PREFACE

This Guidebook is one in a series of AF A5/7DR developed guides describing the Air Force process for validation of operational capability requirements in support of overarching Capability Development efforts. This Guidebook explains the organizational constructs, leadership and participant responsibilities, and activities led by AF A5/7 to develop Capability Development Plans and System Development Plans, in support of overarching operational Capability Development. These products enable the Air Force Enterprise to conduct the necessary intellectual rigor, and document required lines of effort to coordinate fielding necessary future service capabilities. While this volume is framed by activities and interactions between requirements processes, acquisition pathways, and resourcing strategies, the focus of this volume is on the planning and organizing of AF A5/7, MAJCOM, and sponsor activities to enable deliberate and rapid Capability Development. This volume is AF A5/7 Center 2-centric and describes how Air Force Futures teams organize, plan, prioritize, and sequence activities using plans to support the Capability Development Enterprise and drive a holistic and integrated future force design.

This Guidebook is a “how to” guide for use by all stakeholders participating in the USAF requirements process, and in some cases, it includes answers to the questions like, “why do we have to do it that way,” “where is that written,” and “where do we find additional information.”

Although AF A5/7 Capability Development Guidebooks are not statutory or regulatory in nature, they represent official guidance and recommended standard procedures developed by AF A5/7D to ensure compliance with and implementation of overarching Requirements and Acquisition policies. Per AF A5/7 direction and authority under HAF Mission Directive 1-7, Air Force requirements sponsors will follow the guidance and procedures described in these guidebooks or coordinate with AF A5/7D through the AF A5/7DR Requirements Oversight Enabling Team for case-by-case tailoring.

Additional guidance and information to supplement this Guidebook is located on the AF A5/7DR Requirements Policy & Integration Portal Page:

- Go to https://www.my.af.mil
- Navigate to “Search AF Portal” and enter the keyword “A5DR”.
- Click on “A5/7 Capability Development Guidebooks & Handbooks - AF A5DR - Requirements Policy & Integration.”

If you have questions regarding the Volume 2-series Capability Development Guidebooks or if you have suggestions for improvements, please contact:

AF Gatekeeper: Mr. Richard “Bullet” Tobasco, richard.tobasco.2@us.af.mil, (703)692-4197, DSN 222
Guidebook OPR: Mr. Jeff “Shredder” Hackman, jeffrey.hackman.1@us.af.mil, (703)692-1087, DSN 222

There are no restrictions on release or distribution of this guidebook.
# CHANGE SUMMARY

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<td>This document captures updated organizations, roles, responsibilities, DoD and DAF guidance for operational requirements development and must be reviewed in its entirety. Portions of this guidebook were derived from the AF A5R Requirements Guidebook Volume 3 (24 June 2020, Version 5.02), which is rescinded and replaced by this Capability Development Guidebook Volume 2D.</td>
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<td>Simplified graphics. Updated for office symbols, governance, and JCIDS Manual currency. Removed Requirements Roadmaps as redundant with Capability Development Plans</td>
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SECTION 1. INTRODUCTION

1.1. Foundational Documents. This volume provides the format and content guidance for Capability Development (CD) foundational documents. The documents listed below are Air Force-internal and are not formal Joint Capabilities Integration and Development System (JCIDS) documents, however, they do form the basis for all follow-on Capability Requirements (CR) development. Used in the past, Requirements Roadmaps are redundant with Capability Development Plans (CDP) and have been removed from the AF A5/7 CD lexicon.

1.1.1. Capability Development Plan. The CDP is a written proposal describing a plan of action to attain the capabilities needed to address strategic mission gaps and describes the activities that will be pursued to provide the needed capability to the warfighter. This plan covers a specific amount of time and incorporates milestones, engagements, and required decisions along that timeframe. The CDP also serves to sequence, prioritize, and structure the System Development Plans (SDP) that capture strategies to turn concepts and Concept-Required Capabilities (CRC) into capability solutions.

The CDP describes the strategic-level guidance and the threat-based, future operational challenges identified within this guidance for each Cross-Functional Team’s (CFT) or Functional Integration Team’s (FIT) capability portfolio. This plan identifies the on-going Lines of Effort (LOEs) within the portfolio that will be used to assess capability solutions for those challenges, and the CRCs that will resolve those challenges. The CDP then identifies the Performance Attributes and cross-Doctrine, Organization, Training, materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTLmPF-P) capability development solutions that the CFT or FIT will assess for potential development to fulfill those CRCs and deliver the capabilities necessary to resolve the operational gaps and mission risks within their portfolio.

The CDP describes ongoing Lines of Effort (LOE), milestones to achieve the identified capabilities, and may include potential offsets. The CDP also includes how the current solution will bridge the gap to future capability.

The CDP is normally written by a CFT or FIT, in coordination with the requirement owner, normally the MAJCOM. Other stakeholders are invited to participate.

AF A5/7D is the CDP approval authority. Approval typically occurs at a Capability Portfolio Management Review (CPMR) or Periodic Review (PR).

The CDP does not replace a formal Capabilities Based Assessment or similar analysis on which follow-on CR documents are based.

1.1.2. System Development Plan. While the CDP describes the required capabilities, the SDP is the detailed plan of the ways and means to acquire the specific solution system. The SDP captures the activities necessary to bring a capability online. It is primarily used for planning, but also shows how the Requirements, Acquisition, and Resourcing products align with decisions to ensure capability solutions described in CDPs are executable. Concepts consisting of requirements, resourcing, and acquisition strategies are developed for the desired time-phased solutions embedded in CDP LOEs.

AF A5/7D is the SDP approval authority. Approval typically occurs at a CPMR or PR.

1.2. AF A5/7 Role in Capability Development

1.2.1. Scope of Authority. The Deputy Chief of Staff, Strategy, Integration and Requirements, AF A5/7, is the lead for planning the future Air Force and future force design. AF A5/7 has delegated responsibility for CD guidance, CDPs and strategies, and operational CR development to AF A5/7D. Similarly, other Air Force Futures Center leaders have been delegated authority for other essential and related activities, while the MAJCOMs retain a significant and essential role in future force planning as well. However, the
CD planning activities and requirements validation decisions described in this Guidebook are under the sole authority of the AF A5/7D. These decisions may also manifest into operational CR documents that are validated within the AF A5/7 requirements documentation processes described in AF A5/7 Capability Development Guidebook, Volume 2A and other document-appropriate Guidebook volumes. The A5/7 mission is to be the voice of tomorrow’s Airmen. In this role, AF A5/7 will:

- Anticipate the challenges tomorrow’s Airmen will face.
- Implement strategies, develop concepts, and identify technologies to meet these challenges.
- Develop capabilities that preserve advantage for tomorrow’s Airmen.
- Identify the training and organizations tomorrow’s Airmen will need.
- Promote interdependence with Allies and partners across the globe.
- Integrate our efforts into a coherent force design that fits into a broader Joint design.
- Help our senior leaders make decisions that endure.

AF A5/7 performs these interrelated responsibilities on behalf of and in collaboration with the rest of the Department of the Air Force, MAJCOMs, and other key stakeholders. To the extent they desire to influence outcomes, other AF organizations outside of AF A5/7 have a responsibility to engage with AF A5/7 teams and leadership to participate in these processes and create the documents described herein. While AF A5/7 teams are responsible for leading this work and following this guidance, it is in the best interest of all involved that the activities described in this guidebook are collaborative, cross-cutting, transparent, and inclusively performed with all stakeholders across the Capability Development Enterprise (CDE). The vital nature of full and complete alignment across the CDE, and between those participants and the Acquisition and Resourcing communities cannot be overstated. To that end, full engagement and continuous participation with all stakeholders including colleagues in SAF/AQ, AF/A8, MAJCOMs, and other relevant Headquarters staff elements is essential in support of AF A5/7D decisions.

1.2.2. Organizational Overview. AF A5/7 operates via a flat and dynamic organizational structure that leverages teams of teams using constant collaboration to develop an understanding of the capabilities needed to give our Future Force the same competitive advantage that we have enjoyed for the last 75 years. AF A5/7’s organizational structure, organization, and roles and responsibilities are outlined in HAF Mission Directive 1-7. There are leadership forums that, although not in the CD process flow, nevertheless provide CDE input.

1.2.2.1. Capability Development Summit. The CD Summit is a partnership of senior DAF Leaders that guides the alignment of CD initiatives and priorities across requirements, acquisition, and resourcing. It strives to improve the effectiveness of DAF-wide activities by aligning efforts and establishing a disciplined, time-phased, prioritized approach to CD with a steady demand signal for Developmental Planning (DP) activities. The CD Summit is not a decision venue or governance body but serves to align leadership decisions within their own authorities.

1.2.2.2. Capability Development Working Group (CDWG). The CDWG is an O-6/GS-15 level forum that coordinates and integrates CD issues across the enterprise. The CDWG may endorse plans or other CD documents, but it has no approval authority for such documents.
SECTION 2. CAPABILITY DEVELOPMENT FUNDAMENTALS

2.1. Task and Purpose of Capability Development. The fundamental goal of CD activities is to refine and implement key capabilities, typically via combined efforts across the spectrum of DOTmLPF-P. Moreover, this task must be pursued in the context of future uncertainty and dynamic global change. The CSAF aptly described our challenges and task in his 2020 white paper titled *Accelerate Change or Lose*:

“In an environment that includes, but is not limited to, declining resources, aggressive global competitors, and rapid technology development and diffusion...many of the requirements for capabilities that have underpinned our success were developed in the decade today’s most senior leaders joined our Air Force. Since then, much has changed. Not only has the technology revolution dramatically changed the ways in which humans and economies interact in the world, it has changed the way militaries can develop and project power...We must design our capabilities and concepts to defeat our adversaries, exploit their vulnerabilities, and play to our strengths [and] capabilities must be conceived developed, and fielded inside our competitor’s fielding timelines...”

The Air Force’s roles and missions in support of the Joint Warfighting Concepts drive AF operational concepts, capability imperatives, and CRCs that begin to coalesce into defined capability needs. With an understanding of the needs and recognized assumptions of future trends and adversary actions, Operational CD works to define the gaps and refine the need(s) through analytical and DP activities. These activities and insights inform the suitability, feasibility, and resource demands of potential solutions to meet the need(s). As more is understood of these programmatic criteria, the most suitable solution approaches are identified and assessed, leading to informed decisions that prioritize, integrate, and sequence operational requirements for the Acquisition Enterprise to pursue. This process of “Refining the Need” in Operational CD is the focus of this Guidebook volume and is depicted graphically in Figure 2.1.

![Figure 2.1. Refining the Need](image)

The goal of the AF A5/7D (Center 2) CD is to analyze, plan, validate, and enable operational CD to distill validated CRs from operational concepts. Skillfully translating the capability need into operational requirements captured in the appropriate requirements document is essential for the resourcing and acquisition communities to pursue timely solutions for the Air Force. The development of promising technology and concepts into capability solutions is not possible without intentional, flexible, and
intelligently resourced plans, with validated assumptions that reduce risk and uncertainty.

2.2. Definitions. Several CD terms and organizational structures are unique to Air Force Futures and are briefly defined here for reference. Detailed discussion of these structures, products, and their interactions, is the focus of the remainder of this volume.

2.2.1. Cross-Functional Team. A CFT is a formally organized team, tasked to develop solutions to future Air Force capability gaps and challenges. These gaps and challenges cut across traditional Air Force core functions and therefore don’t typically reside within a particular Air Force MAJCOM. Since the CFT works across functional areas, they ensure the proposed solutions to the gaps and challenges are synchronized across the entire DAF enterprise and are aligned with the Department of Defense, and Air Force strategic priorities and guidance, to include future force design priorities. The CFT has both full time and matrixed members across the DAF to ensure this synchronization, but the CFT is held as the primary focal point regarding the proposed solutions. CFTs work with FITs to create bridging strategies that address near term solutions with longer-term needs. The CFTs report their CD progress to multiple Air Force corporate governing processes. Given the cross-cutting nature and variety of stakeholders associated with any given CFT, the CDP is one of the most critical CD products the CFT will produce. A well-coordinated CDP provides a mechanism for common understanding among the CFT and the various stakeholders and organizations.

2.2.2. Functional Integration Team. A FIT is a core team that works with MAJCOM leads to identify, prioritize, and create plans to resolve capability shortfalls within a given functional area. They are mostly aligned against traditional AF core functions and are comprehensive of AF capability. They are responsible for aligning the solutions to capability shortfalls across Joint, Coalition, and Combatant Command equities. The FITs report their CD progress through the various Air Force corporate processes. On topics where FITs and CFTs have overlapping interest, these teams work together to create bridging strategies that address near-and long-term needs.

2.2.3. Capability Portfolio. A capability portfolio is primarily a management structure to improve team engagement and integration. A Center 2, O-6 level Portfolio Manager is responsible for prioritizing and coordinating activities and aligning the efforts of several teams (CFTs and/or FITs) across a portfolio.

2.2.4. Capability Portfolio Management Review. Biannual CPMRs are chaired by Center 2 leadership; all stakeholders (MAJCOMs, Air Staff, A8, AQ, etc.) are invited. The CPMR is a venue for stakeholders to provide input to the CD process and allows Center 2 leadership to provide support and guidance for CD products. A CDP should be the primary product delivered and discussed at these engagements, unless otherwise directed by Center 2 leadership.

2.2.5. Periodic Reviews. PRs are scheduled with Center 2 leadership biannually but can be requested by teams as needed. They can be likened to a round table discussion used to iterate and refine CDPs. PRs are internal to Center 2 but others may be invited as necessary.
SECTION 3. THE CDP/SDP PROCESS

All CD planning activities are continuous and dynamic. The CDPs and SDPs are living documents that must be periodically updated to reflect changes, new insights, revised strategies, updated Concepts of Operation, etc. The CDP and SDP process is shown in Figure 3.1.

<table>
<thead>
<tr>
<th>Levels</th>
<th>Gap and Needs Analysis</th>
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<td>Top-down Direction to Pursue a Capability</td>
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<td></td>
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<td>Bottom-Up Request to Pursue a Capability</td>
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<td></td>
<td>AF A5/7D CDP/SDP Repository</td>
<td>Document Development Process</td>
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* SRDs are optional. SRD development details are covered in Guidebook, Vol 2E.

Figure 3.1. The CDP and SDP Process

3.1. Initiation. CDP initial development or updates can be initiated in various ways. USAF leadership may direct CDP work based on updated concepts or CRCs. The responsible CFT or FIT can initiate CDP work, or Sponsors or Stakeholders may recommend CDP work based on new information obtained in their sphere. CSAF approved Strategic Requirements Documents may also direct CDP work. Strategic Requirements Document development is covered in Guidebook Volume 2E.

3.2. Development. The CDP establishes expectations and outlines a plan that balances the speed and flexibility required to advance specific capabilities while maintaining the coordination required to ensure separate efforts arrive at mutually supportive solutions. The CFT or FIT, working closely with key stakeholders at the MAJCOMs, labs, and across the CDE, develop and refine their CDP to align with DoD and AF-approved Operating Concepts, embedded CRCs, and additional top-down direction and strategic
priorities. The writing team describes existing and new LOEs to achieve the identified capabilities. They explore and analyze all potential ways and means within each LOE to develop the capability. LOEs may include a bridging strategy from the current solution to the future capability and may include potential offsets.

Systems described by SDPs may emerge from more than one CDP. SDPs also function to drive early engagement between the future force designers, the force operators, and the acquisition enterprise. There should be constant feedback between the CDP and related SDPs and iteration driven by frequent collaboration between all stakeholders.

Existing CDPs and SDPs evolve and are updated to reflect the most current timing, requirements and acquisition strategies, and resourcing expectations.

3.3 Approval. Teams must present their CDPs and SDPs to Center 2 leadership for review and approval. Presentations occur during PRs, CPMRs, or as requested by Center 2 leadership. A primary function of the CPMR is to ensure complete integration and alignment between teams. Robust integration will eliminate assumptions or uncertainty in the plans and enable exploration of new capability opportunities. Approval of the CDP and SDPs validate the team’s overall direction, timing, milestones, and integration work with other affected/affiliated CDPs. The CPMR may also direct specific DP activities and tasks to the CFT/FIT, MAJCOMs, and other stakeholders such as experimentation, prototyping, modeling and simulation, or direct requirements document development. Approved CDPs and SDPs are archived in the AF A5D CDP/SDP repository.
Section 4 – AF A5/7 CAPABILITY DEVELOPMENT PRODUCTS

4.1. Capability Development Plans – Format & Content. The CDP is the primary planning document of the CFTs and FITs. The CDP identifies the operational challenges, LOEs, CRCs, and activities required to tackle a specific problem set as summarized in the document’s Problem Statement. For each LOE, the document describes the CRC in terms of the current threat and capabilities, and the plan to resolve the Problem Statement. They are high-level, easy-to-read, stand-alone documents that clearly and succinctly present the team’s plan.

The CDP:

- Captures the strategic questions that further define the operational challenges and mission environments within the problem sets that the CFT/FIT will investigate.
- Identifies the mission/capability gap(s) in the AF’s ability to achieve mission success in Joint/AF strategies and concepts that the CFT/FIT is trying to address. This forms the Problem Statement.
- Establishes separate LOEs within the problem set’s portfolio to better refine the operational mission needs.
- Identifies all the CRCs necessary to address the strategic objectives of the associated operational concepts for each LOE.
- Addresses critical uncertainties and shows a pathway to achieving the CRC and captures and depicts dependencies on other CFTs’ efforts.
- Establishes a clear understanding of baseline capabilities and gaps, and how new capabilities and opportunities may be integrated and synchronized.
- Identifies developmental efforts requiring further refinement, recommends CD efforts required to continue, and provides a recommended schedule.
- Synchronizes capabilities and timing considering resource constraints, schedules key decision points, and establishes rough order of magnitude resource requirements.
- Ensures the team’s CD efforts and responsibilities are understood by all internal and external stakeholders.
- Highlights opportunities for increased speed of CD and fielding through agile acquisition.

An effective CDP has the following characteristics:

- Addresses the team’s operational problem statement by reducing risk to acceptable levels.
- Risk reduction is shown through analysis and other learning.
- Spans the DOTmLPF-P solution space.
- Integrates with other CFT solutions and identifies dependencies.
- Incorporates the baseline capability.
- Considers affordability.
- Aligns the key elements of Requirements, Resourcing, and Acquisition.
- Prioritizes LOEs.
- As a Living Document, it is updated based on:
  - Learning from experiments, prototypes, studies.
  - Technology updates.
  - Threat changes.
  - Resourcing decisions and realities.

4.1.1. Time-phasing CDP activities. The cornerstones of the CDP are the LOEs and their associated CRCs, and while some LOEs are well-formed and ready for transition to acquisition, many LOEs will be immature and require additional study before an informed decision is made. The CDP should include a ‘campaign of
learning’ to develop a robust body of knowledge for immature LOEs. Figure 4.1 is an example showing multiple LOEs and groupings. The LOEs include and embed the CFT/FIT’s plans or recommendations for:

- Programs of record with options to initiate, continue, modify, accelerate, or terminate.
- Science and technology investments and activities.
- Prototyping activities that include learning and decision points.
- Campaigns of experiments that include learning and decision points, and on/off ramps.
- Planning for development with agile acquisition on/off ramps.
- Studies and analysis with learning and decision points.

### 4.1.2. Linking CDP Activities and Identifying Dependencies

Another key component of a CDP is the linkage of LOEs to affected/dependent Mission Effect Threads (where available) and key elements of the latest Force Design. These links are vital to decision makers so LOEs can be grouped together during budget deliberations. For example, a Mission Effect Thread requiring five systems to reduce risk may not reduce risk to acceptable levels if only one or two systems are fielded. In fact, doing so may increase overall risk to the portfolio because those resources have been misused.

### 4.1.3. Explaining Priorities

The CDP is a living document that will evolve over time as teams learn from pursuing solutions. The original problem statement and hypothesis can change based on what the CFT/FIT learns as the document evolves. The team must determine the level of detail needed to effectively convey their plan. It should be detailed enough to enable stakeholders to understand the technology and other details involved, but too much detail may be counterproductive. All potential solutions are prioritized in the CDP, and it must clearly explain the compelling evidence that drives the highest priority option(s). The CFT/FIT must prioritize gaps, risks, and challenges before prioritizing potential solutions. Priorities should be time phased based on need, opportunity, and ability to meet concept, projected timelines, and cost.
4.1.4. Describing Resource Impacts. The CFT/FIT must include existing baseline capability and associated funding for the mission area to develop executable solutions. The solution trade space is comprised of current fielded capability and programmed capability. The MAJCOMs, AF/A8, Program Element Monitors, and AF Life Cycle Management Center can provide details on the performance and cost of baseline systems. Affordability of potential solutions must be considered in the CDP and the SDPs. Initial cost figures are rough order of magnitude estimates and rounded to zeroes. Cost estimates will be refined as requirements mature. CDP and SDP cost estimates are used to assess the affordability of potential solutions. They provide enough fidelity to determine whether potential solutions can be resourced and implemented in the timeframe required (feasibility).

4.1.5. CDP Content. The content of the CDP is the top priority over adherence to a strict format. The format of the CDP may be tailored by each team to best convey their planning and logic, combining document and presentation formats and tools. The CDP is a stand-alone product and easily understood regardless of the reader’s familiarity with the content. The team’s problem statement, capability needs and gaps, guidance, and/or key analytical insights are typically captured in a written document. The time-phased plan is typically a PowerPoint product and lays out the team’s LOEs completely and succinctly. Adding accompanying or embedded text on CDP graphics may also be appropriate. Appendix 1 contains a sample CDP. Examples of approved CDPs are available in the AF A5/7D CDP and SDP Repository.

4.2. System Development Plans. Each material and non-material solution in a CDP that may result in a materiel or non-materiel solution requiring allocation of resources must have an SDP. While the CDP illustrates potential solutions to the problem statement, the SDP captures the steps to realize the solution(s). Like the CDP, the SDP may be a living document and should be kept current. The SDP is a planning and organizing tool that demands close coordination with SAF/AQ and AF/A8 stakeholders. The goal is a collaborative product, and the CFT/FIT must actively engage with the acquisition and resourcing communities to ensure it stays current and relevant. The need for currency, conciseness, and readability can’t be overstated. If a senior leader has a question regarding the inventory of capabilities, a team should be able to take the CDP and SDPs off the shelf and answer the question with a very easy-to-understand product.

4.2.1. Purpose. The SDP is the execution plan for each capability solution in a CDP and describes the Department’s strategy for attaining a capability or other defined outcome, such as learning objectives for research and development activities. Each SDP is specific to one LOE or system development/program, and typically centers around a strategy chart, as shown in Figure 4.2. An SDP will evolve as teams learn and alter plans based on new learning and changes in the threat, operational, fiscal, or political environments.

4.2.2. Content. The SDP is described with a combination of text and graphics and is constructed in a way that it does not require a verbal explanation. There is no mandatory SDP format, but there is mandatory content.

4.2.2.1. Identify the portion(s) of the CDP(s) being supported and the related objectives, deliverables, assumptions, and integration points. This section of the SDP provides a narrative of the general approach, priority, and place it within the context of the supported CDP and history of the owning CFT/FIT. This information will be critical to providing justification to support the requirements, acquisition, and resourcing strategies.
4.2.2.2. Identify the major tasks necessary to deliver the objective and show their time-phased interrelationships in a graphical depiction. This decomposition is driven by differentiating activities by type, such as research, procurement, etc., and possible alignment to legacy AF core function(s). This will help streamline the production of the remaining CDP elements and identify relevant partners to enlist in support of development activities. This view shows the timeline of each activity, key decisions, activity start and end points, and highlight mandatory sequencing relationships or other interdependencies with the CDP or other CD activities/organizations. An example chart showing the alignment of the Requirements, Acquisition, and Resourcing strategies for a notional SDP is shown in Figure 4.2.

![Figure 4.2 Sample System Development Plan for a LOE in a CDP](image)

4.2.2.2.1. The requirements strategy describes how the CFT will engage the requirements community, the plan to develop the insights, and formally document the needs into an operational CR document. The requirements strategy must be coordinated with the acquisition strategy to ensure the planned activities reflect a common solution pathway such as Middle Tier Acquisitions, JCIDS, etc.

- The requirements strategy provides a high-level description of the types of capabilities that will be more narrowly defined and propagated through engagements with the Sponsors. It does not have to list the actual requirements but must list the kinds of topics to be pursued.

- For each of the topics listed, the requirements strategy lists who the CFT is partnering with to codify the needs and identify the requirements and programming sponsor. The CFT/FIT will ensure the SDP content and reviews are appropriately aligned decision points and events. The Air Force Gatekeeper and/or AF A5/7DY-Office of Aerospace Studies can assist the CFT/FIT to identify the appropriate stakeholder points of contact.

- The SDP shows the anticipated timelines for writing, staffing, and validating the necessary requirements, and be updated as the tasks are accomplished. The SDP will recommend the timing, types, and authorities for relevant JCIDS, non-JCIDS, or other requirement validations.
4.2.2.2. The resourcing strategy describes how the CFT will pursue funding to support the development of the objective capability. The SDP explains where activity is already funded; plans for additional resources must be affordable. The SDP may identify and offer potential offsets if those offsets support the overarching CDP concepts.

- Describe the funding requirements over time, broken out according to functions described in the overview graphic. Funding requirements show the desired appropriated category, amount, and must at least span the Future Years Defense Program. Derive funding requirements from cost estimates or other legitimate sources for each element in the SDP. The resources required, resources allocated, and cost estimates must be updated as funding status changes. List the source of all cost estimates.

- Describe how funding is being pursued, either directly through AF corporate budgeting processes or alternate means. Any funding source may be pursued, but the approach must be described and documented.

- For each funding line, the resourcing strategy must list who the CFT/FIT is partnering with to secure the resources.

4.2.2.2.3. The acquisition section of the SDP describes the proposed adaptive acquisition approach to deliver the operational capabilities. For procurement activities, this may take the form of Major Capability Acquisition, Middle Tier Acquisition, or one or more of the other pathways described in the DoDI 5000-series. Learning activities in the SDP may be linked to other avenues, such as experiments, the AF Life Cycle Management Center’s Planning for Development, or activities to inform the development of sustainment strategies. For non-materiel solutions, the SDP will document an overall approach, sequence timelines, and prioritize key activities within the relevant DOTmLPF-P solution space.

- The acquisition strategy must document the approach proposed for each element of the functional overview. It will show activities to be initiated, modified, accelerated, or terminated along a timeline. It will show decision points, milestones, and the CFTs/FITs progress towards deployment of the desired capabilities.

- For each of the activities, the SDP must list who the CFT/FIT is partnering with to advance the development effort.

4.2.2.3. In summary, SDPs convey the following information:

- The key attributes needed, and the strategy for developing the operational requirements.
- The baseline capability, current capability, and the planned capability over time.
- The plan for getting answers to strategic questions such as analytics, modeling and simulation, experiments, science and technology, prototypes, etc.
- The plans for schedule, funding, and status for capability solutions.
- Key decision points and other significant events.
- Initial acquisition timelines for named programs.
Appendix 1 – SAMPLE CDP FORMAT

[Example Cover Page]

--Insert Team Name Here—

Cross Functional Team = or = Functional Integration Team

Capability Development Plan

Current as of: dd Month yyyy [most recent change]

Last Approved: dd Month yyyy [Last CPMR validation]
## Document Change Log

<table>
<thead>
<tr>
<th>CPMR/PR Approval Date</th>
<th>Status (Baseline, Revision, Canceled)</th>
<th>Document Version Number</th>
<th>Section Affected</th>
<th>Description of Revision</th>
<th>Author</th>
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Purpose and Intent: This section provides an overall description of the problem, the proposed way ahead or approved course of action that will explore the problem, and why the proposed capabilities are needed. It logically lays out the CFT’s/FIT’s intent to develop and field capabilities to solve the problem and be clear on what the team expects to learn about the things that are needed to solve the problem. This section also reflects an all-domain, multi-function, family-of-systems solution to the problem to an appropriate degree. It lists and explains the themes of the plan. Recommended length is no more than two pages.

Capability Development Plan Overview: With reference to a graphic/illustration showing the plan and LOEs, this section provides an explanation of why the baseline capability is insufficient to solve the operational problem. Key questions to be answered are listed here, along with critical uncertainties, expected learning points, and decision points that are captured in the LOEs. Include linkage to Joint and Air Force Concepts and show how CRCs relate to the CDP LOEs.
Appendix 2 – SAMPLE SDP FORMAT

[Example Cover Page]

---Insert Team Name Here---

Cross Functional Team = or = Functional Integration Team

System Development Plan

Current as of: dd Month yyyy [most recent change]

Last Approved: dd Month yyyy [Last CPMR validation]
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Purpose: Briefly describe each potential capability solution identified in the CDP and link it to the CDP’s main graphic. Each SDP will show when and how specific system solutions will develop and evolve to meet the overall CDP timeline. Categorize all development efforts used in the SDP by LOEs and provide a description of each LOE.
Plan of Action and Milestones: This chart depicts all the CD activities, tiered, and prioritized on a timeline as shown below. This chart gives readers a holistic view of all LOEs planned and underway and is most often referenced when creating the nested SDPs that inform and guide the entirety of the CDE. The functional area planning and system DP that precedes this section provides the rigor, logic, and justification for what is presented in this Plan of Action and Milestone table. Teams can include in the chart a color coded or easily recognizable visual reference that delineates efforts that are already included in active SDPs or are being pursued due to previous decisions.

<table>
<thead>
<tr>
<th>FY</th>
<th>Description</th>
<th>Decision</th>
<th>POC</th>
<th>Issues</th>
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<tbody>
<tr>
<td>22</td>
<td>Rapid Runway Repair (RRR) Tool Prototype</td>
<td>Fund FY23 POM initiative for RRR tool to increase speed and efficiency in runway repair, $18M total, $8M in FY23, $9M in FY24, $1M in FY25.</td>
<td>AFMC</td>
<td>Critical design requirement for Airbase recovery</td>
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<td>Airbase Defense Sensor AoA</td>
<td>Fund FY23/24 AoA to study alternatives for sensors to detect and track inbound threats, $6M in FY23 and $4M in FY24.</td>
<td>ACC</td>
<td>Critical component of Airbase Defense, Global Integrated ISR CFT is leading this LOE</td>
</tr>
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<td>Skyborg Experiment</td>
<td>Approve sponsor command</td>
<td>CDC</td>
<td>Experiment will identify first mission capability, sponsor command will be needed for POM and transition</td>
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<td>Directed Energy S&amp;T</td>
<td>Increase priority for High Powered Microwave (HPM) technology for close range base defense</td>
<td>CDC</td>
<td>Important part of layered defense, Next Generation Munitions CFT is leading this LOE</td>
</tr>
<tr>
<td>23</td>
<td>Short Range Defense Experiment</td>
<td>Fund purchase of 3 Skyshield gun systems and conduct two year experimentation campaign, $80M across FY24/25</td>
<td>SPDE</td>
<td>Determine role and benefit of short range gun systems to defeat missile attacks</td>
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<td>Logistics Support Study</td>
<td>Direct study by AMC to determine ability to support remote unprepared airbases</td>
<td>AMC</td>
<td>Foundational analysis to understand ability to support remote operations</td>
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<td>Weapons Developmental Planning (DP)</td>
<td>Direct DP for Airbase Defense Airborne Layer Weapon</td>
<td>AFLCMC</td>
<td>Primary MAJCOM does not support, believes current weapons are provide sufficient capability and new weapon will dilute inventory</td>
</tr>
<tr>
<td>24</td>
<td>Weapon X Production</td>
<td>Weapon X Milestone-C LRIP decision</td>
<td>AQ</td>
<td>Integration work for F-22 is 6-months behind, Next Generation Munitions CFT is leading this LOE</td>
</tr>
</tbody>
</table>
Appendix 2 – REFERENCES AND ACRONYMS

References
HAF MD 1-7, Deputy Chief of Staff, Air Force Futures (AF A5/7)
AFI 10-601, Operational Capability Requirements Documentation and Validation
Manual for the Operation of Joint Capabilities Integration and Development System, 30 October 2021
DoDD 5000.01, The Defense Acquisition System, 9 September 2020
DoDI 5000.02, Operation of the Adaptive Acquisition Framework, 8 June 2022

Acronyms
CD - Capability Development
CDE - Capability Development Enterprise
CDP - Capability Development Plan
CDWG - Capability Development Working Group
CFT – Cross-Functional Team
CPMR – Capability Portfolio Management Review
CR – Capability Requirement
CRC – Concept-Required Capability
DAM - Directors Alignment Meeting
DOTmLFP-P - Doctrine, Organizations, Training, materiel, Leadership and Education, Personnel, Facilities, and Policy
DP - Developmental Planning
FIT – Functional Integration Team
JCIDS - Joint Capabilities Integration and Development System
LOE – Line of Effort
PR – Periodic Review
SDP – System Development Plan