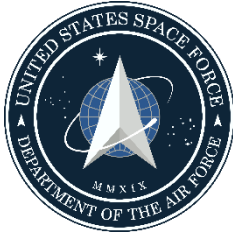


12 AUGUST 2026



Operations

**DOCTRINE, ORGANIZATION,
TRAINING, MATERIEL, LEADERSHIP &
EDUCATION, PERSONNEL, FACILITIES,
AND POLICY (DOTMLPF-P) ANALYSIS**

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This publication implements Department of the Air Force Policy Directive (DAFPD) 10-2, Readiness. This Space Force Instruction (SpFI) establishes organizational responsibilities, authorities, and processes for the management of United States Space Force (USSF) DOTmLPP-P Analysis. The USSF will utilize the DOTmLPP-P framework as the foundational methodology for all activities related to capability development, requirements definition, gap analysis, and solution generation. This includes, but is not limited to, the development of new systems, modification of existing systems, and adjustments to operational procedures. Any proposed deviation from this standard must be documented and approved by Chief of Space Operations (CSO) or a designated board. This publication does not apply to the United States Air Force, except units performing space missions. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, Records Management and Information Governance Program, and are disposed of in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. For recommended changes and questions about this publication, contact the office of primary responsibility (OPR) using the Department of the Air Force (DAF) Form 847, Recommendation for Change of Publication. Route DAF Form 847 from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive installation/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, and T-3") number following the compliance statement. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or

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Chapter 1

THE DOTMLPF-P ANALYSIS PROCESS

1.1. Purpose. This instruction establishes the DOTmLPF-P Analysis process as the official U.S. Space Force (USSF) methodology to assess capabilities, identify gaps, and deliver fully resourced solutions. Governed by the Force Structure Assessment (FSA) process, this continuous evaluation applies to HQ Space Staff, Field Commands (FLDCOM), and Direct Reporting Units (DRU). It mandates a holistic, risk-managed approach to capability development across all operations, ensuring solutions address all eight DOTmLPF-P elements rather than focusing solely on new materiel acquisitions.

1.2. Applicability and Scope. This instruction applies the DOTmLPF-P framework to the early stages of concept development, a phase preceding the formal acquisition lifecycle. The intent is not to replicate the exhaustive analysis required for a formal Analysis of Alternatives (AoA), but to instill a holistic, lifecycle-aware mindset from a concept's inception. The application of this framework should be scalable and iterative. Early-stage concepts require only a high-level review to identify major implications and feasibility risks, preventing the pursuit of concepts that are operationally non-viable. As a concept matures, the depth and fidelity of the DOTmLPF-P analysis will increase, ensuring that the burden of analysis remains appropriate to the concept's maturity level and preventing wasted effort on ideas that do not advance.

1.3. Framework Convention and Focus. To ensure a holistic approach to capability development and to visually emphasize the document's primary focus, this instruction employs a specific convention to distinguish the nature of the analysis being conducted. This convention represents the core principle that a materiel solution serves as the catalyst, which then requires a comprehensive DOTmLPF-P analysis to ensure it is fully supported. For every new piece of hardware, there is a corresponding set of non-materiel requirements that must be addressed.

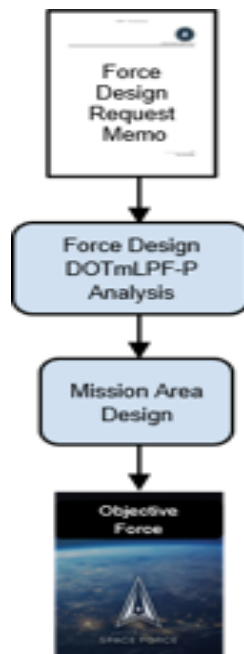
1.3.1. The analysis for DOTmLPF-P is a limited, consequential assessment focused on two key questions: 1) Does the proposed materiel solution have any impact on our existing, fielded non-material capabilities? and 2) Does it require any minor, off-the-shelf materiel changes to be successful? The application of this focus varies by phase (Force Design, Force Development, Force Generation, and Force Employment)

1.3.2. Ultimately, the governing mandate of this instruction is to guarantee that for every new materiel solution and/or modification that is introduced, a rigorous DOTmLPF-P analysis is conducted to ensure all supporting and enabling elements are properly identified, planned for, and resourced.

1.4. Description. The DOTmLPF-P Analysis process is a structured, cyclical approach for identifying resourcing gaps and developing optimally resourced solutions. It is executed across Force Design, Force Development, Force Generation, and Force Employment, four distinct but interconnected phases, with a continuous feedback loop to ensure the Space Force remains agile and responsive to evolving threats and mission requirements.

1.5. Sequencing. The DOTmLPF-P framework is applied with varying focus across Force Design, Force Development, Force Generation, and Force Employment:

1.5.1. Force Design. The Force Design phase serves as the foundational stage where the 5-15 year vision for the force is formally conceptualized and defined.

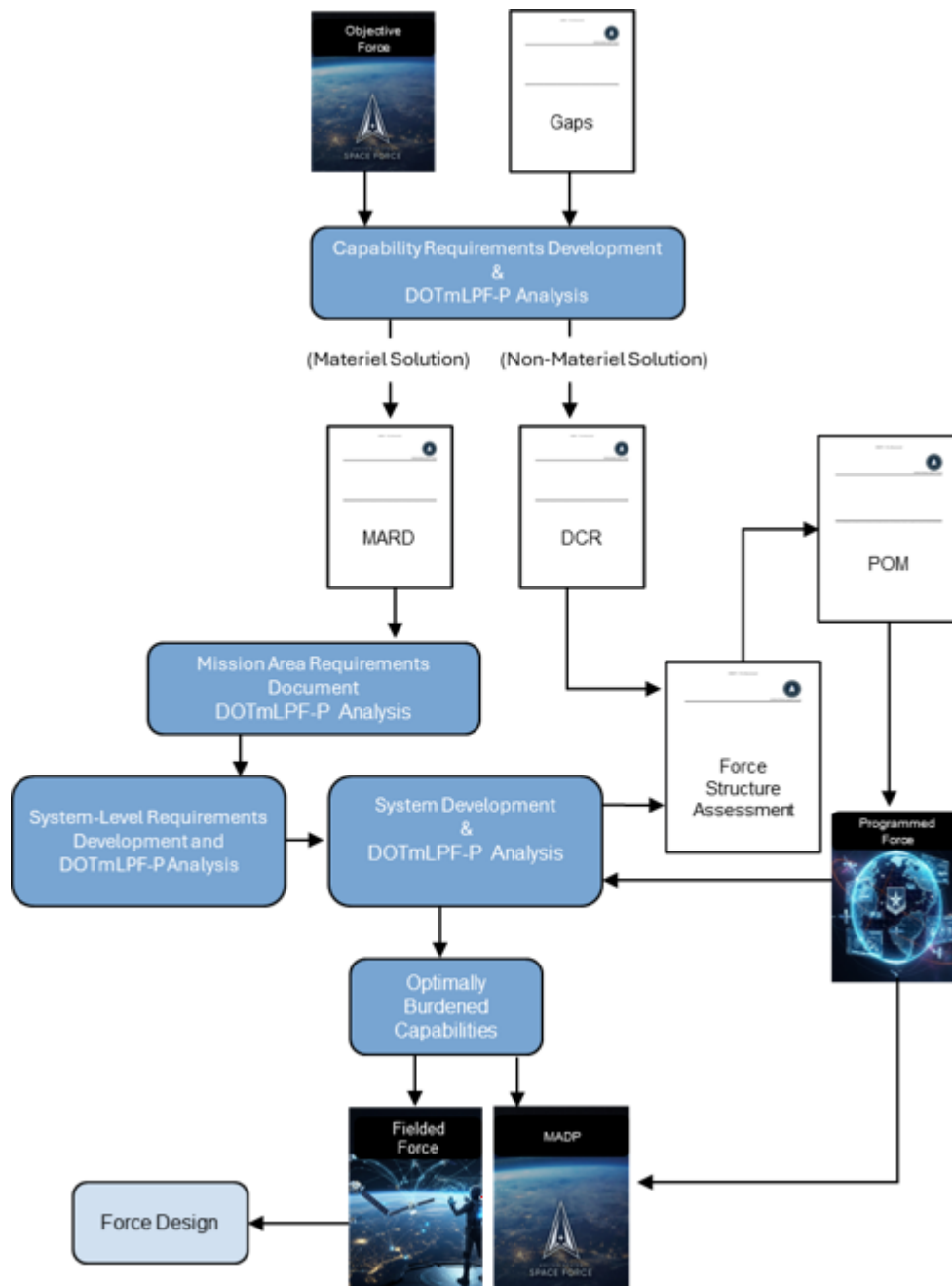
Figure 1.1. Force Design DOTmLPF-P Analysis.

1.5.1.1. Initiation. The process is initiated by the Force Design Request Memo, which provides strategic objectives and Joint Operational Problems for analysis. A new cycle of analysis can also be initiated by the direction of CSO due to shifting operational demands, using methods such as a CSO Decision Memorandum for a new mission area.

1.5.1.2. Analysis. The Deputy Chief of Space Operations for Force Design and Analysis (HQSF/S9) is responsible for leading Force Design activities and the development of associated products. Force Design products (i.e. Future Operating Environment, Ops/Enabling Concepts, Mission Area Design (MAD), Technology Roadmaps, and Objective Force) include a holistic analysis, through the lens of the DOTmLPF-P framework, ensuring every component required to field a functional capability is considered.

1.5.1.3. Output. The primary Force Design output that informs capability development is the Objective Force which includes, but is not limited to, critical performance metrics, the Government Reference Architecture and an estimate of the DOTmLPF-P cost profile. Upon CSO approval, the Objective Force serves as the primary source to guide and shape USSF Force Development efforts.

1.5.2. Force Development. This phase functions as the critical bridge from the strategic vision of the Objective Force to a detailed, resourced, and executable plan. Upon each new iteration/publication of the Objective Force, Capability Developers review the MADs contained within the Objective Force and conduct a thorough Capability Development analysis. During this phase, the conceptual analysis conducted for the capability during Force Design is also reviewed to determine if additional analysis is required based on current procurement and/or modification plans for development and fielding of the capability.

Figure 1.2. Force Development DOTmLPF-P Analysis.

1.5.2.1. Capability Requirements Development & DOTmLPF-P Analysis. Led by the Deputy Chief of Space Operations for Strategy, Plans, Programs, and Requirements (HQSF/S5/8), this initial analysis uses the Objective Force and any identified gaps as primary inputs. It informs the drafting of either a Mission Area Requirements Document (MARD) for materiel solutions and may include an accompanying DOTmLPF-P Change Recommendation (DCR).

1.5.2.2. DCR. The DCR process is used to propose, validate, and approve non-materiel capability solutions. The output of this process is an approved non-materiel requirement that is then passed forward for resourcing and implementation planning.

1.5.2.3. MARD DOTmLPF-P. The MARD DOTmLPF-P analysis is conducted to identify DOTmLPF-P implications driven by the new mission area capability. The primary inputs for this analysis are the CSO-approved Objective Force and identified gaps.

1.5.2.4. System-Level Requirements Development and DOTmLPF-P Analysis. Possible solutions using mature technologies, commercial products, and workable MVCs with appropriate acquisition strategies, cost estimates, and iterative development strategies are developed along with requirements for the supporting DOTmLPF-P requirements.

1.5.2.5. System Development & DOTmLPF-P Analysis. During system development, the system acquirer will provide technical and programmatic data to the lead command as appointed by HQSF S3/4/7 to support the analysis of DOTmLPF-P implications driven by the acquisition of a new system or modification. This information allows for the identification of DOTmLPF-P implications and may serve as an input to the HQ USSF S5/8 Force Structure Assessment.

1.5.2.6. Force Structure Assessment. Before any funding requirements are finalized, HQ USSF S5/8 conducts a holistic Force Structure Assessment. This assessment reviews the entire mission area as a whole by analyzing the projected lifecycle costs and identifying all supporting and enabling infrastructure requirements for the approved capability solutions. The purpose of this assessment is to ensure that all the planned capabilities within the mission area have the required supporting and enabling infrastructure properly identified and budgeted.

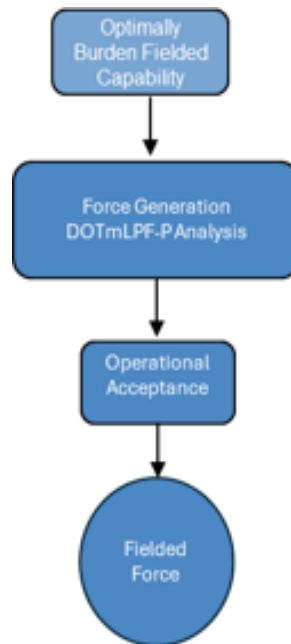
1.5.2.7. Output(s). The successful completion of the Force Structure Assessment confirms that the overall plan is complete and ready for resourcing, serving as the primary input that informs the development of the Program Objective Memorandum (POM). The final, validated outputs of the Force Development phase are the Programmed Force and the resulting optimally burdened and fielded capabilities (the systems delivered for Force Generation). These outputs, in turn, drive updates to the Mission Area Development Plan (MADP).

1.5.2.8. MADP. The MADP tracks, monitors, and reports on the progress of the attainment of Objective Force; serving as the primary implementation mechanism for translating the Objective Force vision into actionable development activities. MADPs capture the latest status for specific mission areas and high-level roadmaps for each capability within the mission area, defining timelines for transitioning to new architectures. The MADP also tracks the timeline and status of the DOTmLPF-P elements required to enable and support the newly acquired and/or modified capabilities.

1.5.2.9. Gap Identification and Reporting. Any new capability gaps identified at any point during the process are formally documented and provided to HQ USSF S5/8 for review and disposition via the headquarters requirements process.

1.5.3. Force Generation. The Force Generation phase is where the strategic plans and requirements materialize into an operational force. It is a continuous audit that ensures all aspects of a new capability or system modification are ready for operations. The culmination of this phase is the formal Operational Acceptance (OA) by the Deputy Chief of Space Operations for Operations (HQSF S3/4/7) or as delegated by HQSF S3/4/7 to the FLDCOM who has overall operational responsibility, signifying the capability is ready to be presented for employment.

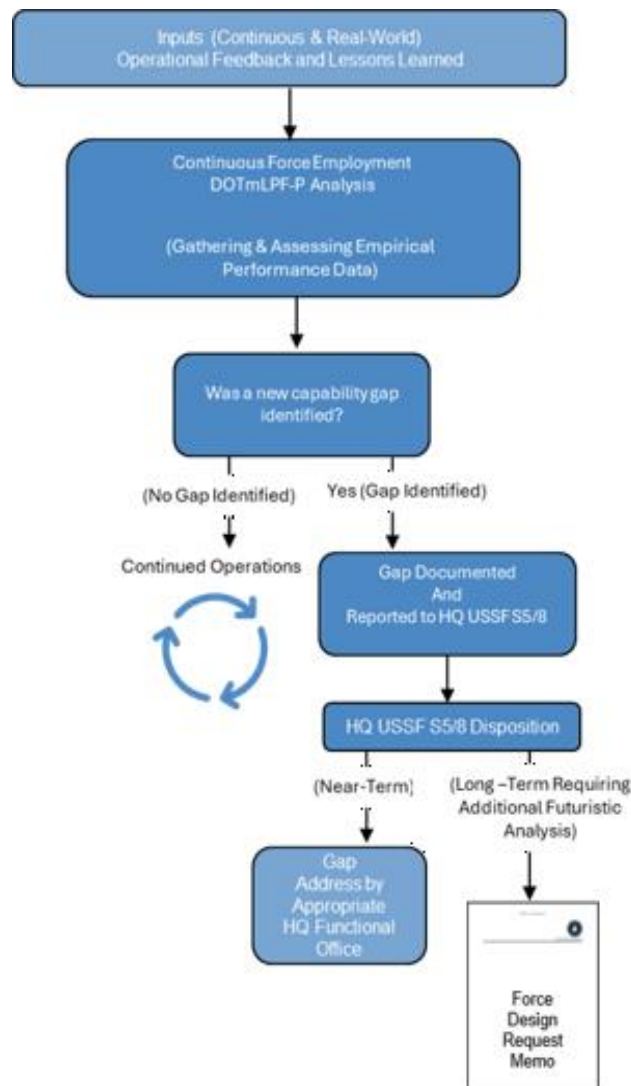
Figure 1.3. Force Generation DOTmLPF-P Analysis.



1.5.3.1. Analysis and Assessment. The Force Generation DOTmLPF-P Analysis is initiated by the operational command that owns the capability. It is a continuous assessment process supported by functional organizations at both the HQ and FLDCOM levels. The primary input for this analysis is the optimally burdened fielded capabilities delivered from the Force Development phase. The purpose of the analysis is to validate and certify the new fielded capability for operational deployment to the Combatant Commands.

1.5.3.2. Output: OA and the Fielded Force. Upon successful validation that all applicable DOTmLPF-P elements have been addressed, the HQSF/3/4/7, or delegated FLDCOM/CC who has overall operational responsibility, will grant OA. This formal decision designates the capability as a part of the Fielded Force. The Fielded Force is then certified and presented as the Generated Force for operational employment by Combatant Commanders. The updated Fielded Force is then provided to HQSF/S9 to inform future Force Design analysis.

1.5.4. Force Employment. Conducted concurrently with all other phases, the Force Employment phase grounds the entire process in real-world performance, providing a continuous stream of operational feedback.

Figure 1.4. Force Employment DOTmLPF-P Analysis.

1.5.4.1. Analysis. Field commanders and operational units conduct a continuous Force Employment DOTmLPF-P Analysis, gathering empirical data from live operations, exercises, and missions.

1.5.4.2. Gap Reporting. Capability Gaps identified are documented and reported to the designated FLDCOM for review and disposition. Based on the nature and severity of the gap, the FLDCOM may elevate the gap to HQ USSF S5/8 via the Capability Gap Identification (CGI) Report ([Attachment 3](#)). HQ USSF S5/8 reviews and dispositions the gaps to the appropriate headquarters functional office, or to HQSF/S9, via a new Force Design Request Memo. This provides an evidence-based feedback loop that informs and improves the realism of all other planning and development phases.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Chief of Space Operations (CSO) shall:

- 2.1.1. Directs the use of the DOTmLPF-P Analysis process as the authoritative mechanism for certifying and generating combat-ready forces.
- 2.1.2. Assesses capability gaps identified in the CSO annual reports to inform strategic guidance and resource allocation for the force.

2.2. Deputy Chief of Space Operations for Human Capital (HQSF/S1) shall:

2.2.1. Force Design.

- 2.2.1.1. Collaborates with HQSF/S9 and CFC to evaluate and recommend conceptual organizational constructs.
- 2.2.1.2. Defines leadership competencies and decision-making attributes required for new conceptual capabilities.
- 2.2.1.3. Designs notional 20-year career path models for developing future leaders.
- 2.2.1.4. Leads the analysis to define the specific human capital requirements (knowledge, skills, attributes, and experience) for new capabilities.
- 2.2.1.5. Determines if a new capability warrants the creation of a new Space Force Specialty Code (SFSC).
- 2.2.1.6. Develops high-level, long-range forecasts of total manpower requirements (military and civilian).
- 2.2.1.7. Develops conceptual, long-term talent sourcing and retention strategies in coordination with the Air Force Recruiting Service (AFRS).

2.2.2. Force Development.

- 2.2.2.1. Holds overarching responsibility for all personnel-related analyses.
- 2.2.2.2. Develops and implements the force's personnel policies and strategies.
- 2.2.2.3. Leads the Skills Gap Analysis to identify the difference between current workforce capabilities and the needs of a new system.
- 2.2.2.4. Conducts Recruiting and Retention Analysis to evaluate the service's ability to attract and keep necessary talent.
- 2.2.2.5. Validates and sources the personnel required for new systems and capabilities.
- 2.2.2.6. Serves as the validation authority for formal requests for new military and civilian billets, which must be submitted three years prior to a system's Integrated Test.

2.2.3. Force Generation.

- 2.2.3.1. Supports the lead command by providing all necessary data and validation to assess Manpower and Personnel.

2.2.3.2. Confirms that approved billets are correctly reflected in manning documents and that personnel with the required skills are available for assignment.

2.2.4. Force Employment.

2.2.4.1. Monitors personnel data, including retention and attrition rates, to identify trends that may indicate human capital challenges.

2.2.4.2. Receives and analyzes formal requests for manning changes from operational units based on their DOTmLPF-P assessments.

2.2.4.3. Develops and implements human capital strategies to address identified personnel-related capability gaps.

2.3. Deputy Chief of Space Operations for Intelligence (HQSF/S2) shall:

2.3.1. Force Design.

2.3.1.1. Leads the assessment of adversary doctrines and strategies that would be employed to counter the HQSF/S9's MADs.

2.3.1.2. Recommends integration points and liaison requirements with the intelligence community for MADs.

2.3.1.3. Provides recommendations for MADs core architectural principles.

2.3.1.4. Recommends knowledge, skills, attributes, and experience required for personnel associated with the MADs.

2.3.1.5. Defines the conceptual type of facility needed to support the MADs, articulating the required hardening levels and security standards for fixed, mobile, or distributed basing, for future facility designs.

2.3.1.6. Responsible for considering long-term geopolitical trends and security requirements when defining the ideal basing posture for MADs.

2.3.1.7. Provides policy review for intel oversight equities as it relates to MADs.

2.3.2. Force Development.

2.3.2.1. Leads the security analysis to develop and adapt data sharing policies for new systems in coordination with operational commands and the Deputy Chief of Space Operations for Cyber and Data (HQSF/S6).

2.3.2.2. Establishes clear data sharing agreements and technical interchange formats to be integrated into new system architectures during the force development phase.

2.3.2.3. Coordinates with HQSF/S1, HQSF/S4, and HQSF/S5/8 to determine projected intelligence manpower requirements and organizational structure in order to project possible basing, facilities, and military construction (MILCON) needs for future intel support.

2.3.2.4. Support DOTmLPF-P analysis by reviewing and coordinating Intelligence Foreign Disclosure as needed.

2.3.3. Force Generation.

2.3.3.1. Supports the lead command by providing subject matter expertise and validation for all intelligence-related efforts, including mission data readiness, threat library updates, and intelligence supportability.

2.3.3.2. Support DOTmLPF-P analysis by reviewing and coordinating Intelligence Foreign Disclosure as needed.

2.3.4. Force Employment.

2.3.4.1. Following any real-world security incident or utility disruption (e.g., a perimeter breach, a commercial power failure), the HQSF/S2, will conduct a formal analysis and assess the performance of physical security measures during the event.

2.3.4.2. Support DOTmLPF-P analysis by reviewing and coordinating Intelligence Foreign Disclosure as needed.

2.4. The Deputy Chief of Space Operations for Operations (HQSF/S3/4/7) shall:

2.4.1. Force Design.

2.4.1.1. Leads the analysis to define the conceptual facility requirements for new capabilities, including physical attributes, and security standards in collaboration with HQSF/S9.

2.4.1.2. Develops long-range infrastructure and demands forecasts for power, cooling, and communications bandwidth to support future capability needs.

2.4.1.3. Establishes strategic basing principles to guide future facility siting decisions, considering geopolitical, security, logistical, and environmental factors.

2.4.2. Force Development.

2.4.2.1. Supports lead commands in conducting geospatial analysis to ensure the selection of optimal sites for new military construction projects.

2.4.2.2. Develop CONOPs for new missions assigned to USSF.

2.4.2.3. Supports lead commands in conducting geospatial analysis to ensure the selection of optimal sites for new military construction projects.

2.4.3. Force Generation.

2.4.3.1. Supports the Force Generation DOTmLPF-P analysis by providing subject matter expertise for the assessment of logistics, sustainment, and facilities.

2.4.3.2. Serves as Early Use Authority and Operational Acceptance Decision Authority unless delegated to CFC. This can be further delegated to Component Field Commands (C-FLDCOMs) for acquisitions falling under, and for the primary use of, the following Combatant Commands: USSPACECOM, USSOCOM, USCYBERCOM, and USTRANSCOM.

2.4.3.3. Serves as the final authority for granting OA, signifying the capability is ready for operational employment.

2.4.4. Force Employment.

2.4.4.1. Incorporates lessons learned from real-world security incidents and utility failures to inform and improve the design and resilience of all future USSF facilities.

2.4.4.2. Provides gaps based on readiness reporting metrics.

2.5. Deputy Chief of Space Operations for Strategy, Plans, Programs, and Requirements (HQSF/S5/8) shall:

2.5.1. DOTmLPF-P Process Governance.

2.5.1.1. Manages the DOTmLPF-P governance process, ensuring identified capability gaps are formally adjudicated and approved requirements are translated into resourced plans.

2.5.1.2. Chairs the Mission Area Working Group (MAWG), the primary analytical body responsible for reviewing capability gaps and DOTmLPF-P requirements.

2.5.1.3. Serves as the senior-level decision-making authority on the L2 Force Structure Assessment (FSA) Board, providing final disposition on capability gaps and resourcing recommendations.

2.5.2. Force Design.

2.5.2.1. Informs conceptual force design by providing analysis of foreign partner and capabilities, strategic intentions, and technology trends.

2.5.2.2. Defines high-level interoperability, disclosure, and releasability requirements to ensure future capabilities are designed for combined operations.

2.5.2.3. Provides basing concepts to HQSF/S9.

2.5.3. Force Development:

2.5.3.1. Leads the Requirements Generation process, translating the conceptual Objective Force into specific, measurable DOTmLPF-P requirements.

2.5.3.2. Develops the POM and Resource Allocation Plan (RAP) based on validated requirements to ensure the force is properly resourced.

2.5.3.3. Serves as the validation authority for all DCRs, assessing their impact across the enterprise before approval and integration.

2.5.3.4. Leads the comprehensive Strategic Basing Analysis for capabilities requiring basing.

2.5.3.5. Initiates the formal Basing Action Request with proponent/requirements owner to conduct strategic basing analysis and obtain necessary approval.

2.5.4. Force Generation.

2.5.4.1. Receives and serves as the disposition authority for any capability gaps identified by the lead command during the Force Generation analysis.

2.5.4.2. Adjudicates identified gaps and routes them to either the internal headquarters requirements process (for a DCR) or back to HQSF/S9 for a new Force Design effort.

2.5.5. Force Employment.

2.5.5.1. Adjudicates capability gaps identified between the programmed and generated forces, directing them to either the headquarters requirements team or to HQSF/S9 for resolution.

2.5.5.2. Provides strategic context for doctrinal relevance reviews to ensure the force's guiding principles remain aligned with strategic goals.

2.5.5.3. Serves as the policy proponent for rules of engagement (ROE), owning and actioning revisions based on feedback from operational units and exercises.

2.6. Deputy Chief of Space Operations for Cyber and Data (HQSF/S6) shall:

2.6.1. Force Design.

2.6.1.1. In coordination with the Deputy Chief of Space Operations for Intelligence (HQSF/S2) and operational commands, leads the development and establishment of collaborative data sharing systems, policies, agreements, and technical interchange formats for new capabilities.

2.6.1.2. Provides cybersecurity analysis for conceptual designs.

2.6.2. Force Development:

2.6.2.1. Works with HQSF/S1 to develop cyber workforce through standards, metrics, and advocacy.

2.6.2.2. Directs and oversees the Cyber Career Field Managers (CFMs) in the execution of all personnel-related analyses for the cyber workforce.

2.6.2.3. Serves as the final approval authority for all cyber-related training and education curriculum and competency requirements.

2.6.2.4. Provides cybersecurity analysis for new systems and/or modifications.

2.6.3. Force Generation:

2.6.3.1. Supports the lead command by providing subject matter expertise for the assessment of all cybersecurity, information systems, and spectrum-related.

2.6.3.2. Validates the formal Authority to Operate (ATO) and ensures compliance with all cyber defense and resiliency standards.

2.6.4. Force Employment.

2.6.4.1. Integrates cyberspace operations into force presentation to ensure digital effects are planned and employed as part of joint space operations.

2.7. Deputy Chief of Space Operations for Force Design and Analysis (HQSF/S9) shall:

2.7.1. Force Design.

2.7.1.1. As delegated by the CSO, executes the Force Design process and leads the generation and maintenance of the Objective Force for CSO approval.

2.7.1.2. Conducts Force Design analysis, modeling and simulation, wargaming, experimentation, prototyping, and related activities to inform the Objective Force.

2.7.1.3. Integrates analysis inputs from across the enterprise to develop the Objective Force and ensure Force Design is fully burdened across DOTmLPF-P at the level of fidelity required to assess ability to implement, affordability, and risk.

2.7.1.4. Leads Force Design analysis & develops Mission Area Designs (MADs).

2.7.1.5. Develops Conceptual Doctrine and Principles of Employment.

2.7.1.6. Collaborates with HQSF S5/8, SAF/GC, AF/JA, SAF/IA and other stakeholders in supporting Force Design policy-related analysis, to include international activities.

2.7.1.7. Collaborates with CFC and HQSF/S1 to evaluate and recommend conceptual organizational constructs.

2.7.1.8. Partners with HQSF/S3/4/7 to define the conceptual facility and infrastructure requirements for new capabilities.

2.7.2. Force Development.

2.7.2.1. Supports Force Development activities, including, but not limited to, POM/RAP Planning development and prioritization, requirements generation, and acquisition support as requested.

2.7.3. Force Generation.

2.7.3.1. Receives and analyzes select capability gaps forwarded from HQSF/S5/8 that require a new Force Design effort.

2.7.4. Force Employment.

2.7.4.1. Receives and analyzes select capability gaps forwarded from HQSF/S5/8 that require a new Force Design effort

2.7.4.2. Conducts Doctrine & TTP Validation from Operations.

2.8. FLDCOM Lead command shall:

2.8.1. Force Development.

2.8.1.1. Leads the design, development, and delivery of training for new systems.

2.8.1.2. Acts as the base selection authority and leads facilities analysis, site surveys, and geospatial analysis for new capabilities.

2.8.2. Force Generation:

2.8.2.1. Accountable for the execution of the entire Force Generation DOTmLPF-P Analysis for any new or modified capability it will operate.

2.8.2.2. Leads the execution of readiness assessments.

2.8.3. Force Employment.

2.8.3.1. Leads the continuous DOTmLPF-P analysis during the Force Employment phase.

2.8.3.2. Materiel Deficiency Reports and requests for manning changes as needed.

2.9. Combat Forces Command (CFC) shall:

2.9.1. Force Design:

2.9.1.1. Collaborates with the HQSF/S9 and HQSF/S1 to evaluate and recommend conceptual organizational constructs for the future force.

2.9.1.2. Leads the analysis to define the conceptual training, education, and professional development requirements needed to support a future capability.

2.9.1.3. Provides operational subject matter expertise to inform the development of conceptual capabilities, ensuring they are grounded in warfighting realities.

2.9.1.4. Identifies and analyzes capability gaps encountered during operations, initiating

2.9.2. Force Development:

2.9.2.1. Provides staff estimates for new system capability and/or modifications.

2.9.2.2. Develops high-level concepts for the training infrastructure and methodologies (e.g., simulators, ranges, curriculum) required to build and sustain readiness.

2.9.2.3. Leads the detailed Training Needs Analysis to define the knowledge, skills, and abilities required for new systems.

2.9.2.4. Translates validated requirements into specific training curricula, courseware, and readiness standards.

2.9.2.5. Provides all necessary data, curriculum details, and instructor qualifications required to validate DOTmLPF-P analysis.

2.9.3. Force Generation.

2.9.3.1. Accountable for the execution of the entire Force Generation DOTmLPF-P Analysis for any new or modified capability it will operate.

2.9.3.2. Leads the formal quality assurance check by assessing the new capability against all DOTmLPF-P elements.

2.9.4. Force Employment.

2.9.4.1. Leads the continuous DOTmLPF-P analysis during the Force Employment phase through field commanders and operational units.

2.9.4.2. Identifies and analyzes capability gaps and deficiencies encountered during operations.

2.9.4.3. Initiates and provides input for the various analyses conducted in this phase, (i.e. Materiel Deficiency Reports and requests for manning changes).

2.9.4.4. Develops and implements updates to training curricula and methodologies to address identified deficiencies in personnel readiness.

2.10. Space Training and Readiness Command (STARCOM) shall:

2.10.1. Force Design.

2.10.1.1. Collaborates with HQSF/S1 to define the leadership competencies and decision-making attributes required for new conceptual capabilities.

2.10.2. Force Development.

2.10.2.1. Serves as the primary agent for developing and delivering initial skills training, education, and professional development programs for the force.

2.10.2.2. Validates the effectiveness of training programs and ensure they produce Guardians who meet the required operational standards.

2.10.3. Force Generation.

2.10.3.1. Executes formal certification exercises and provides objective readiness data and assessments to the lead command to inform the final OA decision.

2.10.4. Force Employment.

2.10.4.1. Conducts a "Curriculum & Alignment Review" in coordination with operational commands when skill gaps are identified during missions.

2.10.4.2. Analyzes feedback from operational units to assess the effectiveness of current training and education programs.

2.11. Assistant Secretary of the Air Force for Space Acquisition and Integration (SAF/SQ) shall:

2.11.1. Force Development.

2.11.1.1. Provide oversight for the integration of DOTmLPF-P considerations into all space acquisition strategies and program plans.

2.11.1.2. Act as the final acquisition adjudication authority to resolve conflicts between operational requirements and acquisition feasibility, balancing cost, schedule, technical risk, and long-term capability needs.

2.11.1.3. Appoint Program Executive Officers (PEOs) or Portfolio Acquisition Executives (PAEs) and delegate authorities as appropriate to execute acquisition programs in accordance with this instruction.

2.11.1.4. Ensures policy and guidance are in place for the management of system communication requirements to achieve Command and Control (C2) integration.

2.11.1.5. Collaborates with HQSF/S1 and ETMO to ensure human resourcing, competency-focused development, and training requirements are identified and integrated for the acquisition workforce.

2.12. Portfolio Acquisition Executives (PAEs)/Portfolio Executive Officer (PEO) / Acquisition Organizations shall:

2.12.1. Force Design:

2.12.1.1. Integrate DOTmLPF-P analysis into early portfolio planning, ensuring capability gaps are addressed holistically prior to formal requirements validation

2.12.1.2. Presents new technologies to HQSF/S9 for evaluation/assessment. These assessments include impacts to capability other implications on future force design concepts and architectures.

2.12.1.3. Collaborates with HQSF/S1 to define specific human capital requirements (knowledge, skills, attributes, and experience) for new capabilities.

2.12.2. Force Development.

2.12.2.1. Integrate DOTmLPF-P analysis into early portfolio planning, ensuring capability gaps are addressed holistically prior to formal requirements validation.

2.12.2.2. In coordination with HQSF/S4 (Logistics, Engineering, and Force Protection) define the conceptual facility and infrastructure requirements for new capabilities

2.12.2.3. Executes development and delivery of, and ensures test execution for, new space systems and supporting infrastructure in accordance with the validated requirements

2.12.2.4. Conducts detailed technical and programmatic analyses to ensure new systems meet all baselined performance, schedule, and cost requirements.

2.12.2.5. Manages the Requirements Traceability Matrix (RTM) to ensure system alignment with warfighting needs.

2.12.2.6. Translates validated materiel requirements into tangible capabilities by executing all aspects of the acquisition lifecycle.

2.12.2.7. In coordination with the Chief Information Officer, provides oversight of cybersecurity strategy and ensures resourcing for the timely achievement of the ATO.

2.12.3. Force Generation.

2.12.3.1. Supports the lead command's DOTmLPF-P analysis by providing all necessary technical data, test results, system performance information, and delivery schedules.

2.12.3.2. Collaborates with the lead command to ensure a seamless technical and programmatic transition of the system from the acquisition community to the warfighter.

2.12.4. Force Employment.

2.12.4.1. Receives and processes Materiel Deficiency Reports submitted by operational units.

2.12.4.2. Analyzes reported materiel deficiencies to identify trends and potential solutions.

2.12.4.3. Initiates or supports actions to address identified materiel shortcomings, which may include modifications, new acquisitions, or changes to sustainment processes.

2.13. The Assistant Secretary of the Air Force for Space International Affairs (SAF/IA) shall:

2.13.1. Force Design.

2.13.1.1. Support HQSF by staffing, negotiating, and concluding new agreements.

2.13.1.2. Support HQSF by reviewing and coordinating non-intel foreign disclosure requests as needed.

2.13.2. Force Development.

2.13.2.1. Facilitates the Basing Action Request with the Department of State, relevant Combatant Commands, and host nations to secure international consent for basing actions.

2.13.2.2. Provides International Agreements Analysis.

2.13.2.3. Supports HQSF/S5/8 in other International Affairs analysis for Force Development analysis as needed.

2.13.3. Force Generation.

2.13.3.1. Supports DOTmLPF-P analysis by providing subject matter expertise and confirming that all required international agreements or information-sharing policies are in place.

2.13.3.2. For non-intelligence equities, acts as the lead agent for resolving issues with information sharing and disclosure policies based on operational feedback.

2.13.4. Force Employment.

2.13.4.1. For non-intelligence equities, acts as lead agent for resolving issues with information sharing and disclosure policies that hinder effective coalition operations, based on feedback from operations.

2.13.4.2. Reviews Lessons Learned reports for international agreements implications.

2.14. General Counsel of the Department of the Air Force (SAF/GC) shall:

2.14.1. Force Design.

2.14.1.1. Provides legal analysis of the authorities required for conceptual capabilities to operate in accordance with international and domestic law as well as ethical and strategic policy requirements.

2.14.1.2. Force Development. Provides legal and regulatory compliance analysis to guarantee that a system's acquisition, deployment, basing, and employment adhere to all applicable international and domestic laws (e.g., Title 10), executive orders, and departmental policies

2.15. Office of the Judge Advocate General (AF/JA) shall:

2.15.1. Force Design.

2.15.1.1. Provides legal analysis of the authorities required for conceptual capabilities to operate in accordance with international and domestic law.

2.15.1.2. Provides legal and regulatory compliance analysis by assessing impacts on military operations and personnel.

2.15.2. Force Development.

2.15.2.1. Provides legal and regulatory compliance analysis by assessing impacts on military operations and personnel.

2.15.2.2. Provides legal support for the international agreements analysis by evaluating the operational implications of proposed agreements.

2.15.3. Force Generation.

2.15.3.1. Provides legal expertise for the assessment of policy-related DOTmLPF-P analysis ensuring the system's employment guidance is legally sufficient.

2.15.4. Force Employment.

2.15.4.1. Provides legal support to operational commanders and their staff during policy reviews.

2.15.4.2. Advises on legal implications of operations and the application of military force in the space domain.

2.16. Air Force Reserve Service (AFRS) shall:

2.16.1. Force Design

2.16.1.1. Provides analysis on the long-term viability of sourcing the required volume and quality of talent from the civilian sector to meet future force demands.

2.16.1.2. Collaborates with the Deputy Chief of Space Operations for Human Capital (HQSF/S1) to develop conceptual, long-term talent sourcing and retention strategies.

2.16.2. Force Development.

2.16.2.1. Provides detailed analysis on the service's ability to attract and retain personnel with the specific skills required for new systems and capabilities.

2.17. Career Field Managers (CFM) shall:

2.17.1. Force Design.

2.17.1.1. Supports the identification of core competencies required by new conceptual capabilities.

2.17.1.2. Collaborates on defining educational prerequisites for leadership and developmental roles.

2.17.1.3. Designs notional 20-year career path models for developing future leaders.

2.17.2. Force Development.

2.17.2.1. Leads the Skills Gap Analysis to identify the delta between the current workforce's capabilities and the needs of a new system.

2.17.2.2. Defines the specific occupational health and safety requirements for new roles.

2.17.2.3. Oversees the continuum of development for their specialty in partnership with STARCOM, ETMO, and HQSF/S1

2.18. Enterprise Talent Management Office (ETMO) shall:

2.18.1. Force Design.

2.18.1.1. Leads the analysis to define the Leadership Attribute Profile, identifying specific competencies required to lead new conceptual capabilities.

2.18.2. Force Development.

2.18.2.1. Leads the Leadership Development Needs Analysis to identify the competencies required for managing and overseeing new systems.

Chapter 3

DOTMLPF-P ANALYSIS: FORCE DESIGN

3.1. Force Design. This chapter describes DOTmLPF-P Analysis conducted during Force Design and defines the minimum required analysis.

3.2. Force Design Analysis. HQSF/S9 conducts Force Design analysis by developing concepts and validating them through wargaming. This process assesses DOTmLPF-P considerations across multiple mission areas to inform Science and Technology (S&T) investments and the development of the MAD. As the primary driver for all subsequent capability development, the final MAD must provide a comprehensive and fully integrated set of DOTmLPF-P recommendations. To achieve this, HQSF/S9 provides a description of employment for potential capability options, which informs the organizations leading their respective, individual DOTmLPF-P analyses for the comprehensive MAD. DOTmLPF-P analysis during Force Design should remain broad, strategic, and at the appropriate level of fidelity. The outputs of Force Design DOTmLPF-P analysis performed by the supporting/contributing organizations (see [attachment 2](#) Responsible, Accountable, Consulted, or Informed (RACI) Chart) will be provided to HQSF/S9 for MAD incorporation.

3.2.1. Doctrine. Doctrinal analysis within the Force Design phase defines the foundational warfighting philosophy of the future Objective Force. This analysis is led by HQSF/S9 with support from the HQSF/S2, AF/JA, and HQSF/S5/8. It is a conceptual endeavor that establishes the high-level principles of space power employment, not the specific tactics or procedures. As part of a MAD, this analysis articulates the "why" and "how" of future operations, providing the intellectual framework that will guide the development of the force for the next 5-15 years. The following is the minimum required analysis:

3.2.1.1. Concept-Specific Threat Doctrine Assessment. This analysis, led by HQSF/S2 in collaboration with HQSF/S9, assesses the specific adversary doctrines and strategies that would be employed to counter the proposed conceptual capability. This ensures the capability's own principles of employment are designed to account for adversary action from inception.

3.2.1.2. Principles of Employment Development. This is a key output. For each conceptual capability, HQSF/S9 develops and articulates its core principles of employment. This analysis translates the broad tenets of the Objective Force into a specific set of guiding rules for the new capability, defining how the capability will contribute to missions (i.e., integrated deterrence, space superiority, and combat power projection).

3.2.1.3. Ethical and Legal Boundary Definition. AF/JA and SAF/GC assess the conceptual capability to ensure compliance with domestic and international law, as well as ethical principles. This assessment identifies novel legal questions and policy constraints, ultimately validating that the proposed conceptual capability is legally sound and strategically defensible.

3.2.2. Organization. Organizational analysis during Force Design focuses on defining the required organization structural attributes for each conceptual capability identified within a MAD. This analysis is led by the Deputy Chief of Space Operations for Human Capital (HQSF/S1) in collaboration with HQSF/S2, HQSF/S3/4/7, HQSF/S5/8 and SAF/IA. For every proposed future capability, this analysis articulates the optimal human enterprise needed to field, operate, and sustain it. This provides the organizational blueprint for the conceptual capability, informing future force structure decisions, manpower estimates, and command relationships. The following is the minimum required analysis:

3.2.2.1. Conceptual Organizational Construct Design. This is the primary output for this element. For each conceptual capability, HQSF/S1 and HQSF/S3/4/7 (with support from HQSF/S2), evaluates and recommends conceptual alternative organizational constructs. This analysis will define the proposed unit's type, general size, and internal structure, ensuring the design is optimized for the speed and agility demanded by the future operating environment.

3.2.2.2. C2 Architecture Definition. For each conceptual capability, this analysis defines its place within the broader command and control architecture of the Objective Force. The FLDCOM with overall operational responsibility for the system recommends the conceptual capability's command relationships and required information flows to HQSF/S3/4/7. HQSF/S3/4/7 provides the final recommendation to HQSF/S9 for incorporation into the MAD.

3.2.2.3. Integration and Liaison Blueprint. This analysis, led by HQSF/S5/8 with support from HQSF/S2, HQSF/S3/4/7, HQSF/S6, and SAF/IA, recommends key integration points and liaison requirements for the conceptual capability. It will define how the future organization will connect with joint partners, the intelligence community, interagency elements, and allies, providing a blueprint for future collaborative structures.

3.2.3. Training. Training analysis during Force Design focuses on recommending the learning requirements for each conceptual capability identified within a MAD. For every proposed future capability, this analysis articulates the specific knowledge, skills, abilities, and attitudes a Guardian must possess to operate, maintain, and support it. Additionally, in instances where mission-critical fielding, operation, or sustainment is reliant upon joint, interagency, or allied partners, the analysis must incorporate the specific training and interoperability requirements necessary for those partners to successfully execute their roles. This provides the foundational training blueprint that will guide the future development of specific courses and learning systems. This analysis is led by CFC with support from the PAE/PEO, acquiring organization, STARCOM, ETMO, and CFM. The following are the minimum required analysis:

3.2.3.1. Core Competency Identification. This analysis is a collaborative effort between HQSF/S9, CFC, CFMs, and ETMO, identifying and defining the unique set of core competencies required by the conceptual capability. This output articulates what a Guardian must know and be able to do, forming the basis for all future curriculum development.

3.2.3.2. Future Training Environment Definition. For each conceptual capability, this analysis defines the optimal future training environment needed to develop the required competencies. The PAE/PEO, acquiring organization and CFC are responsible for evaluating the analysis and prescribing the necessary blend of advanced instructional methods, such as live, virtual, and constructive (LVC) environments, AI-driven tutors, and high-fidelity simulators.

3.2.3.3. Initial Training System Concept Development. Based on the defined training environment, CFC and STARCOM develops and provides the initial concept for any new training systems or infrastructure required by the conceptual capability to HQSF/S9 for incorporation into the MAD. This output provides the high-level requirements that will inform the formal acquisition process during the Force Development phase.

3.2.4. Materiel. The materiel analysis during Force Design, focuses on defining the required architectural principles and key performance metrics for each conceptual capability identified in the MAD. The primary Force Design outputs that inform capability development include, but are not limited to, critical performance metrics, the Government Reference Architecture, and the DOTmLPP-P cost profile. Initial MAD analysis is weighted toward materiel solutions, candidate solution analysis and down-select should be conducted in concert with all DOTmLPP-P implications. This analysis does not specify a particular platform or system but rather articulates what the materiel solution must be able to do and how it integrates into the broader Objective Force architecture. This provides the foundational technical blueprint that will inform the requirements process. This analysis is led by HQSF/S9 with support from HQSF/S2 and Research & Development (R&D)/S&T organizations (i.e. Air Force Research Laboratory (AFRL)). The following are the minimum required analyses:

3.2.4.1. Architectural Principles Definition. For each conceptual capability, HQSF/S9, in collaboration with HQSF/S2 and R&D/S&T organizations, defines its core architectural principles. This analysis will determine if the capability should be realized through a disaggregated, proliferated, or consolidated architecture, and will establish the high-level trade-offs between resilience, cost, and performance.

3.2.4.2. Performance Metrics Conceptualization. This analysis, led by HQSF/S9, defines the critical, high-level performance metrics the conceptual materiel solution must possess. These are the recommended guardrails (i.e. data latency, sensor resolution, position accuracy) that will serve as the foundation for the capability requirements document.

3.2.4.3. Technology Maturation and Risk Assessment. HQSF/S9 in collaboration with R&D/S&T organizations assesses the technology maturation needs associated with a given conceptual capability.

3.2.5. Leadership & Education. Leadership & Education analysis during Force Design focuses on defining the specific leader attributes and foundational educational requirements for each conceptual capability identified within a MAD. For every proposed future capability, this analysis articulates the "ideal leader" profile required to employ it strategically, ensuring that the long-term development of the force's command cadre is aligned with future mission demands. This analysis is led by HQSF/S1 in collaboration with ETMO, CFM, and STARCOM. The following are the minimum required analysis:

3.2.5.1. Leadership Attribute Profile. This analysis is led by ETMO in partnership with HQSF/S1, HQSF/S3, CFM, and STARCOM, defining the specific leadership competencies and decision-making attributes required to lead the conceptual capability. This profile will identify the unique ethical, strategic, and technical challenges a future leader will face, forming the basis for updating Professional Military Education (PME) and developmental education programs.

3.2.5.2. Educational Prerequisite Definition. For each conceptual capability, this analysis defines the foundational educational prerequisites for key leadership and developmental roles. HQSF/S1, in collaboration with CFM, is responsible for identifying the required blend of advanced academic degrees, certifications, and PME completions needed to create the deep intellectual capital necessary for the capability's long-term success.

3.2.5.3. Developmental Career Path Model. HQSF/S1, in collaboration with CFM, designs a notional 20-year career path model for developing the leaders defined in the attribute profile and provides to HQSF/S9 for incorporation into the MAD. This analysis will identify the critical operational, technical, and joint experiences a Guardian must be intentionally exposed to over their career to be prepared for senior leadership roles associated with the conceptual capability.

3.2.6. Personnel. Personnel analysis during Force Design focuses on defining the specific human capital requirements for each conceptual capability identified within a MAD. For every proposed future capability, this analysis articulates the necessary quantity, skills, and attributes of the Guardians required for mission success. This provides the foundational human capital blueprint that will guide long-range recruiting, talent management, and career field development. This analysis, led by HQSF/S1, in collaboration with HQSF/S9, HQSF/S2, HQSF/S3/4/7, HQSF/S6, AFRS and SAF/SQ (or appropriate Portfolio Acquisition Executive). The following is the minimum required analyses:

3.2.6.1. Human Capital Requirements Definition. This analysis, led by HQSF/S1 in collaboration with HQSF/S9, HQSF/S2, HQSF/S3/4/7, HQSF/S6, and SAF/SQ (or appropriate Portfolio Acquisition Executive) identifies the specific knowledge, skills, attributes, and experience required for personnel associated with the conceptual capability. It also determines if the demands of the new capability warrant the conceptualization of an entirely new SFSC.

3.2.6.2. Manpower Estimate Forecasting. For each conceptual capability, HQSF/S1 develops a high-level, long-range forecast of the total manpower required. As part of the analysis HQSF/S1 will take into consideration partial/full system automation, and the dispersion of personnel. This initial estimate will project the number of military and civilian billets needed, providing the foundational data for future programming and resource allocation.

3.2.6.3. Talent Sourcing and Retention Strategy. This analysis outlines the conceptual strategy for how the Space Force will attract and retain the specialized talent identified in the requirements definition. HQSF/S1, in coordination with the AFRS, will identify potential challenges and propose long-term strategic initiatives to build and sustain the necessary workforce.

3.2.7. Facilities. Facilities analysis during Force Design focuses on defining the conceptual physical infrastructure requirements for each conceptual capability identified within a MAD. This analysis does not specify a particular location or building but rather articulates the necessary attributes of the physical environment required to support the future capability. This provides the foundational facilities blueprint that will guide long-range MILCON planning. This analysis is led by HQSF/S3/4/7, and HQSF/S2 in collaboration with HQSF/S6 and HQSF/S9. The following are the minimum required analysis:

3.2.7.1. Facility Concept Definition. This analysis, led by HQSF/S3/4/7 and HQSF/S2 in collaboration with HQSF/S6 and HQSF/S9, defines the conceptual facility type required to support the capability. The analysis must articulate required attributes—including hardening levels, security standards, Information Technology (IT), and cybersecurity requirements—for fixed, mobile, or distributed basing. It also includes the early identification of potential hazardous materials, energy sources, and operational processes to ensure that environmental, safety, and occupational health (ESOH) risks are integrated as foundational design elements. These combined technical and safety requirements result in the initial "spec sheet" for future facility designs.

3.2.7.2. Infrastructure Demand Forecasting. For each conceptual capability, HQSF/S3/4/7 develops a long-range forecast of its core infrastructure demands. This analysis will project the required power, cooling, and communications bandwidth needed, establishing the technical standards that will drive future utility and infrastructure upgrades.

3.2.7.3. Strategic Basing. This analysis provides an enterprise-wide standardized, repeatable, transparent, and deliberate process to determine an optimal location for each capability while ensuring USSF achieves mission requirements, follows environmental guidance, and considers the overall fiscal ramifications of the proposed action. HQSF S5/8 in collaboration with the acquisition/operational proponent and the HQ S-Staff is responsible for considering mission requirements, long-term geopolitical trends, security requirements, installation capacity and resiliency, environment, logistical supportability, cost, and support of military families to define the ideal basing posture.

3.2.8. Policy. Led by HQSF/S5/8, with subject matter expertise from SAF/GC, AF/JA, HQSF/S2, and in consultation with SAF/IA the Policy Analysis during Force Design proactively identifies the legal, ethical, and strategic policy requirements of each conceptual capability. The purpose of this analysis is to anticipate future challenges and begin the long-range process of shaping the normative and legal environment to ensure the future capability can be employed effectively and legitimately. The findings of this analysis are provided to HQSF/S9 for incorporation into the MAD. The following is the minimum required analysis:

3.2.8.1. Capability-Specific Legal and Normative Gap Analysis. AF/JA and SAF/GC with subject matter expertise from HQSF/S5/8, HQSF/S2 (for intelligence oversight equities), conduct a comprehensive legal and policy analysis of the conceptual capability. This analysis assesses the concept against existing treaties, norms of behavior, and domestic and international law to identify potential gaps, future risks, and policy constraints that could impact its development or employment.

3.2.8.2. International Strategy. Based on the gap analysis, this analysis produces a long-range strategy for shaping the international environment to enable the conceptual capability and shape theater posture planning. HQSF/S5/8 in coordination with SAF/IA, HQSF/S3/4/7, SAF/GC, and HQSF/S9 is responsible for outlining the required international diplomatic engagement, status of forces agreement, public diplomacy, access requirements, global defense posture and norm-building activities, as well as identification of priority opportunities for Allied integration in accordance with higher level guidance and strategy. A preliminary assessment of information & technology sharing & transfer policy should also be considered at this stage to avoid unanticipated obstacles and challenges during the Force Development phase based on the need for international Allied integration and potential coalition operations.

3.2.8.3. Domestic Authority Requirement Planning. AF/JA analyzes the conceptual capability in coordination with SAF/GC to determine if new or amended legal authorities from Congress will be required for its lawful employment. This analysis begins the long-term process of legal review and the drafting of legislative proposals necessary to secure those authorities in the future.

3.3. Closing. The Force Design phase is the foundational act of the modernization continuum, and its analyses are deliberately broad, conceptual, and strategic. The purpose of this phase is not to develop specific requirements, but to translate abstract strategic guidance and threat assessments into a concrete, enterprise-wide vision for the future. The successful execution of Force Design culminates in the CSO-approved Objective Force, which serves as the authoritative blueprint and provides the validated "North Star" for all subsequent Force Development efforts, ensuring every future program is directly linked to a unified, long-range warfighting concept.

Chapter 4

DOTMLPF-P ANALYSIS: FORCE DEVELOPMENT

4.1. Force Development. The USSF's Force Development process provides space-based capabilities to the joint warfighter and equips Guardians to protect and defend U.S. interests in space. A rigorous, requirements-driven process, informed by comprehensive DOTMLPF-P analysis, lies at the core of Force Development. This chapter defines the minimum required DOTMLPF-P analysis during Force Development. To ensure the analysis is effective and relevant, the Minimum Viable Capability (MVC) for system development or modification must be defined by the lead command concurrently with system-level requirements. When defining an MVC, the lead command must identify the requirements for baseline materiel, sustained endurance, manpower profile, functional threshold, and redundancy. The lead command, in collaboration with the acquiring organization, is responsible for ensuring DOTMLPF-P analysis is initiated during Force Development.

4.2. Doctrine Analysis. Doctrine is not static; it is a living body of principles that evolves based on new technologies, threats, and operational experiences. The introduction of a new system is a powerful driver of doctrinal change, forcing a re-examination of fundamental warfighting principles. As new systems and technologies emerge, the "software" of warfare, the doctrine, training, and concepts of employment must adapt to keep pace. The primary responsibility for this analysis and the development of associated outputs rests with HQSF/S9 in collaboration with HQSF/S3.

4.2.1. Operational and Tactical Implications. At the operational and tactical levels, this analysis focuses on the immediate warfighting impact of the new system. This process begins with an Initial Doctrine Impact Review led by HQSF/S9. This involves a thorough review of any relevant existing Joint Concepts of Operations (CONOPS), which provide the high-level framework for how a system is used to achieve specific objectives, and Service Concepts of Employment (CONEMP), which provide a tactically focused view of how a system is presented and employed during operations. The integration of a new system may require significant revisions to, or the development of entirely new, CONOPS to leverage its unique capabilities. This, in turn, drives an examination of TTPs. TTPs are the specific methods and procedures used to execute the broader operational concepts. The introduction of a new system will likely necessitate adapting existing TTPs or creating new ones to ensure Guardians can effectively employ the system in various tactical scenarios. To accommodate varying program tempos, the milestones for these activities must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway. The following is a guide to ensure burdening activities align with materiel solution development.

4.2.1.1. Major Capability Acquisition. The Initial Doctrine Impact Review should begin prior to Milestone A. A stable draft of the CONEMP and associated TTPs is required before Milestone B.

4.2.1.2. Middle Tier of Acquisition. Due to the mandate to prototype or field within 5 years, the doctrine review occurs rapidly and concurrently with development. TTPs must be drafted and validated prior to the system's operational demonstration or rapid fielding trial period.

4.2.1.3. Software Acquisition Pathway. Doctrine, CONEMPs, and TTPs are treated as iterative products. Initial doctrine implications must be identified during requirements development for the Minimum Viable Capability Release (MVCR) release, with TTPs updated continuously alongside subsequent software deployments.

4.2.1.4. Urgent Capability Acquisition. To prevent loss of life or mission failure (fielding in < 2 years), doctrine updates and TTP development are executed concurrently with rapid fielding. Draft TTPs must be available immediately upon system delivery to the warfighter for a trial period during the Deliberate Readiness Phase.

4.2.1.5. Defense Business Systems & Acquisition of Services. Doctrine analysis is generally limited to workflow and business process reengineering. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.2.2. Joint and Allied Partner Implications. In joint and multinational operations, the focus is on ensuring seamless interoperability between different U.S. service branches as well as allied and coalition partners. New systems or system modifications must be able to integrate with the existing systems, Mission Partner Environments (MPE), and combined C2 structures of both U.S. services and, as appropriate and to the maximum extent possible, allied nations to achieve unified action. This requires a deep understanding of joint service doctrine, allied operational procedures, and international data standardization agreements, a task spearheaded by HQSF/S9 through a Joint and Allied Doctrine Interoperability Analysis. Because formal changes to joint publications, allied partner agreements, and foreign disclosures can be a lengthy process, this analysis must be tailored to the acquisition pathway.

4.2.2.1. Major Capability Acquisition. Joint and allied partner coordination must begin no later than Milestone B to ensure foreign disclosure and combined interoperability requirements are integrated into the baseline design.

4.2.2.2. Middle Tier of Acquisition. Initial joint and allied coordination must be initiated concurrently with early prototyping to ensure interoperability and critical multinational data-sharing capabilities are not delayed.

4.2.2.3. Urgent Capability Acquisition. Joint and allied coordination is executed concurrently with rapid fielding, focusing immediately on critical joint and combined C2 interoperability.

4.2.2.4. Software Acquisition Pathway. Joint interoperability requirements must be identified during requirements development for the MVCR release, with continuous joint coordination integrated into subsequent release trains.

4.2.2.5. Defense Business Systems & Acquisition of Services. Typically, do not require Joint and Allied Doctrine Interoperability Analysis unless the system explicitly integrates with Joint/Combined C2, intelligence networks, or allied mission partner environments.

4.3. Organization. The integration of a new system or modification necessitates a thorough analysis of its impact on the existing organizational framework, with a focus on optimizing force structure, personnel, and command relationships to effectively leverage the new capability in both joint and combined environments. It is led by the lead command with participation of the PAE/PEO, acquiring organization, and the relevant Headquarters staffs. Primarily HQSF/S1, HQSF/S2, HQSF/S5/8 and HQSF/S6 will support this process to ensure the intelligence, cyber, and multinational manpower requirements are captured to support the system.

4.3.1. Manpower Estimate. Introduction of new capabilities or the modification to existing programs may drive changes to organizational constructs and staffing. The Manpower Estimate Report (MER) is essential as the authoritative source for out-year projections of active-duty and reserve end-strength, civilian full-time equivalents, and contractor support work-years. The MER quantifies the total human capital requirement to effectively operate, maintain, and support the capability throughout its lifecycle. As a foundational input to the POM process, the report ensures long-range fiscal planning accurately captures all personnel costs, preventing unfunded mandates. This critical analysis translates conceptual organizational shifts into tangible manpower authorizations on the Unit Manpower Document (UMD), thereby shaping future personnel assignments and training programs for the total force.

4.3.2. Organizational Structure and Manpower. A primary consideration is determining the most effective placement of the new system within organizational structures and ensuring the system can seamlessly plug into C2 architectures. This includes designing organizational structures from the beginning that can seamlessly integrate allied exchange officers and liaison officers (LNOs) to foster combined operations and data sharing to the maximum extent possible. Driven by the owning operational command, the first analysis determines whether it is more advantageous to change organizational structures (e.g., stand up new units or re-align existing organizations), or to simply re-equip existing units under current organizational structures. Concurrently, the PAE/PEO and/or acquiring organization must analyze system C2 requirements to include communications links, data flows, and other interfaces as described in the system Interface Control Document (ICD). PAE/PEO, and/or acquiring organizations must work with operational organizations to determine if C2 and interface requirements can be met within existing enterprise architecture or if architecture adaptation or expansion will be required. Operational commands validate system performance within the determined enterprise architecture through wargames and simulations to ensure system performance as part of the larger operational enterprise. While the lead command defines the operational need and C2 linkages, SF/S1 validates and sources the personnel. This includes coordinating with foreign disclosure and international affairs offices to establish and authorize specific billets for allied exchange officers and LNOs. This involves identifying specific skills to operate and support the system, which in turn informs recruitment and training. Due to lengthy federal budgeting and personnel cycles, formal requests for new billets (via POM inputs) and necessary organizational design changes (managed through Organizational Change Requests, or OCRs) must be submitted with sufficient lead time. To accommodate varying program tempos, these POM and OCR milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.3.2.1. Major Capability Acquisition. POM inputs must be submitted at least three years prior to Integrated Test to ensure that initial Guardians are available to support system Initial Operational Test and Evaluation (IOT&E). OCRs must be submitted no later than 15 months prior to Integrated Test to allow for official approval and establishment of the unit.

4.3.2.2. Middle Tier of Acquisition. Due to the compressed 5-year timeline, manpower requirements must be accelerated and sourced concurrently with development to ensure Guardians and necessary allied LNOs and exchange personnel are available for the operational demonstration or rapid fielding trial period.

4.3.2.3. Software Acquisition Pathway. Manpower estimates scale iteratively; initial Guardian requirements must be validated and sourced as part of the requirements development process for the MVCR release.

4.3.2.4. Urgent Capability Acquisition. The lead command and HQSF/S1 must expedite manpower sourcing by rapidly realigning existing billets to meet immediate operational needs and support fielding within 2 years.

4.3.2.5. Defense Business Systems & Acquisition of Services. Manpower adjustments must align with specific ATP decision points to enforce necessary process realignments. Ultimately, these organizational considerations are not merely administrative hurdles; they are fundamental to realizing the full potential of any new system. A failure to properly align the organization with the technology can lead to a system that is underutilized, inefficiently managed, and unable to deliver its promised capabilities in an operational environment.

4.4. Training. The successful integration of a new system or system modification is fundamentally dependent on a well-structured and comprehensive training framework. This framework is built upon a systematic analysis that ensures personnel are not just familiar with the new technology but are masters of its employment. The overall responsibility for designing, developing, and delivering this training rests with the gaining operational command, leading the execution of the detailed analysis and development.

4.4.1. Identifying Needs and Designing Solutions. The process begins with a detailed training needs analysis. This foundational step, led by CFC with the PAE/PEO and/or acquiring organization, identifies the distinct audiences that will interact with the system—operators, maintainers, and various support personnel—and defines the specific knowledge, skills, and abilities each group must possess. It answers the critical question: "What does each person need to know and be able to do?" To inform subsequent training and manpower decisions, this analysis must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway:

4.4.1.1. Major Capability Acquisition. The analysis must begin as soon as the initial draft CONEMP and TTPs are available from CFC, typically prior to Milestone A.

4.4.1.2. Middle Tier of Acquisition. The analysis must be conducted rapidly and concurrently with early prototyping or development to support fielding within 5 years.

4.4.1.3. Software Acquisition Pathway. Training needs must be treated iteratively, with initial requirements identified during the requirements development process for the MVCR release and continuously updated for subsequent releases.

4.4.1.4. Urgent Capability Acquisition. Needs identification must be expedited and executed concurrently with rapid fielding to ensure immediate familiarization for operators.

4.4.1.5. Defense Business Systems & Acquisition of Services. The analysis must align with specific ATP decision points and focus primarily on business process and workflow training.

4.4.2. Training System Requirements Analysis (TSRA). Following the needs analysis, a Training System Requirements Analysis determines the most effective methods and tools for delivering that instruction. This evaluation, conducted by the acquisition organizations in collaboration with the gaining operational command, considers a spectrum of training solutions, from high-fidelity simulators to formal classroom instruction and structured on-the-job training. The goal is to select the optimal blend of these systems. This analysis is a critical acquisition input, as the procurement of new training systems (like simulators) has a long lead time. The requirements must be defined and submitted for funding with sufficient lead time to ensure training infrastructure is in place to support training and certification of the initial operator Guardians needed to support system testing. These TSRA milestones must follow the program's AAF pathway.

4.4.2.1. Major Capability Acquisition. Requirements must be defined and submitted for funding at least 48 months prior to Integrated Test to support system IOT&E.

4.4.2.2. Middle Tier of Acquisition. Requirements must be identified and funded concurrently with rapid prototyping or fielding efforts, ensuring training systems are available prior to the operational demonstration.

4.4.2.3. Software Acquisition Pathway. Training system requirements must be continuously evaluated and integrated into the software development lifecycle, utilizing embedded training capabilities where possible.

4.4.2.4. Urgent Capability Acquisition. The lead command must leverage existing training infrastructure or rapidly procure commercial-off-the-shelf (COTS) solutions to meet the immediate operational need.

4.4.2.5. Defense Business Systems & Acquisition of Services. Training system procurement is typically limited; requirements must be aligned with the system's deployment schedule.

4.4.3. Building the Curriculum. Finally, the insights from the preceding analyses culminate in the Curriculum Development Analysis. This is the phase where the actual training content, the lesson plans, instructional materials, and evaluation tools are designed and developed by the gaining operational command. The curriculum is meticulously crafted to align with the identified training needs and leverage the chosen training systems. This ensures logical progression from novice to expert. The entire curriculum for the initial instructor and student Guardians must be fully developed and ready to execute a pilot course based on the specific acquisition pathway, guaranteeing that the force is fully prepared to operate, maintain, and support the new system upon fielding.

4.4.3.1. Major Capability Acquisition. The curriculum must be fully developed and ready to execute a pilot course no later than 12 months prior to the system's Integrated Test.

4.4.3.2. Middle Tier of Acquisition. Curriculum development must be accelerated, with pilot courses ready prior to the operational demonstration or rapid fielding trial period.

4.4.3.3. Software Acquisition Pathway. The curriculum must be developed iteratively, with training modules released concurrently with software updates or major value assessments.

4.4.3.4. Urgent Capability Acquisition. The lead command must rapidly develop and execute abbreviated or just-in-time training curriculums immediately upon system delivery.

4.4.3.5. Defense Business Systems & Acquisition of Services. Curriculum development must be tied to the system's change management and deployment schedule. This curriculum must be updated as required to remain aligned with significant mission system updates or changes to the threat.

4.5. Materiel. When a DCR proposes a non-materiel solution, the associated materiel ('m') analysis is a limited, consequential assessment, distinct from a major systems acquisition effort. The purpose of this analysis is not to develop a new capability, but to identify and plan for any minor materiel requirements or impacts that are a direct consequence of the non-materiel change. This "ripple effect" analysis is typically led by the DCR sponsor in coordination with the relevant system program office, sustainer, and base-level support agencies. All analyses must be completed in time to inform the POM cycle for any associated costs.

4.5.1. Software Configuration and Settings Analysis. This analysis assesses the impact of a proposed non-materiel change on existing, fielded software systems. The DCR sponsor, in coordination with the responsible software sustainer, must review all relevant system documentation to determine if the new process requires any modifications to software configurations or user permissions. This process requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.1.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.5.1.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure modifications to software configurations or user permissions are complete prior to the operational demonstration or rapid fielding trial period.

4.5.1.3. Software Acquisition Pathway. Software Configuration and Setting Analysis must be conducted continuously as part of the requirements development for MVCR(s) ensuring alignment with subsequent releases and evolving software capabilities.

4.5.1.4. Urgent Capability Acquisition. The analysis must be expedited to ensure modifications to software configurations or user permissions are complete upon system fielding.

4.5.1.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.5.2. Interface Control and Interoperability Assessment. This analysis validates that existing materiel interfaces can support the proposed non-materiel change. If a change involves collocating units or sharing information in a new way, the sponsor must conduct an interoperability assessment to verify connectivity. This process requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.2.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.5.2.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure interface control and interoperability connectivity is verified prior to the operational demonstration or rapid fielding trial period.

4.5.2.3. Software Acquisition Pathway. Interface Control and Interoperability Analysis must be conducted continuously as part of the requirements development for MVCR(s) ensuring alignment with subsequent releases and evolving software capabilities.

4.5.2.4. Urgent Capability Acquisition. The analysis must be expedited to ensure interface control and interoperability connectivity is verified upon system fielding.

4.5.2.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.5.3. Human Systems Integration (HSI) Review. This analysis assesses the impact of a new non-materiel process on the interaction between operators and their existing hardware. The DCR sponsor must conduct a limited HSI review to ensure a new TTP, or workflow does not create undue ergonomic stress or increase the likelihood of human error. Because this process requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.3.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.5.3.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure new TTPs, or workflows do not create undue ergonomic stress or increase the likelihood of human error prior to operational demonstration or rapid fielding trial period.

4.5.3.3. Software Acquisition Pathway. Human Systems Integration must be treated iteratively, continuously considered to as subsequent releases and evolving software capabilities are developed and delivered.

4.5.3.4. Urgent Capability Acquisition. The analysis must be expedited ensure new TTPs, or workflows do not create undue ergonomic stress or increase the likelihood of human error prior system fielding

4.5.3.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.5.4. Support Equipment and Tooling Analysis. This analysis identifies any new support equipment required to implement a non-materiel change, such as a new maintenance procedure. The sponsor, in coordination with logistics and maintenance units, must review the proposed change to determine if it necessitates the procurement of any new diagnostic tools or calibration equipment. Because this process requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.4.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.5.4.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure any new support equipment required to implement a non-materiel change is available for the operational demonstration or rapid fielding trial period.

4.5.4.3. Software Acquisition Pathway. Support Equipment and Tooling Analysis must be treated iteratively, updating continuously to align with subsequent releases and evolving software capabilities.

4.5.4.4. Urgent Capability Acquisition. The analysis must be expedited to ensure any new support equipment required to implement a non-materiel change is available upon system fielding, leveraging existing leadership frameworks.

4.5.4.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.5.5. Minor Facility Modification Assessment. This analysis assesses the impact of a non-materiel change on the existing physical infrastructure. The sponsor, in coordination with the local Civil Engineer squadron, must conduct an assessment to determine if a change requires minor facility alterations, such as adding workstations or running network drops. Because this process requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.5.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.5.5.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure any required minor facility alterations are complete prior to operational demonstration or rapid fielding trial period.

4.5.5.3. Software Acquisition Pathway. Minor Facility Modification Assessment must be conducted as part of the requirements development for MVCR(s) to ensure minor facility alterations are accomplished prior to delivery of MVCR.

4.5.5.4. Urgent Capability Acquisition. The analysis must be expedited to ensure required minor facility alterations are complete upon system fielding, leveraging existing leadership frameworks.

4.5.5.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.5.6. Weapon System Sustainment (WSS) and Readiness. This analysis assesses the impact of non-materiel changes on existing sustainment strategies to maintain weapon system readiness, adjust requirement costs, and inform POM inputs for all impacted resourcing activities. Pursuant to 10 U.S.C. § 4324 and DoDI 5000.91, the Program Manager (PM) develops and executes the weapon system's Life-Cycle Sustainment Plan (LCSP), the single, authoritative sustainment plan informed by all relevant DOTmLPF-P analyses, while HQSF/S4, as the headquarters proponent for logistics, provides enterprise policy guidance and advocates for WSS funding based on these validated LCSP requirements. Because this process is strategic and requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.5.6.1. Major Capability Acquisition. The analysis must be completed 12 months prior to Initial Operational Capability (IOC).

4.5.6.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure inform POM inputs for all impacted resourcing activities, ensuring sustainability of capability.

4.5.6.3. Software Acquisition Pathway. Weapon System Sustainment (WSS) and Readiness analysis must be conducted as part of the requirements development for MVCR(s) to inform POM inputs for all impacted resourcing activities upon MVCR delivery.

4.5.6.4. Urgent Capability Acquisition. The analysis must be expedited to ensure sustainability of capability.

4.5.6.5. Defense Business Systems & Acquisition of Services. The analysis must align with system deployment schedules. Timelines are tied to specific Authority to Proceed (ATP) decision points.

4.6. Leadership & Education. Successfully integrating a new system hinges on preparing personnel at all levels with the right skills and knowledge. Unlike "Training," which focuses on the procedural "how" of operating a system, "Education" focuses on the conceptual "why," building the intellectual foundation for strategic and innovative employment. This analysis is driven by CFMs who oversee the continuum of development for their specialty in close partnership with CFC, STARCOM, ETMO, and HQSF/S1.

4.6.1. Leadership Development Needs Analysis. A Leadership Development Needs Analysis identifies the specific leadership competencies required to manage and oversee the new system effectively. It is not enough for leaders to have generic management skills; they must understand the system's strategic implications, lead teams through technological change, and make informed decisions that maximize operational value. This analysis, conducted by ETMO in coordination with CFC, STARCOM, and CFMs, examines the new CONEMP and TTPs to identify novel challenges and decision-making requirements for leaders. The findings must be used to update PME, leadership development, and continuing education program curricula, and to develop targeted leadership courses. Because this process is strategic and requires lead time to formally modify and implement changes, the analysis milestones must be tailored to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.6.1.1. Major Capability Acquisition. The analysis must be completed 9-12 months prior to Initial Operational Capability (IOC).

4.6.1.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to ensure leaders are prepared for the operational demonstration or rapid fielding trial period.

4.6.1.3. Software Acquisition Pathway. Leadership development must be treated iteratively, updating continuously to align with subsequent releases and evolving software capabilities.

4.6.1.4. Urgent Capability Acquisition. The analysis must be expedited to provide leaders with immediate, targeted guidance upon system fielding, leveraging existing leadership frameworks.

4.6.1.5. Defense Business Systems & Acquisition of Services. The analysis must align with organizational change management and system deployment schedules.

4.6.2. Education Requirements Analysis. An Education Requirements Analysis establishes the foundational and specialized educational prerequisites for all personnel associated with the system. This goes beyond immediate operational training to encompass a deeper, more conceptual understanding of the system's principles and its place within the broader operational architecture. STARCOM, in collaboration with CFMs, must conduct this analysis. STARCOM will determine if specific academic degrees, advanced certifications, or PME completions should become prerequisites for assignment to key roles. By ensuring the workforce meets these educational standards, the organization builds the intellectual capital necessary for long-term success. To influence the Space Force's accession, assignment, and career development strategies, this long-range planning effort must be tailored to the program's AAF pathway:

4.6.2.1. Major Capability Acquisition. The analysis must be completed 18-24 months of IOC to properly shape accession and assignment strategies for the total force.

4.6.2.2. Middle Tier of Acquisition. The analysis must be accelerated to align with rapid fielding timelines, primarily leveraging the existing educational foundation of the workforce.

4.6.2.3. Software Acquisition Pathway. Education requirements must be continuously evaluated and integrated into ongoing professional development as the software and mission evolve.

4.6.2.4. Urgent Capability Acquisition. The lead command must rely on the existing educational foundation of the workforce, focusing on rapid system-specific training rather than establishing new long-term educational prerequisites.

4.6.2.5. Defense Business Systems & Acquisition of Services. The analysis must align with strategic workforce planning and enterprise deployment schedules.

4.7. Personnel. Successfully integrating a new system requires a strategic approach to managing human capital to ensure the right people are in the right roles with the proper credentials. The overarching responsibility for these analyses resides with the HQSF/S1, which develops and implements the force's personnel policies and strategies, supported by the AFRS and security adjudication authorities.

4.7.1. Bridging the Skills Divide. The first step is a Skills Gap Analysis, led by CFMs with critical input from HQSF/S1 and STARCOM. This assessment identifies the delta between the current workforce's capabilities and the new competencies demanded by the system, pinpointing specific areas where training, re-skilling, or new hiring is necessary. This provides the data-driven foundation for all subsequent personnel planning. To effectively influence training programs and recruiting efforts, this analysis must be completed according to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.7.1.1. Major Capability Acquisition. The analysis must be completed between months 6 to 9 of the capability process to allow sufficient time for long-term accession and training adjustments.

4.7.1.2. Middle Tier of Acquisition. The analysis must be conducted concurrently with early prototyping to identify immediate re-skilling or training needs prior to the operational demonstration.

4.7.1.3. Software Acquisition Pathway. The analysis must be iterative, identifying and addressing skill gaps continuously as the software evolves and new features are released.

4.7.1.4. Urgent Capability Acquisition. The analysis must be expedited, focusing heavily on identifying existing personnel with the required baseline skills for immediate reassignment and rapid training.

4.7.1.5. Defense Business Systems & Acquisition of Services. The analysis must be aligned with organizational change management and workflow adoption schedules.

4.7.2. Defining Occupational Health and Safety Requirements. In conjunction with the Skills Gap Analysis, the CFM, in coordination with the appropriate medical and safety authorities, must define the specific occupational health requirements for the new role. This analysis will identify necessary medical surveillance programs, required immunizations, physical fitness standards, and the baseline Personal Protective Equipment (PPE) required for personnel to safely perform their duties. These requirements must be defined and incorporated into accession, training, and assignment processes according to the AAF pathway:

4.7.2.1. Major Capability Acquisition. Requirements must be defined early in development to ensure they are codified well before IOC.

4.7.2.2. Middle Tier of Acquisition. Requirements must be defined rapidly to ensure personnel safety during early operational demonstrations or rapid fielding trial periods.

4.7.2.3. Software Acquisition Pathway. Occupational health impacts are generally minimal, but any specific requirements must be validated prior to system deployment.

4.7.2.4. Urgent Capability Acquisition. Requirements must be expedited, utilizing existing safety standards or rapidly validated commercial best practices to support immediate fielding.

4.7.2.5. Defense Business Systems & Acquisition of Services. Requirements must be aligned with standard workplace safety and deployment schedules.

4.7.3. Acquiring and Retaining Talent. Once the required skills are known, a Recruiting and Retention Analysis evaluates the organization's ability to attract and keep the necessary talent. This analysis, conducted by HQSF/S1 in partnership with the Recruiting Service, assesses the competitiveness of current strategies against the private sector. The findings inform necessary adjustments to incentives, bonuses, and targeted recruiting campaigns to ensure a stable and experienced workforce. Because these initiatives require significant lead time and budget approval, this analysis must be tailored to the AAF pathway:

4.7.3.1. Major Capability Acquisition. The analysis must be completed 12 months before IOC to have a measurable impact on force composition by the time of fielding.

4.7.3.2. Middle Tier of Acquisition. The analysis must focus on retaining the initial cadre and scaling the workforce concurrently with the rapid fielding timeline.

4.7.3.3. Software Acquisition Pathway. The analysis must be continuous, focusing on attracting and retaining the specialized operational talent required to effectively utilize the rapidly evolving software, with initial recruiting targets established during the requirements development process for the MVCR release.

4.7.3.4. Urgent Capability Acquisition. Sourcing relies primarily on reassigning the existing workforce; long-term recruitment adjustments are managed separately from the urgent fielding effort.

4.7.3.5. Defense Business Systems & Acquisition of Services. To ensure the administrative, financial, and management personnel have the necessary talent to effectively utilize the new business systems and oversee contracted services, this analysis must be completed prior to the system's ATP.

4.7.4. Ensuring Security and Trust. In conjunction with acquiring and retaining talent, a Personnel Security Analysis must be conducted by HQSF/S2 to determine the appropriate security clearance levels and access requirements for individuals working with the new system. This analysis, driven by the system's Program Office and validated by security officials, is crucial for protecting sensitive capabilities. It ensures that personnel billets are created with the correct security requirements from the outset. This analysis must be completed before the formal OCR is submitted for manpower approval, ensuring that personnel are properly vetted and can be granted the necessary access upon assignment.

4.7.4.1. Major Capability Acquisition. The analysis must be completed 9-12 months before OCR submission to account for lengthy clearance adjudication timelines.

4.7.4.2. Middle Tier of Acquisition. The analysis must be accelerated, prioritizing the clearance requirements for the initial prototyping or rapid fielding team.

4.7.4.3. Software Acquisition Pathway. Security requirements must be continuously assessed, particularly as new features or data integrations change the system's classification posture.

4.7.4.4. Urgent Capability Acquisition. The lead command must prioritize assigning personnel who already possess the requisite clearances to support immediate fielding.

4.7.4.5. Defense Business Systems & Acquisition of Services. The analysis must align with the system's deployment schedule and enterprise identity management processes.

4.8. Facilities. Facilities analysis during Force Development focuses on defining the specific physical infrastructure requirements for the new system and/or modification. This analysis is a collaborative effort led by the base selection authority and the designated owning operational command, with technical execution provided by Civil Engineering professionals at multiple echelons. Concurrently, this process is informed by strategic oversight from HQSF/S4, which provides the foundational blueprint for MILCON; HQSF/S2, which defines security requirements and advises on hardening requirements through threat analysis. This integrated evaluation is critical for determining the final location and ensuring the physical environment can adequately house, power, and secure the new capability.

4.8.1. Strategic Basing Analysis, Access, and Approval. When a new capability requires basing, a comprehensive basing analysis must be conducted to determine the optimal location for achieving long term national security objectives and obtain necessary approval. This analysis weighs a wide range of competing factors, including geopolitical considerations, mission requirements, installation capacity, force protection, and long-term logistical and financial costs. The results of this analysis provide a data-driven recommendation for the preferred basing location. The process for initiating this analysis and securing formal approval is through a Basing Action Request which details the overall requirements for the new capability. This strategic-level Basing Action Request is initiated by the owner of the new capability and submitted to HQSF/S8PX, who coordinates the action with the host headquarters for the proposed location, relevant USSF service components to the Combatant Commands, and HQSF/S5S for any required overseas force structure or host nation notification actions before being staffed to the Secretary of the Air Force (SecAF) or Secretary of War for final approval. Due to the complex and lengthy nature of international diplomacy, the basing process must be initiated according to the program's approved Adaptive Acquisition Framework (AAF) pathway.

4.8.1.1. Major Capability Acquisition. At least 6 to 7 years prior to the required IOC date to ensure it is complete before the start of the 5-year MILCON planning window.

4.8.1.2. Middle Tier of Acquisition. Within 5 years, the program to leverage existing basing agreements or expedited diplomatic processes to support fielding in the 5-year timespan.

4.8.1.3. Software Acquisition Pathway. OCONUS basing is typically not a primary driver, but any facility/land requirements require submission of a Basing Action Request to obtain approval and ensure alignment with existing host nation agreements.

4.8.1.4. Urgent Capability Acquisition. The program must immediately submit a Basing Action Request for approval to utilize existing OCONUS locations and infrastructure to meet immediate operational needs.

4.8.1.5. Defense Business Systems & Acquisition of Services. OCONUS basing requirements must be addressed within existing enterprise and theater infrastructure agreements. A Basing Action Request and formal agreement with the host nation is the non-negotiable prerequisite for any subsequent site surveys, environmental studies, or MILCON programming in that country.

4.8.2. Infrastructure and Utilities Resilience Analysis. A comprehensive analysis shall be conducted for all new systems, facilities, and supporting infrastructure to ensure resilience is integrated into the foundational design. This includes a thorough energy resilience analysis providing the Days-of-Supply as required for continuous operations during normal day-to-day operations to include increasing these storage requirements based on indications and warnings during a contested logistics viewpoint per Combatant Command (CCMD) plans. For example, a classified CCMD Operation Order (OPORD) may require specific Space Force mission sets to have more than the DAF directed quantity of 7 days of fuel storage for emergency generators. In addition, the total projected water and wastewater demand generated by new facilities, systems, and personnel must be calculated to ensure the host installation's utility systems can support the additional load. Mission-critical infrastructure, such as water deluge systems, must be designed and validated for sustained operational tempo during a prolonged utility outage, independent of commercial replenishment.

4.8.3. Critical Facility Resilience Analysis. This analysis is conducted to ensure all new facility concepts meet the statutory and performance-based energy resilience requirements necessary for mission assurance. This analysis begins with a formal collaboration between mission owners, FLDCOMs' S4, installation energy managers, and Base Civil Engineers to identify all major energy and water-consuming tasks, critical assets, facilities, and supporting infrastructure. The core of the analysis is the systematic validation that the facility design complies with all standards mandated by the "Metrics and Standards for Energy Resilience at Military Installations" memorandum. This includes verifying that the design meets the prescribed minimum availability levels, such as 99.999% for operational headquarters or 99.9999% for satellite control facilities, as applicable. Finally, the analysis must ensure all associated utility and energy control systems are designed to be cyber-secure to protect the integrity of the installation's resilient power posture.

4.8.4. Off-Installation Essential Transportation or Resources and Community Infrastructure Resilience. This is an analysis of external dependencies and community infrastructure resilience. It identifies and mitigates off-installation vulnerabilities that could impair mission assurance. This analysis, which must be incorporated into all installation planning and programming efforts, includes an assessment of the vulnerabilities of essential off-installation transportation routes, logistical networks, and other critical community infrastructure required to support mission-essential activities. More importantly, formal collaboration with relevant state and local government partners must be established and maintained to identify shared risks and develop cooperative resilience strategies. To avoid redundant efforts, the analysis will also incorporate and leverage existing plans and vulnerability assessments developed through the Office of Local Defense Community Cooperation's Installation Resilience Program. Finally, the analysis must evaluate the exposure of these external dependencies to both current and all reasonably foreseeable hazards, including climate-related threats, to ensure long-term mission viability.

4.8.5. Mission Assurance and Critical Infrastructure. To ensure installation energy and water resilience, the mission owner will determine task critical assets requirements. Utilities need to be evaluated both inside the installation boundary and outside the installation for the resiliency and availability of commodities the Space Force missions require, e.g., how vulnerable are utility providers to disruption caused by sabotage, kinetic- or cyber-attack, or natural disaster. The critical requirements and facility energy loads may be used to comply with guidelines for emergency preparedness requirements and the identification, design, and implementation of energy generation systems, infrastructure, equipment, fuel, and testing.

4.8.6. Resilience and Mission Assurance Timelines. The comprehensive resilience analyses detailed in paragraphs 4.9.2, 4.9.3, 4.9.4, and 4.9.5 must be conducted as an integrated effort. The findings are critical for informing site selection, facility design, and MILCON programming, and therefore, the timelines for their completion must be tailored to the program's AAF pathway:

4.8.6.1. Major Capability Acquisition. These analyses must be completed as part of the formal site selection and design process, ensuring their findings are incorporated into the MILCON project submission 5 years prior to the required IOC date.

4.8.6.2. Middle Tier of Acquisition. These analyses must be conducted rapidly to validate that a proposed existing facility meets resilience and mission assurance requirements prior to the operational demonstration or rapid fielding trial period.

4.8.6.3. Software Acquisition Pathway. These analyses are required only if new, dedicated hardware infrastructure is necessary. The analysis must be completed to validate the resilience of the chosen data center or cloud environment during the requirements development process for the MVCR release.

4.8.6.4. Urgent Capability Acquisition. A rapid assessment of these factors must be completed concurrently with fielding to verify the suitability of an existing facility and to inform risk acceptance by the operational commander.

4.8.6.5. Defense Business Systems & Acquisition of Services. These analyses must be completed prior to the system's ATP, ensuring the chosen enterprise data center or commercial provider meets all resilience and mission assurance requirements.

4.8.7. Site Survey and Plan Development. The process begins with a formal Site Survey to determine the necessary physical accommodation and infrastructure capacity at potential locations. This survey, driven by the system's specifications from the PAE/PEO, Space Systems Command (SSC) Program Office and/or acquiring organization, is the primary data-gathering effort that assesses whether existing buildings can be modified or if new MILCON is needed. Additionally, as part of this survey, a baseline Environmental, Safety, and Occupational Health (ESOH) assessment must be conducted. This assessment will identify and document existing environmental contamination, required permits, risks from natural disasters, and potential community encroachment issues. It will also analyze how new mission requirements, such as the introduction of hazardous materials or processes, can be integrated in a safe and compliant manner, ensuring that necessary engineering controls (e.g., specialized

ventilation, containment systems) are incorporated into facility plans in accordance with AFI 32-1023, Designing and Constructing Military Construction Projects. Concurrently, the Site Survey verifies that essential support systems, power, water, communications, and security, are sufficient to handle the additional load and reliability demands. The findings from this comprehensive survey are documented in the Facilities and Infrastructure Plan, which must be initiated according to the AAF pathway.

4.8.7.1. Major Capability Acquisition. The plan must be initiated within the first 6 to 9 months of the capability development process to inform basing decisions and drive the MILCON process.

4.8.7.2. Middle Tier of Acquisition. The plan must be expedited to align with rapid fielding timelines, focusing on leveraging existing infrastructure where possible.

4.8.7.3. Software Acquisition Pathway. The plan must focus on assessing data center and cloud infrastructure capacity and must be drafted during the requirements development process for the MVCR.

4.8.7.4. Urgent Capability Acquisition. The plan must be executed concurrently with fielding to rapidly validate the suitability of existing facilities.

4.8.7.5. Defense Business Systems & Acquisition of Services. The plan must align with enterprise IT infrastructure and facility planning.

4.8.8. Geospatial Analysis and Construction Planning. If new construction is required, a Geospatial Analysis is performed to select an optimal location. This analysis, led by the lead command or mission owner with support from HQSF/S4, weighs various factors to ensure the chosen site meets all operational and security requirements, such as providing necessary standoff distances, controlling access, and mitigating environmental threats. This detailed site selection is a prerequisite for any MILCON project. MILCON is the longest lead-time item in the entire DOTmLPF-P framework, and the multi-year federal budgeting process dictates that planning must be tailored to the AAF pathway:

4.8.8.1. Major Capability Acquisition. A MILCON project must be identified, designed, and submitted for funding 5 years prior to the required IOC date. A failure to initiate this process early is a common and critical barrier to fielding a new capability on schedule.

4.8.8.2. Middle Tier of Acquisition. Programs must prioritize the use of existing facilities or rapidly reconfigurable structures to meet the 5-year fielding mandate, avoiding new-start MILCON wherever possible.

4.8.8.3. Software Acquisition Pathway. MILCON is typically not required; any facility needs must be met through existing data centers or commercial cloud infrastructure.

4.8.8.4. Urgent Capability Acquisition. Programs must exclusively use existing or temporary facilities to meet immediate operational needs.

4.8.8.5. Defense Business Systems & Acquisition of Services. Facility needs must be met through existing enterprise data centers or approved commercial service providers.

4.9. Policy. The integration of a new system demands a comprehensive policy review to ensure its entire lifecycle is nested within a sound legal and strategic framework. This analysis is a shared responsibility across multiple functional areas, primarily led by the S5/8 in coordination with SAF/GC and SAF/IA.

4.9.1. Legal and Regulatory Compliance. A Legal and Regulatory Compliance Analysis is conducted to guarantee that the system's acquisition, deployment, basing, and employment adhere to all applicable domestic laws (e.g., Title 10), executive orders, and departmental policies. This proactive review, led by the General Counsel of the Department of the Air Force (SAF/GC) legal offices in support of S5/8, is essential for ensuring the program's legitimacy. Legal support for the system's employment is led by AF/JA, ensuring adherence to the law of armed conflict and applicable rules of engagement. These legal and policy reviews are not one-time events but ongoing processes, with formal reviews required at key decision points tailored to the program's AAF pathway.

4.9.1.1. Major Capability Acquisition. An initial assessment, including potential barriers to allied data sharing, foreign disclosure limitations, and exportability—must be completed before each major milestone decision (A, B, and C) to identify any potential showstoppers.

4.9.1.2. Middle Tier of Acquisition. Legal, policy, and foreign disclosure compliance must be continuously assessed as part of the development lifecycle, with formal reviews prior to the MVCR release and any subsequent release that changes the system's operational scope or its ability to share data with allied mission partners.

4.9.1.3. Software Acquisition Pathway. A rapid legal, policy, and foreign disclosure review must be completed concurrently with the requirements development process to identify and accept any associated risks, particularly concerning immediate allied and coalition data-sharing needs in theater.

4.9.1.4. Urgent Capability Acquisition. A rapid legal and policy review must be completed concurrently with fielding to identify and accept any associated risks.

4.9.1.5. Defense Business Systems & Acquisition of Services. The review must be completed prior to the system's ATP, and must ensure any foreign or multinational business, logistics, or services data sharing complies with relevant international agreements.

4.9.2. International Strategy and Agreements. SAF/IA, with support from HQSF/S5/8, assesses the strategic policy requirements for coalition interoperability and Allied integration. SAF/IA evaluates information sharing, technology transfer, and exportability constraints ("Allied by Design"). Concurrently, SAF/IA conducts a programmatic feasibility analysis in coordination with SAF/GC to identify the specific international partnership mechanisms (e.g., International Armaments Cooperation, Foreign Military Sales) required to legally and practically share the capability, acting as the Department of the Air Force focal point for the subsequent staffing, negotiation, and conclusion of those agreements. These assessments are not one-time events but ongoing processes, with formal reviews required at key decision points tailored to the program's AAF pathway:

4.9.2.1. Major Capability Acquisition. An initial assessment must be completed before each major milestone decision (A, B, and C) to identify any potential showstoppers.

4.9.2.2. Middle Tier of Acquisition. An initial assessment must be completed prior to rapid prototyping or fielding, with a final review before the operational demonstration.

4.9.2.3. Software Acquisition Pathway. The assessment of the strategic policy requirements for coalition interoperability and Allied integration must be continuously assessed as part of the development lifecycle, with formal reviews during the requirements development process for the MVCR release and any subsequent release that changes the system's operational scope.

4.9.2.4. Urgent Capability Acquisition. A rapid assessment of the strategic policy requirements for coalition interoperability and Allied integration must be completed concurrently with fielding to identify and accept any associated risks.

4.9.2.5. Defense Business Systems & Acquisition of Services. The assessment must be completed prior to the system's ATP.

4.9.3. Data Sharing Policy Analysis. A Data Sharing Policy Analysis establishes the formal framework to govern all information handled by a new system. This analysis balances the need for interoperability with joint and coalition partners against classification and privacy requirements and delineates clear leadership responsibilities, HQSF/S2 as the security lead for the service shall make initial determination regarding identifying appropriate Information Owner. The analysis produces clear data sharing agreements and technical interchange formats, which are then provided to the PAE/PEO and/or acquiring organization to be built into the system's architecture. To ensure secure interoperability is a foundational component of the design, this analysis and its resulting policies must be drafted according to the AAF pathway:

4.9.3.1. Major Capability Acquisition. The analysis must be completed, and policies drafted prior to the system's Critical Design Review.

4.9.3.2. Middle Tier of Acquisition. The analysis must be completed prior to the operational demonstration or rapid fielding trial period.

4.9.3.3. Software Acquisition Pathway. The analysis must be completed during the requirements development process for the MVCR release, with policies updated iteratively for subsequent releases.

4.9.3.4. Urgent Capability Acquisition. The analysis must be completed concurrently with fielding, leveraging existing data sharing agreements where possible.

4.9.3.5. Defense Business Systems & Acquisition of Services. The analysis must be completed prior to the system's ATP.

4.9.4. Electromagnetic Spectrum Allocation Strategy. An Electromagnetic Spectrum (EMS) Allocation Analysis will be led by HQSF/S6 with support from the acquisition office and other stakeholders to ensure planned capabilities will be enabled by existing and planned EMS allocations and that planned activities will support strategic preservation and attainment of EMS allocations in accordance with US national interests. This analysis must be initiated with sufficient lead time, tailored to the program's AAF pathway:

4.9.4.1. Major Capability Acquisition. The analysis must begin prior to Milestone B to align with long-lead spectrum certification processes.

4.9.4.2. Middle Tier of Acquisition. The analysis must be initiated concurrently with development to ensure spectrum availability for the operational demonstration.

4.9.4.3. Software Acquisition Pathway. The analysis must validate that all required spectrum is available concurrently during the requirements development process for the MVCR release.

4.9.4.4. Urgent Capability Acquisition. The program must rely on existing or readily available spectrum allocations to meet immediate operational needs.

4.9.4.5. Defense Business Systems & Acquisition of Services. The analysis must be completed prior to the system's ATP.

4.10. Closing. The analyses detailed in this chapter are not discrete events but form an iterative and integrated whole. This integrated approach serves as the critical function that translates the conceptual vision of the Objective Force into a detailed, executable plan by defining the specific requirements across all eight DOTmLPF-P domains. By conducting these analyses concurrently, the process ensures that a complete understanding of a new system's impact is developed, allowing for the proactive identification and mitigation of technical, financial, and logistical risks before significant resources are committed. Ultimately, the successful execution of the Force Development phase produces a defensible and resourcing plan, enabling the fielding of an optimally burdened force, one where the materiel solution is supported by all its enabling DOTmLPF-P elements.

Chapter 5

DOTMLPF-P ANALYSIS: FORCE GENERATION

5.1. Force Generation. The Force Generation phase is where the strategic plans and resourced requirements from Force Development materialize into a certified, combat-ready operational force. The primary purpose of this phase is to conduct a formal quality assurance process that culminates in OA, the formal decision by HQSF/S3/4/7 to accept a new capability as operationally ready. This phase ensures that a capability is not just technically functional, but holistically supported and sustainable before it is presented to the warfighter.

5.1.1. Force Generation DOTmLPF-P analysis is a structured assessment led by the lead command. The purpose of this is to provide an objective evaluation of the fielded capability to ensure enabling supporting elements are in place and available. See the minimum required analysis below:

5.2. Doctrine. The Doctrine analysis conducted during Force Generation validates the maturity, completeness, and accessibility of all doctrinal guidance required to employ the new capability. Crucially, this analysis should also validate that USSF doctrine is de-conflicted and harmonized with key allied doctrine when possible to ensure seamless multinational interoperability. This is accomplished by assessing the system against the approved CONEMP, published TTPs, combined or multinational publications (e.g., allied standardization agreements), and the formal Lessons Learned process. The successful completion of this analysis is confirmed when a trained operator can apply approved guidance in a representative joint and combined operational environment.

5.3. Organization. The Organization analysis validates that the organizational structure, command relationships, and required formal agreements are in place to effectively manage and sustain the new capability. This is accomplished by assessing the program against Memorandums of Agreement/Understanding (MOAs/MOUs), and Risk Management. Successful validation is confirmed when a validated and resourced organizational framework is stable and capable of supporting the system.

5.4. Training. The Training analysis validates the readiness and sustainability of the formal training enterprise required to support the new capability. Crucially, this validation must include an assessment of the enterprise's capacity to train allied personnel on new systems. This is accomplished by assessing the program against a comprehensive review of all courseware (including foreign disclosure and releasability considerations), training systems, qualified instructors, facilities, and programmed funding. The successful completion of this analysis is confirmed when there is a ready and sustainable training pipeline capable of producing a sufficient quantity of fully qualified USSF and, to the maximum extent possible, allied partner personnel to support combined operations.

5.5. Materiel. The Materiel analysis validates the readiness, safety, security, and long-term supportability of the physical weapon system. This is accomplished by conducting a comprehensive assessment, including Weapon System (WS) Delivery, Technical Orders, Support Equipment, Logistics, and Sustainment to validate the capability, confirming the functionality, safety, security, and sustainability.

5.6. Leadership & Education. The Leadership & Education analysis validates that the appropriate leadership development and professional education frameworks are in place to support the force employing the new capability. STARCOM is the primary agent for developing and delivering all training, education, and professional development programs for the force. The successful completion of this analysis is confirmed when there is a prepared leadership pipeline capable of effectively commanding the units and personnel associated with the new system.

5.7. Personnel. The Personnel analysis validates that the correct number of fully qualified personnel are available to operate, maintain, and support the new and/or modified capability. This is accomplished by assessing the organization to confirm that the required billets are formally approved in manning documents and that a sufficient number of personnel with the correct SFSCs are assigned or available.

5.8. Facilities. The Facilities analysis validates that all required physical infrastructure is complete, certified, and ready to support the new capability. This is accomplished by assessing the housing facility of the system to confirm that all construction, power, cooling, and safety standards have been met.

5.9. Policy. The Policy analysis validates that the new capability is supported by a comprehensive and mature policy framework, enabling it to be operated legally, safely, and securely. This is accomplished by assessing the system to confirm compliance with Space Operations Security (OPSEC) directives, and proper Electromagnetic Spectrum allocation.

5.10. Closing. The analyses conducted during the Force Generation phase serve as the critical, final quality assurance check before a new capability is presented to the warfighter. By assessing the fielded system against the DOTmLPF-P elements, this validates that the materiel solution is fully supported by all of its non-materiel enabling elements. This disciplined process culminates in the formal OA by HQSF/S3/4/7, which certifies the capability as the Fielded Force, a complete, effective, and sustainable warfighting solution, fully interoperable with key allies to the maximum extent possible, and ready for immediate operational employment.

Chapter 6

DOTMLPF-P ANALYSIS: FORCE EMPLOYMENT

6.1. Force Employment. The Force Employment phase grounds the entire DOTmLPF-P Analysis process in real-world performance, providing a continuous stream of operational feedback. The analysis conducted in this phase is not a one-time event, but a continuous cycle of assessment and refinement led by field commanders and operational units. The goal is to gather empirical data from live operations, exercises, and missions to identify emerging capability gaps and drive evidence-based improvements across the force. The following is the minimum required analysis.

6.2. Doctrine. This doctrinal analysis is the critical feedback loop that transforms real-world operational experience into institutional wisdom. This process, executed by all participants in an operation and managed by the unit's leadership and planning staff, is essential for ensuring doctrine evolves based on evidence. It consists of immediate "hotwash" feedback and more formal after-action reporting.

6.2.1. Connecting Doctrine to Practical Execution. During Force Employment, the central activity of doctrinal analysis is the crucial examination of the link between high-level doctrine and its practical application. This is achieved through a formal Tactical Doctrine & TTP Validation process, which is triggered by a Lessons Learned Analysis from major exercises and operations. When this analysis identifies a doctrinal gap or a more effective TTP, the appropriate information owner is responsible for rapidly developing, validating, and disseminating the updated guidance, ensuring the "why" of doctrine is always connected to a validated "how" of execution.

6.2.2. Ensuring Relevance in a Dynamic Threat Environment. To ensure current doctrine adequately addresses the evolving threat landscape, HQSF/S9 conducts periodic Doctrinal Relevance Reviews. While a tactical lesson might trigger a TTP change, a significant shift in adversary capability could trigger a formal review of a foundational Space Doctrine Publication (SDP). This deliberate review, supported by intelligence from HQSF/S2 and strategic context from HQSF/S5/8, confirms that the force's guiding principles remain relevant.

6.2.3. Promoting Doctrinal Understanding and Agile Processes. This analysis assesses how effectively doctrine is understood and whether the feedback process is working. When a trend in lessons learned reveals a common misunderstanding of doctrine, STARCOM directs a Doctrine Integration & Education Audit. This audit assesses their institutions and reviews training curriculums to ensure doctrine is being taught effectively, creating a feedback loop from tactical-level innovation back to formal training programs.

6.3. Organization. This organizational analysis provides a critical diagnostic of the unit's performance under operational stress. This after-action review is essential for identifying structural strengths and weaknesses, allowing for targeted improvements. This analysis is conducted by the unit's leadership and planning staff, with findings captured in formal reports for institutional review.

6.3.1. **Optimizing Speed and Agility.** To ensure the structure is optimized for agility, units conduct C2 Efficiency Reviews following major exercises and operations. This analysis scrutinizes decision-making timelines and communication pathways. If a review identifies bottlenecks, the operational commander has the authority to implement immediate changes or initiate a minor OCR to refine the structure.

6.3.2. **Ensuring Efficiency and Accountability.** To confirm clear roles and responsibilities, units perform periodic Roles and Responsibilities Reviews. This methodical assessment, often triggered by a Lessons Learned report, highlights confusion, identifies gaps or overlaps in responsibility. The outcome is typically an update to applicable instructions, position descriptions, or a minor OCR to clarify duties on the UMD.

6.3.3. **Fostering Integrated Operations and a Multi-Domain Mindset.** This analysis evaluates how well the structure facilitates coordination between key specialties, joint partners, and allied partners. During readiness exercises, an Integrated Crew Validation assesses the collaboration between space, air, naval, and ground operations, as well as intelligence, cyber and, to the maximum extent possible, allied partner personnel. Feedback from these validations can lead to immediate changes in crew composition, TTPs, or result in a formal request to HQSF/S1 to establish a joint or allied partner billet, a personnel exchange program, or an allied LNO position.

6.4. Training. This training analysis is a critical after-action review of the human performance continuum. This evaluation, executed by the operational unit and its leaders, is essential for validating the effectiveness of the Ready Space Crew Program training and ensuring it evolves based on real-world feedback provided to the responsible training organization.

6.4.1. **Validating Training Through Performance.** The Training analysis in this phase validates the effectiveness of the established training pipeline by assessing operator and maintainer performance during live operations. This is achieved through a Performance Validation & Feedback process, where data from exercises, mission debriefs, and readiness evaluations is systematically collected. This analysis seeks to answer the critical question: "Did the formal training program adequately prepare our Guardians to execute their mission under realistic, operational conditions?"

6.4.2. **Identifying and Closing Skill Gaps.** When the analysis identifies a systemic performance issue or a "skill gap" across multiple crews or units, it triggers a Curriculum & Alignment Review. This review, led by the operational command in coordination with STARCOM and the CFM, pinpoints specific deficiencies in the training curriculum or delivery method. The outcome could be an immediate update to local training scenarios or a formal recommendation to STARCOM to modify a course syllabus, ensuring that lessons learned from the field are rapidly incorporated back into the schoolhouse.

6.4.3. **Fostering Advanced Skills and Combat Readiness.** This analysis also identifies opportunities to develop and integrate advanced, combat-focused skills that may not be covered in initial training. Through an Advanced Skills Integration Review, units can develop and share innovative, unit-level training programs that focus on TTPs for operating in a contested environment. When these programs prove effective, they can be formalized and shared across the enterprise, allowing tactical innovation to drive the evolution of our combat readiness.

6.5. Materiel. This materiel analysis is a comprehensive technical and operational review of the force's equipment. This after-action assessment, conducted by the operational unit in partnership with their embedded sustainment and engineering support, is crucial for validating system performance and informing the entire lifecycle of acquisition and future design.

6.5.1. Materiel Performance and Anomaly Reporting. The Materiel analysis in this phase validates the real-world reliability and performance of the fielded weapon system. During and after operations, operators and maintainers meticulously document maintenance events which includes any system failures, malfunctions, or performance degradations. This data is formally submitted via Materiel Deficiency Reports, providing essential, evidence-based data for the sustainment providers to diagnose root causes and prioritize fixes.

6.5.2. Operational Gap and Resilience Analysis. This analysis assesses the suitability of the materiel in the context of the current operational and threat environment. Field commanders conduct an Operational Gap Analysis to determine if the system has deficiencies that limit its ability to execute assigned missions against a thinking adversary. As a core element of this analysis, commanders must evaluate the materiel's technical and operational interoperability with allied and coalition partners' systems to ensure seamless data exchange and combined C2. This rigorous evaluation identifies vulnerabilities to new electronic warfare tactics, detects critical integration gaps with multinational networks, and provides essential feedback on the materiel's real-world combat effectiveness in a combined theater of operations.

6.5.3. Sustainment and Lifecycle Feedback. This analysis evaluates the long-term effectiveness and efficiency of the system's sustainment and logistics support. Through a Sustainment & Lifecycle Feedback process, units track system health metrics such as mission capable rates, the availability of spare parts, or supply fulfillment. This data provides crucial, fact-based feedback to the system program office, informing future product improvements, technology refreshes, and decisions about the system's eventual decommissioning.

6.6. Leadership & Education. Analysis of Leadership & Education provides a critical evaluation of leader performance under the stress of real-world operations.

6.6.1. Career Path and Developmental Feedback. This analysis evaluates how well the current career path and educational opportunities are preparing leaders for the demands of their operational roles. Through formal and informal feedback mechanisms, such as command climate surveys and senior leader mentoring sessions, the force provides input on whether the current system is creating the right incentives, providing the right experiences, and teaching the right skills. This Career Path and Developmental Feedback is provided to HQSF/S1 and the relevant career field managers to inform future adjustments to promotion, assignment, and PME policies.

6.7. Personnel. This Personnel analysis provides a critical review of the human dimension of an operation. This after-action assessment, led by the unit's leadership and supported by formal feedback mechanisms, is essential for understanding how the force's people fared under stress and for providing key insights to HQSF/S1 for future force management.

6.7.1. Skills Verification and Job Performance Analysis. The Personnel analysis in this phase validates that Guardians possess the skills and proficiency required for mission execution in a live environment. Through a skills verification analysis, unit leadership and training sections continuously assess individual and team performance against established readiness standards during day-to-day operations and exercises. This analysis identifies specific skill gaps or areas where initial training may not fully align with operational demands, providing direct, evidence-based feedback to STARCOM and CFM to refine training pipelines and skill-awarding criteria.

6.7.2. Retention and Attrition Analysis. This analysis evaluates the long-term health and sustainability of the force by examining personnel trends. Unit commanders and HQSF/S1 monitor Retention & Attrition data to identify trends that could indicate burnout, low morale, or a misalignment between career expectations and reality. This analysis provides critical insight into the human dimension of the force, informing strategic decisions on quality-of-life initiatives, bonus and incentive programs, and personnel policies.

6.7.3. Manning and Force Structure Assessment. This analysis assesses the adequacy of the current manning and organizational structure from a practical, operational perspective. During sustained operations, units conduct a Manning and Force Structure Assessment to determine if the number of assigned billets and the mix of SFSCs and Air Force Specialty Codes (AFSCs) are sufficient to meet mission demand without creating undue stress on the force. The findings from this analysis can trigger a formal request for a change to the UMD or serve as the primary justification for a DCR to address a systemic manning shortfall.

6.8. Facilities. This Facilities analysis provides a critical assessment of the physical infrastructure's performance under operational conditions. This after-action review, led by the operational unit with support from the local Civil Engineer Squadron (CES) Security Forces Squadron (SFS), Air Force Installation and Mission Support Center (AFIMSC), and HQSF/S2, is essential for validating facility design and informing future military construction.

6.8.1. Evaluating the Impact of Facilities on Mission Effectiveness. The Facilities analysis in this phase validates the long-term operational suitability and performance of the infrastructure supporting the mission. Through a continuous Facility Suitability and Performance Assessment, units monitor the reliability of critical systems such as power, Heating, Ventilation, and Air Conditioning (HVAC), and communications infrastructure, and assess the efficiency of the physical layout for watch floor operations. This data provides direct feedback to local Civil Engineer and Communications Squadrons to inform sustainment priorities and can serve as the justification for a DCR to address the required facility upgrade or modification.

6.8.2. Infrastructure Security and Resilience Analysis. This analysis evaluates the facility's real-world security posture and its resilience against environmental and man-made threats. This analysis is conducted through periodic inspections, vulnerability assessments, and the evaluation of performance during real-world events like power outages or natural disasters. The findings from this analysis ensure that physical security measures, backup power systems, and continuity of operations plans are effective and can trigger corrective actions to harden the facility against identified vulnerabilities.

6.8.3. Assessing Real-World Security and Resilience. This is the Installation Security and Resilience Post-Incident Analysis. Following any real-world security incident or utility disruption (e.g., a perimeter breach, a commercial power failure), the HQSF/S2, local SFS, AFIMSC, and CES conduct a formal analysis. They assess the performance of physical security measures, backup power systems, and other critical utilities. This analysis provides invaluable, hard-won data on how the installation's defenses and resilience measures hold up against actual threats. The findings are used to develop improved local defensive procedures and are reported to enterprise-level organizations like the HQSF/S4 and HQSF/S2 to inform the design of more secure and resilient facilities across the force.

6.9. Policy. This policy analysis evaluates the real-world impact and effectiveness of the governing framework during and after mission execution. This review, conducted by operational commanders and their staff with legal support from their Judge Advocate (JA), is critical for identifying and rectifying policy-induced friction and for providing evidence-based feedback to the highest levels of command.

6.9.1. Identifying Operational Friction Points Caused by Policy. This is the Policy Friction After-Action Review. During mission debriefs and "hotwashes," any instance where a policy caused a critical delay, prevented a necessary action, or forced a suboptimal workaround is documented. This provides commanders with concrete justification to request immediate clarification or, in time-sensitive situations, to accept prudent risk and issue commander's guidance. This feedback is formally captured in lessons learned reports with clear examples of where the framework needs revision and submitted to HQSF/S5/8. HQSF/S5/8 will distribute to appropriate HQ USSF functional office(s) as required for consideration of revision.

6.9.2. Evaluating the Clarity and Usability of the ROE. This is the most critical component of the reactive review, the ROE Clarity and Effectiveness Assessment. This is a dedicated part of every After-Action Review following a tactical engagement. It focuses on whether the ROE were clear and unambiguous to operators under stress. Any evidence of hesitation or a need for excessive clarification is documented immediately. This feedback is provided through operational reporting channels to the Combatant Command staff that issued the ROE, allowing for rapid clarification or adjustment for the entire theater. This is vital for empowering personnel to act with the speed and confidence required to succeed.

6.9.3. Analyzing Second and Third-Order Policy Effects. This is the Systemic Policy Impact Review, a more formal analysis conducted post-deployment. The unit's leadership and planners take a broader, systemic view to identify any unintended consequences that arose from policy decisions. For example, a data-sharing policy that seemed logical may have inadvertently revealed a vulnerability. This analysis, captured in the final lessons learned report, provides invaluable insights for HQSF and Joint Staff policymakers, fostering a more holistic understanding of how guidance interacts with the operational ecosystem and leading to wiser policymaking in the future.

6.10. Closing. The analyses performed during the Force Employment phase are the essential mechanism that grounds the entire modernization process in operational reality. By continuously gathering empirical data and lessons learned from live operations and exercises, field commanders provide the unvarnished "ground truth" on the performance of the force. This provides a crucial, evidence-based feedback loop that informs every other phase of the continuum, allowing the Space Force to identify emerging gaps, validate existing capabilities, and adapt at the speed of relevance, thereby transforming the organization into a true learning enterprise.

Chapter 7

DOTMLPF-P GOVERNANCE

7.1. The Force Structure Assessment (FSA) Process.

7.2. Purpose. This chapter establishes the Force Structure Assessment (FSA) Process as the authoritative governance mechanism for the DOTMLPF-P Analysis continuum. For DOTMLPF-P, the FSA process serves two primary functions:

7.2.1. To provide formal direction for how capability gaps identified through DOTMLPF-P analysis are dispositioned.

7.2.2. To translate approved DOTMLPF-P requirements into resourced requirements that inform the POM.

7.2.3. This process is distinct from, and should not be confused with, the separate DCR process. The FSA process determines if a gap should be addressed by the DCR process but does not execute the DCR process itself.

7.3. Governance Bodies. The FSA process is executed through a two-tiered structure to ensure both detailed analysis and senior leader oversight.

7.3.1. The L2 FSA Board. The L2 FSA Board, chaired by S5/8, is the senior-level decision-making body for this process. The board reviews all recommendations from the Mission Area Working Group (MAWG) and drafts authoritative direction via memorandums approved by CSO, as applicable.

7.3.2. MAWG(s). The MAWG is an enduring, interdisciplinary group of action officers that serves as the primary forum for integrating cross-functional expertise to support USSF Force Design and Development activities. It is chaired by HQSF/S5/8's delegated O-6 or civilian equivalent. During the FSA process, the MAWG serves as the analytical body of the FSA process, responsible for receiving and adjudicating the FSA's two formal inputs: Capability Gap Identification (CGI) Reports (see [Attachment 3](#)) from the operational community, and DOTMLPF-P analysis results submissions. After conducting the appropriate analysis, either Capability Gap Disposition or DOTMLPF-P Requirements Determination, the MAWG prepares a formal recommendation package for the L2 FSA Board's review and final decision.

7.4. Initiation of the FSA Process for DOTMLPF-P Analysis. The FSA process can be initiated through one of two formal paths:

7.4.1. Path 1: Capability Gap Identification. When a capability gap is identified by the operational community during the Force Generation or Force Employment phases, the sponsoring organization shall document the issue via the CGI Report. This report, which details the problem, its impact, and supporting evidence, is submitted to HQSF S5/8 to be triaged for disposition. Triage recommendations are provided by the MAWG(s) to the FSA Board for concurrence and direction.

7.4.2. Path 2: DOTMLPF-P Analysis Results Submission. As part of the annual POM cycle, program managers and functional leads shall submit the results of their System Development DOTMLPF-P Analysis results. These submissions contain the planned DOTMLPF-P requirements for new and sustained capabilities that require validation and resourcing.

7.5. FSA Process Execution. Once an input is received, the MAWG convenes to execute one of its two core functions:

7.5.1. Function 1: Capability Gap Disposition (for CGI Reports). When reviewing a CGI Report, the MAWG shall conduct an analysis and recommend a disposition through one of three distinct paths:

7.5.1.1. DCR Process: For gaps that can be resolved with a non-materiel solution.

7.5.1.2. Capability Requirements Development: For gaps that require a materiel solution.

7.5.1.3. Force Design Analysis: For complex or systemic gaps that require a new warfighting concept and/or additional analysis. These gaps are not urgent, emergent, and do not require solutioning within the current Future Years Defense Program (FYDP).

7.5.2. Function 2: DOTmLPF-P Requirements Determination and Resourcing. When reviewing the System Development DOTmLPF-P Analysis results submissions, the MAWG shall:

7.5.2.1. Translate the System Development DOTmLPF-P Analysis results into requirements. Conduct a detailed assessment of the DOTmLPF-P requirements to determine their funding requirements for the upcoming POM cycle and resourcing implications. Prepare a formal recommendation for the resourcing and implementation of these DOTmLPF-P requirements.

7.6. Outputs of the FSA Process. The FSA process produces two formal, authoritative outputs:

7.7. The L2 FSA Board Memorandum(s). Upon review of the MAWG's recommendation, the L2 FSA Board will issue either a formal Force Design Request Memo and/or FSA Memo. This document contains the board's findings from the DOTmLPF-P Requirements Determination and provides authoritative direction to the force. This direction includes the final disposition of capability gaps, the resourcing of approved DOTmLPF-P requirements, and the taskings of any other activities required to enable the delivery of optimally burdened capabilities and/or any other Force Structure decisions.

7.8. POM Inputs. The directions contained within the approved Decision Memorandum serves as the authoritative input to the POM. These validated and resourced requirements, upon enactment of an appropriated budget, ultimately become the Programmed Force.

DAVID N. MILLER, JR.
Lieutenant General, USSF
Deputy CSO for Strategy, Plans, Programs, and
Requirements

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

DoDI 8510.01, *Risk Management Framework (RMF) for DoD Information Technology (IT)*, 19 July 2022

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CJCSI 5120.02E, *Joint Doctrine Development System*, 6 November 2020

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CJCSM 5123.01, *Manual for the Joint Requirements Oversight Council and the Joint Force Requirements Process*, 15 January 2026

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DAFI 90-802, *Risk Management*. 20 January 2026

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UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings, with Change 3*, 24 May 2024

UFC 4-020-01, *DoD Security Engineering Facilities Planning Manual*, 11 September 2008

Space Capstone Publication, 10 August 2020

The Guardian Ideal, 17 September 2021

Space Force Vector, 13 November 2025

SPFI 13-604, *System Acceptance*, 30 August 2023

Prescribed Forms

None

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AAF—Adaptive Acquisition Framework

AAR—After-Action Report

AF/JA—Office of the Judge Advocate General

AFI—Air Force Instruction

AFRL—Air Force Research Laboratory

AFRS—Air Force Recruiting Service

ATP—Authority to Proceed

ATO—Authority to Operate

C-FLDCOM—Component Field Command

C2—Command and Control

CES—Civil Engineer Squadron

CFC—Combat Forces Command

CFM—Career Field Manager

CGI—Capability Gap Identification

CJCSI—Chairman of the Joint Chiefs of Staff Instruction

CJCSM—Chairman of the Joint Chiefs of Staff Manual

COCOM—Combatant Command

CONEMP—Concept of Employment

CONOPS—Concepts of Operation

COTS—Commercial-Off-The-Shelf

CSO—Chief of Space Operations

DAF—Department of the Air Force

DAFI—Department of the Air Force Instruction

DAFMAN—Department of the Air Force Manual

DCR—DOTmLPF-P Change Request

DoD—Department of Defense

DoDM—Department of Defense Manual

DOTmLPF-P—Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, Facilities, and Policy

DRU—Direct Reporting Unit

EMS—Electromagnetic Spectrum

ESOH—Environmental, Safety, and Occupational Health

ETMO—Enterprise Talent Management Office

FLDCOM—Field Command

FSA—Force Structure Assessment
FYDP—Future Years Defense Program
HQ—Headquarters
HSI—Human Systems Integration
HVAC—Heating, Ventilation, and Air Conditioning
ICD—Interface Control Document
IOC—Initial Operating Capability
IOT&E—Initial Operational Test and Evaluation
JA—Judge Advocate
LNO—Liaison Officer
LVC—Live, Virtual, and Constructive
MAD—Mission Area Design
MADP—Mission Area Development Plan
MARD—Mission Area Requirement Document
MAWG—Mission Area Working Group
MER—Manpower Estimate Report
MILCON—Military Construction
MOA—Memorandum of Agreement
MOU—Memorandum of Understanding
MVCR—Minimum Viable Capability Release
OA—Operational Acceptance
OCONUS—Outside the Continental United States
OCR—Organizational Change Request
OPORD—Operation Order
OPR—Office of Primary Responsibility
OPSEC—Operations Security
PAE—Portfolio Acquisition Executive
PME—Professional Military Education
POM—Program Objective Memorandum
PPE—Personal Protective Equipment
PSP—Personnel Security Program
R&D—Research & Development

RACI—Responsible, Accountable, Consulted, or Informed

RMF—Risk Management Framework

ROE—Rules of Engagement

RTM—Requirements Traceability Matrix

S&T—Science and Technology

SDP—Space Doctrine Publication

SecAF—Secretary of the Air Force

SFS—Security Forces Squadron

SFSC—Space Force Specialty Code

SpFI—Space Force Instruction

SSC—Space Systems Command

STARCOM—Space Training and Readiness Command

TTP—Tactics, Techniques, and Procedures

UFC—Unified Facilities Criteria

UMD—Unit Manpower Document

USCYBERCOM—United States Cyber Command

USSF—United States Space Force

USSOCOM—United States Special Operations Command

USSPACECOM—United States Space Command

USTRANSCOM—United States Transportation Command

WS—Weapon System

WSS—Weapon System Sustainment

Office Symbols

HQSF—Headquarters Space Force

HQSF/S1—Deputy Chief of Space Operations for Human Capital

HQSF/S2—Deputy Chief of Space Operations for Intelligence

HQSF/S3/4/7—Deputy Chief of Space Operations for Operations

HQSF/S5/8—Deputy Chief of Space Operations for Strategy, Plans, Programs, and Requirements

HQSF/S6—Deputy Chief of Space Operations for Cyber and Data

HQSF/S9—Deputy Chief of Space Operations for Force Design and Analysis

SAF/GC—General Counsel of the Department of the Air Force

SAF/IA—Deputy Under Secretary of the Air Force for International Affairs

SAF/OCS—Office of the Secretary of the Air Force (specific office not defined)

SAF/SQ—Assistant Secretary of the Air Force for Space Acquisition and Integration

Figure A2.4. Force Employment DOTmLPP-P Analysis RACI Chart.

RACI Legend R - Responsible: The done(s) of the work. A - Accountable: The single, ultimate owner of the task, the buck stops here. C - Consulted: Provides input/feedback (two-way communication). I - Informed: Kept up-to-date on progress or decisions as requested/required.																				
Force Employment DOTmLPP-P Analysis																				
DOTmLPP-P Element	Task/Activity	CSO	SAF/IGC	HQSF/151	HQSF/152	HQSF/153/47	HQSF/155/8	HQSF/156	HQSF/159	SAF/IA	HQAF/JA	AFRS	CFC	CFM	ETMO	FLDCOM	SAF/ISO	PAE/PEO	STARCOM	AFSEC
Process	Continuous DOTmLPP-P Analysis	I	I	C	C	I	I	I	C	I	I	I	AR	I	I	AR	I	I	C	I
Doctrine	Tactical Doctrine & TTP Validation	I	I	I	I	I	I	I	I	I	I	I	A	I	I	A	I	I	I	I
	Doctrinal Relevance Reviews	I	I	I	C	I	C	I	AR	I	I	I	I	I	I	I	I	I	I	I
	Doctrine Integration & Education Audit	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	AR	I
Organization	C2 & Rules/Responsibilities Reviews	I	I	C	I	I	I	I	I	I	I	I	AR	I	I	AR	I	I	I	I
Training	Performance Validation & Curriculum Review	I	I	I	I	I	I	I	I	I	I	I	A	C	I	A	I	I	C	I
Material	Material Performance Reporting & Gap Analysis	I	I	I	I	I	I	I	I	I	I	I	AR	I	I	AR	C	C	I	I
	Sustainment and Lifecycle Feedback	I	I	I	I	I	I	I	I	I	I	I	AR	I	I	AR	C	C	I	I
Leadership	Career Path & Developmental Feedback	I	I	A	I	I	I	I	I	I	I	I	R	C	I	R	I	I	I	I
Personnel	Skills, Manning, & Retention Analysis	I	I	A	I	I	I	I	I	I	I	I	R	I	I	R	I	I	C	I
Facilities	Facility Suitability & Performance Assessment	I	I	I	I	I	I	I	I	I	I	I	AR	I	I	AR	I	I	I	I
	Infrastructure Security & Resilience Analysis	I	I	I	I	I	I	I	I	I	I	I	AR	I	I	AR	I	I	I	C
	Post-Incident Analysis	I	I	I	AR	C	I	I	I	I	I	I	I	I	I	I	I	I	I	C
Policy	Policy Friction & ROE Effectiveness Reviews	I	C	I	I	I	C	I	I	I	C	I	AR	I	I	AR	I	I	I	I
	Systemic Policy Impact Review	I	C	I	I	I	I	I	I	I	I	I	AR	I	I	AR	I	I	I	I

Attachment 3

CAPABILITY GAP IDENTIFICATION (CGI) REPORT

Figure A3.1. CGI Report Page 1.

	<u>USSF Capability Gap Identification (CGI) Report</u>	
Submission Date: _____		
<i>Instructions: The focus of this report is to clearly define the problem, its mission impact and provide supporting evidence. Details and specificity are required, however do NOT provide a specific solution.</i>		
<u>I. Administrative Information:</u>		
CGI Control Number:	Sponsoring Organization:	Sponsor Name:
Sponsor Rank:	Sponsor Email:	Sponsor Phone Number:
<u>II. Capability Gap Description</u>		
Capability Gap Title: <i>[Provide a short, descriptive title for the capability gap.]</i>		
Capability Gap Description:		

Figure A3.2. CGI Report Page 2.

How the gap was assessed/identified: *Clearly state the conditions under which the gap is observed. e.g., Mod, Sim, Operational Lessons, OPLAN, etc.*

Time Horizon: *What year (approx.) do you expect the gap to arise, if not already?*
(select one)

Mission Area (LAW SFDD-1):
(Select Mission Area)

Joint Capability/Functional Area(s):

☐ Fires	☐ Maneuver
☐ Protection	☐ C2
☐ Intel	☐ Sustainment
☐ Information	

JS CGA Identifier: *If applicable, enter the JS CGA IPL number. Ie. 2025-SPACECOM-03*

Figure A3.3. CGI Report Page 3.

III. Gap Triage

DOTmLPF-P Assessment: *Based on your initial observations, which DOTmLPF-P element(s) appears to be the primary root cause of this capability gap? (Check all that apply.)*

☐ Doctrine ☐ Organization ☐ Training ☐ Materiel ☐ Leadership & Education
☐ Policy ☐ Facilities ☐ Personnel

Is it a Capacity Issue?:
(Select)

Is it an issue that requires a 1067 (software or current system modification)?:
(Select)

Does this gap affect other USSF operational units or external organizations? (Select)
If yes, provided affected units and/or organizations:

IV. Joint Risk Analysis Methodology (JRAM) Risk Assessment against NMS:

Risk Name: *Title of the risk*

Narrative/Explanation: *Brief narrative on the risk*

Figure A3.4. CGI Report Page 4.

Describe the impact on unit's ability to accomplish assigned missions. Describe the specific mission impact if this gap is not addressed. How does this deficiency create risk to the mission, risk to the force, or impact national security objectives?

(C-FLDCOM/FLDCOM)

lacks ability to do _____
(task=mission/effect)

to _____
(standard=to what performance level)

in support of _____
(condition=operational env./OPLAN/obj.).

Risk Drivers: Select All That Apply

☐ Threat ☐ Capacity ☐ Capability ☐ Readiness ☐ Posture ☐ Other

Military Risk Likelihood/Probability (JRAM):

(Select)

Probability of Event (P)
Very Likely (~81-100%)
Likely (~51-80%)
Unlikely (~21-50%)
Very Unlikely (~0-20%)

Figure A3.5. CGI Report Page 5.

Military Risk Consequence (JRAM):

(Select)

Consequence of Event (C) to NMS	
Extreme	• RM, Mission Failure, Objectives Unachievable • RF, No Sourcing Solutions Exist for Critical Requirements
Major	• RM, Objectives Minimally Achieved (consider time, priority) • RF, Shortfalls Exist for Critical Requirements
Modest	• RM, Objectives Mostly Achieved (consider time, priority) • RF, Worldwide Sourcing Solution Exist for Most Requirements
Minor	• RM, Mission Success, Objectives Achievable • RF, Joint Force Fully Sustained and Requirements Sourced

V. USSF Operational Risk Assessment

Consequence to Mission Impact (*How severely does the gap degrade mission execution*). Use the following questions to help guide your assessment :

How does this gap affect the unit's ability to accomplish assigned missions?

Which mission threads or operational outcomes are degraded?

Does the gap impact day-to-day operations, contingency operations, or both?

Does the gap create a single point of failure for a critical mission?

Figure A3.6. CGI Report Page 6.

Mission Impact (Weight)

How severely the gap degraded mission execution.

(Select)

Operational Urgency (*How Soon the Gap will Affect Operations*). Use the following questions to guide your assessment:

Is the gap affecting current operations, or is it a future risk?

What is the timeline before the gap becomes mission-critical?

Are there near-term events (launches, deployments, exercises) that increase?

Operational Urgency (Weight)

(Select)

Scope and Scale (How broadly does the gap affect the force). Use the following questions to help guide your assessment:

What happens if the gap is not addressed?

Does it risk mission failure, degraded performance, or inefficiency?

Does it create safety, security, or mission assurance concerns?

Does it increase operational risk to forces, assets, or national objectives?

How many units, deltas, or mission areas are affected?

Is the gap localized, enterprise-wide, or cross-FLDCOM?

Does it impact joint, coalition, or interagency partners?

Figure A3.7. CGI Report Page 7.

Scope & Scale (Weight)
(Select)

Operational Burden (How much manpower, time or workaround effort the gap creates). Use the following questions to help guide your assessment:

How often does the gap manifest during operations?
Is it a rare edge case or a recurring operational barrier?
Is the likelihood increasing due to threat, environment, or system aging?
Does the gap affect integration with other systems, networks, or mission partners?
Does it create bottlenecks in mission planning, execution, or data flow?
Are there upstream or downstream impacts?
Does the gap increase manpower requirements or workload?
Does it require excessive workarounds, manual processes, or specialized skills?
Does it degrade readiness or training effectiveness?

Figure A3.8. CGI Report Page 8.

Operational Burden (Weight)
(Select)

Feasibility of Mitigation (how difficult it is to close the gap). Use the following questions to help guide your

How long would it take to close the gap?

Are there quick wins or interim solutions?

Does the solution require new infrastructure, training, or acquisitions?

What is the estimated cost to close the gap?

Are there existing programs or funding lines that could address it?

Is the gap driven by policy limitations, authorities, or regulatory barriers?

Would resolving it require policy change, legal review, or new authorities?

Are classification or data-sharing rules contributing to the gap?

Is the gap caused by immature technology, obsolete systems, or lack of modernization?

Are there viable solutions available today, or is R&D required?

Does the gap stem from integration challenges rather than missing tech?

Figure A3.9. CGI Report Page 9.

Feasibility of Mitigation (Weight) How difficult is it to close the gap (Select)
<u>VI. Mitigation</u> Mitigation: <i>Brief narrative on the proposed mitigation. If none, enter "none exist"</i>
Type (of mitigation): ☐ Avoidance ☐ Reduction ☐ Transfer ☐ Acceptance ☐ Contingency ☐ Control
Residual risk after mitigation? If yes, explain:

Figure A3.10. CGI Report Page 10.

Timeline (for application of mitigation):
Resourcing Required: <i>Brief description on the resourcing required for mitigation</i>

Figure A3.11. CGI Report Page 11.

<u>VII. References and Additional Data</u> Supporting Evidence: (List and/or attach all objective, empirical data that proves the existence and impact of this gap. Reference the specific AAR, exercise finding, operational mission report, intel assessment or test report, etc. that documents the gap) Additional Data (as required): <i>Describe any other attached data, such as performance metrics, operator/maintainer feedback forms, pictures, etc</i>
--

Figure A3.12. CGI Report Page 12.

VIII. Sponsoring Commander/Director Endorsement

Digital Signature: _____

Printed Name & Rank: _____

Date: _____