AF/A5/7
CAPABILITY DEVELOPMENT
GUIDEBOOK

Volume 2F
Middle Tier Acquisition – Rapid Requirements Guidebook
August 2023
Air Force Futures Requirements Oversight Team
AF/A5/7DR, Pentagon 5C858
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 describes the specific requirements actions that support Middle Tier Acquisition efforts.

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 the 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.

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

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 “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:

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## CHANGE SUMMARY

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<td>This document captures updated organizations, roles, responsibilities, and DAF</td>
<td>Jan 2023</td>
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<td>guidance and must be reviewed in its entirety. Portions of this guidebook were</td>
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SECTION 1. INTRODUCTION

1.1. Description of Middle Tier of Acquisition Authority

Middle Tier Acquisition (MTA) is a rapid acquisition approach within the Adaptive Acquisition Framework (AAF) that focuses on rapidly delivering capability to fill an identified mission capability gap. Originally introduced in the Section 804 of the 2016 National Defense Authorization, the MTA process is detailed in DoD Instruction 5000.80_DAFI63-146, Operation of the Middle Tier of Acquisition (MTA), which provides the DAF’s acquisition community the authorities to rapidly prototype and/or rapidly field capabilities requiring minimal capability development effort and able to deliver to the warfighter in a period of 2 – 5 years. DoDI 5000.80_DAFI63-146 allows for an acquisition process distinct from the traditional acquisition system and exempt from the Joint Capabilities Integration and Development System (JCIDS) under the Chairman of the Joint Chiefs of Staff Instruction 5123.01H, JROC Charter and JCIDS Implementation, and the processes in DoD Directive 5000.01, The Defense Acquisition System. Each DoD Component has developed processes to implement MTA.

Not all programs are appropriate for the MTA pathway. Acquisition programs requiring significant capability development to satisfy operational needs are discouraged from using the MTA pathway. Approval to pursue capability development using MTA is made by the appropriate Decision Authority within SAF/AQ as part of the Material Development Decision to pursue material capability development to address validated operational needs. Capability development sponsors should coordinate the use of the MTA pathway as early as practical during capability solution requirements development and must gain approval to use the MTA pathway before a Rapid Requirements Document can be validated.

1.2. Overview and Background

The overarching management principles that govern the Defense Acquisition System (DAS) are described in DoD Directive 5000.01. The DAS supports the National Defense Strategy and is employed through the AAF described in DoD Instruction 5000.02. The AAF’s objective is to deliver effective, secure, supportable, and affordable solutions to the end user while enabling execution at the speed of relevance. The AAF is comprised of multiple acquisition pathways, shown in Figure 1, each tailored for the unique characteristics and risk profile of the capability being acquired. This guidebook describes the Air Force implementation of the MTA pathway.
The MTA pathway fills a gap in the DAS for capabilities that have a level of maturity that allow rapid prototyping within an acquisition program or fielding within 5 years of MTA program start. The MTA pathway may be used to accelerate capability maturation before transitioning to another acquisition pathway or may be used to minimally develop a capability before rapidly fielding. MTA may also be used as part of a multiple acquisition pathway strategy to provide value not otherwise available through use of a single pathway. Details of the multiple pathway application are contained in DoDD 5000.01.

1.2.1. Rapid Prototyping. The rapid prototyping path provides the opportunity to demonstrate and evaluate the performance of innovative technologies in the prototyping phase of development. It allows capability development sponsors to assess the prototyped solution's ability to address validated operational needs. The assessment may discover that further development is necessary, or the prototyped solution demonstrates new capabilities that successfully meet emerging military needs. An MTA program will field a prototype meeting defined requirements that can be demonstrated in an operationally relevant environment and provide a residual operational capability within 5 years of MTA program start date. Virtual prototyping models are acceptable if they result in a fieldable residual operational capability. MTA programs may not be planned to exceed five years to completion and, in execution, will not exceed five years after MTA program start without a Defense Acquisition Executive (DAE) waiver. Program start begins when the Decision Authority (DA) signs the Acquisition Decision Memorandum (ADM) and ends with an outcome determination ADM signed by the DA. At MTA exit, the program may transition to a new or existing acquisition program for further development, production, fielding, and operations and sustainment as appropriate under either the rapid fielding pathway or
another acquisition pathway. The rapid prototyping USAF requirements document is a Rapid Prototyping Requirements Document (RPRD).

1.2.2. Rapid Fielding. The rapid fielding path provides the opportunity to bypass the Engineering, Manufacturing, and Development (EMD) acquisition phase for proven technologies (TRL 8 or 9) to rapidly field capabilities that meet validated operational needs that are either currently in production or ready for production. The objective of an acquisition program under this path will be to begin production within six months of MTA Approval/ADM signature (i.e., program start date) and complete fielding within five years of the MTA program start date. Programs with a production start date exceeding six months after MTA program start date require an SAE waiver. The program production start date is when funds are first obligated to perform production activities. MTA programs may not be planned to exceed five years to completion of fielding of all planned production quantities and in execution, will not exceed five years after MTA program start without DAE waiver. The associated AF requirements document is a Rapid Fielding Requirements Document (RFRD).
SECTION 2. USAF MIDDLE TIER OF ACQUISITION REQUIREMENTS PROCESS

2.1. Requirements Process Overview

The process to establish requirements in support of MTA activity is based on the normal requirements process in that it requires analysis to determine the most effective materiel or non-materiel solution based on a valid threat assessment or approved capability gap(s) and requires proper documentation to deliver capability solutions to the warfighter quickly.

2.2. Initiation of MTA Efforts

Per SAF/AQ direction, all new capability development efforts will be reviewed for MTA applicability. Ongoing acquisition efforts may elect to “transition” to take advantage of MTA authorities, and those programs likely already have some degree of capability analysis, requirements documentation and programming support in place.

MTA efforts may also be initiated in response to Senior Leader direction (Top-Down) or from MAJCOM/Agency capability development proposals (Bottom-Up). Top-down direction will most likely fall to the appropriate Air Force Futures Capability Development Team (CDT).

![Figure 2.1. MTA Requirements Documents Process](image)

<table>
<thead>
<tr>
<th>Top Level</th>
<th>HAF-LEVEL SOLUTION PATHWAY REVIEW (DPR)</th>
<th>Approval to use MTA Pathway</th>
<th>Requirements Development</th>
<th>Document Staffing, Validation and Approval</th>
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<td>AF/A5/7D</td>
<td>CAF/AFSAP/AFS</td>
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<td>HAF SME</td>
<td>AF/A5/7D</td>
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<td>AF/A5/7D</td>
<td>CAF/AFSAP/AFS</td>
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2.3. AF/A5/7D Approval of Capability Development Plan/Strategy

AF/A5/7D MTA approval typically occurs at the periodic Capability Portfolio Management Review (CPMR). Capability Development Plan (CDP) and CPMR details are in the AF/A5/7 Guidebook, Volume 2B. This approval accomplishes the following:

- Ensures the proposed MTA effort aligns with the overarching USAF strategy, capability development guidance, and resourcing plans.
- Determines what capability analysis and/or documentation exists or needs to be developed to support proceeding to MTA.
• The MAJCOM/Agency Sponsor working through their AF/A5/7D Subject Matter Expert (SME), coordinates with AF/A5/7DR and AF/A5/7DY-OAS to assess the sufficiency of existing analyses that may support the MTA effort.

• The Sponsor assesses available resources in coordination with the Acquisition Program Office, SAF/AQX, SAF/FMB, AF/A8P, and AF/A8X (as appropriate) to determine the amount and timing of funding and other resources available for the MTA effort.

• Written approval (via formal ADM) from SAF/AQ, or as delegated (or from USD (A&S), when the effort will exceed funding thresholds of a Major Defense Acquisition Program) is required for the Program Manager (PM) to utilize the MTA acquisition authorities. Refer to DoDI 5000.80_DAFI63-146 for more detail on the Defense Acquisition policies related to MTA. Contact SAF/AQX for further information on acquisition procedures.

2.4. Solution Pathway Review

Following AF/A5/7D gap and resource approval, the Sponsor, in coordination with the AF/A5/7D SME, prepares a Solution Pathway Review (SPR) Worksheet for Air Force Gatekeeper (AFGK) approval to proceed. Sponsors should not begin development of any requirements document until the SPR Worksheet and associated document strategy has been reviewed and approved by the AFGK, in consultation with SAF/AQX and HQ AFMC/A5R.

2.4.1. Document Strategy. Sponsors have the option to propose using an existing requirements document(s) to support the MTA process, or they can propose creating a new MTA-specific requirements document.

• An existing requirements document may include any previously validated requirements document(s) or a draft currently under development.

• AFGK determines the level of review and approval necessary to use any existing draft or previously validated requirements document(s) in support of MTA activity. AFGK notifies SAF/AQX of any decision to approve or deny the proposed use of existing requirements documents to support MTA activity.

• If using a currently draft document, the AFGK may approve the Sponsor to continue staffing the current document through to validation in support of MTA rather than starting over with a new MTA document.

• If use of an existing requirements document is not deemed appropriate, the MAJCOM/Agency Sponsor can propose developing a new MTA-specific requirements document; either an RPRD or RFRD. Format and content for the RPRD and RFRD are described in section 3 of this Guidebook).

2.4.2. SPR Content. During the review of the SPR Worksheet, Sponsors will be prepared to discuss the document preparation and document writing team membership to include the following:

• Ensure entry criteria (pre-requisites) are met as described above

• The document title should reflect the solution/system approach, or plan to use an existing requirements document title

• Specific gaps and/or mission needs which will be addressed by the effort

• Potential applicability of JCIDS-Mandated Performance Attributes, and/or Certifications that may influence prototype design decisions or rapid fielding criteria. For example:
• Elements of the System Survivability KPP that include Cyber and Electromagnetic Spectrum protections against intrusion and exfiltration of data.
• Elements of the Force Protection KPP may apply to rapidly fielded systems that are occupied.
• Elements of the Energy KPP may apply to rapid fielding of energy demanding programs. Per DepSecDef and SAF/IE directive, all AF capability development programs must include an Energy Supportability Assessment as part of their operational requirements, and an Energy KPP, or AF/A5/7D approved waiver for this KPP if appropriate.
• Elements of the Sustainment KPP may apply to rapidly fielded systems that have availability attributes.
• Certifications such as interoperability, threat/intelligence.
• DoD Architecture Framework (DoD AF) OV-1 or similar product. Others DODAF products may apply that best describe potential interdependencies with other USAF or joint systems/solutions or other enablers.
• Timeframe when the solution needs to be fielded
• Cost estimates (as applicable) and funding strategy with respect to available funding sources
• Proposed document writing plan, to include team members (name, organization, and Requirements Management Certification Training (RMCT) level) location, dates, and format (live or virtual), plus any issues/concerns with support, security, etc.
• All Document Writing Teams require a minimum of two (2) members who have completed DAU’s RQM 2100 (Application Skills for Requirements Managers) Course.
• Training and experience level of Team Leaders and Acquisition POC(s)
• Proposed Plan of Action and Milestones with a timeline for completion of the document
• Expected timeframe/date when the Sponsor expects to submit the document for initial staffing
• Projected follow-on requirements oversight/reviews and interaction with stakeholders from the Joint Staff, other Services and OSD (if required)
• Specific recommendations for proposed Joint or Combatant Command interest or involvement. As a minimum, AF/A5/7DR is required to provide an information copy of the final document to the Joint Staff Gatekeeper.

Following SPR approval, the document sponsor convenes the Document Writing Team and develops the draft document as approved. Any deviations must be presented to the AFGK for approval.

2.5. Document Staffing and Approval

2.5.1. AFGK Review. Following development of the draft version of the RPRD or RFRD, and upon approval by the MAJCOM/Agency Director of Requirements (or higher), the sponsor submits the document to AF/A5/7DR via the Information and Resource Support System (IRSS) or higher classification network if needed, for AFGK Review.

• AF/A5/7DR in consultation with the AF/A5/7D SME conducts initial AFGK checks to determine if the document is ready to enter staffing.
• AF/A5/7DR will forward the document to the J8 Gatekeeper for Joint Staff awareness. Should Joint Staff determine that Joint equity exists, the Sponsor may continue to proceed with MTA activities while Joint equities are being outlined and a Joint approach is developed.

2.5.2. Tailored electronic Air Force Requirements Oversight Council (eAFROC) Staffing. To maintain the rapid nature of MTA, only one round of coordination will be accomplished.

- A tailored staffing period will be conducted using IRSS tasking procedures on SIPRNET or higher classification network procedures.
- All comments will be signed out by designated eAFROC voting members.

2.5.2.1. Feasibility Review. During tailored staffing, AFMC/A5R reviews the document in consultation with the assigned program office. This review covers the entire document and system attributes to ensure feasibility with respect to cost, schedule, and quantity. Note. The purpose of this review is to make sure the PM agrees that the program will be able to provide the capability/capacity as described, and within the allotted timeframe and resourcing available, to meet the need date and remain within the constraints of the MTA authority.

2.5.3. Comment Resolution. Following the tailored staffing period, the Sponsor completes comment adjudication and any internal MAJCOM/Agency review process, then submits a final version of the document via IRSS for HAF review and validation staffing. Any unresolved comments will be carried through validation staffing as “Views of Others.”

2.5.4. Validation and Approval. AF/A5/7DR prepares the staff package for review by the designated Requirements Decision Authority. Following validation and approval AF/A5/7DR uploads the final version of the approved document along with the Air Force Requirements Decision Memorandum (AFRDM) to IRSS or appropriate file sharing platform and forwards a copy to SAF/AQX and the J8 Gatekeeper.

2.6. MTA Exit

In accordance with DoDI5000.80_DAFI63-146, no later than 60 calendar days after the MTA program completion date, the DA will provide an outcome determination via an ADM. The outcome determination will inform the decision to pursue program fielding or further development through JICDS or other acquisition pathways.
SECTION 3. MTA REQUIREMENTS DOCUMENT FORMAT

3.1. Rapid Prototyping Requirements Document (RPRD)

Below is the format for the RPRD. Sponsors should refer to the Capability Development Document (CDD) format and content guidelines found in the JCIDS Manual for additional information on how to develop each section as described below. The outline mirrors the elements of a CDD but in an abbreviated, 5-section format.

3.1.1. Cover Page

[Classification]

Rapid Prototyping Requirements Document

for

[Title of Program]

Document revision number: [version xx]

As of: [date]

Acquisition Decision Authority: [Office/Title]

Requirements Decision Authority: [Office/Title]

Primary and secondary POCs for the document sponsor. [Include name, title/rank, phone and both NIPRNET and SIPRNET email addresses.]

3.1.2. Validation Page.

While in draft, a placeholder page will be included, with the statement: “This document (include revision numbering) has not yet been validated and shall not be considered an authoritative source for the content herein. This document may be considered authoritative only when this page is replaced by a signed validation memorandum from the appropriate validation authority.”

Once validated by the validation authority, the placeholder page will be replaced by the signed memorandum indicating validation of the document.

3.1.2. Executive Summary.

Explain why this effort is a candidate for MTA rapid prototyping.

Briefly discuss the schedule to achieve a residual capability and a description and definition of the successful demonstration of this materiel solution.

3.1.3. Document Body.

- Section 1: Operational Context, Challenge and Anticipated Threats.
• Summarize the operational context and challenge to be addressed and explain how the capability solution will contribute to the missions and activities of the Air Force or meet an identified operational challenge within the context of the anticipated threat environment.

• Describe the timeframe under consideration and the overall operational risk and priority to the Air Force.

• Consider evolving threats to ongoing and follow-on RDT&E, production, and O&M resulting from technology transfer, espionage, and other adversarial collection efforts.

• Summarize approved Critical Intelligence Parameters (CIPS), or information from Classified Information Compromise Assessment (CICA), which could critically impact the effectiveness and survivability of the proposed system.

• Cite the latest DIA or Service-approved threat products used during the development of this document.

• Section 2: Capability Requirements and Gaps/Opportunities.

  • Identify the mission needs/capability requirements and associated gaps, challenges, or opportunities to be addressed by the proposed solution(s).

  • Summarize the results of related analyses or studies conducted to determine the mission needs/required capabilities and gaps, or opportunities used to derive the required system-level performance attributes.

• Section 3: Required System Attributes.

  • Outline the system level performance attributes that are necessary to address the capability requirements, gaps, or opportunities which are essential to achieve mission goals and objectives.

  • System attributes must be assigned and have sufficient granularity to support contracting actions. Avoid over specification or inclusion of technical specifications.

  • Provide measures for each attribute in terms of threshold values or initial objective values as appropriate, to indicate the acceptable level of performance for the residual capability to be effective in an operational environment as required by MTA.

  • Include applicable elements of JCIDS-Mandated Performance Attributes, Joint Certifications, and DoDAF products and annotate them as such.

  • Define other system attributes (as applicable). See the JCIDS Manual for examples.

• Section 4: Interoperability and Supportability

  • Specify how the individual system will operate within the Joint environment, including any physical or net-ready interoperability effects on joint or allied operations. Include factors that impact both the Air Force internally as well as outside agencies and programs.

  • Include an Energy Supportability Assessment (ESA) for the program, detailing impacts to campaign level energy demands due to the introduction of the system’s capabilities. Include an Energy KPP, or a Waiver to this KPP (approved by AF/A5/7D) if not appropriate.

  • Include any requirements for electromagnetic spectrum and environmental effects controls.

  • Include any requirements for intelligence supportability.
• Include information or attributes for modular open system architecture (MOSA) or exportability that may impact future decisions about development, fielding, follow-on production, joint training, etc.

• Include requirements for Weapons Safety Assurance (as required for munitions systems)

• Outline non-materiel (DOTMLPF-P) changes that need to be made to successfully implement fielding of the residual capability in an operational environment. Address both changes that enable implementation, operations, and support of the system and, changes that must be made to support integration of the system with other fielded capabilities.

• Section 5: Resourcing and Schedule.
  • Identify the overall resourcing plan and schedule of activities to provide the capability solution and highlight any challenges or risks to the planned timelines.
  • Highlight any technology challenges that may impact the feasibility of meeting the timelines or providing a usable capability within the timeline.

• Glossary – Terms and Definitions
  • Highlight any unique terms, definitions, acronyms, or other references.

• Architecture Products (determined by the PM).
3.2. Rapid Fielding Requirements Document (RFRD).

Below is the format for the RFRD: Sponsors should refer to the CDD format and content guidelines found in the JCIDS Manual for additional information on how to develop each section as described below. The outline mirrors the elements of a CDD but in an abbreviated, 5-section format.

3.2.1. Cover Page.

[Classification]

Rapid Fielding Requirements Document

for

[Title of Program]

Document revision number: [version xx]

As of: [date]

Acquisition Decision Authority: [Office/Title]

Requirements Decision Authority: [Office/Title]

Primary and secondary POCs for the document sponsor. [Include name, title/rank, phone and both NIPRNET and SIPRNET email addresses.]

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- While in draft, a placeholder page will be included, with a statement of: “This document (include revision numbering) has not yet been validated and shall not be considered an authoritative source for the content herein. This document may be considered authoritative only when this page is replaced by a signed validation memorandum from the appropriate validation authority.”
- Once validated by the validation authority, the placeholder page will be replaced by the signed memorandum indicating validation of the document.

3.2.3. Executive Summary.

- Explanation of why this effort is a candidate for MTA rapid fielding.
- Briefly discuss the schedule to achieve a fielded capability and a description and definition of the successful fielding and implementation of this new materiel solution.

3.2.4. Document Body.

- Section 1: Operational Context, Challenge and Anticipated Threats.
  - Summary of the operational context and challenge to be addressed, explaining how the capability solution will contribute to the missions and activities of the Air Force or meet an identified operational challenge within the anticipated threat environment.
• Describe the timeframe under consideration and overall operational risk and priority to the USAF.
• Consider evolving threats to ongoing and follow-on RDT&E, production, and O&M resulting from technology transfer, espionage, and other adversarial collection efforts.
• Summarize approved Critical Intelligence Parameters (CIPS), or information from Classified Information Compromise Assessment (CICA), which could critically impact the effectiveness and survivability of the proposed system.
• Cite the latest DIA or Service-approved threat products used during the development of this document.

• Section 2: Capability Requirements and Gaps/Opportunities.
  • Identify the mission needs/capability requirements and associated gaps, challenges, or opportunities to be addressed by the proposed solution(s).
  • Summarize the results of related analyses or studies conducted to determine the mission needs/required capabilities and gaps, or opportunities used to derive the required system-level performance attributes.

• Section 3: Required System Attributes.
  • Outline the system level performance attributes that are necessary to address the capability requirements, gaps, or opportunities which are essential to achieve mission goals and objectives.
  • System attributes must be assigned and have sufficient granularity to support contracting actions. Avoid over specification or inclusion of technical specifications.
  • Provide measures for each attribute in terms of threshold and objective values as appropriate, to indicate the acceptable level of performance for the solution to be effective in an operational environment.
  • Include applicable elements of JCIDS-Mandated Performance Attributes, Joint Certifications, and DoDAF products and annotate them as such.
  • Define other system attributes (as applicable). See the JCIDS Manual for examples.

• Section 4: Interoperability and Supportability
  • Specify how the individual system will operate within the Joint environment, including any physical or net-ready interoperability effects on joint or allied operations. Include factors that impact both the Air Force internally as well as outside agencies and programs.
  • Include an Energy Supportability Assessment (ESA) for the program, detailing impacts to campaign level energy demands due to the introduction of the system’s capabilities. Include an Energy KPP, or a Waiver to this KPP (approved by AF/A5/7D) if not appropriate.
  • Include any requirements for electromagnetic spectrum and environmental effects controls.
  • Include any requirements for intelligence supportability.
  • Include information or attributes for modular open system architecture (MOSA) or exportability that may impact future decisions about development, fielding, follow-on production, joint training, etc.
• Include requirements for Weapons Safety Assurance (as required for munitions systems)

• Outline non-materiel (DOTMLPF-P) changes that need to be made to successfully implement fielding in an operational environment. Address both changes that enable implementation, operations, and support of the system and, changes that must be made to support integration of the system with other fielded capabilities.

• Section 5: Resourcing and Schedule

  • Identify the overall resourcing plan and schedule of activities to provide the capability solution and highlight any challenges or risks to the planned timelines.

  • Identify funding across the FYDP, to include life cycle costs.

  • If funding comes from other sources, discuss how operations and support funding is obtained and any applicable agreements.

  • Glossary – Terms and Definitions. Highlight any unique terms, definitions, acronyms, or other references.

• Architecture Products (determined by the PM).
# APPENDIX 1 – GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

**References**

DepSecDef Memo Apr 21, 2022, *Energy Supportability and Demand Reduction in Capability Development*

DoD Instruction 5000.02, *Adaptive Acquisition Framework*

DoD Instruction 5000.80_DAFI63-146, *Operation of the Middle Tier of Acquisition*

HAF MD 1-7, *Deputy Chief of Staff for Strategy, Integration and Requirements (AF/A5)*


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**Requirements Process Abbreviations and Acronyms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<td>AAF</td>
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<td>Acquisition Decision Memorandum</td>
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<td>AF Gatekeeper</td>
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<tr>
<td>AFRDM</td>
<td>Air Force Requirements Decision Memorandum</td>
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<td>Capability Development Plan</td>
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<td>Capability Portfolio Management Review</td>
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<td>IRSS</td>
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<td>Joint Capabilities Integration and Development System</td>
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<td>KPP</td>
<td>Key Performance Parameter</td>
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<td>MTA</td>
<td>Middle Tier of Acquisition</td>
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<td>Program Manager</td>
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<td>RFRD</td>
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