## BY ORDER OF THE SECRETARY OF THE AIR FORCE

## **AIR FORCE POLICY DIRECTIVE 10-6**

6 NOVEMBER 2013

**Operations** 

# CAPABILITY REQUIREMENTS DEVELOPMENT

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This directive establishes the framework for the development of Air Force (AF) capability requirements consistent with DoD Directive 5000.01, *The Defense Acquisition System*; Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H, *Joint Capabilities Integration and Development System*; and the associated *Manual for the Operations of the Joint Capabilities Integration and Development System*; and the associated *Manual for the Operations of the Joint Capabilities Integration and Development System* (JCIDS Manual). It applies to all AF organizations, including the Air National Guard and AF Reserve Command and to all unclassified, collateral, compartmented and special access programs. AF/A3/5 is the waiver authority for the provisions in this instruction. Waiver requests shall contain compelling justification and must be submitted formally through AF/A5R-P. Request recommended changes to this publication by submitting an AF Form 847, *Recommendation for Change of Publication*; staffed through the appropriate functional OPR's chain of command for review and coordination. All records created as a result of processes prescribed in this publication are maintained in accordance with AF Manual (AFMAN) 33-363, *Management of Records* and disposed of in accordance with the AF Records Disposition Schedule (RDS) located in the AF Records Information Management System (AFRIMS) located at https://www.my.af.mil/afrims/afrims/afrims/rims.cfm.

# SUMMARY OF CHANGES

This directive supersedes and renames Air Force Policy Directive 10-6, dated 31 May 2006, titled *Capabilities-Based Planning & Requirements Development*. This document has been significantly changed and requires complete review.



# 1. Purpose.

1.1. This directive prescribes policies and establishes responsibilities and authorities related to capability requirements development. Air Force organizations must use formal capabilities-based processes to identify, evaluate, develop, field and sustain capabilities that compete for limited resources. The intent of these processes is to facilitate timely development of affordable and sustainable operational systems needed by combatant commanders. Results of these processes will align with the National Defense Strategy, National Military Strategy and other high level strategy and planning efforts and will feed the Joint Capabilities Integration and Development System (JCIDS) process.

1.2. To ensure capability requirements development occurs continuously and collaboratively with other program stakeholders, this AFPD must be used in conjunction with AFPD 63-1/AFPD 20-1, *Integrated Life Cycle Management*, AFPD 90-11, *Strategic Planning System* and AFPD 99-1, *Test and Evaluation Process*.

**2. Policy.** The Air Force shall:

2.1. Establish and use the Air Force Requirements Oversight Council (AFROC) as the single, corporate body to validate and prioritize all Air Force capability requirements, including both Quick Reaction Capabilities (i.e., Urgent Operational Needs) and predecessor capability development efforts (i.e., Development Planning, Joint Capability Technology Demonstrations, Science and Technology Flagship Capability Concepts).

2.2. Use the JCIDS for the development of all capability requirements, including Quick Reaction Capabilities.

2.3. Use Capabilities-Based Assessments (CBAs) to initiate the development of capability requirements. CBAs are conducted in support of National Defense Strategy, National Military Strategy, Defense Planning Scenarios, AF Strategic Planning Documents and Core Function Master Plans.

2.4. Validation of capability requirements occurs at a point in time and is dependent upon the current and future projections of the National Military Strategy, the threat environment, and the fiscal environment. Significant changes to national strategy and the operating environment may require revalidation of the capability requirement

2.5. Ensure capability requirements are fiscally informed and affordable.

2.6. Establish and use the AF Risk Assessment Framework for all capability requirements across Air Force Core Functions.

2.7. Use validated capability requirements and associated risk assessment to inform the AF Planning, Programming, Budgeting and Execution process.

2.8. Use JCIDS for information technology systems designated as National Security Systems. Use the Defense Business Systems Management Committee for Defense Business Systems.

# 3. Responsibilities and Authorities.

3.1. The Air Force Chief of Staff (CSAF) is the approval authority for all Air Force Acquisition Category (ACAT) I JCIDS documents.

3.2. The Air Force Vice Chief of Staff (VCSAF) shall:

3.2.1. Exercise oversight and execution authority for the development of all Air Force operational requirements.

3.2.2. Act as the approval authority for all Air Force ACAT II and ACAT III JCIDS documents.

3.3. The Air Force Deputy Chief of Staff for Operations, Plans and Requirements (AF/A3/5) shall:

3.3.1. Establish the Air Force capability requirements development process, assign responsibilities, and provide guidance and procedures to implement this directive.

3.3.2. Appoint a General Officer (GO) or Civilian Senior Executive (CSE) Principal to chair the AFROC.

3.3.2.1. Ensure the AFROC identifies, assesses and validates operational requirements.

3.3.2.2. Ensure the AFROC has considered non-materiel and existing materiel solutions being pursued by other Services and DoD Components before proceeding with a materiel solution and entering the JCIDS process.

3.3.2.3. Ensure the AFROC verifies operational requirements align with need date and available resources prior to validation.

3.3.2.4. Ensure the AFROC considers tradeoffs in life cycle cost, schedule and performance for all operational requirements.

3.3.3. Ensure affordability discussions take place at all GO-level operational requirements forums.

3.3.4. Use the AF Risk Assessment Framework in the development of all capability requirements.

3.3.5. Support and prepare Air Force senior leaders for attendance at the Joint Requirements Oversight Council.

3.3.6. Direct responsible organizations within Headquarters Air Force (HAF), Major Commands (MAJCOMs) and Agencies to review and staff JCIDS requirements documents.

3.4. Assistant Secretary of the Air Force, Acquisition (SAF/AQ) shall:

3.4.1. Designate a GO or CSE Principal to the AFROC.

3.4.2. Designate a single office of primary responsibility (OPR) within SAF/AQ to coordinate requirements activities with AF/A3/5.

3.4.3. Ensure affordability discussions take place at all GO-level acquisition forums.

3.4.4. Ensure contractual specifications accurately reflect AFROC validated operational requirements.

3.4.5. Ensure life cycle cost and capability tradeoff analysis is used for all Air Force Review Boards and Configuration Steering Boards.

3.5. Office of the Secretary of the Air Force, Information Dominance and Chief Information Officer (SAF/CIO A6) shall:

3.5.1. Designate a GO or CSE Principal to the AFROC.

3.5.2. Designate a single OPR within SAF/CIO A6 to coordinate operational requirements activities with AF/A3/5.

3.5.3. Ensure all capability requirements are compliant with DoD, Joint Staff and Air Force Net Ready and Networthiness standards.

3.6. Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance (AF/A2) shall:

3.6.1. Designate a GO or CSE Principal to the AFROC.

3.6.2. Designate a single OPR within AF/A2 to coordinate operational requirements activities with AF/A3/5.

3.6.3. Ensure all capability requirements documents are reviewed for sufficiency in intelligence mission data, threat and any other relevant intelligence content pertinent to mandatory KPPs. As per DoDD 7045.20, *Capability Portfolio Management*, ensure consistency with Joint portfolio management as aligned with the current Joint Capability Areas.

3.7. Deputy Chief of Staff, Logistics, Installations & Mission Support (AF/A4/7) shall:

3.7.1. Designate a GO or CSE Principal to the AFROC.

3.7.2. Designate a single OPR within AF/A4/7 to coordinate operational requirements activities with AF/A3/5.

3.7.3. Ensure capability planning contains executable and affordable agile combat operational support for materiel, systems, installations and mission-support requirements before Initial Operational Capability (IOC). AF/A4/7 provides agile combat support for most, but not all systems. For systems outside their portfolio, AF/A4/7 will advise the appropriate HAF functional area.

3.8. Deputy Chief of Staff, Strategic Plans & Programs (AF/A8) shall:

3.8.1. Designate a GO or CSE Principal to the AFROC.

3.8.2. Designate a single OPR within AF/A8 to coordinate operational requirements activities with AF/A3/5.

3.8.3. Ensure all capability requirements are fiscally informed and programmed funding is aligned with the validated requirements for each acquisition phase.

3.8.4. In coordination with AF/A9, review risk assessments for all capability requirements to ensure the use of the AF Risk Assessment Framework.

3.9. Director, Studies & Analysis, Assessment and Lessons Learned (AF/A9) shall:

3.9.1. Designate a GO or CSE Principal to the AFROC.

3.9.2. Designate a single OPR within AF/A9 to coordinate operational requirements activities with AF/A3/5.

3.9.3. Review risk assessments for all capability requirements to ensure proper use of the AF Risk Assessment Framework.

3.9.4. Ensure appropriate AF/A9 tools, studies and Lessons Learned are available to Sponsors and Implementing Commands to consider during their CBA, Analysis of Alternative (AoA) and Development Planning efforts.

3.9.5. Review and assess AoAs for select programs, as directed by the AFROC.

3.10. Assistant Chief of Staff for Strategic Deterrence and Nuclear Integration (AF/A10) shall:

3.10.1. Designate a GO or CSE Principal to the AFROC.

3.10.2. Designate a single OPR within AF/A10 to coordinate operational requirements activities with AF/A3/5.

3.10.3. Provide integration and oversight of all nuclear related capability requirements and maintain synchronization in strategic deterrence responsibilities across the nuclear enterprise.

3.11. Air Force Test and Evaluation (AF/TE) shall:

3.11.1. Designate a GO or CSE Principal to the AFROC.

3.11.2. Designate a single OPR within AF/TE to coordinate operational requirements activities with AF/A3/5.

3.11.3. Collaborate with requirements sponsors and system developers to improve the development, testing, and fielding of Air Force systems or subsystems.

3.11.4. Ensure all capability requirements are testable and measurable.

3.12. Air Force Operational Test and Evaluation Center (AFOTEC) shall:

3.12.1. Designate a GO or CSE Principal to the AFROC.

3.12.2. Designate a single OPR within AFOTEC to coordinate operational requirements activities with AF/A3/5.

3.12.3. Certify all capability requirements are testable and measurable.

3.13. Air Education and Training Command (AETC) shall:

3.13.1. Designate a GO or CSE Principal to the AFROC.

3.13.2. Designate a single OPR within AETC to coordinate operational requirements activities with AF/A3/5.

3.13.3. Review all capability requirements to ensure training considerations are properly addressed and fully resourced.

3.14. Lead Command/Core Function Lead Integrator shall:

3.14.1. Designate a GO or CSE Principal to the AFROC.

3.14.2. Designate a single OPR within the Lead Command to coordinate operational requirements activities with AF/A3/5.

3.14.3. Through the Core Function Master Plan, provide a strategic vision for the Service Core Function (SCF) and force structure options to inform the requirement process, the Planning, Programming, Budgeting & Execution process and the acquisition process, to ensure consistency with strategic direction.

3.14.4. Sponsor capability requirements documents.

3.14.5. Use the AF Risk Assessment Framework in the development of all capability requirements.

3.14.6. Ensure life cycle cost assessments, cycle times, and requirements tradeoffs are addressed in acquisition decision forums, to include Configuration Steering Boards and AF Review Boards. *NOTE:* For the purposes of this directive, Lead Command is normally the sponsoring MAJCOM. In addition, a Direct Reporting Unit (DRU) or a Field Operating Agency (FOA) with no direct MAJCOM oversight can sponsor JCIDS requirements. The DRU/FOA must follow all guidance specified for Lead Commands when acting in this capacity.

3.15. Implementing Command (Air Force Materiel Command, Air Force Space Command, or Air Force Civil Engineer Center) shall:

3.15.1. Designate a GO or CSE Principal to the AFROC.

3.15.2. Designate a single OPR within the Implementing Command to coordinate operational requirements activities with AF/A3/5.

3.15.3. Ensure all capability requirements are feasible (technically achievable and executable within the estimated schedule and budgeted life cycle cost).

3.15.4. Ensure sufficient development planning is conducted to support feasible and affordable capability requirements.

3.15.5. Ensure life cycle cost assessments, cycle times, and requirements tradeoffs are addressed in acquisition decision forums, to include Configuration Steering Boards and AF Review Boards.

3.15.6. Support the requirements sponsor by advising and assisting during the Capability Based Planning and Analysis activities within and across SCFs to ensure investment on highest priority capability gaps and shortfalls.

3.16. Air Reserve Component (National Guard Bureau and Office of the Air Force Reserve) shall:

3.16.1. Designate a GO or CSE Principal to the AFROC.

3.16.2. Designate a single OPR to coordinate operational requirements activities with AF/A3/5.

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3.16.3. Review all capability requirements for impacts to assigned Air Reserve Component missions.

ERIC K. FANNING Acting Secretary of the Air Force

### Attachment 1

### **GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

### References

AFPD 10-9, Lead Command Designation and Responsibilities for Weapon Systems, 8 March 2007

AFPD 10-28, Air Force Concept Development & Experimentation, 17 April 2012

AFPD 16-5, Planning, Programming, Budgeting and Execution Process, 27 September 2010.

AFPD 63-1/AFPD 20-1, Integrated Life Cycle Management, 3 July 2012

AFPD 90-11, Strategic Planning System, 26 March 2009

AFPD 99-1, Test and Evaluation Process, 22 July 1993

AFI 14-111, Intelligence Support to the Acquisition Life Cycle, 18 May 2012

AFI 63-101/20-101, Integrated Life Cycle Management, 7 March 2013

AFI 63-114, Quick Reaction Capability Process, 4 January 2011

AFI 63-131, Modification Management, 19 March 2013

AFI 99-103, Capabilities Based Test and Evaluation, 26 February 2008

CJCSI 3170.01H, Joint Capabilities Integration and Development System, 10 January 2012

CJCSI 5123.01F, Charter of the Joint Requirements Oversight Council, 10 January 2012

CJCSI 6212.01F, Net Ready Key Performance Parameter, 21 Mar 2012

DoDAF v2.0, Department of Defense Architecture Framework, 28 May 2009

DoDD 5000.01, Defense Acquisition System, 20 November 2007

DoDD 7045.20, Capability Portfolio Management, 25 September 2008

DoDI 5030.55, Department of Defense Procedures for Joint DOD-DOE Nuclear Weapons Life-Cycle Activities, 6 March 2006

Joint Publication (JP) 1-02, Department of Defense Dictionary of Military and Associated Terms, 8 November 2010

JS/J8, Manual for the Operation of the Joint Capabilities Integration and Development System, 19 January 2012

## Abbreviations and Acronyms

ACAT—Acquisition Category
AFPD—Air Force Policy Directive
AFROC—Air Force Requirements Oversight Council
AoA—Analysis of Alternatives
CBA—Capabilities-Based Assessment

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CDD—Capability Development Document

CJCSI-Chairman, Joint Chief of Staff Instruction

CSAF—Chief of Staff of the United States Air Force

**CSE**—Civilian Senior Executive

**DoD**—Department of Defense

**DOTmLPF**—P – Doctrine, Organization, Training, materiel, Leadership and education, Personnel, Facilities, and Policy

**DRU**—Direct Reporting Unit

FCC—Flagship Capability Concept

FOA—Field Operating Agency

GO—General Officer

HAF-Headquarters Air Force, includes the Secretariat and the Air Staff

**ICD**—Initial Capabilities Document

**IOC**—Initial Operational Capability

JCIDS—Joint Capabilities Integration and Development System

MAJCOM-Major Command

**OPR**—Office of Primary Responsibility

PM—Program Manager

VCSAF—Vice Chief of Staff of the United States Air Force

#### Terms

*NOTE*—: The purpose of this glossary is to help the reader understand the terms listed as used in this publication. It is not intended to encompass all terms. See pertinent Joint and AF specific publications for standardized terms and definitions for DoD and AF use.

Acquisition Category (ACAT)— Categories established to facilitate decentralized decision making and execution, and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority and applicable procedures.

Affordability— The degree to which the life-cycle cost of an acquisition program is in consonance with the long-range modernization, force structure and manpower plans of the individual DoD Components (military department and defense agencies), as well as for the Department as a whole. For major defense acquisition program, affordability assessments are required at Milestones B and C. The purpose of the assessment is for the DoD Component to demonstrate that the program's projected funding and manpower requirements are realistic and achievable, in the context of the DoD Component's overall long-range modernization plan. Affordability constraints force prioritization of requirements, drive performance and cost trades, and ensure that unaffordable programs do not enter the acquisition process. If affordability caps are breached, costs must be reduced or program cancelation is expected. Constraints stem from long-term affordability planning and analysis, which is a Component leadership responsibility

that should involve the Component's programming, resource planning, requirements and acquisition communities. Affordability is reviewed during Air Force Requirements Review Group and AFROC reviews.

**Analysis of Alternatives (AoA)**— The AoA is an analytical comparison of the operational effectiveness, suitability, risk and life cycle cost of alternatives that satisfy established capability needs stipulated in an approved initial capabilities document (ICD). The AoA helps decision makers select courses of action to satisfy an operational capability need.

**Capabilities-Based Assessment (CBA)**— The CBA is the Joint Capabilities Integration and Development System analysis process. It answers several key questions for the validation authority prior to their approval: define the mission; identify capabilities required; determine the attributes/standards of the capabilities; identify gaps/shortfalls; assess operational risk associated with the gaps/shortfalls; prioritize the gaps/shortfalls; identify and assess potential non-materiel solutions; provide recommendations for addressing the gaps/shortfalls.

**Capability**— The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways across the doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTmLPF-P) to perform a set of tasks to execute a specified course of action.

**Capability Gaps**— The inability to execute a specified course of action. The gap may be the result of no existing capability, lack of proficiency or sufficiency in an existing capability solution, or the need to replace an existing capability solution to prevent a future gap.

**Capability Requirement (or Requirement)**— A capability required to meet an organization's 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. If a capability requirement is not satisfied by a capability solution, then there is also an associated capability gap which carries a certain amount of risk until eliminated. A requirement is considered to be 'draft' or 'proposed' until validated by the appropriate authority.

**Capability Shortfall**— A lack of full military utility required for an operational sponsor to execute a task effectively.

**Capability Solution**— A materiel solution or non-materiel solution required to satisfy one or more capability requirements (or needs) and reduce or eliminate one or more capability gaps.

**Defense Business System**— The term "defense business system" means an information system, other than a national security system, operated by, for, or on behalf of the Department of Defense, including financial systems, mixed systems, financial data feeder systems, and information technology and information assurance infrastructure, used to support business activities, such as acquisition, financial management, logistics, strategic planning and budgeting, installations and environment and human resource management.

**Feasible**— A requirement that is technically achievable and executable within the estimated schedule and budgeted life cycle cost.

**Flagship Capability Concept (FCC)**— FCC is a demonstration of the maturity and potential of advanced technologies for enhanced military operational capability or cost effectiveness. FCCs

are commissioned by the AFROC with scope, objectives and organizational responsibilities defined in a Technology Transition Plan.

**Implementing Command**— The command (usually Air Force Materiel Command, Air Force Space Command, or Air Force Civil Engineering Center) providing the majority of personnel in direct support of the program manager responsible for development, production and sustainment activities.

**Information System (IS)**— As defined by CJCSI 6212.01F, *Net Ready Key Performance Parameter*, is any equipment, or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information and includes computers and computer networks, ancillary equipment, software, firmware and similar procedures, services (including support services) and related resources. Notwithstanding the above, the term information technology (IT) does not include any equipment that is acquired by a federal contractor incidental to a federal contract. The term "information systems" is used synonymously with IT (to include National Security Systems).

**Initial Operational Capability** (**IOC**)— That first attainment of the capability to employ effectively a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained and equipped personnel necessary to operate, maintain, and support the system. It is normally defined in the Capability Development Document (CDD). *NOTE:* IOC is event-driven and not tied to a specific future date.

**Joint Capability Technology Demonstration (JCTD)**— An OSD approved program that seeks to rapidly and collaboratively demonstrate, assess, and transition solutions to address Combatant Commanders', Joint, Interagency, and Coalition problems. A JCTD demonstrates the military utility of significant new technology and provides an assessment to clearly establish operational utility and system integrity.

**Lead Command**— The command that serves as the operators' interface with the Program Manager for a system as defined by AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*.

**Materiel Solution**— Correction of a deficiency, satisfaction of a capability gap, or incorporation of new technology resulting in the development, acquisition, procurement, or fielding of a new item (including ships, tanks, self-propelled weapons, aircraft, and related software & data, spares, repair parts, and support equipment, but excluding real property, installations, and utilities) necessary to equip, operate, maintain, and support military activities without disruption as to its application for administrative or combat purposes. In the case of family of systems and system of systems approaches, an individual materiel solution may not fully satisfy a necessary capability gap on its own.

**Militarily Useful Capability**— A capability that achieves military objectives through operational effectiveness, suitability and availability, which is interoperable with related systems and processes, transportable and sustainable when and where needed and at costs known to be affordable over the long term.

**Non-Materiel Solution**— Changes in doctrine, organization, training, materiel, leadership and education, personnel, facilities, or policy to satisfy identified functional capabilities. The materiel portion is restricted to commercial or non-developmental items that may be purchased

commercially or by purchasing more systems from an existing materiel program. The acquisition of the materiel portion must comply with all acquisition policies.

**Operational Capability**— The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways across the doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTmLPF-P) to perform a set of tasks to execute a specified course of action. It is defined by an operational sponsor and expressed in broad operational terms in the format of an ICD or a Joint DOTmLPF-P change recommendation. In the case of materiel proposals/documents, the definition will progressively evolve to DOTmLPF-P performance attributes identified in the capability development document and the Capability Production Document.

**Operator**— An operational command or agency that employs acquired systems for the benefit of warfighters. Operators may also be warfighters.

**Program Manager (PM)**— The PM, as defined in DoDD 5000.01, *Defense Acquisition System*, is the designated individual with the responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. As used in this instruction applies collectively to System Program Director, Product Group Manager, Single Manager, or acquisition program manager.

**Quick Reaction Capability**— An expedited process for documenting and staffing materiel solutions to urgent, time-sensitive requirements. The process is fully described in AFI 63-114, *Quick Reaction Capability Process*.

**Requirement**— see Capability Requirement.

**Requirements Risk Assessment**— The requirements risk assessment provides the AFROC the level of risk to the applicable SCF if a capability requirement is not executed and how the risk will change if the capability requirement is executed. Additionally, the requirements risk assessment is used in 1) establishing the justification to proceed with next step in the JCIDS process (specifically the ICD) 2) to provide a relative comparison of AF programs for use by the AF principal during Functional Capabilities Board prioritization discussions and 3) to inform the AF planning and programming process to better shape the future force. The requirements risk assessment encompasses those capabilities for which the AF is pursuing a materiel solution; specifically, those capabilities that will lead to development of ICDs and CDDs. A risk assessment must be accomplished for every capability seeking AFROC validation.

**Sponsor**— The organization responsible for documentation, periodic reporting, and funding actions necessary to support needed capabilities (e.g., MAJCOM, FOA, DRU).

**Urgent Operational Need**— AF specific needs identified during conflict or crisis situations that if not satisfied in an expedited manner, would result in unacceptable loss of life or critical mission failure.

**Validation**— The review of documentation by an operational authority other than the sponsor to confirm the operational capability. Validation is a precursor to approval.

**Warfighter**— An operational command or agency that receives or will receive benefit from the acquired system. Combatant commanders and their Service component commands are the warfighters. There may be more than one warfighter for a capability.