BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 10-601

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Operations

OPERATIONAL CAPABILITY REQUIREMENTS DOCUMENTATION AND VALIDATION

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This instruction implements Air Force Policy Directive (AFPD) 10-6, Capabilities Requirements Development, and supports implementation of the policies and procedures described in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5123.01H, Charter for the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS), and DoD Instruction (DoDI) 5000.02, Operation of the Adaptive Acquisition Framework. This publication establishes the guidelines for the Air Force process managed by the Directorate of Operational Capability Requirements (AF/A5R) for documentation and validation of operational capability requirements under the authority described in Headquarters Air Force (HAF) Mission Directive (MD) 1-7, Deputy Chief of Staff, Strategy, Integration and Requirements. The guidance provided in this instruction applies to all personnel, including Air Force Reserve and Air National Guard, who develop, review or approve operational capability requirements documents as governed by this instruction, whether such programs are designated as unclassified, collateral, compartmented, or special access. This publication does not apply to the United States Space Force. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAFI 33-360, Publications and Forms Management, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items. This instruction may be supplemented at the Major Command (MAJCOM) (or equivalent) level, but all supplements must be routed to AF/A5RP for coordination before certification and approval. Submit recommended changes using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with Air Force Records Information Management System Records Disposition Schedule.

SUMMARY OF CHANGES

This document has been substantially revised and should be reviewed in its entirety. It incorporates changes necessary to provide updated guidance for development and approval of requirements documents within the Air Force that align with current guidelines of the Joint Capabilities Integration and Development System and the Adaptive Acquisition Framework.

Section 1A— Overview

1. Overview.

- 1.1. **Purpose.** The AF/A5R operational capability requirements documentation and validation process provides approved requirements documents to facilitate timely implementation of solutions to address identified deficiencies associated with validated capability requirements (mission needs) or to otherwise take advantage of opportunities to improve operational mission effectiveness.
- 1.2. **Scope.** Under the authority described in HAF Mission Directive 1-7, AF/A5R is responsible for matters pertaining to the development and documentation of operational capability requirements. Organizations wishing to utilize the documents or processes governed by this instruction must adhere to the AF/A5R guidance and oversight as outlined herein. Detailed process maps and specific guidance on the various operational capability requirements documents and processes are captured in a series of *AF/A5R Guidebooks* which are maintained by AF/A5RP and available on the AF Portal (www.my.af.mil); navigate to "Organization A to Z", then enter the keyword "A5RP."

1.3. Guidelines.

- 1.3.1. All Air Force organizations will:
 - 1.3.1.1. In accordance with *Public Law 109-364 Sec. 801*, ensure only fully trained and appropriately certified requirements managers are assigned responsibility for the development of operational capability requirements and associated documentation governed by this instruction.
 - 1.3.1.2. Use HAF approved Capabilities Based Assessments, or equivalent studies/analysis, to inform decisions regarding solution pathway selection and development of associated operational capability requirements documents.
 - 1.3.1.3. Ensure full consideration of non-materiel solution approaches and existing solutions, including those in use or in development by other Services and components, before pursuing new capability solutions via the requirements processes governed by this instruction.
 - 1.3.1.4. Verify that proposed solution pathways align with need date and available resources.
 - 1.3.1.5. Perform feasibility analysis to ensure proposed solution approaches are technically achievable and executable with respect to cost targets and fielding/deployment timelines.
 - 1.3.1.6. Perform cost-capability analysis to ensure proposed solutions and system attributes are affordable with respect to expected future budget, resourcing and investment strategies.

Section 2A—Headquarters Air Force (HAF) level Requirements Oversight

2. Roles and Responsibilities.

- 2.1. **Authority.** The Chief of Staff of the Air Force (CSAF) is designated as the Chief Requirements Officer for the AF. The oversight for the AF capability development and requirements processes and procedures has been further delegated through the Deputy Chief of Staff, Strategy, Integration and Requirements to the Director of Operational Capability Requirements (AF/A5R). The AF/A5RP Division Chief is the process owner and AF waiver authority for the requirements activities covered by this instruction.
- 2.2. **HAF Subject Matter Expert (SME).** AF/A5R provides subject matter expertise on operational capability requirements to support HAF-level review and decision making. When a subject matter expert does not reside within AF/A5R, the designated AF/A5R division works with the appropriate stakeholder organization to identify a HAF SME for the topic. The SME facilitates communication between the Sponsor and the various HAF and Joint requirements process owners and stakeholders and assists in providing prep sessions for senior leaders prior to decision meetings and other forums. The designated AF/A5R division provides SME endorsement as part of the HAF-level review.
- 2.3. **AF Gatekeeper (AFGK).** The AF/A5RP Division Chief serves as the AFGK. The gatekeeping function serves as the entry point for HAF-level review of proposed solution pathways and approval to begin development of associated requirements documents. The AFGK is the single AF point of entry into the Joint Staff for the JCIDS process. AF/A5RP conducts AFGK reviews at various points in the process in conjunction with appropriate AF/A5R division(s), HAF SME(s) and other designated key stakeholders, to assess a Sponsor's readiness to begin or continue progression through the operational capability requirements document development and validation process.
- 2.4. **AF Requirements Oversight Council (AFROC).** The AFROC consists of AF operational capability requirements stakeholders and organizations tasked to review and make recommendations on AF-sponsored requirements documents as part of document validation and approval. The AF/A5R Director serves as the AFROC Chair and, as such, exercises decision authority regarding recommendations made during AFROC review.
- 2.5. **Air Force Requirements Decision Authority (RDA).** Pursuant to Title 10 U.S.C. Section 2547, *Acquisition Related Functions of Chiefs of the Armed Forces*, the Chief of Staff of the Air Force is the AF decision authority for requirements documents associated with any program designated as a Major Defense Acquisition Program (MDAP). Unless otherwise specified, the AF decision authority for all other requirements documents is assigned to an appropriate AF RDA, as designated by AF/A5R.

Section 3A—Joint Requirements Oversight

3. Functional Capability Boards (FCBs). The FCBs are the first level of joint oversight. They advise the Joint Capabilities Board (JCB) and Joint Requirements Oversight Council (JROC) on issues within their Joint Capability Area portfolio(s). FCBs are O-6 level forums chaired by a Joint Staff General Officer (GO) or Flag Officer (FO), or civilian equivalent. AF/A5R designates an AF FCB Lead and Action Officer(s) for each Functional Capability Board to ensure AF interests are represented in the Joint process.

- 3.1. **Joint Integration Forums.** The Joint Staff's Force Structure, Resources, and Assessment Directorate (Joint Staff J-8) leads O-6-level and GO/FO-level integration meetings for deliberation of cross-cutting JCIDS issues. The AF/A5RP Division Chief is designated as the AF representative to the Joint Integration Forums and oversees the activities of the Air Force FCB Leads and Action Officers on behalf of AF/A5R.
- 3.2. **Joint Capabilities Board (JCB).** The JCB is one level above the Functional Capability Boards and advises the JROC on issues across the capability portfolios. The JCB is a 1-star/2-star level forum chaired by the Director, Joint Staff J-8. The AF/A5R Director is designated as the AF Principal to the JCB.
- 3.3. **Joint Requirements Oversight Council (JROC).** The JROC is the highest level of joint oversight and the JCIDS process owner. The JROC is a 4-star level forum chaired by the Vice Chairman of the Joint Chiefs. The Vice CSAF is designated as the AF Principal to the JROC. AF/A5R exercises VCSAF authority to task responsible organizations within the HAF, MAJCOMs, and Agencies to review and staff JCIDS requirement documents, Comment Resolution Matrices (CRM), and responses to JROC memorandum directed taskings.
- 3.4. **Cyber Requirements Evaluation Board (CREB).** US Cyber Command has been given authority for Cyberspace Operations capabilities and associated document validation. The Director, AF/A5R is the AF representative to the CREB. The HAF lead is the AF/A5R Cyber Division (AF/A5RK).
- 3.5. **Special Operations Command Requirements Evaluation Board (SOCREB).** US Special Operations Command has been given authority for Special Operations capabilities and associated document validation. AF Special Operations Command (AFSOC) is the AF representative to the SOCREB. The HAF Lead is AF/A3.

Section 4A—Additional Oversight

- **4. AF Capability Development Council.** The AF capability development governance bodies (Working Group and Council) serve to prioritize, integrate, and verify new and ongoing capability development efforts across the enterprise. These forums ensure key strategic questions related to capability development have AF senior leadership direction. For more detail, refer to the *Charter for the Air Force Capability Development Council*, available on the AFWIC Capability Development SharePoint site.
 - 4.1. Office of the Secretary of Defense (OSD) Cost Assessment & Program Evaluation (CAPE). The Director, CAPE, has oversight authority for analysis documentation and cost estimating associated with defense acquisition programs. For AF programs or studies where CAPE elects not to provide oversight, the AF Capability Development Council provides oversight of AF-sponsored studies and analysis documentation.
 - 4.2. **Acquisition Decision Authority.** This is the designated individual who has overall responsibility for an acquisition program. The individual has authority to approve the acquisition strategy consistent with the chosen acquisition pathway and for entry of an acquisition program into the next phase of the acquisition process. The acquisition decision authority is accountable for associated cost, schedule, and performance reporting to higher authority, including congressional reporting. Acquisition policies are governed by appropriate DoD 5000-series instructions, as implemented by Air Force 63-series publications.

Section 5A—Requirements Sponsor Responsibilities

- **5. Sponsorship.** Requirements sponsorship is assigned to a MAJCOM/Agency or HAF Organization to lead development of capability requirements and associated documentation for assigned systems, programs, functions and/or missions. Sponsorship includes, but is not limited to, advocating for resourcing, manpower, and other support necessary for the conduct of requirements development activities, consistent with the following guidance:
 - 5.1. Utilize recommended guidelines for requirements document development as described in the *AF/A5R Requirements Development Guidebooks* and coordinate with AF/A5RP for tailoring or exceptions/exemptions.
 - 5.2. For JCIDS documents and related studies, sponsors will ensure document development team lead, document point-of-contact and/or study lead is trained and certified, in accordance with the JCIDS Requirements Manager Certification Training guidelines. (**T-0**)
 - 5.3. Ensure proper development and documentation of Concept of Operations (CONOPs) (including Operational Mission Profile/Mode Summary as described in the JCIDS Manual), applicable DoD Architecture Framework (DoDAF) products, and concepts relevant to the mission context and required to support capability requirements analysis, acquisition, test, operations and sustainment.
 - 5.4. Conduct studies and analyses with direct assistance from the AF/A5R Office of Aerospace Studies. Utilize approved risk assessments when conducting capability gap analysis. Provide risk assessment data in support of HAF-level decision bodies, and others as required.
 - 5.5. Maintain close coordination with the acquisition program office to ensure capability requirements and system-level attributes remain affordable, feasible, testable/measurable, supportable and sustainable with respect to available resourcing, time and technology. Conduct analysis to inform cost-capability tradeoffs and provide results to HAF-level capability development, requirements and acquisition forums.
 - 5.6. Ensure key systems engineering considerations, as identified by the acquisition program office, program manager, Program Executive Officer or Milestone Decision Authority (including, but not limited to operational safety, suitability, and effectiveness; environmental, safety, and occupational health; human systems integration, including incorporation of the most current anthropomorphic standards/accommodation data for the US recruitment population as maintained by Air Force Life Cycle Management Center's office of Human Factors Engineering, Survivability, and Habitability; maintenance and sustainment engineering; product and system integrity; and software engineering) are appropriately addressed in the associated capability requirements documents.
 - 5.7. For intelligence-sensitive capabilities, intelligence representatives from the sponsor organization are responsible for obtaining (or injecting) the future threat environment and accounting for the necessary intelligence support, data dependencies, and infrastructure for the capability to be fully fielded, supported and sustained.

5.8. Consult with appropriate AF/A5R Division(s) and AF/A5RP FCB Lead(s) before interacting with representatives from other services, components, or outside agencies on operational capability requirements matters – in particular, for interactions involving the Joint Staff, or OSD. Obtain AF/A5R Division Chief-level approval (as a minimum) prior to submitting any presentation(s) for review or decision.

Section 6A—Key Stakeholder Responsibilities and Authorities

6. Requirements Process Stakeholders. Responsibilities for organizations and individuals participating in the AF operational capability requirements development process are summarized below in **Table 1** This list is not exhaustive; other organizations not specified in this instruction may be called on to provide expertise, as needed, to assist in the requirements process. AF/A5RP maintains an updated list of stakeholders and roles, in the *AF/A5R Guidebook*, *Volume 1*.

Table 1. Summary of Key Requirements Process Stakeholders.

Office Symbol	Functional Area of Responsibility
SAF/AQ	Oversees implementation of the Agile Acquisition Framework policies and procedures: OPR is SAF/AQX (Acquisition Integration)
	SME for Development Planning, Experimentation, and Engineering: OPR is SAF/AQR (Science, Technology, and Engineering)
	Co-Secretariat of the Capability Development Council: OPR is SAF/AQR (along with AF/A5A - Air Force Warfighting Integration Capability)
SAF/CN	Liaison with Joint Staff J6 for Interoperability and Net-Ready Attribute: OPR is SAF/CNZA (Cyberspace Capabilities and Compliance Division)
	SME for DoDAF and products: OPR is SAF/CNZA
	SME for Cyber Security strategies and accreditations: OPR is SAF/CNZP (Cybersecurity Division)
SAF/IE	SME for Operational Energy including support for Energy Supportability Analysis and Liaison with Joint Staff J4 regarding the Energy Key Performance Parameter: OPR is SAF/IEN (Deputy Assistant Secretary of the Air Force for Operational Energy)
	SME for energy, environment, infrastructure (e.g. MILCON, facilities), occupational health and safety (excluding aviation and weapon safety): OPR is SAF/IEE (Environment, Safety, and Infrastructure)
SAF/SP	Oversight of acquisition management and feasibility review for programs under the Space and Missile Systems Center: OPR is USSF/S5R (Space Requirements)
DAF/JA	SME for legal aspects of AF capability development and requirements processes and procedures
AF/SE	SME for Air Force aviation, occupational, weapons, space and system mishap prevention and nuclear surety programs and policy: OPR is the AF Safety Center

AF/SG	SME for Medical Capabilities: OPR is AFMRA/SG3/4 (Air Force Medical Readiness Agency - Medical Operations and Logistics)
AF/A2/6	SME for Intelligence threat integration and supportability planning within requirements assessment and approval process and Liaison with Joint Staff J2 and DIA for Threat and Intel Certifications: OPR is AF/A2/6O (Director for Intelligence, Surveillance, Reconnaissance Operations)
	SME for Information Operations: OPR is AF/A2/6/CX with AF/A3CX (Cyber Effects Division)
AF/A3	Oversight of Headquarters AF Flight Standards Agency as the SME for Airfield Operations : HAF OPR is AF/A3O (Directorate of Operations)
	Oversight of AF Agency for Modeling and Simulation and SME for AF Operational Training Infrastructure: OPR is AF/A3TI (Operational Training Infrastructure Division)
	SME for Integrated Air and Missile Defense: OPR is AF/A3TY (Information Operations Division)
	SME for Air Force Special Warfare (formerly Battlefield Airmen): OPR is AF/A3S (Directorate of Strategic Security)
	SME for Air Force Weather capabilities: OPR is AF/A3W (Directorate of Weather)
AF/A4	SME for Civil Engineering: OPR is AF/A4C (Civil Engineers)
	SME for Explosive Ordnance Disposal: OPR is AF/A4C
	SME for Fire Protection and Emergency Services: OPR is AF/A4C
	SME for Air Force Emergency Management: OPR is AF/A4C
	SME for Chemical, Biological, Radiological and Nuclear (CBRN) Defense: OPR is AF/A4C
	SME for Security Forces, Nuclear Security and Base Defense: OPR is AF/A4S (Security Forces)
AF/A5	Co-Secretariat of the Capability Development Council: OPR is AF/A5A (Air Force Warfighting Integration Capability) [with SAF/AQR]
	Oversight of AF Operational Capability Requirements process: OPR is AF/A5RP (Requirements Integration Division)
	Secretariat of the AFROC: OPR is AF/A5RP
	SME for Capability Studies and Analysis: OPR is AF/A5RA (Office of Aerospace Studies)
	SME for Combat Air Forces capability requirements: OPR is AF/A5RC (Force Application Division)
	SME for Conventional Munitions inventory and capability requirements: OPR is AF/A5RW (Weapons Requirements Division)
	SME for non-nuclear Command & Control and Communications requirements and Intelligence, Surveillance and Reconnaissance requirements: OPR is AF/A5RI (Command and Control, Intelligence, Surveillance, and Reconnaissance Division)
	SME for Air Mobility, Special Operations, and Personnel Recovery: OPR is AF/A5RM (Mobility, Personnel Recovery, and Special Operations Requirements Division)
	SME for Cyber capability requirements: OPR is AF/A5RK (Cyber Division)

	SME for Electronic Warfare: OPR is AF/A5L (Directorate of Electromagnetic Spectrum Superiority)
AF/A8	Oversight of AF Planning and Programming activity: OPR is AF/A8X (Directorate of Planning), AF/A8P (Directorate of Programming)
AF/A9	SME for conducting studies, analyses, assessments, and modeling & simulation for capability, capacity, and risk
AF/A10	SME for CBRN Survivability issues: OPR is AF/A10S (Countering Weapons of Mass Destruction Division)
	SME for Counter-Weapon of Mass Destruction Enterprise: OPR is AF/A10S
	SME for Nuclear Weapons Delivery: OPR is AF/A10C (Capabilities Division)
	SME for Nuclear Command, Control and Communications (NC3): OPR is AF/A10N (Strategic Deterrence and Nuclear Integration)
	SME for Arms Control, International Treaties & Agreements: OPR is AF/A10P (Policy)
AF/TE	Oversight of Test & Evaluation policy supporting requirements documentation: OPR is AF/TEP (Policy, Programs, and Resources Division)
AFOTEC	SME for Operational Test & Evaluation and Testability determination
HQ AFMC	Oversight of acquisition management and feasibility review for programs under:
	AF Life Cycle Management Center AF Nuclear Weapons Center AF Security Forces Center AF Civil Engineering Center
HQ AETC	SME for Force Development Training and Education requirements issues

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

CJCSI 5123.01H, Charter of the Joint Requirements Oversight Council (JROC) and Implementation of Joint Capabilities Integration and Development System (JCIDS), 31 Aug 18

DoDI 5000.02, Operation of the Adaptive Acquisition Framework, 23 Jan 20

HAF MD 1-7, Deputy Chief of Staff Strategy, Integration and Requirements, 29 Oct 19

AFI 33-322, Records Management and Information Governance Program, 23 Mar 20

AF/A5R Guidebook, Volume 1, Guidelines, Oversight, and Governance, 24 Jun 20

Public Law 109-364 Sec. 801, 17 Oct 06

10U.S.C., Section 2547, Acquisition-related functions of Chiefs of the Armed Forces

Charter for the Air Force Capability Development Council, 20 June 19

Abbreviations and Acronyms

AF/A2/6—Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance and Cyber Effects Operations

AF/A3—Deputy Chief of Staff for Operations, Plans and Requirements

AF/A4—Deputy Chief of Staff for Logistics, Engineering and Force Protection

AF/A5—Deputy Chief of Staff for Strategy, Integration and Requirements

AF/A5A—Air Force Warfighting Integration Capability

AF/A8—Deputy Chief of Staff for Plans and Programs

AF/A9—Deputy Chief of Staff for Studies, Analysis and Assessments

AF/A10—Deputy Chief of Staff for Strategic Deterrence and Nuclear Integration

AF/SE—Chief of Safety of the Air Force

AF/SG—Surgeon General of the Air Force

AF/TE—Director of Test and Evaluation

AFGK—Air Force Gatekeeper

AFOTEC—Air Force Operational Test & Evaluation Center

AFROC—Air Force Requirements Oversight Council

FCB—Functional Capabilities Board

HQ AETC—Headquarters Air Education and Training Command

HQ AFMC—Headquarters Air Force Materiel Command

JCB—Joint Capabilities Board

JROC—Joint Requirements Oversight Council

SME—Subject Matter Expert

SAF/AQ—Assistant Secretary of the Air Force for Acquisition, Technology & Logistics

SAFAQX—Acquisition Integration

SAF/CN—Deputy Chief Information Officer of the Air Force

SAF/CNZA—Cyberspace Capabilities and Compliance Division

SAF/CNZP—Cybersecurity Division

SAF/IE—Assistant Secretary of the Air Force for Installations, Environment & Energy

SAF/SP—Deputy Undersecretary of the Air Force for Space Police

Terms

Capability Requirement (or Requirement, Need)—A capability required to meet organizational roles, functions, and missions in current or future operations. To the greatest extent possible, capability requirements are described in relation to tasks, standards and conditions in accordance with the Universal Joint Task List or equivalent DoD Component Task List.

Materiel Capability Solution—Correction of a deficiency or incorporation of new technology that results in development, acquisition, procurement, or fielding of a new item (including ships, tanks, self-propelled weapons, aircraft, space vehicles and related software & data, spares, repair parts, and support equipment, but excluding real property, installations, and utilities).

Non-Materiel Capability Solution—Changes to doctrine, organization, training, (previously fielded) materiel, leadership and education, personnel, facilities, or policy implemented to satisfy one or more capability requirements (or needs) and reduce or eliminate one or more gaps, without the need to develop or purchase new materiel capability solutions.