by the CSAG-M formerly called the Depot Maintenance Business Area of the DWCF. The CSAG-M performs organic and contract repair services for its customers.

CSAG-M Appropriations—CSAG-M is a no-year appropriation. It follows similar guidelines as O&M, except it receives expense authority to incur cost. Income is derived from operations; it finances continuing operations without fiscal limitations; its primary unit of measure is expenses (not obligations) and it holds gains and losses (the key to its flexibility).

Energy—Any usable power, including but not limited to: coal, petroleum products, steam, electricity, natural gas, propane, military operational fuels and propellants, alternative fuels and renewable energy including, but not limited to: synthetic and biomass-derived fuels, solar, wind, geothermal, and nuclear but excluding nuclear energy used in ship propulsion.

Energy Management Steering Group (EMSG)—The EMSG is the focal point for energy-related matters. The EMSG is chaired by the 75 ABW/CC, or vice with representatives from at least the CE, transportation, aircraft operations, budget, supply, public affairs, contracting, acquisition and fuels management organizations.

Energy Security—Energy security includes physical security of infrastructure and supply, and continuity of operations.

Facilities Annual Improvement Plan—FAIPs are annual plans developed by the 309 MXSG Facility Engineering functions to facilitate the execution of the supported production group's strategic facilities goals and objectives. FAIPs contain tactical actions that support the achievement of the long-term/strategic facilities goals and objectives contained in the group FSDP. Like the FSDP, there is no specified format for a FAIP. These plans are created and maintained to suit the needs and requirements of the group they serve. FAIPs are one of three key plans (FSDP and IADP being the other two) that guide continuous process improvement activity in the area of depot facilities.

Facilities Board—An OO-ALC-level body providing senior officer/civilian equivalent level review, evaluation and decision making on critical OO-ALC facility issues. In most cases, these issues are forwarded to the IGB/IGC from the OO-ALC FPC. Topics discussed include but are not limited to: space utilization, M&R, minor construction, MILCON, depot capacity, energy management and the OO-ALC strategically focused IADP.

Facilities Board Process—The 75 ABW/CC has established and conducts a base-level FB process to ensure Hill AFB facilities and infrastructure can fully support assigned missions. To address and resolve facility issues and to review program information unique to the DMAG world, the OO-ALC Commander/Director has elected to establish a corresponding OO-ALC FB (IGB/IGC) process. The complex process augments but does not take the place of the higher level base FB. All OO-ALC facility issues that require base-level FB attention will continue to be addressed at that level. The OO-ALC process is used primarily to resolve CSAG-M-related facility issues in the areas of space utilization, M&R, minor construction, MILCON, energy management and IADP. It is also used to keep senior wing leadership informed and involved in tactical and strategic facilities decision making.

Facilities Strategic Development Plan—All OO-ALC production groups develop FSDPs to document and achieve long-term facilities goals and objectives. The group-level FSDP is one of three key plans (FAIP and IADP being the other two) that guide continuous process improvement activity in the area of depot facilities. There is not a specified format for an FSDP. These plans are created and maintained to suit the needs and requirements of the group they serve. While responsibility to create and maintain an FSDP belongs to the group commander/director, the applicable 309 MXSG Support Facility Engineering Section is responsible for working with production group leadership to produce and update the plan. As indicated above, production group FSDPs are supported by annual FAIPs and FSDPs are the foundation of the complex wide IADP.

Facilities Working Group—An OO-ALC-level body that provides initial review and decision making for OO-ALC facility issues to include, but not limited to: M&R, minor construction, MILCON, energy management and the OO-ALC strategically focused IADP.

Facility—A building or structure to include utility systems, pavements and land.

Facility Engineer—Coordinates and supervises the facilities engineering program. Conducts specialized and complex facilities engineering work in support of maintenance activities. So as not to impact their distinctive but different responsibilities, facility engineering personnel will not be assigned as primary FMs.

Facility Manager (Primary and Alternate)—The primary and alternate FMs serve as the POC for the unit commander's assigned facilities regarding M&R, or other services required from Industrial Services and CE. Another commonly used term for the FM is "building custodian". Primary and alternate FMs must attend a CE FM briefing within 90-days of being assigned.

Failure to attend will result in their removal from the FM listing.

Facility Program Coordinator—While the requirement to appoint FMs and alternates is normally executed at the squadron director level, to facilitate this process and ensure consistency across the group, group commander/directors may choose to appoint a group facility program coordinator to assist squadron directors with this responsibility.

Facility Requirement Plan—The FRP provides the information that drives the entire base facility acquisition program. The FRP is prepared by the system contractor, as called out in the statement of work and Contract Data Requirements List. A preliminary FRP should be submitted by the contractor, prior to the end of the Dem/Val phase. FRB can provide information on all facilities required to support a new system program throughout the life cycle of system development, acquisition and operation such as: operational, depot and training facilities or may be tailored to provide information on those facilities of interest during a single phase of the program. While at this stage of the program, the information contained in the document is preliminary; it will provide a means to justify or update previous facility and cost estimates.

Facility Requirements System—The Facility Requirements System develops and approves standards that define the type, number and size support facilities. The system promotes economy and efficiency in using and developing facilities and helps to realize the following goals: design standards for new and revised functional requirements, maximum use of existing facilities standards of use to justify new facilities and occupying existing facilities. Comprehensive programming for the construction, operation and maintenance of needed facilities.

Facility Requirements Handbook (DAFMAN 32-1084)—This handbook is a compilation of standards, references and detailed technical guidance that is provided as a tool to assist installation CCs, their staffs, their design and construction agents and their chain of command in the facility programming process. It serves as a guide to provide excellent facilities through new construction and through maintenance, repair and renovation of existing permanent and temporary facilities, so that the installation can accomplish its mission now and in the future. The handbook also aides base-level real property personnel in correctly identifying facilities and maintaining accurate inventory records. The handbook provides general guidance for developing facility requirements. Its companion document, AFI 32-1024, *Standard Facility Requirements*, describes the facility requirement system, assigns responsibility and explains how new and revised guidance and criteria are initiated and processed for publication. Both DAFMAN 32-1084 and AFI 32-1024 emphasize the importance of anticipating and taking timely actions to establish new and revised guidance and criteria for facilities needed to fulfill mission objectives.

Industrial Area Development Plan—The complicated/competitive nature of DoD depot maintenance, workload projection and government funding requires a flexible approach for addressing future infrastructure needs. IADP is not a traditional AF (deliberate) plan. Instead, it is an adaptive, strategic planning process that attempts to pull together OO-ALC facilities, infrastructure and resource information to facilitate future business planning and to assist senior leadership with their decision-making processes. The IADP is developed from the group-level FSDP. The goal of the IADP is to ensure every organization in the OO-ALC is working effectively toward the same goals. Specifically, the goals set by OO-ALC senior leadership. The IADP is the last of three key plans (FAIPs and FSDPs being the other two) that guide continuous process improvement activity in the area of depot facilities.

Initial Operating Equipment—IOE is equipment that is not real property installed equipment. IOE is the required equipment that allows the facilities to be fully operational for the purpose it was intended. All IOE must be justified in the facility economic analysis.

Maintenance and Repair—M&R refers to an O&M funding source for CSAG-M facility projects. The MAJCOM's approval authority for maintenance is unlimited. Repair approval authority is limited to \$5M as long as the combined cost of all repairs proposed for a facility does not exceed 70 percent of the building's replacement value. These limits are per building, per year, not per project. M&R does not change the nature of a facility, but simply ensures it can continue to be used effectively. Repair does not normally increase the volume or footprint of a building, although it may result in greater usable floor space due to reconfiguration of the interior.

NOTE: Conjunctive projects combining minor construction and M&R are possible, but you must identify the minor construction portion separately. For both minor construction and M&R, the FM should initiate the project by submitting an electronic AF Form 332 for each request. Ensure each is properly coordinated through the Fire Protection, Safety, Environmental, Bio-Environmental, and the Communications Squadron.

Materiel Support Division (MSD)—Within AFMC, the MSD is responsible for AF-managed depot-level repairable spare parts and the AF-managed consumable spares. Repairable MSD assets typically represent a substantial inventory investment. From the AFMC perspective, the expectation should be that the logistics system achieves the level of performance that is consistent with its funding level.

MILCON—The program is approved annually by Congress in the DoD Authorization and MILCON Acts, plus individual projects authorized pursuant to standing project authority provided by Congress in Title 10 of the United States Code. Construction projects over

\$1.0M or large M&R projects (\$5M or greater) are funded through MILCON. Before a MILCON project can be approved, the requirement must be verified and justified. Space requirements are found in DAFMAN 32—1084. Congress approves MILCON by line item and justification must be adequate to convince Congress. This is a lengthy process; often taking several years just to get approval; then several more for actual construction. Pre-planning is essential to this process.

Minor Construction—New facility construction or alteration of existing facilities up to \$750,000 and meeting the definition of minor construction as provided in AFI 32-1020. The minor construction includes replacement, productivity, environmental or new mission projects. Real Property. Any government owned, leased or controlled property used to fulfill government research, development, test, evaluation, production, maintenance/modification or for the storage of supporting production machinery and equipment. This includes land, buildings, structures, utility systems and improvements. It also includes equipment attached to and part of buildings and structures (such as heating systems), but not movable equipment (such as plant equipment). Real property includes equipment attached to and made part of buildings and structures (such as heating systems); it does not include movable equipment (such as plant equipment). Real Property Asset Management. The AF in its role as executive agent for property owned by the United States of America, plans, acquires, manages and divests real property to ensure the overall sustainability and support of its missions, as well as the largest defense requirements of the DoD. Real property encompasses lands, buildings, structures, utilities, systems, improvements and appurtenances thereto. The AF will accurately manage its real property asset inventory, while efficiently and

effectively sustaining it IAW with Federal Real Property Council guidance. The AF will also ensure it manages its real property asset inventory as needed, to sustain current and enable projected mission capabilities. Before acquiring new property, the AF will consider: using available real property from another military service or federal agency; exchanging excess federal property for privately owned land, facilities or other real property; using state or local land through donation or a lease agreement.

Real Property Installed Equipment—Those items of government owned accessory equipment, apparatus and fixtures that are essential to the function of the real property (lands, structures, leaseholds, etc.). They are permanently attached to, integrated into or on government owned or leased property, whether or not initially procured and installed under a MILCON. If the item is essential to the function or mission that the facility was designed to house and could not be removed without causing structural damage, it is real property.

Restoration and Modernization (R&M) Using O&M Funds—Restoration includes repair and replacement work to restore facilities damaged by inadequate sustainment, excessive age, natural disaster, fire, accident or other causes. Modernization includes alteration of facilities solely to implement new or higher standards (including regulatory changes) to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural members). Projects in this category will be classified as repair and/or minor construction. Assign these projects to Element of Expense/Investment Codes (EEIC) 522 (Repair) or EEIC 529 (minor construction O&M). All costs for this work should be charged to

Program Element 76F. (There is also an R&M component of MILCON funding, i.e., R&M can also be funded from the MILCON appropriation (3300).

Space Utilization Management—The ability of the OO-ALC to accommodate new workload is directly impacted by the management of existing space on Hill AFB. On behalf of the OO-ALC Commander/Director, the 309 MXSG/CL manages the OO-ALC space utilization process. The OO-ALC (and Hill AFB) use a standardized process (outlined in this instruction) for requesting, approving and assigning facilities space. All requests for space and reallocation of facilities space shall be approved through the OO-ALC (and/or CE) Infrastructure Governance Process.

Special-Use Facility—A facility built specifically for a high-priority mission and usually suitable only for that mission. These facilities often are not funded or budgeted through normal MILCON channels, and frequently are acquired through equipment funds as part of a new mission bed-down package. Examples are satellite communication systems and phased array radar systems.