

Comparative Analysis of Tier 1 Joint Capability Area (JCA) Alignment with Joint Functions

SPECIAL STUDY



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EXECUTIVE SUMMARY

Purpose and Product

The Joint Staff (JS) J-7/Joint Education and Doctrine Division (JEDD) has noted a lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine communities, specifically between the six extant joint functions outlined in joint doctrine and the Tier 1 joint capability areas (JCAs). Accordingly, on 21 October 2010, the Joint Staff J-7/JEDD requested US Joint Forces Command (USJFCOM), Joint Warfighting Center (JWFC), Doctrine and Education Group (DEG) conduct a special study to:

- Identify the differences between the joint functions and the current Tier 1 JCA structure (e.g., Battlespace Awareness JCA versus Intelligence joint function).
- Identify all the modifications necessary to align Tier 1 JCA functions with joint functions with emphasis on linking capability development language to current employment of the joint force without constraining either.
- Assesses the impact of aligning Tier 1 JCAs with joint functions.

This report provides data analysis, conclusions, and recommendations concerning an examination of the lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine communities. It provides an in-depth comparative analysis among the six extant joint functions outlined in joint doctrine and the nine Tier 1 joint capability areas (JCAs) and specific recommendations to better align the joint functions with the Tier 1 JCAs.

Key Conclusions

JCAs are not fully compatible with the joint functions and some are outside the scope of planning and executing joint operations.

Failure to comply with DOD policy that mandates DOD components use JP 1-02 as the primary terminology source creates unacceptable confusion when preparing policy, strategy, doctrine, and planning documents.

The unique and unilateral definitions of the JCAs do not improve communications and mutual understanding within DOD, because the JCAs were devised, mostly on theory, and without benefit of practical application.

Key Recommendations

Use approved DOD terminology from JP 1-02 per the guidance in DODI, 5025.12, *Standardization of Military and Associated Terminology*, CJCSI 5705.01D, *Standardization of Military and Associated Terminology*, and the *Joint Capability Area Management Plan* (JCAMP).

Do not use JCAs for any purpose beyond the Joint Capabilities Integration and Development System (JCIDS) and capability portfolio management, capabilities-based force development, investment decision making, capability delegation, and capability analysis (gap, excess, and major trades).

Change the JCA “**Force Support**” to “**Personnel, Health, and Readiness Management**” and retain the current definition.

Change the JCA “**Battlespace Awareness**” to “**Operational Environment Awareness**” and retain the current definition.

Change the JCA definition of **Force Application** to: “The ability to integrate the use of fires and movement and maneuver to create the effects necessary to achieve objectives.”

Change the JCA “**Logistics**” to “**Logistics, Less Health Service Support**” or “**Supply, Maintenance Operations, Deployment and Distribution, Engineering, Logistic Services, and Operational Contract Support**” and define it as: “The ability to plan and execute the movement and support of forces. It includes those aspects of military operations that deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. acquisition or construction, maintenance, operation, and disposition of facilities; and c. acquisition or furnishing of services.”

Change the JCA definition of “**Command and Control**” to: “The ability to exercise authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.” (JP 1-02. SOURCE: JP 3-0)

Change the JCA term “**Net-Centric**” to “**Cyberspace Operations**” and define it as: “The ability to employ cyber capabilities where the primary purpose is to achieve objectives in or through cyberspace. Such operations include computer network operations and activities to operate and defend the Global Information Grid.” (JP 1-02. SOURCE: JP 3-0)

Change the JCA definition of **Protection** to: “The ability to preserve the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area.” (JP 1-02. SOURCE: JP 3-0)

Change the JCA “**Building Partnerships**” to “**Nation Assistance and Strategic Communication**” and define it as: “The ability to render civil and/or military assistance to a nation by foreign forces within that nation’s territory based on agreements mutually concluded between nations and to focus United States Government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States Government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power.”

Retain the JCA “**Corporate Management and Support**” in its present form.

Make policy changes to align JCA usage with the joint functions.

Map the JCAs to the joint functions. Figure V-1 suggests a model for further analysis. Actual mapping may need to occur at Tier 2 or below.

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CHAPTER I

INTRODUCTION

SECTION A. PURPOSE AND PRODUCT

1. **Background and Tasks.** The Joint Staff (JS) J-7/Joint Education and Doctrine Division (JEDD) has noted a lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine communities, specifically between the six extant joint functions outlined in joint doctrine and the Tier 1 JCAs. Accordingly, on 21 October 2010, the Joint JS J-7/JEDD requested US Joint Forces Command (USJFCOM), Joint Warfighting Center (JWFC), Doctrine and Education Group (DEG) conduct a special study (Appendix A) to:

a. Identify the differences between the joint functions and the current Tier 1 JCA structure (e.g., Battlespace Awareness JCA versus Intelligence joint function).

b. Identify all the modifications necessary to align Tier 1 JCA functions with joint functions. The emphasis is on linking capability development language to current employment of the joint force without constraining either.

c. Assesses the impact of aligning Tier 1 JCAs with joint functions.

2. **Study Report.** This report provides data analysis, conclusions, and recommendations concerning an examination of the lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine communities. It provides an in-depth comparative analysis among the six extant joint functions outlined in joint doctrine and the nine Tier 1 joint capability areas (JCAs) and specific recommendations to better align the joint functions with the Tier 1 JCAs.

SECTION B. METHODOLOGY

3. **Approach.** A systematic approach was applied by gathering pertinent information and then analyzing it in relation to both the six extant joint functions outlined in joint doctrine and the Tier 1 JCAs. The analysis reviewed policy regarding Department of Defense (DOD) dictionary definitions, joint doctrine, and JCAs. It then described, compared, and contrasted the six joint functions and Tier 1 JCAs. Finally, it compared and contrasted the origins and purposes of the six joint functions and Tier 1 JCAs. Conclusions were drawn and recommendations made based on the information and analysis results.

4. **Assumptions.** The following assumptions were applied:

a. Terms and definitions found in final coordination drafts of joint publications will be approved as written and incorporated into JP 1-02.

b. JCAs are not a suitable replacement for joint functions in doctrine. Appendix B contains an analysis of this assumption.

c. The functional capability board (FCB) structure is primarily Office of the Secretary of Defense (OSD) portfolio and workload driven.

d. As JCAs were decomposed, rather than aggregated, the Tier 2 contents provide additional context to the JCA definitions.

e. Realignment of Tier 1 JCAs will cause re-decomposition and effect lower tiers.

f. It is beyond the scope of this study to determine the optimum number and contents of capability portfolios.

5. **Research and Data Collection.** The following publications, directives, instructions, and relevant materials were identified:

a. The Joint Doctrine, Education, and Training Electronic Information System (JDEIS) and Joint Electronic Library (JEL) and associated indices were searched to identify Department of Defense (DOD) directives and instructions, Chairman of the Joint Chiefs of Staff (CJCS) instructions, approved and emerging joint doctrine, and approved doctrine projects relevant to this study.

b. Joint Concepts and the Joint Capability Area Management System (JCAMS) were searched to identify information relevant to this study.

c. General Internet searches were conducted for additional information.

6. **Analysis, Conclusions, and Recommendations**

The analysis centered on DOD policy and terminology. Conclusions were drawn regarding the construct of JCAs versus the six joint functions and their associated terminology. An assessment was made of the impact of aligning Tier 1 JCAs with joint functions. Finally, recommendations were made regarding courses of action for resolving identified terminology implications/doctrinal issues. The analysis, conclusions, and recommendations are based on available information as of 1 December 2010. The dynamics of the research arena should be considered during approval and application of the recommendations.

SECTION C. ADMINISTRATIVE

Address questions concerning this study to the USJFCOM JWFC, DEG. Points of contact at the USJFCOM JWFC are Lt Col David Hauck, 757-203-6061 (DSN 668), david.hauck@jfc.com, and Mr. Charles Shaver, 757-203-6062, charles.shaver.ctr@jfc.com. US postal mailing address:

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CHAPTER II RESEARCH AND DATA SOURCES

SECTION A. RESEARCH

Research was conducted and data collected on the six extant joint functions outlined in joint doctrine and the Tier 1 JCAs. This involved identifying and reviewing DOD issuances and CJCS directives, current and draft joint doctrine, and other relevant materials. Internet searches were conducted against military, government, and general websites and databases for additional information relevant to this study.

SECTION B. DATA SOURCES

1. **DOD Issuances.** DOD issuances were searched to determine current policy regarding terminology, definitions, doctrine, and JCAs.

a. Department of Defense Instruction (DODI) 5025.12, *Standardization of Military and Associated Terminology* states DOD uses joint publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* as the primary terminology source when preparing correspondence, to include policy, strategy, doctrine, and planning documents. DOD does not restrict the use and publication of terms and definitions for unique functional areas or unilateral use by individual DOD Components. Any military or associated terms or definitions that involve DOD-wide applicability or usage across functional boundaries, may be nominated for inclusion in JP 1-02 if appropriate.

b. Department of Defense Directive (DODD) 7045.20, *Capability Portfolio Management*, states the existing JCA structure shall serve as DOD's common framework and lexicon for the organization of capability portfolios.

2. **CJCS Directives.** CJCS directives were searched to determine current policy regarding terminology, definitions, doctrine, and JCAs.

a. Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5705.01D, *Standardization of Military and Associated Terminology*, provides the specific policy, roles, and responsibilities of those who establish terminology in JP 1-02. DOD documents should use approved JP 1-02 terminology, properly sourced, to the maximum extent possible. Authors should carefully research new and revised terms to preclude creating unique DOD definitions when widely recognized and accepted definitions already exist.

b. CJCSI 5120.02B, *Joint Doctrine Development System*, discusses the need for standardized terminology in joint doctrine, and the development of doctrinal terms and their use in joint publications.

3. **Joint Doctrine.** The principle relevant publications included JPs 1, *Doctrine for the Armed Forces of the United States*; 1-02, *Department of Defense Dictionary of Military and Associated Terms*; 2-0, *Joint Intelligence*; 3-0 (Ch 2), *Joint Operations*; 3-09 (Ch 1), *Joint Fire Support*; 5-0, *Joint Operation Planning*, and 6-0, *Joint Communications System*. For more detailed information on joint doctrine, refer to Appendix C, “Joint Doctrine Overview.”

4. **DOD Strategic Guidance and Planning Documents.** The *Joint Capability Area Management Plan* (JCAMP) states: “when possible and appropriate, use joint doctrinal and approved DOD terms and definitions and identify/explain any deviations.”

5. DOD websites

a. J7 Joint Force Development and Integration Division (JFDID) <http://www.dtic.mil/futurejointwarfare> provides a JCA definition and additional information regarding JCAs.

b. JCAMS <http://jcams.penbaymedia.com> is the authoritative DOD database for the JCA taxonomy and lexicon. Where necessary, JCAMS includes business rules and related documentation to more clearly define JCAs. JCAMS also provides JCA linkages to related DOD information such as the program elements, universal joint tasks (UJTs), and joint operating concepts.

CHAPTER III DATA ANALYSIS

SECTION A. OVERVIEW

This analysis applies the data to the topics identified in the methodology. It begins with an overview of the joint functions and JCAs. It is centered on the terminology used in the DOD dictionary and the JCA definitions from JCAMS. It examined current joint doctrinal treatment of the joint functions compared with the JCAs to identify the differences between the joint functions and the current tier 1 JCA structure. It then analyzes all the modifications necessary to align Tier 1 JCA functions with joint functions. Finally, it analyzes the impact of aligning Tier 1 JCAs with joint functions.

SECTION B. GENERAL

1. **Joint Functions.** Joint functions are related capabilities and activities grouped together to help joint force commanders (JFCs) integrate, synchronize, and direct joint operations. Functions that are common to joint operations at all levels of war fall into six basic groups — **command and control, intelligence, fires, movement and maneuver, protection, and sustainment.** Some functions, such as command and control and intelligence, apply to all operations. Others, such as fires, apply, as the JFC's mission requires. A number of subordinate tasks, missions, and related capabilities help define each function, and some could apply to more than one joint function.

a. The joint functions reinforce and complement one another, and integration across the functions is essential to mission accomplishment. For example, joint fires can enhance the protection of a joint security area by destroying enemy forces before they can threaten the joint security area. Likewise, ground forces can improve their protection by using intelligence to alter movement or maneuver so that enemy ambushes or other hazards are avoided. In any joint operation, the JFC can choose from a wide variety of joint and Service capabilities and combine them in various ways to perform joint functions and accomplish the mission. The operation plan or operation order describes how the JFC uses capabilities (organizations, people, and systems) to perform tasks associated with each joint function. However, forces and other assets are not characterized by the functions for which the JFC is employing them. Individual Service capabilities often can support multiple functions simultaneously or sequentially while the joint force is executing a single task. For example, capabilities employed in the air domain typically accomplish tasks that support all six functions in a single combat operation. Just as component commanders integrate activities across functions to accomplish component tasks and missions, the JFC and staff do likewise for the joint force. Various factors complicate the JFC's integration challenge, such as

competing demands for high-priority capabilities and the fact that joint force Service components have different function-oriented approaches, procedures, and perspectives. The synchronization, coordination, and/or integration of military operations with the activities of governmental and nongovernmental entities to achieve unity of effort are key to success, and military forces need to work competently in this environment while properly supporting the agency in charge.

b. While information operations (IO) is not a separate function, the JFC and staff apply the IO core, supporting, and related capabilities across the joint functions and independently in some cases. Some IO capabilities are offensive in application, such as computer network attack. Operations security is an example of a defensive capability, and relates to the protection function. Regardless of these alignments, integration and synchronization across IO capabilities and actions is essential to many aspects of joint operations. For example, the commander and staff must integrate public affairs and the commander's defense support to public diplomacy with other IO actions to enable the commander's communications strategy.

c. For information on the history of the joint functions, refer to Appendix D, "Historical Information."

2. Joint Capability Areas. JCAs are collections of like DOD capabilities functionally grouped to support capability analysis, strategy development, investment decision making, capability portfolio management, and capabilities-based force development and operational planning. JCAs are logically broken down from higher level capability categories to further scope, bound, and clarify capability categories by providing greater granularity to facilitate detailed analysis or allow better mapping of resources to capabilities. The number of tiers/levels required to decompose a JCA down to its component capabilities is not a constant across the JCAs. JCAs identify the major functional areas of near and far-term challenges. The JCA taxonomy establishes a Tier 1 (top level) joint capability, Tier 2 (subordinate), and Task levels describing the enabling elements of a joint capability.

a. Tier 1 JCA - A Tier 1 JCA is a high-level capability category that facilitates capabilities-based planning, major trade analysis, and decision making. Tier 1 JCAs are comprised of functional-, operational-, domain-, and institutional-based joint capabilities. All DOD capabilities can be mapped to a Tier 1 JCA.

b. JCAs are an integral part of capabilities planning intended to provide a common language across related DOD activities and processes.

c. JCAs inform options for cross portfolio trades. (DODD 7045.20)

d. The Joint Capabilities Integration and Development System (JCIDS) uses the JCAs as an organizing construct. The Functional Capabilities Boards (FCBs) are organized around the Tier 1 JCAs and the JCIDS documents link the capabilities identified to the applicable JCAs. (CJCSI 3170.01G)

e. Each FCB and its designated sponsoring organization are aligned with an approved Tier I JCA to support joint requirement oversight council (JROC) efforts and processes. FCBs are also responsible for assessing capabilities and tradeoffs across the range of their respective Tier 1 JCA. (CJCSI 3137.01D)

f. JCAs are used in a variety of DOD processes beyond just portfolio management.

(1) During concept development, concept authors will use the JCAs as a baseline of joint capabilities relevant to their concept. Concept authors will analyze the potential merit of their posited solution by comparing it to the JCA baseline of extant joint capabilities. Any expansion or deviation from this baseline of existing joint capabilities must be fully explained in the concept. (CJCSI 3010.02B)

(2) The Comprehensive Joint Assessment data, where appropriate, is submitted using the JCA lexicon/taxonomy. (CJCSI 3100.01B)

(3) Warfighter mission area uses JCAs to align information technology investments to a warfighter mission information technology domain/FCB. The Global Information Grid architecture is JCA based to enable joint warfighting priorities. (CJCSI 8410.01A)

(4) The Department of Defense Readiness Reporting System is a capabilities-based readiness reporting system. (DODD 7730.65)

(5) The JCAs must be mapped to the universal joint task list (UJTL) to fully meet operational mission requirements.

g. For information on the history of the JCAs, refer to Appendix D, "Historical Information."

3. **Purpose Comparison.** The joint functions span the entire doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) construct while JCAs are focused mainly on materiel solutions. JFCs use joint functions to fight and win to defeat our adversaries. Portfolio managers decompose JCAs providing greater granularity for mapping of resources for cross portfolio trades.

4. **Focus Comparison.** JCAs are defined with respect to budget categories and acquisition requirements while joint functions are described in detail

throughout the joint doctrine hierarchy of 78 JPs. JCAs were devised mostly on theory and without focus on a JFC employing joint warfighters. Joint doctrine represents what is taught, believed, and advocated as what is right (i.e., what works best). Joint functions are fundamental principles that guide the employment of US military forces.

5. **Application Comparison.** JFCs use joint functions to employ forces. DOD and the Services use JCAs to develop the force. Joint functions are related capabilities and activities grouped together to help JFCs integrate, synchronize, and direct joint operations. JCAs are collections of like DOD activities functionally grouped to support capability analysis, strategy development, investment decision making, capability portfolio management, and capabilities-based force development and operational planning.

6. Other Frameworks

a. **Universal Joint Tasks.** UJT are primarily based on joint doctrine (CJCSI 3500.01E); however, they can also be based on policy or approved joint concepts. Though even when not based on doctrine, UJT are consistent with doctrine. UJT support joint warfighting by:

(1) Providing a library of mission tasks for development of mission essential task lists and readiness reporting.

(2) Defining capability requirements for readiness reporting, systems acquisition, and contingency operations planning.

(3) Expressing military tasks to support readiness, lessons-learned, joint experimentation, capabilities development, training, and joint military education programs.

(4) Providing a standardized tool to support the planning, execution, evaluation, and assessment of joint training.

b. **Future Years Defense Program.** This program summarizes resources associated with DOD programs. It includes 11 major programs: Program 1 - Strategic Forces, Program 2 - General Purpose Forces, Program 3 - Command, Control, Communications, and Intelligence, Program 4 - Mobility Forces, Program 5 - Guard and Reserve Forces, Program 6 - Research and Development, Program 7 - Central Supply and Maintenance, Program 8 - Training, Medical, and Other General Personnel Activities, Program 9 - Administration and Associated Activities, Program 10 - Support of Other Nations, and Program 11 - Special Operations Forces. Each major force program reflects a macro-level force mission or a support mission of DOD and contains the resources necessary to achieve a broad objective or plan. It

reflects fiscal time-phasing of mission objectives and the means proposed for their accomplishment.

SECTION C. SPECIFIC JCA AND JOINT FUNCTION DIFFERENCES

1. Command and Control versus Command and Control, Net-Centric

a. The DOD dictionary definition for **command and control** is: “The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.” (JP 1-02. SOURCE: JP 1)”

b. The JCA definition is: “The ability to exercise authority and direction by a properly designated commander or decision maker over assigned and attached forces and resources in the accomplishment of the mission.” (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Organize, Understand, Planning, Decide, Direct, and Monitor.

c. These definitions are very similar, with the JCA definition adding “decision maker” and “resources” to the first sentence of the DOD dictionary definition and omitting the remainder of the DOD dictionary definition. “Decision makers” do not command; only commanders command. The JCA inclusion of “decision makers” is factually incorrect. The second sentence of the DOD dictionary definition includes “personnel, equipment, communications, facilities” which are resources.

d. There is no DOD dictionary definition for **net-centric**; however, multiple unique or unilateral definitions exist.

(1) The JCA definition is: “The ability to provide a framework for full human and technical connectivity and interoperability that allows all DOD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence, and protects information from those who should not have it.” (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Information Transport, Enterprise Services, Net Management, and Information Assurance

(2) “Relating to or representing the attributes of a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data are shared timely and seamlessly among users, applications, and platforms.” (DODD 8000.01)

(3) “Relating to or representing the attributes of net-centricity. Net centricity is a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data is shared timely and seamlessly among users, applications, and platforms. Net-centricity enables substantially improved military situational awareness and significantly shortened decision making cycles. Net-Centric capabilities enable network-centric operations and Network-Centric Warfare.” (DODD 8320.02)

(4) “Relating to or representing the attributes of a net-centric environment. A net-centric environment is a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data is shared timely and seamlessly among users, applications, and platforms. A net-centric environment enables substantially improved military situational awareness and significantly shortened decision-making cycles.” (CJCSI 5123.01E)

(5) “Information-based operations that use service-oriented information processing, networks, and data from the following perspectives: user functionality (capability to adaptively perform assigned operational roles with increasing use of system-provided intelligence/cognitive processes), interoperability (shared information and loosely coupled services), and enterprise management (net operations).” (CJCSI 6212.01E)

e. “**Net-centric**” is found in only 4 instances in JP 6-0 and not used in JP 3-0 (revision final coordination [RFC])

f. The JCA definition of **net-centric** includes aspects of **command and control** and **protection**. One of the tasks of **command and control** is to communicate and maintain the status of information. Protecting information is part of counter intelligence, operations security, and computer network defense.

g. The DOD dictionary definition for **cyberspace operations** is: “The employment of cyber capabilities where the primary purpose is to achieve objectives in or through cyberspace. Such operations include computer network operations and activities to operate and defend the Global Information Grid.” A joint test publication 3-12, *Cyberspace Operations*, is being developed.

2. **Intelligence versus Battlespace Awareness**

a. The DOD dictionary definition for **intelligence** is “the product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the

organizations engaged in such activity.” (JP 1-02. SOURCE: JP 2-0) JP 3-0 RFC further describes the intelligence function: “Understanding the operational environment is fundamental to joint operations. The intelligence function provides an aspect of this understanding to JFCs.”

b. The DOD dictionary does not define battlespace. The term “battlespace” was replaced with the term “operational environment by JP 3-0 on 17 September 2006 and removed from JP 1-02.

c. **Battlespace Awareness Definitions**

(1) JP 2-01 RFC removes this term from JP 1-02.

(2) The JCA definition is: The ability to understand dispositions and intentions as well as the characteristics and conditions of the operational environment that bear on national and military decision-making. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

(3) Knowledge and understanding of the operational area’s environment, factors, and conditions, to include the status of friendly and adversary forces, neutrals and noncombatants, weather, and terrain, that enables timely, relevant, comprehensive, and accurate assessments, in order to successfully apply combat power, protect the force, and/or complete the mission. (CJCSI 3340.02)

(4) **Battlespace Awareness** was decomposed into Intelligence, Surveillance and Reconnaissance and Environment

d. Per JP 1, situational awareness is the sixth tenant of nine of command and control. The primary objective that the staff seeks to attain for the commander and for subordinate CDRs is situational awareness — a prerequisite for CDRs anticipating opportunities and challenges. True situational understanding should be the basis for all decision makers. Knowledge of friendly capabilities and adversary capabilities, intentions, and likely courses of action (COAs) enables CDRs to focus joint efforts where they best and most directly contribute to achieving objectives. Further, the JFC’s situational awareness must be broad to include the actions and intentions of multinational partners, civilian agencies, adjacent commands, higher headquarters, HN authorities, and nongovernmental organizations.

e. The DOD dictionary definition for **operational environment** is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 1-02. SOURCE: JP 3-0)

f. The DOD dictionary definition for **joint intelligence preparation of the operational environment** is the analytical process used by joint intelligence organizations to produce intelligence estimates and other intelligence products in support of the joint force commander's decision-making process. It is a continuous process that includes defining the operational environment; describing the impact of the operational environment; evaluating the adversary; and determining adversary courses of action.

g. The JCA definition of **battlespace awareness** is similar to the tenant of situational awareness. The JCA definition implies awareness of the **operational environment**.

3. **Fires, Movement and Maneuver versus Force Application, Building Partnerships**

a. The DOD dictionary definition for **fires** is the use of weapon systems to create specific lethal or nonlethal effects on a target. (JP 1-02. SOURCE: JP 3-09)

b. The DOD dictionary does not define **movement and maneuver**. JP 3-0 describes it as follows: This function encompasses the disposition of joint forces to conduct operations by securing positional advantages before or during combat operations and by exploiting tactical success to achieve operational and strategic objectives. This function includes moving or deploying forces into an operational area and maneuvering them to operational depths for offensive and defensive purposes. It also includes assuring the mobility of friendly forces. (as described in JP 3-0 RFC). **Maneuver** is defined in the DOD dictionary and is also a principle of war. **Movement** is adequately covered in a standard, commonly accepted dictionary.

c. The JCA definition for **force application** is the ability to integrate the use of maneuver and engagement in all environments to create the effects necessary to achieve mission objectives. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Maneuver and Engagement.

d. The JCA definition for **building partnerships** is the ability to set the conditions for interaction with partner, competitor or adversary leaders, military forces, or relevant populations by developing and presenting information and conducting activities to affect their perceptions, will, behavior, and capabilities. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Communicate and Shape.

e. The DOD dictionary definition for engagement is: 1. In air defense, an attack with guns or air-to-air missiles by an interceptor aircraft, or the launch

of an air defense missile by air defense artillery and the missile's subsequent travel to intercept. 2. A tactical conflict, usually between opposing lower echelons maneuver forces. (JP 1-02)

f. The DOD dictionary definition for military engagement is routine contact and interaction between individuals or elements of the Armed Forces of the United States and those of another nation's armed forces, or foreign and domestic civilian authorities or agencies to build trust and confidence, share information, coordinate mutual activities, and maintain influence. (JP 1-02. SOURCE: JP 3-0)

g. The Capstone Concept for Joint Operations (CCJO) describes engagement. Engagement activities seek to improve the capabilities of or cooperation with allied and other partners. They may be conducted as a complement to broader diplomatic or economic engagement, in aid of a friendly (and sometimes not so friendly) government's own security activities, and even during war itself. They are the primary military contribution to the national challenge of establishing cooperative security. Engagement activities typically are long-duration undertakings, ending only when they have achieved their goals or when either the US or partner government concludes that they have become unnecessary or unproductive. (CCJO)

h. building partner capacity is defined as targeted efforts to improve the collective capabilities and performance of the Department of Defense and its partners. (CJCSI 3210.06)

i. The DOD dictionary definition for **nation assistance** is civil and/or military assistance rendered to a nation by foreign forces within that nation's territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Nation assistance programs include, but are not limited to, security assistance, foreign internal defense, other Title 10, US Code programs, and activities performed on a reimbursable basis by Federal agencies or international organizations. (JP 1-02. SOURCE: JP 3-0)

j. The DOD dictionary definition for **strategic communication** is focused United States Government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States Government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power. (JP 1-02. SOURCE: JP 5-0)

k. **Force application** is somewhat similar to a combination of **fires** and **movement and maneuver**. Engagement has widely differing meanings dependent on the context of its usage. The decomposition of communicate

from **building partnership** is confusing as communication is an element of command and control.

4. **Protection versus Protection**

a. The DOD dictionary definition for **protection** is: preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. (JP 1-02. SOURCE: JP 3-0)

b. The JCA definition is: The ability to prevent/mitigate adverse effects of attacks on personnel (combatant/non-combatant) and physical assets of the United States, allies and friends. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Prevent, Mitigate, and Research and Development.

c. Both definitions are similar; however, the DOD dictionary definition is broader than the JCA definition as the JCA definition is limited to only attacks, while the DOD dictionary definition includes other risks (e.g., fratricide, accidents, health threats, natural disasters).

5. **Sustainment versus Force Support, Logistics, Corporate Management and Support**

a. The DOD dictionary definition for **sustainment** is the provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment. (JP 1-02. SOURCE: JP 5-0) **Logistics** is an integral part of sustainment. The DOD dictionary definition for **logistics** is planning and executing the movement and support of forces. It includes those aspects of military operations that deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services. (JP 1-02. SOURCE: JP 4-0)

b. The JCA definition of **logistics** is the ability to project and sustain a logistically ready joint force through the deliberate sharing of national and multi-national resources to effectively support operations, extend operational reach and provide the joint force commander the freedom of action necessary to meet mission objectives. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Deployment and Distribution, Supply, Maintain, Logistic Services, Operational Contract Support, Engineering, and Installations Support

c. Both definitions of **logistics** are similar; however, the DOD dictionary definition is broader than the JCA definition as the JCA definition is limited to only resource sharing, while the DOD dictionary definition includes the aspects of all seven core logistic capabilities (i.e., supply, maintenance operations, deployment and distribution, health service support, engineering, logistic services, operational contract support).

d. The JCA definition of **force support** is the ability to establish, develop, maintain and manage a mission ready Total Force. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Force Management, Force Preparation, Human Capital Management, and Health Readiness. **Force support** is inherent in command. A commander is responsible for the administration, training, and readiness of their unit. Personnel services are part of sustainment. Health service support is part of logistics.

e. The JCA definition of **corporate management and support** is the ability to provide strategic senior level, enterprise-wide leadership, direction, coordination, and oversight through a chief management officer function. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc). It was decomposed into Advisory and Compliance, Strategy and Assessment, Information Management, Acquisition, and Program, Budget and Finance. Leadership, direction, coordination, and oversight is a commanders responsibility. Joint force commanders do not have chief management officers.

f. The JCA definitions of **Force Support, Logistics, Corporate Management and Support**, taken together include the elements of sustainment with aspects of **command and control** added.

SECTION D. ALIGNMENT MODIFICATIONS

1. **General.** Capability portfolio titles should be descriptive of their contents. Since many capabilities are not unique to JCIDS, they should be described using standard terminology (i.e., JP 1-02 terms and definitions). Those that are unique to JCIDS can have unique definitions.

2. **Alignment Alternatives**

a. Some JCAs can be changed to align with the DOD dictionary when they are similar enough, some JCAs can be renamed to align with joint doctrine, and some JCAs can remain as is.

b. Two additional alternatives are to align JCAs with either the 11 major force programs or the UJTL.

(1) Realigning the nine portfolios with the 11 major force programs could be beneficial. The FCBs would not have to be reorganized from nine portfolio-based boards. This would strengthen the linkage between the OSD portfolios and the planning, programming, budgeting, and execution system. This would involve combining some of the programs while dividing others among the portfolios, with some subsequent realignment of portfolio contents. Portfolio contents would then be mapped to the joint functions and joint doctrine.

(2) Aligning the nine portfolios with the UJTL could also be beneficial. The UJTL defines capability requirements for systems acquisition and expresses military tasks to support capabilities development. The FCBs would not have to be reorganized from nine portfolio-based boards. This would strengthen the linkage between the OSD portfolios and training, doctrine, and education. This would involve some subsequent realignment of portfolio contents. Portfolio contents would then be mapped to the joint functions and joint doctrine. The added benefit is the UJTL is already based on doctrine and most UJTs already have a joint doctrine reference.

SECTION E. ALIGNMENT IMPACT

1. General Impact

a. JCAs, while a useful acquisition and budgeting construct, have spread to functions outside of JCIDS where the JCAs have no real utility. When definitions are created for unique functional areas or unilateral use, they should not be used outside the context of the unique functional area or unilateral use. While JCAs are intended to provide a common language across related DOD activities and processes, they have been used in unrelated or marginally related activities and processes, such as readiness reporting and concept development, creating confusion.

b. Aligning the nine JCAs into the six joint functions would require extensive portfolio realignment and reorganization without any real benefit. The FCBs would have to be reorganized from nine portfolio-based boards to six functionally based boards. While on the surface, this would appear to have merit; the OSD portfolios would become fragmented and the linkage to the planning, programming, budgeting, and execution system would not be improved.

c. Mapping the JCAs to joint functions and joint doctrine would align them with the primary terminology source for DOD.

d. JCAMS is the authoritative DOD database for the JCA taxonomy and lexicon. JCAMS is currently hosted on a commercial site. To improve JCA linkages to related DOD information such as the program elements, universal

joint tasks (UJTs), and joint operating concepts, JCAMS can be integrated into current DOD systems.

2. **Impact by Joint Capability Area**

a. **Force Support.** Renaming this JCA would make it more descriptive of its portfolio contents.

b. **Battlespace Awareness.** Changing this JCA would remove obsolete terminology.

c. **Force Application.** Making this JCA consistent with the definitions of fires and movement and maneuver would align this JCA with its supporting joint functions and joint doctrine.

d. **Logistics.** Renaming this JCA would make it more descriptive of its portfolio contents.

e. **Command and Control.** Making this JCA consistent with the definitions of command and control would align this JCA with its supporting joint function and joint doctrine.

f. **Net-Centric.** Renaming and redefining this JCA would make it more descriptive of its portfolio contents and align it with a DOD definition and emerging joint doctrine.

g. **Protection.** Making this JCA consistent with the definitions of protection would align this JCA with its supporting joint function and joint doctrine.

h. **Building Partnerships.** Renaming and redefining this JCA would make it more descriptive of its portfolio contents.

i. **Corporate Management and Support.** This JCA is administrative.

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CHAPTER IV CONCLUSIONS

SECTION A. OVERVIEW

This chapter provides conclusions concerning the topics developed in the analysis that in turn, are the basis for the recommendations that satisfy the purpose of the study. Specifically, this chapter draws conclusions regarding the differences between the joint functions and the current tier 1 JCA structure (e.g. Battlespace Awareness JCA versus Intelligence joint function). It further provides conclusions on the modifications necessary to align Tier 1 JCA functions with joint functions and the impact of aligning Tier 1 JCAs with joint functions. Additional conclusions are made regarding other doctrinal issues uncovered during research and analysis.

SECTION B. GENERAL

1. JCAs and joint functions serve fundamentally different purposes.
2. JCAs have a narrower focus than the joint functions.
3. JCAs are not fully compatible with the joint functions and some are outside the scope of planning and executing joint operations.
4. JCAs are administratively based on OSD and JS Force Structure, Resources, and Assessment Directorate responsibilities and workload, rather than a general force development construct.
5. Although JCAs are collections of like capacities, they are more descriptions of unrelated portfolio contents.
6. Failure to comply with DOD policy that mandates DOD components use JP 1-02 as the primary terminology source creates unacceptable confusion when preparing policy, strategy, doctrine, and planning documents.
7. The unique and unilateral definitions of the JCAs do not improve communications and mutual understanding within DOD, because the JCAs were devised, mostly on theory, and without benefit of practical application.
8. JCA usage beyond JCIDS and capability portfolio management, capabilities-based force development, investment decision-making, capability delegation, and capability analysis (gap, excess, and major trades) creates unacceptable confusion and is redundant to joint doctrine and UJTs.

9. JCA linkages to related DOD information such as the program elements, universal joint tasks (UJTs), and joint operating concepts can be improved.

SECTION C. SPECIFIC JCA AND JOINT FUNCTION DIFFERENCES

1. **Command and Control**; and **Command and Control** and **Net-Centric**. The JCA definition of command and control is factually inaccurate and incomplete. The JCA definition of net-centric is a condition not a capability. Net-Centric is a transformational term with a wide variety of unique and unilateral definitions within DOD. **Cyberspace operations** has a DOD dictionary definition based in joint doctrine.

2. **Intelligence** and **Battlespace Awareness**. The term “battlespace awareness” is obsolete. The term “operational environment awareness” is descriptive of this portfolio and more compatible with the intelligence function.

3. **Fires, Movement and Maneuver** and **Force Application, Building Partnerships**. The JCA “Force Application” is an inaccurate combination of the joint functions “fires” and “movement and maneuver.” The JCA “Building Partnerships” is a strategy not a capability; it is a combination of the joint constructs “**nation assistance**” and “**strategic communication**.”

4. **Protection** and **Protection**. The JCA definition of “protection” is incomplete.

5. **Sustainment** and **Force Support, Logistics, Corporate Management and Support**. The JCA “Force Support” is more a collection of responsibilities of the Under Secretary for Personnel and Readiness than a function performed by a JFC. The JCA definition of “logistics” is factually inaccurate and incomplete. The JCA “Corporate Management and Support” is not a capability; it is a duty description of a chief management officer.

SECTION D. ALIGNMENT MODIFICATIONS

1. **General**. JCAs should link capability development language to current employment of the joint force without constraining either.

2. **Force Support**. This JCA is more a collection of its decomposition -- Force Management, Force Preparation, Human Capital Management, and Health Readiness – than a function a JFC performs. **This JCA can be made more descriptive of its portfolio contents by including context from its Tier 2.**

3. **Battlespace Awareness**. The term “battlespace” is obsolete. The term “operational environment” is a broader and has wide acceptance among the joint community. **This JCA can be aligned by using current joint terminology.**

4. **Force Application** is an aggregation of fires and movement and maneuver, which are established with robust descriptions in joint doctrine. **This JCA can be redefined to make it more consistent with current joint terminology.**
5. **Logistics** has a well established DOD dictionary definition with a robust description in joint doctrine. Health service support is not part of this portfolio. **This JCA can be made more descriptive of its portfolio contents and redefined to make it more consistent with current joint terminology.**
6. **Command and Control** has a well established DOD dictionary definition with a robust description in joint doctrine. **This JCA can be redefined to make it more consistent with current joint terminology.**
7. **Net-Centric.** Net-Centric has a wide variety of definitions within DOD. Cyberspace operations has an established DOD dictionary definition with an emerging description in joint doctrine. **This JCA can be made more descriptive of its portfolio contents and redefined to make it more consistent with current joint terminology.**
8. **Protection** has a well established DOD dictionary definition with a robust description in joint doctrine. **This JCA can be redefined to make it more consistent with current joint terminology.**
9. **Building Partnerships** can be made more descriptive of its portfolio contents. **This JCA can be made more descriptive by using current joint terminology.**
10. **Corporate Management and Support** is administrative in nature and does not involve the employment of joint forces. **There is no need or way to align it with the joint functions.**

SECTION E. ALIGNMENT IMPACT

1. Aligning JCAs with joint functions will likely prompt a short-term effort to realign portfolios, re-compose lower tiers, and map JCAs to joint functions.
2. Revising JCAs to become consistent with joint functions will have a long-term benefit of reducing confusion and redundancy. JCAs will become more relevant as they mature from theory without benefit of practical application to align with fundamental principles that guide the employment of US military forces.

3. Limiting JCAs to JCIDS and capability portfolio management, capabilities-based force development, investment decision making, capability delegation, and capability analysis (gap, excess, and major trades) will require policy changes.
4. Moving JCAMS to a DOD system will require realignment of resources.

CHAPTER V RECOMMENDATIONS

SECTION A. OVERVIEW

This chapter provides recommendations concerning all the modifications necessary to align Tier 1 JCA functions with joint functions. The emphasis is on linking capability development language to current employment of the joint force without constraining either.

SECTION B. GENERAL

1. **Use approved DOD terminology from JP 1-02** per the guidance in DODI, 5025.12, *Standardization of Military and Associated Terminology*, CJCSI 5705.01D, *Standardization of Military and Associated Terminology*, and the *Joint Capability Area Management Plan* (JCAMP). Only create definitions for unique functional areas or unilateral use when there is a gap in JP 1-02 or the definition is clearly superior to the JP 1-02 definition when applied to JCIDS and not the employment of joint forces. Definitions that deviate from JP 1-02 must have compelling rationale to do so.
2. **Nominate new terms and their definitions for inclusion in JP 1-02** that involve DOD-wide applicability or usage across functional boundaries. They must be codified in a JP, DOD issuance, or CJCS directive; and proposed for inclusion in JP 1-02 in accordance with (IAW) CJCSI 5705.01D and CJCSI 5120.02B.
3. Do not use JCAs for any purpose beyond JCIDS and capability portfolio management, capabilities-based force development, investment decision-making, capability delegation, and capability analysis (gap, excess, and major trades).
4. Transfer proponentcy for JCAs from the Operational Plans and Joint Force Development Directorate to the Force Structure, Resources, and Assessment Directorate.
5. Merge JCAMS into JCIDS

SECTION C. JOINT CAPABILITY AREA MODIFICATIONS

1. Change the JCA “**Force Support**” to “**Personnel, Health, and Readiness Management**” and retain the current definition.
2. Change the JCA “**Battlespace Awareness**” to “**Operational Environment Awareness**” and retain the current definition.

3. Change the JCA definition of **Force Application** to: “The ability to integrate the use of fires and movement and maneuver to create the effects necessary to achieve objectives.”
4. Change the JCA “**Logistics**” to “**Logistics, Less Health Service Support**” or “**Supply, Maintenance Operations, Deployment and Distribution, Engineering, Logistic Services, and Operational Contract Support**” and define it as: “The ability to plan and execute the movement and support of forces. It includes those aspects of military operations that deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. acquisition or construction, maintenance, operation, and disposition of facilities; and c. acquisition or furnishing of services.”
5. Change the JCA definition of “**Command and Control**” to: “The ability to exercise authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.”
6. Change the JCA term “**Net-Centric**” to “**Cyberspace Operations**” and define it as: “The ability to employ cyber capabilities where the primary purpose is to achieve objectives in or through cyberspace. Such operations include computer network operations and activities to operate and defend the Global Information Grid.”
7. Change the JCA definition of **Protection** to: “The ability to preserve the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area.”
8. Change the JCA “**Building Partnerships**” to “**Nation Assistance and Strategic Communication**” and define it as: “The ability to render civil and/or military assistance to a nation by foreign forces within that nation’s territory based on agreements mutually concluded between nations and to focus United States Government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States Government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power.”
8. Retain the JCA “**Corporate Management and Support**” in its present form.

SECTION D. MAPPING AND ALIGNMENT

1. **Map the JCAs to the joint functions.** Figure V-1 suggests a model for further analysis. Actual mapping may need to occur at Tier 2 or below.

JCAs (As Recommended)	Joint Functions
Personnel, Health, and Readiness Management	Sustainment
Operational Environment Awareness	Intelligence
Force Application	Fires, movement and maneuver
Logistics, less Health Service Support	Sustainment
Command and Control	Command and Control
Cyberspace	Command and Control, Protection
Protection	Protection
Building Partnerships	Command and Control (potentially all 6 functions)
Corporate Management and Support	Sustainment, Command and Control

Figure V-1. JCAs Mapped to Joint Functions

2. **Two additional alternatives are to align JCAs with either the 11 major force programs or the UJTL** as shown in Figures V-2 and V-3 below. Aligning with the major force programs requires fewer portfolio realignments but requires more mapping of the portfolios. Aligning with the UJTL requires greater portfolio alignments but reduces mapping.

Joint Capability Areas	Portfolios Based on Major Force Program Elements
Force Support	Training, Medical, and Other General Personnel Activities
Battlespace Awareness	Intelligence
Force Application	General Purpose Forces, Guard and Reserve Forces,
Logistics	Central Supply and Maintenance, and Mobility Forces
Command and Control	Command, Control
Net-Centric	Communications and Strategic Forces
Protection	Special Operations Forces
Building Partnerships	Support of Other Nations
Corporate Management and Support	Administration and Associated Activities, and Research and Development

Figure V-2. JCAs Aligned to Major Force Program Elements

Joint Capability Areas	Portfolios Based on Universal Joint Tasks
Force Support	Force Development/Readiness/Counter-CBRNE
Battlespace Awareness	Intelligence
Force Application	Employment of Forces
Logistics	Sustainment
Command and Control	Command and Control
Net-Centric	CBRNE Deterrence
Protection	Mobilization/Force Protection
Building Partnerships	Multinational/Interagency
Corporate Management and Support	Deployment and Redeployment

Figure V-3. JCAs Aligned to Universal Joint Tasks

SECTION E. POLICY CHANGES

1. **Make the following policy changes** to align JCA usage with the joint functions:

a. Change CJCSI 3010.02B, subparagraph A7c, to read: “...During concept development, concept authors will use ~~the JCAs~~joint doctrine as a baseline of joint capabilities relevant to their concept. Concept authors will analyze the potential merit of their posited solution by comparing it to the ~~JCA~~joint doctrine baseline of extant joint capabilities. Any expansion or deviation from this baseline of existing joint capabilities must be fully explained in the concept....”

b. Change CJCSI 3100.01B, subparagraph 3a(6), to read: “The CJA [Comprehensive Joint Assessment] data, where appropriate, is submitted using ~~the JCA lexicon/taxonomy~~JP 1-02, *Department of Defense Dictionary of Military and Associated Terms* as the primary terminology source.”

c. Change CJCSI 8410.01A, subparagraph A1b, to read: “...The GIG [global information grid] 2.0 architecture is ~~JCA~~doctrinally based to enable joint warfighting priorities.

d. Change CJCSI 3500.01E, subparagraph D2c, to read: “...This web-enabled database of appropriate tasks, conditions, measures, and criteria must include Joint, Service, CSA [combat support agency], multinational, and interagency tasks; and be adaptive, flexible, and horizontally and vertically integrated; ~~and be mapped to the JCAs~~ to fully meet operational mission requirements.”

e. Change DODD 7730.65, subparagraph 1.1, to read: "... This Directive establishes a ~~capabilities~~mission-based, adaptive, near real-time readiness reporting system for the Department of Defense." Change DODD 7730.65, paragraph 4.2. to read: "The DRRS shall build upon the processes and readiness assessment tools used in the Department of Defense to establish a ~~capabilities~~mission -based, adaptive, near real-time readiness reporting system...."

SECTION F. SUMMARY

This study report provided research data, analysis, conclusions, and recommendations concerning the lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine development communities. It provides a comparative analysis among the six extant joint functions outlined in joint doctrine and the Tier 1 JCAs. Specifically, this study identifies differences between the current tier 1 JCA structure and the joint functions (e.g., JCA "Battlespace Awareness" versus joint function "Intelligence"); identifies all the modifications necessary to align Tier 1 JCAs and the joint functions with emphasis on linking capability development language to current employment of the joint force without constraining either; and assesses the impact of aligning Tier 1 JCAs with joint functions.

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APPENDIX A
**COMPARATIVE ANALYSIS OF TIER 1 JOINT CAPABILITY AREA (JCA)
ALIGNMENT WITH JOINT FUNCTIONS SPECIAL STUDY MEMORANDUM**



**THE JOINT STAFF
WASHINGTON, DC**

Reply ZIP Code:
20318-7000

21 October 2010

MEMORANDUM FOR THE DIRECTOR, J-7, JOINT WARFIGHTING CENTER

Subject: Comparative Analysis of Tier 1 Joint Capability Area (JCA) Alignment
with Joint Functions

1. The Joint Staff (JS) J-7/Joint Education and Doctrine Division (JEDD) has noted a lack of standardization in defining functions and activities common to both the capabilities development and joint doctrine communities.
2. Accordingly, the Joint JS J-7/JEDD requests US Joint Forces Command (USJFCOM), Joint Warfighting Center (JWFC)/Doctrine and Education Group (DEG) conduct a comparative analysis between the Tier 1 JCAs and the six extant joint functions outlined in joint doctrine. Specifically this study should:
 - a. Identify the differences between the current tier 1 JCA structure and the joint functions, e.g. Battlespace Awareness (JCA) versus Intelligence (joint function).
 - b. Identify all the modifications necessary to align Tier 1 JCA functions with joint functions. Emphasis should be on linking capability development language to current employment of the joint force without constraining either.
 - c. Assess the impact of aligning Tier 1 JCAs with joint functions.
2. Submit the study report to JS J-7 JEDD NLT 15 December 2010.
The POC is Lt Col George Hock, DSN 222-6294, george.hock@js.pentagon.mil.

A handwritten signature in black ink, appearing to read "Jer. M. Lynes".

JEROME M. LYNES
Chief, Joint Education
and Doctrine Division

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APPENDIX B

JOINT CAPABILITY AREA SUITABILITY IN JOINT DOCTRINE

1. **Joint capability areas are administrative categories**

- a. JCAs are aligned with OSD portfolios. Joint force commanders do not have portfolios.
- b. JCAs are collections of like DOD capabilities. JFCs do not use collections of like DOD capabilities to accomplish missions. JFCs execute tasks to create effects to achieve objectives and reach an end state.
- c. JFCs do not conduct research and development as part of protection.
- d. The rare recommendations to insert JCAs into doctrine through the joint doctrine development system have been rejected.
- e. JCAs were developed through a stovepipe committee process, (portfolio decomposition) disconnected from the range of military operations.

2. **Capability Based Planning is an Acquisition and Budgeting Construct**

- a. JFCs do not conduct capability based planning.
- b. Capability based planning is not described in any joint doctrine, nor proposed to be added to joint doctrine. Capability based planning is not linked to the joint operation planning process (JOPP).
- c. Capability based planning is not part of the Adaptive Planning and Execution System (APEX). Capability based planning is not linked to APEX.
- d. Capability based planning is only used within JCIDS.

3. **Joint Capability Areas do not meet the Definition of Joint Doctrine**

- a. Joint doctrine consists of fundamental principles that guide the employment of US military forces in coordinated action toward a common objective. Joint doctrine represents what is taught, believed, and advocated as what is right (i.e., what works best). Joint doctrine is based on extant capabilities, i.e., current force structures and materiel. It incorporates time-tested principles; e.g., the principles of war, operational art, and elements of operational design for successful military action, as well as contemporary lessons that exploit US advantages against adversary vulnerabilities.

b. JCAs were devised mostly on theory and without benefit of practical application. JCA reassessment afforded the opportunity to holistically improve the JCAs by applying lessons learned from their use in numerous DOD processes.

APPENDIX C

JOINT DOCTRINE OVERVIEW

1. Joint Doctrine in Perspective

a. Joint doctrine consists of fundamental principles that guide the employment of US military forces in coordinated action toward a common objective. Joint doctrine contained in JPs also includes terms, tactics, techniques, and procedures.

b. Joint doctrine represents what is taught, believed, and advocated as what is right (i.e., what works best). Joint doctrine is written for those who:

(1) Provide strategic direction to joint forces (the Chairman and combatant commanders).

(2) Employ joint forces (combatant commanders, subordinate unified commanders, or joint task force (JTF) commanders).

(3) Support or are supported by joint forces (combatant commands, subunified commands, JTFs, component commands, the Services, and combat support agencies).

(4) Prepare forces for employment by combatant commander, subordinate unified commanders, and JTF commanders.

(5) Train and educate those who will conduct joint operations.

c. The purpose of joint doctrine is to enhance the operational effectiveness of US forces. With the exception of JP 1, joint doctrine will not establish policy. Joint policy will be reflected in other CJCS instructions (CJCSIs) or CJCS manuals (CJCSMs). These instructions and manuals contain CJCS policy and guidance that do not involve the employment of forces. Although joint doctrine is neither policy nor strategy, it serves to make US policy and strategy effective in the application of US military power.

d. Joint doctrine is based on extant capabilities, i.e., current force structures and materiel. It incorporates time-tested principles; e.g., the principles of war, operational art, and elements of operational design for successful military action, as well as contemporary lessons that exploit US advantages against adversary vulnerabilities. Use of joint doctrine standardizes terminology, training, relationships, responsibilities, and processes among all US forces to free JFCs and their staffs to focus their efforts on solving the strategic, operational, and tactical problems confronting them.

e. Joint doctrine is authoritative guidance and will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise. That means doctrine does not replace or alter a commander's authority and obligation to determine the proper COA under the circumstances prevailing at the time of decision; such judgments are the responsibility of the commander, and doctrine cannot be a substitute for good judgment. Joint doctrine is not dogmatic -- the focus is on how to think about operations, not what to think about operations. Its purpose is to aid thinking, not to replace it. Yet it must be definitive enough to guide operations, while versatile enough to accommodate a wide variety of situations. Joint doctrine should foster initiative, creativity, and conditions that allow commanders the freedom to adapt to varying circumstances.

f. Joint doctrine applies to the combatant commanders, subordinate unified commanders, JTF commanders, subordinate component commanders of these commands, as well as forces assigned or attached to these commands.

g. In addition to guidance discussed above, joint doctrine provides:

(1) The foundation for building a joint culture and a basis for joint training.

(2) Instructional material for joint professional military education (JPME).

(3) A basis for the development of joint models and simulations.

(4) Information for US Government agencies concerning the employment of US joint forces.

2. Influence of Joint Doctrine

a. **Doctrine and Policy.** Policy and doctrine are closely related, but they fundamentally fill separate requirements. Policy can direct, assign tasks, prescribe desired capabilities, and provide guidance for ensuring the Armed Forces of the United States are prepared to perform their assigned roles; implicitly policy can therefore create new roles and a requirement for new capabilities. Conversely, doctrine enhances the operational effectiveness of the Armed Forces by providing authoritative guidance and standardized terminology on topics relevant to the employment of military forces.

(1) Most often, policy drives doctrine; however, on occasion, an extant capability will require policy to be created. Policy makers and doctrine developers should work interactively and in full understanding of the other arena, striving to issue harmonized policy and doctrine.

(2) Of particular note, terminology developed within the two arenas serves different purposes. The terminology required to support the employment of forces (doctrinal terms) may not be optimal within the policy lane, whose purpose may be, for instance, to illuminate resource or requirement documents. **Development of terminology to support policy is not limited by the constraints imposed on the development of doctrinal terms.**

b. **Doctrine and Strategy.** A primary role of joint doctrine is to provide guidance for unified action in the employment of US military power. As such, joint doctrine is closely linked to the development of national military strategy. In general terms, joint doctrine establishes a link between the “ends” (what must be accomplished) and the “means” (capabilities) by providing the “ways” (how) for joint forces to accomplish military strategic and operational objectives in support of national strategic objectives. Joint doctrine also provides information to senior civilian leaders responsible for the development of national security strategy as to the core competencies, capabilities, and limitations of military forces. In addition, it provides other government agencies and nongovernmental organizations an opportunity to understand better the roles, capabilities, and operating procedures used by the Armed Forces of the United States, thus facilitating coordination.

c. **Joint Doctrine and Operation Planning.** Use of approved joint doctrine during contingency and crisis action planning facilitates both planning for and the execution of operations. Joint doctrine provides a basis for analysis of the mission, its objectives and tasks, and developing the commander’s intent and associated planning guidance. The development of the COA using decision-making processes is also based on joint doctrinal principles. JOPP provides a detailed and orderly way of translating task assignments into an operation plan or an operation order in crisis action planning. However, the COA development phase in JOPP involves both art and science and has its foundation in joint doctrine. Joint doctrine provides fundamental guidance on how operations are best conducted to accomplish the mission.

d. **Doctrine and Training**

(1) Joint doctrine establishes the fundamentals of joint operations and provides the guidance on how best to employ national military power to achieve strategic ends. Since it is axiomatic that we “train as we fight,” it follows that joint doctrine logically provides the foundation for joint training. Joint training will be accomplished IAW approved joint doctrine. Joint doctrinal publications, which are not intended to be textbooks or stand-alone documents, describe common procedures and establish uniform operational methods from a common baseline, using common terminology. This baseline assists commanders and their staffs in developing standards for joint training, exercises, and operations.

(2) The UJTL contains a list of tasks that identifies “what” can be performed by the Joint Staff, Services, combatant commands, and components, activities, joint organizations, and agencies responsive to CJCS in terms common to the Armed Forces. The UJTL task description does not address “how” or “why” a task is performed (found in joint doctrine or other governing criteria), or “who” performs the task (found in the commander’s concept of operations and joint doctrine). UJTL language and terminology must be consistent and compliant with existing joint doctrine language and terminology.

e. **Joint Doctrine and Military Education.** Joint doctrine provides the foundation for JPME at all five military educational levels. All curricula must be joint doctrine-based. National Defense University ensures that the CAPSTONE program is thoroughly and inherently joint, and that participants understand joint doctrine and joint operational art. The Officer Professional Military Education Policy provides the mechanism for periodic review and revision of all five JPME levels to ensure that the standards and learning areas maintain linkage to joint doctrine. The JPME process promotes a career-long, doctrinally based educational framework for all officers.

f. **Doctrine and Lessons Learned.** A major influence on doctrine is lessons and observations from operations, exercises, and training. This review provides a standard from which to judge what works and what does not work. As a military institution, these lessons also consider changes in the threat and operational environment. This ensures JPs remain current and relevant.

g. **Doctrine and Concepts.** There is a close and complementary relationship between concepts and doctrine. In general terms, a concept contains a notion or statement that expresses how something might be done. In military application, a joint concept describes how a JFC may plan, prepare, deploy, employ, sustain, and redeploy a joint force within the range of military operations; guides the further development and integration of the Capstone Concept for Joint Operations, subordinate Joint Concepts, and Service concepts into a joint capability; and articulates the measurable detail needed for experimentation, assessment, and decision making. From a ways, means, and ends perspective, concepts and doctrine both describe how (the ways) a joint force uses given capabilities (means) in a generic set of circumstances to achieve a stated purpose (ends). There also is an important distinction between the two. Approved joint doctrine is authoritative, describes operations with extant capabilities, and is subject to policy, treaty, and legal constraints, while joint concepts -- whether near-term or futuristic in nature -- can explore new operational methods, organizational structures, and systems employment without the same restrictions. Joint concepts provide the basis for joint experimentation and assessment. These concepts are refined and validated during experiments, modeling and simulation, selected training events and

exercises, and capabilities-based assessment. Joint doctrine provides the basis for education, training, and execution of current joint operations.

(1) Concepts may be conceived for a variety of reasons, such as to respond to inadequacies in current joint capabilities, test new capabilities, or propose innovative solutions to military problems. Whatever the reason, concepts should embrace the overarching goal of improving joint force effectiveness. Concepts provide a venue to explore solutions to problems and emerging missions for which no doctrine exists. They also may enable consideration of alternatives to methods described in approved doctrine, based either on lessons learned from recent operations or on emerging capabilities whose military application has not yet been exploited. Futuristic concepts typically focus on new ways and means with which the joint force can meet expected future operational challenges using advanced technologies and capabilities, many of which are not yet developed. This requires concept developers to project the nature of the operating environment 8-20 years in the future and describe new approaches and advanced capabilities required to operate successfully in that environment. However, this process of forecasting the future and evaluating concepts may uncover ideas that could improve how joint forces operate today and could have an immediate impact on established doctrine.

(2) Validated, value added concepts can impact favorably on doctrine, training, and education. The results of experimentation are not sufficient to require doctrinal change. The concept must clearly demonstrate “value-added” to current joint doctrine and represent an extant capability. In other words, approved joint doctrine is the authoritative, generic baseline against which concepts and experimentation results will be compared to assess their transformational value. In addition, current combatant command operation plans provide situation-specific application of current doctrine, which can be useful in evaluating a concept. Concepts typically are not copied directly into joint doctrine, but their central themes and essential constructs may be incorporated in a number of ways.

(a) Most commonly, new ideas will be considered during the routine process of developing, assessing, and revising existing JPs.

(b) While most concept-based changes to JPs will be incremental in nature, a validated concept might provide a substantially new and beneficial way of accomplishing a particular function or task, thereby affecting a significant part of an existing JP or requiring a new JP.

(c) Concepts can form the basis of recommended changes to doctrine. With JROC endorsement of DOTMLPF change recommendations and approval by CJCS (or designated representative), conditions are met for the introduction

of these doctrine recommendations to the joint doctrine development community.

h. **Doctrine and JCAs.** JCAs are an integral part of the evolving capabilities-based planning process. JCAs are intended to provide a common capabilities language for use across many related DOD activities and processes. Processes identified for incorporation of JCAs include the Planning, Programming, Budgeting, and Execution process; JCIDS; and joint force development. Many JCAs are being described using joint doctrine and joint terminology and are already covered by joint doctrine. As capabilities described in the JCAs that affect the employment of the joint force are fielded and validated, they will be incorporated through the joint doctrine development process.

APPENDIX D

HISTORICAL INFORMATION

1. Joint Functions Historical Information

a. In 1988, the Army adopted a Blueprint of the Battlefield for each level of war, to further refine the combined arms concept. Each blueprint defined a number of operating systems that integrate all combat, combat support, and combat service support activities by function, rather than by mission, branch, or unit. This approach represented a new methodology for how to think about war and other military operations. This methodology demanded that commanders and their staffs think in terms of integrated systems, rather than orienting on the units that compose those systems.

b. Over time, the focus shifted to just the Battlefield Operating Systems (BOSs) which specify the major combat functions for the tactical level of war. By definition, BOSs were the major functions occurring on the battlefield, performed by the force to successfully execute operations (battles and engagements). The seven BOSs were: Command and Control, Maneuver, Intelligence, Fire Support, Mobility/Counter mobility/Survivability, Air Defense, Combat Service Support.

c. These subsequently evolved into the current six Army warfighting functions — movement and maneuver, intelligence, fires, sustainment, command and control, and protection. They also parallel the six warfighting functions of the Marine Corps. DOD adopted the six Army warfighting functions as the six joint functions.

2. Joint Capability Area Historical Information

a. JCAs were first proposed in the 2003 Joint Defense Capabilities Study, also referred to as the Aldridge Study. It called for dividing DOD's capabilities into manageable capability categories (later called areas) as an essential early step to implementing a capabilities-based approach, because they provide the framework for capabilities planning. The study recommended dividing capabilities along functional or operational lines and favored functional categories. The study recommended dividing capabilities along functional or operational lines and favored functional categories because there were fewer of them; they were more enduring, and less likely to change due to new technologies or emerging threats; they minimized redundancies in capability decomposition; provided clearer boundaries to assign systems; and improved management ability to develop and implement capabilities planning. The study also noted these functional categories were focused on warfighting needs, and other categories such as force management and infrastructure might be necessary to address the DOD's enterprise needs. The study further stated

that whether organized along functional or operational lines, the categories adopted by the DOD must enable all Services, Defense Agencies, and Combatant Commands to orient their planning on capabilities, vice platforms or units.

b. In 2005, the Joint Force Capabilities Assessment sub study (Part of the Operational Availability-05 Analytic Agenda) developed the initial 21 tier 1 JCAs, and draft tier 2 JCA candidates. A subsequent Secretary of Defense memo (6 May 2005) approved them for “use as appropriate,” and referred to them as “the beginnings of a common language to discuss and describe capabilities across many related DOD activities and processes.” The memo further tasked elements of the Office of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff with specific JCA related activities to further their development and Departmental integration. In response to the taskings, two separate JCA refinement efforts were conducted and resulted in the 24 August 2006 JROC-approved framework. This framework was comprised of 22 tier 1 JCAs, 240 subordinate JCAs, and corresponding definitions. These initial JCAs were divided into four distinct capability categories; operational, functional, domain, and institutional.

c. The JROC also approved a deliberate way forward to enhance the nascent JCAs’ utility across the DOD. Recognizing the original JCAs were devised mostly on theory and without benefit of practical application, the JROC agreed a baseline JCA reassessment was necessary. This baseline reassessment afforded the opportunity to holistically improve the JCAs by applying lessons learned from their use in numerous DOD processes. Research conducted for the baseline reassessment proved how the four distinct capability categories in the original framework led to undesirable JCA overlaps and redundancies, and unnecessary complexity. To improve the framework, the Deputy’s Advisory Working Group (DAWG) approved (22 June 2007) the use of only one capability category – functional, and replaced the original tier 1 JCAs with nine new functional tier 1 JCAs (Force Application, Command & Control, Battlespace Awareness, Net-Centric, Influence [later changed to Building Partnerships], Protection, Logistics, Force Support, and Corporate Management and Support). Subsequently, the baseline reassessment was completed and the JROC (13 December 2007) and the DAWG (15 January 2008) approved nine new tier 1 JCAs and their functional decomposition down to the tier 3 level. This was further codified in a Deputy Secretary of Defense memo (14 February 2008) that described the JCAs as the DOD’s capability management language and framework. The memo also tasked the development of this JCA management plan, further JCA refinement, and the deployment of an authoritative JCA database.

d. The JCAs were further refined by developing JCAs below the tier 3 level, and moving two tier 2 and the associated tier 3 JCAs (Installations Support moved from Force Support to Logistics, and Research and Development moved

from Corporate Management and Support to Protection). A JCA numbering system was also added to the framework for identification brevity. The refinements were approved in a memo (12 January 2009) co-signed by the Principal Deputy Under Secretary of Defense for Policy and the Director of the Joint Staff. JCAMS was deployed as the authoritative JCA database, and is available via the JDEIS (Joint Doctrine Education, and Training Electronic Information System) Portal at <https://jdeis.js.mil/jdeis> and <https://jdeis.js.mil/jdeis>. (<http://jcams.penbaymedia.com/files/news/17%20Jun%2009%20JCA%20History.doc>)

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APPENDIX E

REFERENCES

The Comparative Analysis of Tier 1 Joint Capability Area (JCA) Alignment with Joint Functions Special Study is based upon the following primary references:

1. Department of Defense Issuances

- a. DODD 7045.20, *Capability Portfolio Management*.
- b. DODD 7730.65, *Department of Defense Readiness Reporting System (DRRS)*.
- c. DODD 8000.01, *Management of the Department of Defense. Information Enterprise*.
- d. DODD 8320.02, *Data Sharing in a Net-Centric Department of Defense*.
- e. DODI 5025.12, *Standardization of Military and Associated Terminology*.

2. Chairman of the Joint Chiefs of Staff Directives and Memorandums

- a. CJCSI 3010.02B, *Joint Operations Concepts Development Process (JOpsC-DP)*.
- b. CJCSI 3100.01B, *Joint Strategic Planning System*.
- c. CJCSI 3137.01D, *The Functional Capabilities Board (FCB)*.
- d. CJCSI 3170.01G, *Joint Capabilities Integration and Development System*.
- e. CJCSI 3210.06, *Irregular Warfare*.
- f. CJCSI 3500.01E, *Joint Training Policy and Guidance for the Armed Forces of the United States*.
- g. CJCSI 5120.02B, *Joint Doctrine Development System*.
- h. CJCSI 5123.01E, *Charter of the Joint Requirements Oversight Council*.
- i. CJCSI 5705.01D, *Standardization of Military and Associated Terminology*.
- j. CJCSI 6212.01E, *Interoperability and Supportability of Information Technology and National Security Systems*.

k. CJCSI 8410.01A, *Warfighting Mission Area Information Technology Portfolio Management and Net-Centric Data Sharing*.

l. CJCSM 3170.01C, *Operation of the Joint Capabilities Integration and Development System*.

m. JS J7 Memorandum, Subject: Comparative Analysis of Tier 1 Joint Capability Area (JCA) Alignment with Joint Functions, 10 October 2010.

3. Joint Publications and Assessments

a. JP 1, *Doctrine for the Armed forces of the United States*.

b. JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*.

c. JP 2-0, *Joint Intelligence*.

d. JP 3-0, (Ch 2) *Joint Operations*.

e. JP 3-09, *Joint Fire Support*.

f. JP 5-0, *Joint Operation Planning*.

g. JP 6-0, *Joint Communications System*.

4. Other Papers, Reports, References

a. *Capstone Concept for Joint Operations, Version 3.0*

b. Joint Capability Areas
http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc

c. *Joint Capability Area Management Plan (JCAMP)*

d. Joint Capability Area Management System (JCAMS)
<http://jcams.penbaymedia.com>

GLOSSARY
PART I — ABBREVIATIONS AND ACRONYMS

APEX	Adaptive Planning and Execution System
BOS	Battlefield Operating Systems
CCJO	Capstone Concept for Joint Operations
CJCS	Chairman of the Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff manual
COA	course of action
DAWG	Deputy's Advisory Working Group
DEG	Doctrine and Education Group
DOD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DOTMLPF	doctrine, organization, training, materiel, leadership and education, personnel, and facilities
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
FCB	functional capability board
IAW	in accordance with
IO	information operations
JCA	joint capability area
JCAMP	Joint Capability Area Management Plan
JCAMS	Joint Capability Area Management System
JCIDS	Joint Capabilities Integration and Development System
JDEIS	Joint Doctrine, Education, and Training Electronic Information System
JEDD	Joint Education and Doctrine Division
JEL	Joint Electronic Library
JFC	joint force commander
JFDID	Joint Force Development and Integration Division
JOPP	joint operation planning process
JP	joint publication
JPME	joint professional military education
JROC	joint requirement oversight council
JS	joint Staff
JTF	joint task force

JWFC	Joint Warfighting Center
OSD	Office of the Secretary Of Defense
RFC	revision final coordination
UJT	Universal Joint Task
UJTL	universal joint task list
USJFCOM	US Joint Forces Command

PART II — TERMS AND DEFINITIONS

Terms and definitions listed below are used in this study are listed only for the convenience of the reader. The source of each term and definition is identified parenthetically. JP 1-02, *Department of Defense Dictionary of Military and Associated Terms* is the primary terminology source when preparing correspondence, to include policy, strategy, doctrine, and planning documents.

battlespace — None. (Note: removed from JP 1-02 by JP 2-01.3)

battlespace awareness — 1. None. (Note: JP 2-01 RFC removes from JP 1-02) 2. Knowledge and understanding of the operational area's environment, factors, and conditions, to include the status of friendly and adversary forces, neutrals and noncombatants, weather, and terrain, that enables timely, relevant, comprehensive, and accurate assessments, in order to successfully apply combat power, protect the force, and/or complete the mission. (CJCSI 3340.02) 3. The ability to understand dispositions and intentions as well as the characteristics and conditions of the operational environment that bear on national and military decision-making.
(http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

building partnerships — The ability to set the conditions for interaction with partner, competitor or adversary leaders, military forces, or relevant populations by developing and presenting information and conducting activities to affect their perceptions, will, behavior, and capabilities.
(http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

building partner capacity — Targeted efforts to improve the collective capabilities and performance of the Department of Defense and its partners. (CJCSI 3210.06)

corporate management and support — The ability to provide strategic senior level, enterprise-wide leadership, direction, coordination, and oversight through a chief management officer function.
(http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

capability — 1. The ability to execute a specified course of action. (A capability may or may not be accompanied by an intention.) (JP 3-0 RFC removes from JP 1-02) 2. The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks. (CJCSI 3500.01) 3. The ability to achieve a desired effect under specified standards and conditions through a combination of means and ways across doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) to perform a set of tasks to execute a specified course of action. (DODD

7045.20) (JCAM) 4. 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, and facilities (DOTMLPF) to perform a set of tasks to execute a specified course of action. It is defined by an operational user and expressed in broad operational terms in the format of an initial capabilities document or a joint DOTMLPF change recommendation. In the case of materiel proposals/documents, the definition will progressively evolve to DOTMLPF performance attributes identified in the capability development document and the capability production document. (CJCSI 3170.01G) 5. the quality or state of being capable; also : ability (merriam-webster.com) 6. The ability to perform actions (Wikipedia.com) 7. The power or ability to generate an outcome (Wiktionary.com)

command and control — 1. The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. (JP 1-02. SOURCE: JP 1) 2. The ability to exercise authority and direction by a properly designated commander or decision maker over assigned and attached forces and resources in the accomplishment of the mission. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

cyberspace operations — The employment of cyber capabilities where the primary purpose is to achieve objectives in or through cyberspace. Such operations include computer network operations and activities to operate and defend the Global Information Grid. (JP 1-02. SOURCE: JP 3-0)

engagement — 1. In air defense, an attack with guns or air-to-air missiles by an interceptor aircraft, or the launch of an air defense missile by air defense artillery and the missile's subsequent travel to intercept. 2. A tactical conflict, usually between opposing lower echelons maneuver forces. (JP 1-02) 3. Engagement activities seek to improve the capabilities of or cooperation with allied and other partners. They may be conducted as a complement to broader diplomatic or economic engagement, in aid of a friendly (and sometimes not so friendly) government's own security activities, and even during war itself. They are the primary military contribution to the national challenge of establishing cooperative security. Engagement activities typically are long-duration undertakings, ending only when they have achieved their goals or when either the US or partner government concludes that they have become unnecessary or unproductive. (as described in CCJO)

fires — The use of weapon systems to create specific lethal or nonlethal effects on a target. (JP 1-02. SOURCE: JP 3-09)

force application — The ability to integrate the use of maneuver and engagement in all environments to create the effects necessary to achieve mission objectives.
(http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

force support — The ability to establish, develop, maintain and manage a mission ready Total Force.
(http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

intelligence — The product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity. (JP 1-02. SOURCE: JP 2-0)

joint capability areas — 1. JCAs are collections of similar capabilities logically grouped to support strategic investment decision-making, capability portfolio management, capability delegation, capability analysis (gap, excess, and major trades), and capabilities-based and operational planning. JCAs are intended to provide a common capabilities language for use across many related DOD activities and processes and are an integral part of the evolving CBP process. a. Tier 1 JCA - A Tier 1 JCA is a high-level capability category that facilitates capabilities-based planning, major trade analysis, and decision making. Tier 1 JCAs are comprised of functional-, operational-, domain-, and institutional-based joint capabilities. All DOD capabilities can be mapped to a Tier 1 JCA. b. Tier 2 JCA - A Tier 2 JCA is a comprehensive capability area logically placed within a Tier 1 JCA. Tier 2 JCAs are capability areas with sufficient detail to help identify operationally required military capabilities, or to help identify joint force generation and management capabilities. A Tier 2 JCA scopes, bounds, clarifies, and better defines the intended capability area of its 'parent' Tier 1 JCA. Tier 2 JCAs are intended to reduce duplication between Tier 1 JCAs, and are not Service, mission, or platform specific. c. JCA Taxonomy. The structure or framework of joint capabilities, used in conjunction with the JCA Lexicon, to facilitate capabilities-based planning, analysis, and decision-making. d. JCA Lexicon. A collection of joint capability definitions that provide a common capabilities language for DOD to facilitate capabilities-based planning, analysis, and decision-making. (CJCSM 3170.01C) 2. Collections of like DOD capabilities functionally grouped to support capability analysis, strategy development, investment decision making, capability portfolio management, and capabilities-based

force development and operational planning.
(http://www.dtic.mil/futurejointwarfare/cap_areas.htm)

joint doctrine — Fundamental principles that guide the employment of US military forces in coordinated action toward a common objective. Joint doctrine contained in joint publications also includes terms, tactics, techniques, and procedures. It is authoritative but requires judgment in application. See also Chairman of the Joint Chiefs of Staff instruction; Chairman of the Joint Chiefs of Staff manual; doctrine; joint publication; joint test publication; multinational doctrine. (JP 1-02. SOURCE: CJCSI 5120.02B)

joint functions — Related capabilities and activities grouped together to help joint force commanders synchronize, integrate, and direct joint operations. Functions that are common to joint operations at all levels of war fall into six basic groups — command and control, intelligence, fires, movement and maneuver, protection, and sustainment. (JP 1-02. SOURCE: JP 3-0)

joint intelligence preparation of the operational environment — The analytical process used by joint intelligence organizations to produce intelligence estimates and other intelligence products in support of the joint force commander's decision-making process. It is a continuous process that includes defining the operational environment; describing the impact of the operational environment; evaluating the adversary; and determining adversary courses of action. (JP 1-02. SOURCE: JP 2-01.3)

logistics — 1. Planning and executing the movement and support of forces. It includes those aspects of military operations that deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services. (JP 1-02. SOURCE: JP 4-0) 2. The ability to project and sustain a logistically ready joint force through the deliberate sharing of national and multi-national resources to effectively support operations, extend operational reach and provide the joint force commander the freedom of action necessary to meet mission objectives. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc)

maneuver — 1. A movement to place ships, aircraft, or land forces in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war. 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission. (JP 1-02.

SOURCE: JP 3-0) 5. The movement of forces in relation to the enemy to secure or retain positional advantage, usually in order to deliver—or threaten delivery of—the direct and indirect fires of the maneuvering force. (A principle of war as stated in JP 3-0).

military engagement — Routine contact and interaction between individuals or elements of the Armed Forces of the United States and those of another nation's armed forces, or foreign and domestic civilian authorities or agencies to build trust and confidence, share information, coordinate mutual activities, and maintain influence. (JP 1-02. SOURCE: JP 3-0)

movement — 1. a (1) : the act or process of moving; especially : change of place or position or posture (2) : a particular instance or manner of moving b (1) : a tactical or strategic shifting of a military unit : maneuver (2) : the advance of a military unit c : action, activity —usually used in plural (merriam-webster.com)

movement and maneuver — This function encompasses the disposition of joint forces to conduct operations by securing positional advantages before or during combat operations and by exploiting tactical success to achieve operational and strategic objectives. This function includes moving or deploying forces into an operational area and maneuvering them to operational depths for offensive and defensive purposes. It also includes assuring the mobility of friendly forces. (as described in JP 3-0 RFC)

nation assistance — Civil and/or military assistance rendered to a nation by foreign forces within that nation's territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Nation assistance programs include, but are not limited to, security assistance, foreign internal defense, other Title 10, US Code programs, and activities performed on a reimbursable basis by Federal agencies or international organizations. (JP 1-02. SOURCE: JP 3-0)

net-centric — 1. The ability to provide a framework for full human and technical connectivity and interoperability that allows all DOD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence, and protects information from those who should not have it. (http://www.dtic.mil/futurejointwarfare/strategic/jca_framework_defs.doc) 2. Relating to or representing the attributes of a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data are shared timely and seamlessly among users, applications, and platforms. (DODD 8000.01) 3. Relating to or representing the attributes of net-centricity. Net centricity is a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data is shared timely and

seamlessly among users, applications, and platforms. Net-centricity enables substantially improved military situational awareness and significantly shortened decision making cycles. Net-Centric capabilities enable network-centric operations and Network-Centric Warfare. (DODD 8320.02) 4. Relating to or representing the attributes of a net-centric environment. A net-centric environment is a robust, globally interconnected network environment (including infrastructure, systems, processes, and people) in which data is shared timely and seamlessly among users, applications, and platforms. A net-centric environment enables substantially improved military situational awareness and significantly shortened decision-making cycles. (CJCSI 5123.01E) 5. Information-based operations that use service-oriented information processing, networks, and data from the following perspectives: user functionality (capability to adaptively perform assigned operational roles with increasing use of system-provided intelligence/cognitive processes), interoperability (shared information and loosely coupled services), and enterprise management (net operations). (CJCSI 6212.01E)

operational environment — A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 1-02. SOURCE: JP 3-0)

protection — 1. Preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. (JP 1-02. SOURCE: JP 3-0) 2. The ability to prevent/mitigate adverse effects of attacks on personnel (combatant/non-combatant) and physical assets of the United States, allies and friends. (http://www.dtic.mil/futurejointwarfare/strategic/jca/framework_defs.doc)

strategic communication — Focused United States Government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States Government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power. (JP 1-02. SOURCE: JP 5-0)

sustainment — The provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment. (JP 1-02. SOURCE: JP 3-0)

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