

# Joint Concept for Rapid Aggregation



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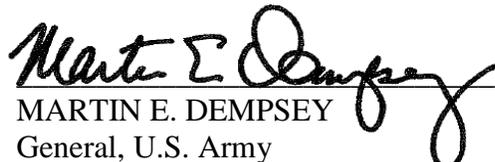
## FOREWORD

In 2012, I released the *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO) as a first step toward transforming from a force shaped by over a decade of crisis to one prepared for the challenges of the next decade and beyond. Central to the future way of operating described in the CCJO is the ability of a globally dispersed U.S. Joint Force to aggregate on demand and apply decisive force anywhere in the world with a wide array of partners. This kind of agility will allow us to set the tempo of the response and exploit opportunities in a dynamic operating environment.

However, after over a dozen years of predictable deployments into mature theaters, the knowledge and practices necessary for executing a well-honed, rapid response to an emerging crisis have eroded across the Joint Force. Though we are arguably still unmatched in our ability to form and project military power around the globe, we will have to adapt our current approaches if we are to achieve our envisioned way of operating, especially when one considers the expected changes to resources and threats in future environment.

The Joint Concept for Rapid Aggregation describes actions necessary for the Joint Force to improve its ability to aggregate forces more rapidly as part of an escalation or response framework at the outset of crisis. The concept builds on current doctrine, lessons learned from recent operations, best practices, and ongoing development work, and molds them into a solution for the future operating environment. It offers improvements across a broad range of related areas, from strategic guidance, force management, and training to headquarters transitions and forming forces in a contested environment. Taken collectively, these changes will sharpen our ability to respond and form coherent Joint Forces with both speed and precision. While each Service, Defense Agency, and Combatant Command has a vital role in this effort, we will only achieve rapid aggregation through seamless integration of the organizations, processes, and mechanisms associated with generating Joint Force responses. We cannot afford to be slowed by the paradigms and organizational stovepipes of the past.

As we transition from wartime budgets to fewer resources and to increasingly dynamic global operations from relatively static counterinsurgency operations, we must continue to unify our efforts to prepare a force that preserves options through quick, flexible, and credible responses. The Joint Concept for Rapid Aggregation is a critical step toward ensuring that we can continue to do so.



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MARTIN E. DEMPSEY  
General, U.S. Army  
Chairman of the Joint Chiefs of Staff

# Joint Concept for Rapid Aggregation (JCRA)

## Executive Summary

The *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO: JF 2020) offers globally integrated operations as the solution for addressing the complex, rapidly changing, and increasingly transparent security environment we face. Globally integrated operations both enable and rely on global agility, which places a premium on swift and adaptable military responses. To achieve this, the CCJO: JF 2020 envisions employing networks of forces and partners that will form, evolve, dissolve, and reform with significantly greater fluidity than today's Joint Force. The objective is to develop a more agile Joint Force. JCRA advances the CCJO: JF 2020 vision of a globally postured Joint Force that can quickly combine capabilities within itself and mission partners across domains, echelons, geographic boundaries, and organizational affiliations with the agility matching the high tempo of globally integrated operations. Specifically, JCRA describes new approaches and identifies improvements in joint capabilities to overcome historic challenges to aggregation when supporting crisis response or limited contingency operations in the current and future security environment. Figure 1 provides an overview of the concept's main elements.

**Purpose and Scope of JCRA.** JCRA seeks to improve the speed, effectiveness, and efficiency of Joint Force aggregation in support of globally integrated operations by informing force development and force management activities across the Department of Defense (DoD). JCRA focuses on preparatory and crisis-specific actions that facilitate the Joint Force, in conjunction with interorganizational partners, to transition from a steady-state global defense posture to a crisis-specific operational stance at the outset of a short-notice or no-notice crisis. The scope of the challenge is the response to a single crisis that a Combatant Commander cannot address with assigned resources. It centers on crisis response situations requiring short-notice deployments (within 30–45 days from initial notification) and the activities that usually occur within the first 30–45 days following the start of deployments. To facilitate a common understanding, JCRA expounds the definitions of four key terms: *Rapid, Aggregate, Force, and Agility*.

**Future Environment.** JCRA is applicable to the future security environment as described in CCJO: JF 2020 and other operating concepts. Additionally, it identifies the potential for increased operational challenges due to reduced resources; a continuing demand for military responsiveness; and a complex, capable threat array posing significant challenges to the Joint Force's ability to project relevant force at the speed required for response. These challenges pose a significant problem set for the Joint Force when coupled with the following historic impediments to rapid aggregation:

- Pre-crisis planning and global posture
- Joint training associated with crisis response
- Response force readiness and availability
- Joint force headquarters formation
- Crisis action planning while in transition
- Force and capability sequencing at the start of deployment
- Joint force assembly during joint headquarters transition
- Incorporation of interorganizational partners
- Command and collaborative relationships

**The Operational Challenge.** *How will the future force quickly combine forces and capabilities, internally and with mission partners, across domains, echelons, geographic boundaries, and organizational affiliations to form operationally coherent joint and combined forces with the necessary agility to support globally integrated operations?*

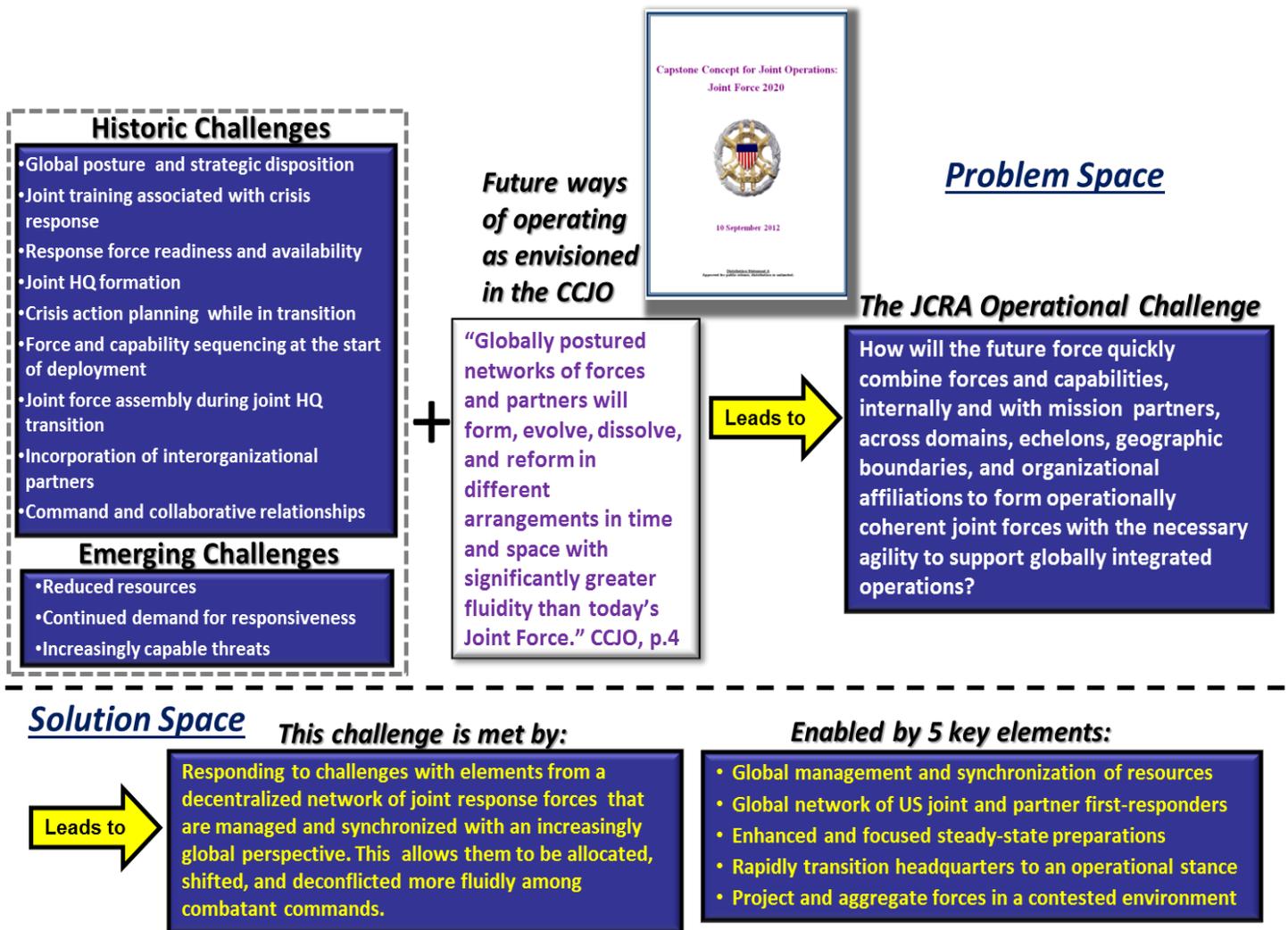
**The Central Idea.** To address this challenge, the concept advances the premise that an interconnected global network of joint response forces will have an improved ability to rapidly aggregate forces achieving efficiencies and synergies required to overcome historic impediments to Joint Force formation. The concept postulates that the future force will leverage improved collaborative tools and practices to quickly connect with a diverse and evolving set of partners and networks. Rapid aggregation relies upon significant strategic and operational agility, enabled by increasingly globally integrated planning and resourcing strategies, to generate and aggregate forces for operations. By accelerating the infusion of joint capabilities into the responding headquarters, the future Joint Force effectively employs joint capabilities earlier in the response cycle, thus allowing it to promptly seize the initiative. Finally, the future force will counter advanced threats, in part, through new force projection schemes that integrate deception, protection, and dispersion in innovative ways. Implementing the JCRA solution-set builds on the following five key elements in order to better posture the Joint Force for conducting globally integrated operations:

- Global management and synchronization of resources. Adjust strategic guidance, staff practices, planning, posture, and readiness to better meet the requirements of globally integrated operations.
- Formation of a decentralized global network of response forces. More comprehensively designate and ready the total pool of first-response forces.
- Enhanced and focused steady-state preparations. Increase emphasis on planning, training and exercises, and interoperability related to rapid aggregation.
- Rapidly transition headquarters to an operational stance. Accelerate headquarters transition to crisis by rapidly forming crisis-capable staffs built around existing command and control (C2) structures.

- Project and aggregate forces in a complex and contested environment. Improve ability to generate, project, and form forces in a contested environment when required.

**Required Capabilities.** This concept identifies 10 required capabilities and 40 supporting actions across the force development spectrum to enable executing the concept’s five key elements as envisioned.

**Joint Concept for Rapid Aggregation Logic Flow**



**And realized through 10 concept-required capabilities...**

Figure 1: Joint Concept for Rapid Aggregation Logic Chart

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## I. Introduction

The *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO) offers globally integrated operations as the solution for addressing the complex, rapidly changing, and increasingly transparent security environment we face. Globally integrated operations both enable and rely on global agility, which places a premium on swift and adaptable military responses. To achieve this, the CCJO envisions “employing networks of forces and partners that will form, evolve, dissolve, and reform with significantly greater fluidity than today’s Joint Force.” The capstone concept sees a future Joint Force that can quickly combine forces and capabilities, internally and with mission partners, across domains, echelons, geographic boundaries, and organizational affiliations. The objective is to develop a more agile Joint Force.<sup>1</sup>

As a supporting concept to the CCJO, the Joint Concept for Rapid Aggregation (JCRA) examines how the future force will form operationally coherent Joint Forces<sup>2</sup> in conjunction with mission partners, circa 2020 and beyond, with the agility necessary to match the tempo of globally integrated operations. Specifically, it describes new approaches for overcoming aggregation challenges when supporting a crisis response or limited contingency operations<sup>3</sup> in a future environment shaped by reduced resources, a continuing demand for military responsiveness, and a complex and capable array of threats (Figure 1, above). These are conditions for which existing approaches and capabilities are insufficient and that thereby require reexamination of current Joint Force operations.

### A. Purpose.

This concept describes a way of operating that seeks to improve the speed, effectiveness, and efficiency of Joint Force aggregation. It will inform the development of Joint Force 2020 within the Department of Defense and potentially the force development efforts of our interorganizational partners.<sup>4</sup>

*“The most important change needed for the Joint Force of 2020 is an approach we’ve called ‘globally-integrated operations,’ which is, simply put, the ability of a globally postured Joint Force to assemble quickly and apply decisive force anywhere in the world with a wide array of partners. This is no small task. There may be times when a large centralized force is needed, but more often than not, the Joint Force will operate as a decentralized network that can aggregate on demand and dial capabilities up or down depending on the mission and the operating environment.”\**

*General Martin Dempsey  
Chairman of the Joint Chiefs of Staff*

<sup>1</sup> CCJO, pages 4-5. The ideas in the paragraph are paraphrased from the CCJO description of globally integrated operations and global agility.

\* (M. E. Dempsey 2013) <http://www.foreignaffairs.com/articles/139524/martin-e-dempsey/the-future-of-joint-operations>.

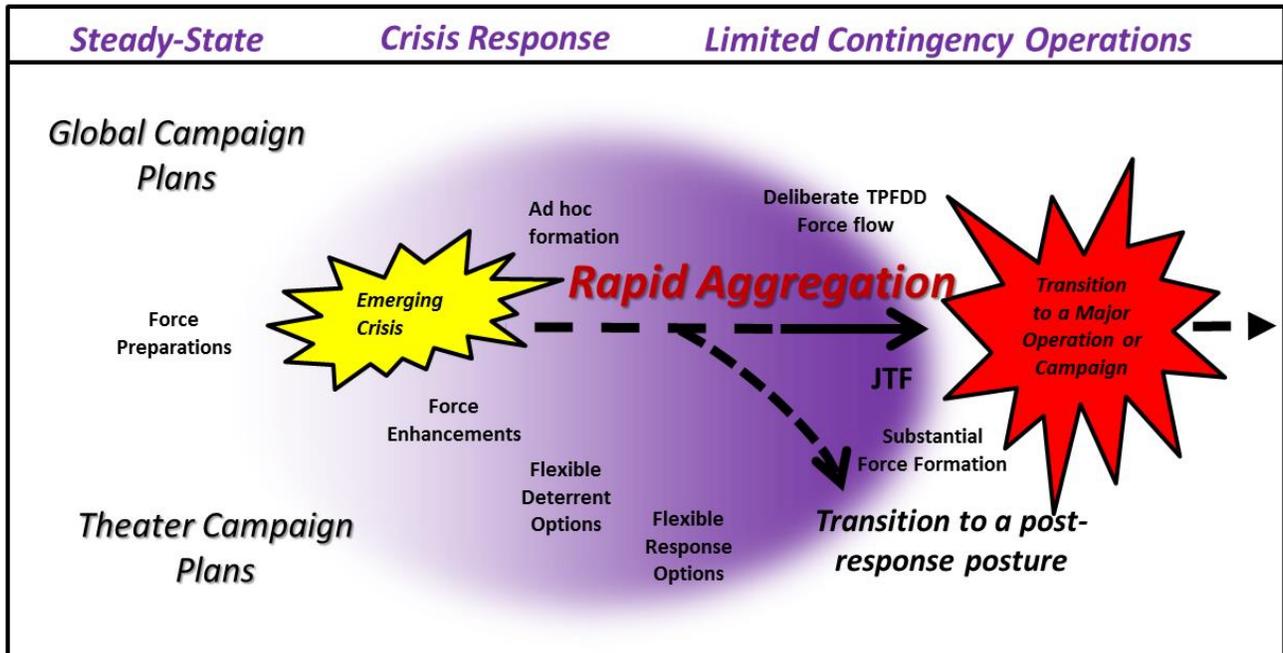
<sup>2</sup> Operationally coherent Joint Forces/formations. As used in this concept, operationally coherent means the aggregated forces are “complete, well connected, and they work closely and well together” internally and with interorganizational partners. Coherent: <http://www.merriam-webster.com/dictionary/coherent>.

<sup>3</sup> (Joint Chiefs of Staff 2011) “*Crisis response and limited contingency operations* are typically limited in scope and scale and conducted to achieve a very specific strategic or operational objective in an operational area. They may be conducted as stand-alone operations in response to a crisis (such as a noncombatant evacuation operation (NEO)) or executed as an element of a larger, more complex campaign or major operation.” This concept will use the term “crisis response” as shorthand for these types of operations.

<sup>4</sup> Interorganizational Partners. JP 3-0 states: “This publication uses the term interorganizational partners to refer collectively to U.S. federal departments and agencies; state, territorial, local, and tribal agencies; foreign military forces and government agencies; nongovernmental agencies; and the private sector.” This aligns with the term and definition of interorganizational coordination established in JP 3-08, *Interorganizational Coordination During Joint*

**B. Scope.**

This concept focuses on those actions, both preparatory and crisis-specific, which permit the Joint Force, in conjunction with interorganizational partners, to transition from a steady-state global defense posture, to a crisis-specific operational stance at the outset of a short-notice or no-notice crisis in the future operating environment (Figure 2). It describes a response to a single crisis that a Combatant Commander cannot address with forward positioned resources, as well as the management of competing resource demands of concurrent global operations. While the actions described in the concept will apply to crises with longer response timelines, it centers on



**Figure 2: JCRA Scope. Steady state force preparation through transition to crisis response and limited contingency operations**

crisis response situations requiring short-notice deployments (within 30-45 days from initial notification) and the activities that usually occur within the first 30-45 days following the start of deployments.<sup>5</sup>

The JCRA is a supporting concept to the CCJO, and its solution nests within the joint concepts family. JCRA provides a solution that can improve aggregation in support of operations across the full range of military operations and under a variety of threat conditions (Figure 3). It also is scoped to account for aggregation with a diverse and extensive set of interorganizational partners. The JCRA solution is closely linked with the solutions described in the Joint Operational Access Concept (JOAC) and the Joint Concept for Entry Operations (JCEO). As such, JCRA shares some language these two concepts use to describe aggregation in an anti-access and area denial (A2/AD) environment.

*Operations.* This concept recognizes that not all organizations working within the operational area will want to be considered “partners.” As such, military forces should refrain from referring to, and treating, those organizations as partners. However, they must still be adept at establishing working relationships with them.

<sup>5</sup> While aggregation and disaggregation occur throughout an operation or campaign, this concept focuses on activities in Phase 0: Shape; Phase I: Deter, Phase II: Seize Initiative, and the initial actions of Phase III: Dominate, as described in JP 5-0.

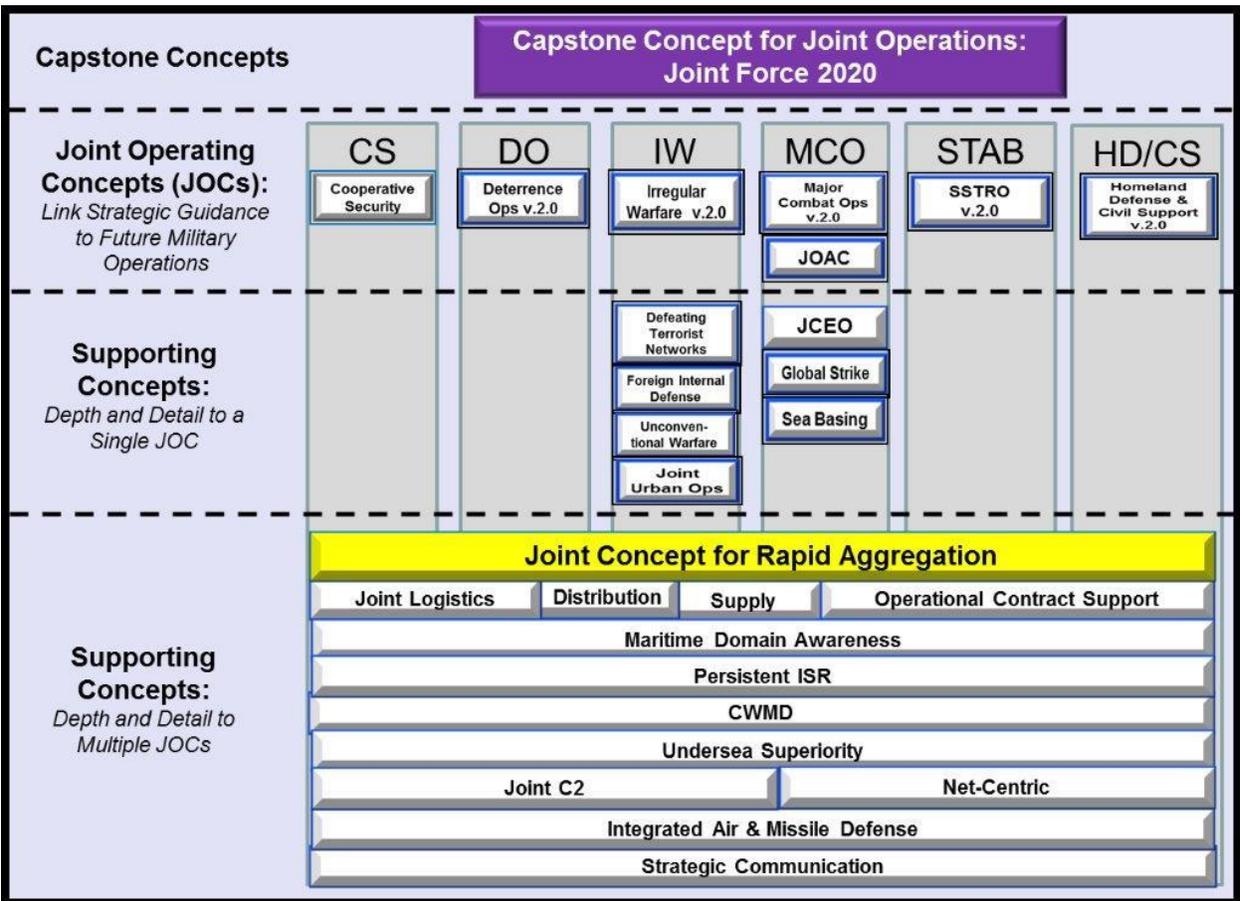


Figure 3: JCRA within the family of Joint Concepts

C. Key Terms.

As used in this concept, *rapid*<sup>6</sup> denotes the speed of action required to aggregate forces under the compressed timelines of crises. Ultimately, the necessary response speed is relative to mission tempo as it unfolds. Generally speaking, this concept seeks to improve the response speed and the ability to aggregate forces internally and with mission partners within the first 30-45 days of a response.

To aggregate (v) is “to collect units or parts into a mass or whole,” whereas an aggregation (n) is “a group, body, or mass composed of many distinct parts or individuals.”<sup>7</sup> In this concept, aggregation includes all activities required to physically and virtually bring U.S. joint and interorganizational partner forces and capabilities together to achieve unity of effort in the accomplishment of common objectives. These forces or capabilities may share assets in supported, supporting, or other relationships and may come from across the DoD or other interorganizational partners. Although operational necessity may require physical concentration, forces may aggregate without concentration by changing command or organizational relationships. For example, a force that is located forward in the operational area may aggregate

<sup>6</sup> Rapid. Joint doctrine defaults to the English definition of rapid rather than including it in JP 1-02. According to Merriam-Webster Dictionary, rapid is defined as: “(adj) 1. Happening in a short amount of time. 2. Having a fast rate. 3. Moving quickly.” Merriam Webster Online Dictionary. <http://www.merriam-webster.com/dictionary/rapid>.

<sup>7</sup> Aggregation. Merriam Webster Online Dictionary. <http://www.merriam-webster.com/dictionary/aggregation>

through the establishment of a command relationship with supporting capabilities such as ISR, space, and cyberspace that are far from the controlling headquarters.

A *force* is “an *aggregation* of military personnel, weapon systems, equipment, and necessary support, or a combination thereof.”<sup>8</sup> As used in this concept, it applies to aggregations of both U.S. and partner military formations and capabilities. This concept uses the term *response forces* to describe those forces designated for initial response to a contingency operation. The specific response requirements will be defined through strategic guidance and Combatant Commander requirements. Based on these requirements, the Services will develop the specific response force composition of the response forces as well as their readiness and availability guidance. These forces may be assigned or allocated to Combatant Commands (CCMDs) and may include designated theater-sourced response forces—the Combatant Commander’s first-response forces, and globally-sourced response forces—that not only includes the global response forces (GRF), but also other likely first or early responders.

Rapid aggregation is an integral component of global agility and by extension, globally integrated operations. *Agility* is defined as the “ready ability to move with quick easy grace; a quick resourceful and adaptable character”<sup>9</sup> The CCJO describes *global agility* as follows:

“Globally integrated operations both enable, and are premised on, global agility. As with today’s force, all joint operations will begin from an initial posture of bases, home-station forces, forward-deployed forces, and prepositioned stocks. However, the increasing speed at which events develop will place a premium on swift and adaptable military responses. To achieve this, globally integrated Joint Forces can use capabilities such as cyber and global strike to rapidly bring combat power to bear. Massed formations will remain an option but increasingly they will not be the option of choice. Further, smarter positioning of forces, and greater use of prepositioned stocks and rapid expeditionary basing, will increase overall operational reach. More nimble command and control will also allow resources to be allocated, shifted, and de-conflicted more fluidly among Combatant Commanders as strategic priorities evolve. The result is a more agile Joint Force able to aggregate, reconfigure, and disaggregate as required.”<sup>10</sup>

#### ***D. Assumptions.***

- The U.S. 2020 military capacity will be smaller than it is today, though there may be increases in some capability areas.
- Constrained DoD resources will require commanders to aggregate in, and out of, theater response forces and increasingly rely on partner capabilities and contracted support.
- In situations that require rapid aggregation, deployments for most elements will begin as soon as 15-30 days after the warning order issuance, though some forces could move as soon as 18-24 hours after notification.
- Rapid aggregation for a specific crisis will not be a stand-alone event; other global operations will compete for many of the same resources.

#### ***E. Historical Analysis.***

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<sup>8</sup> Force. Joint Publication 1-02.

<sup>9</sup> Agile. <http://www.merriam-webster.com/dictionary/agile?show=0&t=1413469368>

<sup>10</sup> CCJO, page 5.

Past crisis-response and limited contingency operations highlight recurring challenges to rapid aggregation. Since 1970, the U.S. has formed over 300 joint task forces to address a full spectrum of missions across every geographic CCMD.<sup>11</sup> An analysis of 64 of these short-notice operations from 1990 until 2012<sup>12</sup> revealed that in over 70 percent of these operations, JTF elements had less than five weeks after receiving a warning order to prepare and deploy for operations.<sup>13</sup> In four of the cases, the JTFs had one week or less to prepare and deploy, and in two of these cases the warning order was the order to deploy and begin operations.<sup>14</sup> Lack of time for planning and preparation, fluid situations, vague requirements, and ill-defined organizational relationships frequently characterized these operations. This fog and friction was often at its worst at the start of the crisis, and it tended to abate after the first 30-45 days of operations.<sup>15</sup> Lessons from these operations – drawn from after-action reports, articles, histories, studies, and interviews<sup>16</sup> – suggest the future Joint Force must address the following historic issues if it is to operate in the future environment as described in the CCJO:

- Pre-crisis planning and global posture
- Joint training associated with crisis response
- Response force readiness and availability
- Joint Force headquarters formation
- Crisis action planning while in transition
- Force and capability sequencing at the start of deployment
- Joint Force assembly during joint headquarters transition
- Incorporation of interorganizational partners
- Command and collaborative relationships

## II. Future Environment

The future operating environment will make the difficult tasks associated with aggregation even more challenging due to reduced resources; a continuing demand for military responsiveness; and a complex, capable threat array.

### A. *Reduced resources*

Anticipated resource reductions will affect how the U.S. military will respond to crises. While some capability areas will see increased investment, decreased defense spending will reduce capacity in terms of overall force structure.<sup>17</sup> This condition also will likely apply to other interorganizational partners. Resource reductions will affect readiness, lift, basing,

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<sup>11</sup> (Bonds, Hura and Young 2010) (US Joint Forces Command 2004)

<sup>12</sup> In operations large enough to require the formation of a joint task force (JTF) (Scales 1994) (Swain 1997) (Schubert 1995) (Mroczkowski 2005) (Brown 2003) (D. R. Stewart 2012) (Bonds, Hura and Young 2010) (Winstead 2013)

<sup>13</sup> (Bonds, Hura and Young 2010) (Winstead 2013)

<sup>14</sup> (Bonds, Hura and Young 2010)

<sup>15</sup> A general conclusion based on the body of research.

<sup>16</sup> (Third Air Force / A9L 2007) (Arroyo Center 2011) (Bonds, Hura and Young 2010) (DPM Program Management and Strategy Division 2009) (EUCOM Lessons Learned 2006) (Joint Center for Operational Analysis 2010) (Joint Concepts Division, Joint Staff J7 2012) (Joint Enabling Capabilities Command 2012) (Naval Support Activity Bahrain 2006) (Parker, III 2012) (Schisser 2001) (Stewart, George; Fabbri, Scott M.; Siegel, Adam B.; 1994) (Strong 2007) (USARAF 2012) (USTRANSCOM 2011) (Wahlman 2011) (XVIII Airborne Corps 2013)

<sup>17</sup> CCJO, page 3-4.

training, prepositioned stocks, and steady-state shaping – all of which are critical to rapid aggregation. A reduced pool of forces will increase the probability that response forces may be re-tasked from an on-going mission to address another rapidly developing, and possibly geographically separated, mission requirement. Reduced resources may also increase dependence on interorganizational partners to provide capabilities, while at the same time decreasing the DoD’s ability to develop relationships with these partners before a crisis. Projected global posture adjustments will likely require deployment of homeland-based Joint Forces, increasing deployment timelines, and the likelihood that aggregation will occur under austere conditions. Reduced forward presence may degrade regional knowledge and responsiveness and the breadth and quality of relationships in the operational area. Reduced forward presence can also affect the ability to gain early indications and warnings, access, and agreements necessary for strategic responsiveness, all key ingredients for rapid aggregation.

### ***B. Continuing demand for military responsiveness***

While U.S. Armed Forces’ composition is likely to shrink, the Nation will continue to demand prompt, credible, and effective responses from its military forces once a political decision to act is made.<sup>18</sup> Extensive media coverage and omnipresent social networks may increase pressure for a quick military response, potentially reducing the time available for planning and preparation.

### ***C. Complex and capable array of threats***

Over the past several decades, the United States has aggregated its forces in relatively advantageous geographic proximity to the operational area, has generally had sufficient access to supporting infrastructure such as mature ports, and it has faced minimal threats during aggregation. By contrast, the future Joint Force will likely face complex, capable threats that could disrupt its aggregation efforts. Future threat actions may challenge access to the global commons and freedom of maneuver within theaters of operations. Disruptions could occur at any point throughout the duration of the conflict. (See the discussion of threats in the CCJO and the Joint Operational Environment, and in Annex B: Threats to Aggregation, in this concept.)

## **III. The Operational Challenge.**

Given the expected environment and future way of operating as described in the CCJO and other joint concepts, this concept seeks to address the following operational challenge:

*How will the future force quickly combine forces and capabilities, internally and with mission partners, across domains, echelons, geographic boundaries, and organizational affiliations to form operationally coherent joint and combined forces with the necessary agility to support globally integrated operations?*

## **IV. A Joint Concept for Rapid Aggregation.**

To meet the challenges described above, the future Joint Force will respond to crises with elements from a decentralized global network of joint response forces. This globally dispersed pool of ready forces will be available to address the most pressing operational priorities across

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<sup>18</sup> (Dempsey, 18th Chairman's Strategic Direction to the Joint Force 2014) (Department of Defense 2014)

the range of military operations. The DoD will manage and synchronize these forces with an increasingly global perspective, allowing them to be allocated, shifted, and deconflicted more fluidly among Combatant Commanders as strategic priorities evolve. In times of crisis, the future force will draw these response forces from across domains, echelons, geographic boundaries, and organizational affiliations, and rapidly aggregate them into operationally coherent joint formations as required. As part of a network of first responders, these forces will leverage advanced planning, shared situational awareness, standardization, and established relationships to speed response and reduce past impediments to aggregation.<sup>19</sup> The response forces will deploy and position differently, employing different force mixes, protection, dispersion, and deception to counter an increasingly complex threat environment. The net effect of all these actions is a force that can fluidly adapt organizationally, dialing capabilities up or down as the situation requires.<sup>20</sup>

Collectively, the ideas described within the five key elements of this concept (Figure 4) will enable a “smaller, more agile, more lethal, and smartly postured Joint Force”<sup>21</sup> to respond quickly, seize the initiative early, and provide U.S. national leadership with strategic options.

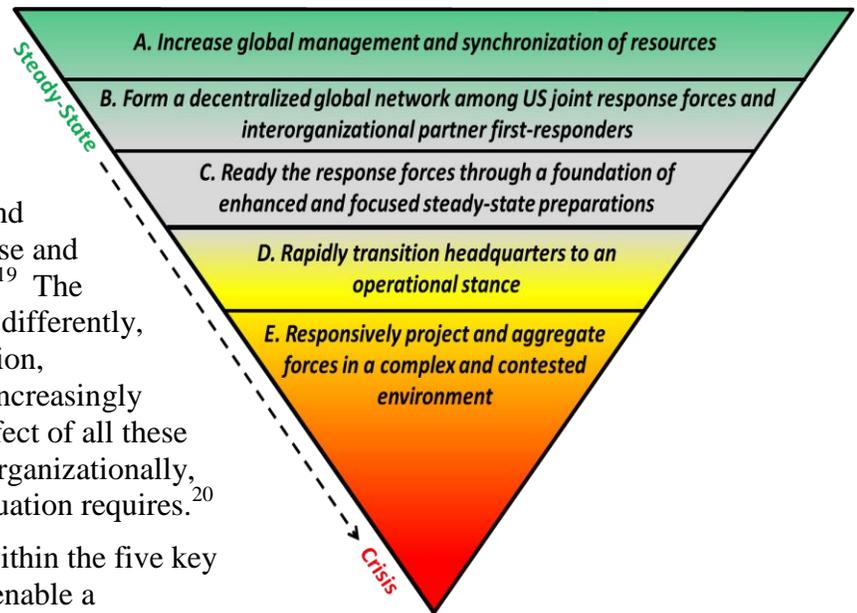


Figure 4: JCRA Key Elements

***A. First, rapid aggregation requires increased global management and synchronization of resources to achieve the agility required to support globally integrated operations.***

To meet dynamic demands of globally integrated operations, the future force must increasingly manage and synchronize resources with a global and joint perspective. This mandates changes in strategic guidance, staff roles, global posture, and force management. These changes will improve the DoD’s ability to manage risk and the demand for limited resources.

1. *Provide strategic guidance that focuses response requirements.*

<sup>19</sup> See Section I: Historic Analysis (page 5) and Appendix B: Threats to Aggregation (page 37).

<sup>20</sup> (Dempsey, *The Future of Joint Operations. Real Cooperation for Real Threats* 2013) “There may be times when a large centralized force is needed, but more often than not, the Joint Force will operate as a de-centralized network that can aggregate on demand and dial capabilities up or down depending on the mission and the operating environment.” <http://www.foreignaffairs.com/articles/139524/martin-e-dempsey/the-future-of-joint-operations>.

<sup>21</sup> (Dempsey, *The Bend of Power | How the U.S. military can overcome the challenges of complexity in a rapidly changing world* 2014) “To this end, the U.S. military is adapting the way we distribute the force and manage readiness... We are adjusting our processes so that we can aggregate and disaggregate forces rapidly to shape, deter, and, if necessary, strike. Our force will be smaller, so it must be more agile, more lethal, and postured to project power wherever needed.”

[http://www.foreignpolicy.com/articles/2014/07/25/the\\_bend\\_of\\_power\\_us\\_leadership\\_military\\_martin\\_dempsey](http://www.foreignpolicy.com/articles/2014/07/25/the_bend_of_power_us_leadership_military_martin_dempsey)

Future strategic guidance<sup>22</sup> must provide increasingly specific requirements to the Combatant Commanders and the Services for directed response missions. Implementation of this guidance will require striking a balance between demands for forces to achieve current campaign objectives and the need to maintain a pool of ready forces to meet surge demands in crisis.<sup>23</sup> Though the dynamic nature of the operational environment will make it impossible to predict the specific locations of a future crisis response, guidance can define the nature of the rapid response missions for which the forces must prepare. Not all missions will require rapid aggregation, nor will it be feasible to prepare all forces to this level. Therefore, contingency planning guidance must clearly define acceptable risk, prioritize response mission types, establish timelines, and allocate or apportion response forces and other resources against the mission requirements. This guidance should also define response force requirements for supporting forward presence and pre-crisis shaping activities associated with these missions. These focused strategic requirements will inform priorities for resource allocation and necessary readiness preparations.

## 2. *Structure force for an agile strategic response.*

Management and synchronization of globally integrated operations will bring about changes in how senior staffs organize and how commands interact. The interrelated demands of the future environment will require increasing alignment of key crisis management structures at the strategic and theater levels to better enable global synchronization of requirements across multiple ongoing operations. Among other potential changes, current roles may have to expand to aid in the synchronization of resources during the execution of globally integrated operations, especially when addressing trans-regional issues.<sup>24</sup> This approach may also apply to functional synchronizers (e.g., cyber) and to joint functional managers (e.g., ISR).

Combatant Commanders (CCDRs) and their staffs must become increasingly collaborative and interdependent in both planning and execution. They must expand virtual and physical collaboration among commands to allow for shared situational understanding and for the collective capacity of multiple commands to quickly combine and solve problems. Adjustments to future Global Force Management business rules, for example, will increase flexibility for the Chairman, CCDRs, and force providers to collectively exercise mission command to resolve rapidly developing sourcing and battlespace management issues.<sup>25</sup> Innovative use of traditional command relationships will enable increased flexibility in the formation of Joint Forces and more seamless shifting of resources within and across organizational boundaries.<sup>26</sup> Other measures such as increased standardization of reporting and staff organizations across CCMDs,

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<sup>22</sup> Strategic guidance documents may include the Guidance for the Employment of the Force (GEF), the Joint Strategic Capabilities Plan (JSCP), the Contingency Planning Guidance, and associated supporting plans including the Global Response Force EXORD. These examples are not open-source documents.

<sup>23</sup> Guidance for Employment of the Force 2014-2016 (Draft as of 15 September 2104), page 9. (Limited distribution)

<sup>24</sup> The current Unified Command Plan establishes the role of global synchronizer for several functions. These synchronizers are responsible for establishing a planning framework for CCMDs to use in developing and assessing campaign objectives. The CCMDs currently synchronize execution. In a future environment of globally integrated operations with trans-regional issues, resourcing, and implications, there may be a requirement for the synchronizers to play an increased management role during the execution of operations.

<sup>25</sup> Secretary of Defense Memo dated 16 September 2014; Subject: Business Rule Changes for Secretary of Defense's Deployment Orders Book (SDOB) (limited distribution).

<sup>26</sup> See, for example, "Libya: Operation Odyssey Dawn Command and Control" (Joint and Coalition Operational Analysis 2011, Quartararo 2012)

and common processes for activities such as joint targeting, combat search and rescue, integrated air defense, etc., will further aid in rapid aggregation efforts. A unifying DoD battle rhythm, established during steady-state, can expand habitual cross-Combatant Command coordination, enable shared understanding of emerging problems, and accelerate resource re-allocation on a global scale.

3. *Adjust strategic planning and posture to enable rapid aggregation.*

Future plans and global posture must also adjust to the changing force structure and to the contested future operational environment to better enable rapid aggregation. Addressing emerging trans-regional issues will require increased integration of theater campaign plans, Service support plans, and the En Route Infrastructure Master Plan, among others, to better support a multi- and trans-theater perspective across the Department. Overlaying and reconciling these and other plans will aid in identifying common infrastructure requirements and potential efficiencies. It should also foster a perspective that causes the traditionally solid black lines defining the geographic AORs to appear more dotted in the future, enabling increased operational synergies, easing resource shifts, and improving flexibility.

Future plans must account for the implications of anticipated shifts in the U.S. global defense posture,<sup>27</sup> due to the redeployment of forward-based forces, base closures, and reliance upon Reserve Components for capabilities exceeding Active Component capacity. Posture adjustments must take on a more joint, combined, and global perspective that blends both regional and trans-regional requirements to “set the globe” rather than exclusively “set the theater.”<sup>28</sup> This approach includes the increasingly global management of key support contracts and nodes of en route infrastructure, such as key air bases, ports, etc., to ensure access and viability in times of crisis.

Assured access to vital regions in times of crisis will necessitate early and sustained partner engagement. It will also require regularly exercising elements of the response forces to actively demonstrate the ability to access vital regions if required. To this end, the DoD must efficiently manage a smaller pool of Joint Forces and optimize the availability and use of the remaining forward-deployed bases and forces. Adjustments may include placement of rotationally forward-deployed response forces and multipurpose pre-positioned stocks in anticipated areas of operation, and development and use of contingency locations, other infrastructure, and contracted support to decrease response times.

4. *Synchronize readiness requirements and reporting of Service forces designated to meet rapid response timelines.*

Readiness is vital to global agility. Readiness is both consumable and perishable; if not sustained across the pool of response forces, lack of readiness can slow response in times of crisis. However, the DoD will have to balance the readiness and use of the response forces

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<sup>27</sup> Posture. “Global Defense Posture describes the U.S. Forces and capabilities forward positioned or rotationally deployed for defensive activities in foreign countries and U.S. territories overseas, and the network of bases/infrastructure and international agreements and arrangements that underwrite and support the stationing, deployment, and employment of these forces.” DoD recognizes posture as three interdependent elements: forces, footprint (disposition), and agreements. Global Employment of the Force, page 34-35.

<sup>28</sup> In a future environment where issues, operations, and resources are increasingly globally interconnected, posture planning and adjustments must reflect a more global view vice the dominance of theater-centric perspectives in the past.

against the long-term readiness of the remainder of the force if it is to retain strategic flexibility and depth. After over a decade of synchronizing force generation cycles to sustain the known demands for two active combat theaters, the future Joint Force must realign efforts toward the generation of a more clearly defined pool of ready forces to meet projected baseline and surge demands for short- and no-notice contingencies. Strategic guidance must also outline the nature and scale of these anticipated contingency response missions to aid the Services in making force generation and readiness decisions. The Department will differentiate readiness requirements by identifying the specific missions to train against and the timeline on which a particular force is required for contingency response.<sup>29</sup> This will allow maximum flexibility for the force providers to meet the CDR's requirements.<sup>30</sup>

Guidance may also include cross-CCMD and Department synchronization of response mission requirements, including the generation of JTF-capable headquarters, consolidated core training requirements for all CCMDs, associated metrics for response and readiness reporting, and interdependence requirements with non-DoD partners. Additionally, CCMDs may be asked to provide specifications for assured access, authorities, and funding to execute rapid aggregation plans and address associated issues. With the likelihood that an increasing portion of the crisis response will be globally sourced, Combatant Commanders must identify and reconcile response requirements for non-assigned forces through the contingency plans development process. This is especially the case with critical high demand/low density assets (e.g., ISR). Strategic visibility of response assets will require a composite global picture that melds both Service and non-DoD inputs.

***B. Second, form a decentralized global network among U.S. joint response forces and interorganizational partner first responders.***

Rapid aggregation hinges on the premise that the future Joint Force will achieve greater global agility by generating initial responses with forces that are ready for short notice employment and have robust pre-crisis operating relationships. These globally distributed U.S. joint response forces will be part of a decentralized global network that includes other interorganizational partner first responders.

***1. Designate the pool of U.S. response forces.***

Since the future force will likely have fewer resources than today, implementing this concept will require increased task prioritization and more effective and efficient use of the resources available, particularly staff expertise. As discussed above, strategic guidance will define the priorities and missions for the pool of response forces, enabling the Services to designate and prepare the forces to meet those requirements. These forces will include not only the combat forces, staff augmentees who have been “battle-rostered”<sup>31</sup> against pre-established staff joint manning documents (JMD), and liaisons, but also the requisite supporting architecture of enabling capabilities, including the DoD civilians and contracted support, necessary for sustained operations.<sup>32</sup> While they may be assigned to a CCMD, these response forces may also

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<sup>29</sup> Guidance for Employment of the Force (GEF), 2014-2016, page 9.

<sup>30</sup> Ibid.

<sup>31</sup> The term “battle-rostered augmentees” refers to individuals who are assigned to one duty during steady-state, but who report to a different duty during crisis, such as a crisis action team (CAT), etc.

<sup>32</sup> The mission force must be accompanied by the requisite enablers, including sustainment, to be fully operational.

be available to meet global demands, necessitating new approaches for maintaining global visibility of their readiness and availability. A more comprehensive identification of response forces may require a re-definition of the current GRF list, either by expanding it to include the broader pool of globally available response forces or by including the GRF as a subcomponent of a larger response force grouping.

The future readiness reporting system may also have to change to track some response forces on the basis of both Service- and cross-Service force modules.<sup>33</sup> These scalable packages, comprised of a tailored blend of combat and sustainment-and-support capabilities, will prepare together and report readiness as an entity where possible. This will aid in preparations, force tracking, ease of force assembly, and ultimately operational effectiveness. Forming operationally coherent force modules as envisioned in this concept will require closing existing critical enabler availability shortfalls. Addressing this will require a careful examination of current force structures and adjusting the availability of critical low-density capabilities across Active and Reserve Components.

## *2. Strengthen relationships among other interorganizational partner first responders.*

Achieving future national strategic objectives will continue to require unified action to produce unity of effort.<sup>34</sup> The future force will accomplish this, in part, through the development of broader, deeper, working relationships with organizations representing other instruments of U.S. national power and with other interorganizational partners. Strategic guidance, priority missions, and the operating environment will define the range of potential partners with whom to develop relationships and how best to organizationally and procedurally interact with each. The response forces will build organizational relationships on a foundation of personal relationships that have been strengthened through shared experiences gained through activities such as planning, training, exercises, and responses to real-world events. Recognizing the challenges in achieving the desired level of partnership, the goal is to achieve effective organizational linkages, create organizational and professional relationships, develop common understanding of problems, and to build trust.<sup>35</sup>

The ability to form and strengthen these relationships will depend on the number of potential partners, their proximity, and mission duration. Leveraging an existing network or

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Historically, the “above the line” or combat forces have been at a higher state of readiness than their associated support. As a result, the combat forces’ ability to sustain mission execution was hampered, especially early on, by the absence of the proper complement of supporting capabilities that followed later in the force flow.

<sup>33</sup> Force modules. “In addition to the JOPES Volumes I and Volume III prescribed force module types and usage, there are nearly limitless ways in which force modules are used by planners and operators, such as for grouping Time-Phased Force and Deployment Data (TPFDD) records for analysis and/or update and showing force hierarchical structure. A force module can serve almost any planning purpose requiring a logical grouping of TPFDD records. For example, it may define force composition, functional capabilities, deployment order forces, port throughput requirements, time-phasing requirements, or validation requirements.” CJCSM 3150.16E, 13 September 2013, Enclosure F, page F-2.

<sup>34</sup> Unified Action. “Achieving national strategic objectives requires effective unified action resulting in unity of effort. This is accomplished by collaboration, synchronization, and coordination in the use of the diplomatic, informational, military, and economic instruments of national power. In such situations, military power is used in conjunction with the other instruments of national power to advance and defend U.S. values, interests, and objectives.” Joint Publication 5-0, p II-8.

<sup>35</sup> Organizational relationships discussion summarized from the Joint Staff, J7, Joint and Coalition Operational Analysis (JCOA) Division’s JTF Best Practices Study.

developing new “networks of networks” could extend relationships beyond the pool of habitual partners.<sup>36</sup> For example, leveraging special operations forces (SOF) presence (via the Global SOF Network), National Guard presence (via the State Partnership Program), and other forward force presence may serve as a conduit to potential partners. Depending on the situation, network connections could be either persistent or temporary. Historically, a clearly-defined mission (e.g., Joint Interagency Task Force (JIATF) South), produces more effective coordination and collaboration among participants. Establishing and sustaining these relationships may involve an increased exchange of physical and virtual<sup>37</sup> liaison teams, and expanded authorities to coordinate and plan before a crisis. While pre-crisis relationships may be developed and maintained through physical or virtual means, they must be sufficiently close and frequent to provide the designated response headquarters the ability to achieve effective command and control links, create organizational and professional relationships with both military and interorganizational partners, develop problem understanding, and build trust. The premise is that trust and shared vision will allow the response forces to reduce the friction associated with all aspects of operations.

3. *Establish vertical and horizontal connections across the headquarters within the networks.*

Connections within the networks will include not only the supported U.S. headquarters and its vertical chain of command, but also the other U.S. military forces and interorganizational partners who will likely operate horizontally abreast of the supported command in times of crisis. As the CCJO states, “...greater use of functional or mission-based Joint Forces increases the likelihood that multiple commands will operate in geographic proximity. Commanders’ relationships in these scenarios will become increasingly complex, with one commander supported by another for some aspects of the response and supporting with regard to others.”<sup>38</sup> “Lateral coordination will be the distinguishing feature of these new hybrid arrangements.”<sup>39</sup> In a future environment that may be increasingly characterized by operations in which supporting and supported, and other less formal cooperative relationships, become a more common means for establishing unity of effort, future commanders must become more accustomed to having only access to some capabilities vice ownership during execution, and building the trust to do so.

4. *Define authorities among the network of response partners.*

Achieving the necessary degree of collaboration, both before and during a response, will require expansion of current cross-organizational collaboration and execution authorities. Granting coordinating authorities to response forces via plans and other directives before a crisis, and then expanding the authorities early in the response, will enable responders to rapidly solidify the network and enhance collaboration. Approaches must facilitate horizontal coordination without usurping existing command authorities or burdening staffs with additional requirements. For example, expanded future use of collaborative tools and a shared common operating picture should allow staffs to gather and share information with less effort than in the past. Authorities must address the relationships between the Services that prepare the

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<sup>36</sup> JCOA, JTF Best Practices.

<sup>37</sup> With increased ability to connect and collaborate through virtual means, future staffs may be able to maintain sufficient liaison presence without the requirement for physical presence.

<sup>38</sup> CCJO, page 6.

<sup>39</sup> Ibid.

capabilities and the Combatant Commanders who employ them, as well as the relationships and authorities with interorganizational partners. Cross-organizational collaboration and coordination is not a new requirement, but the sheer volume and complexity of the relationships among the globally dispersed organizations that may be involved in a response demands a fresh look at the function.

***C. Third, ready the response forces through a foundation of enhanced and focused steady-state preparations.***

Rapid aggregation will require renewed emphasis on joint planning for rapid force generation, short-notice strategic movement, and the delivery of ready, mission-tailored formations to meet the requirements of rapidly developing situations. Training and exercises will also require adjustments to refocus on the art of rapidly forming a Joint Force in a contested environment. In a constrained fiscal environment, each of these activities will require difficult resource prioritization choices in light of other competing demands.

***1. Increase emphasis on planning and coordination for rapid force projection and augmentation.***

Timely, effective, and efficient strategic movement and expeditionary operations are critical components of rapid aggregation. As such, the future Joint Force must reinvigorate the planning and procedures for these activities and develop the mindset for rapid response. Future approaches cannot just revisit the old way of doing business. Commanders and staffs must think differently about how to leverage the myriad of operational and technological advancements made over the past decades to project and form forces differently, especially in light of changing resources and emerging threats. Areas that require particularly close coordination and future review for improvements include an improved ability for force tailoring, including cross-Service force packaging within the joint operation planning process (JOPP), and increased visibility of U.S. and interorganizational partner assets.

***2. Establish the framework and tools for distributed planning and enhanced information sharing across the network.***

The future force must upgrade the framework and tools for distributed planning and enhanced information sharing. Distributed planning and coordination among a globally dispersed group of participants will require robust virtual collaborative tools and authorities to enable planning, information sharing, and coordination across operational and functional networks. Where collaborative networks do not exist, the future forces must build them by connecting and collaborating across both an enduring and evolving set of mission partners. Greater use of low-bandwidth virtual planning forums will allow the entire response network to plan and coordinate regardless of location, reducing costs and the time-consuming travel often required for plan development and coordination. Increased adoption of social networking practices and digital collaboration technology for military use will allow stakeholders to easily connect and collaborate.

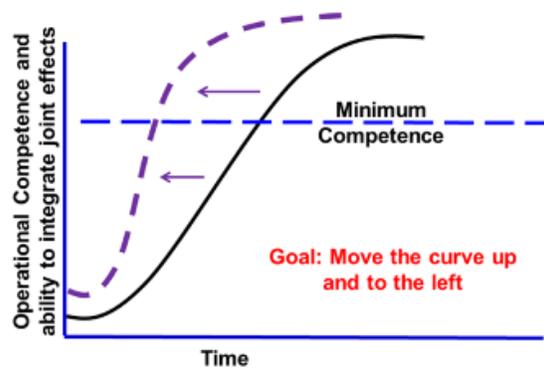
This approach will require communication networks that can simultaneously integrate secure and non-secure communications, widening the circle of partners who can support an

operation, and allowing diverse stakeholders to contribute insights and expertise in real time.<sup>40</sup> This must include standardization of force capability and readiness data across systems and the development of joint planning tools that integrate actual operational force data into deliberate planning efforts. These systems may be part of the mission partner environment (MPE) within the Joint Information Environment (JIE),<sup>41</sup> “allowing visibility across multiple security levels without the need for segregated hardware systems.”<sup>42</sup> Aggregating force HQs must provide guidance to Service enablers to connect to dissimilar joint and interorganizational classified and unclassified networks. Improved connections can facilitate reachback to home station for various planning aspects. Such reachback capabilities will serve to minimize the forward footprint, and unencumber the forward staff so it can better focus on near-term planning efforts.

Ultimately, improved collaboration and cooperation within the network of response forces will aid in aggregation by mitigating many historic challenges such as poor interorganizational relationships, difficult information-sharing processes, and lack of familiarity with organizational procedures, while laying the foundation for improved organizational agility. In execution, organizations within the networks can leverage the richness of their expanded connections and relationships, enabling them to collectively overcome challenges that may disrupt a single organization on its own.

### 3. *Emphasize rapid aggregation in joint training and exercises.*

Historically, training and exercises have focused more on operations after JTF formation than on the preceding actions required to transition to crisis and aggregate forces (Figure 5).<sup>43</sup> To execute this concept, the future force must emphasize rapid aggregation in joint training and exercises, shifting the exercise paradigm from the current post-JTF formation focus, to one that places a greater emphasis on the transition at the outset of the response. Exercise objectives may include rapid formation of crisis-capable and joint-enabled staffs, and the transition of joint functions from the GCC to subordinate operating headquarters. They should involve greater participation by elements of the entire C2 network, including higher and lateral



**Figure 5: Intended Outcome of Improved Preparations**

<sup>40</sup> CCJO, page 5.

<sup>41</sup> (Joint Staff (JS) J6, Deputy Director Cyber and Command, Control, Communications, and Computers Integration (DD C5I), Combat Capability Developer (CCD) Division 2014) “The MPE is a federation of networks and national systems composed of policy, transport, systems, applications, a concept of operations, and agreed upon guidelines across nations and combatant commands (CCMDs) to achieve unity of effort. (JIE Operations Sponsor Group 2013) The Joint Information Environment (JIE) is a secure joint information environment, comprised of shared information technology (IT) infrastructure, enterprise services, and a single security architecture to achieve full spectrum superiority, improve mission effectiveness, increase security and realize IT efficiencies. JIE is operated and managed per the Unified Command Plan (UCP) using enforceable standards, specifications, and common tactics, techniques, and procedures (TTPs).”

<sup>42</sup> CCJO, page 13.

<sup>43</sup> Figure 3 is a modified diagram from USPACOM Deployable Joint Task Force Augmentation Cell (DJTFAC) briefing, 6 November 2012.

headquarters, and appropriate government agencies operating in parallel in the same battlespace.

Exercise sequences may include the transition of headquarters from the pre-crisis steady-state structure within the CCMD to a subordinate C2 structure capable of employing joint capabilities. While exercises should ultimately involve all staff augmentees, enabling capabilities, and partners, they may start before the augmentation arrives. Focusing on these C2 transitions must also include the exploration and exercise of the sometimes unique and always changing command relationships. This will require increased training and educational focus on understanding the fundamentals of command relationships. To reinforce global agility, future joint professional military education must also develop mental agility in leaders in a way that fosters an anticipatory and expeditionary mindset. Education and training must retain or even increase regional expertise within certain elements of the force while simultaneously improving mechanisms for quickly infusing forces shifting from other regions with sufficient expertise to operate effectively.

Training and exercises must also reflect the expected increase in threat activity during aggregation. Changes to exercises may include increased operations under degraded command and control conditions, aggregation with widely distributed basing, and aggregation in an A2/AD environment, including increased integration of force protection assets in deploying formations. They must also include more specific A2/AD-related requirements such as cyberspace operations, using sea-basing to deploy traditionally land-based assets, and the use of tactical intermodal connectors and intra-theater surface connectors such as water craft, landing craft, and high speed vessels and transports.

Much like the environment they are intended to replicate, future exercises and pre-crisis training should be increasingly distributed. Improved networking and collaborative tools will allow for more extensive use of on-line training for staff members and greater use of distributed participation for staff augmentees and partners during exercises.

4. *Improve practices that enable quick integration of response forces.*

Rapid aggregation requires emphasizing organization, policies, and practices that will improve interoperability, reduce friction, and decrease the time required to form and operate effectively. Dissimilar structures, equipment, operating procedures, and logistical requirements can impede aggregation. The DoD should focus interoperability and standardization efforts on the response forces. Information-sharing practices, including foreign disclosure, and an increased ability to share across functional networks, will be key enablers. Information sharing should include the establishment of partner mission responsibilities and other enabling agreements before a crisis. Reduced friction and increased integration will allow the expertise and resources existing outside the U.S. military to be more quickly integrated in a variety of operational contexts.<sup>44</sup>

***D. Fourth, as a crisis emerges, rapidly transition headquarters to an operational stance.***

The primary objective of rapid aggregation is to enable the formation of operationally coherent Joint Forces with the necessary speed to seize the initiative and gain a strategic

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<sup>44</sup> CCJO, page 6.

advantage. The timely and effective transition of headquarters from their steady-state organization and manning into an operational stance prepared to command and control Joint Forces depends on the formation of crisis-capable, joint C2 structures. While the CCDR has multiple options from which to build the response C2 structure,<sup>45</sup> this concept proposes rapidly building on existing C2 structures rather than forming new ones during crisis. These headquarters will be rapidly augmented to expand the capacity and capabilities necessary to make them *crisis-capable* for sustained joint operations. To accelerate the ability of subordinate Service or functional headquarters to coordinate and integrate joint capabilities while in transition, this concept proposes *joint-enabled*<sup>46</sup> subordinate headquarters through pre-designated enhancement packages and reachback. The subordinate headquarters (possibly more than one) will then be able to sustain the momentum towards the formation of a functional component or a JTF headquarters. This can accelerate transition of the crisis C2 from the GCC, enabling the GCC to re-focus on broader area of responsibility (AOR)-wide issues (notional scenario at Figure 6).

1. *Build upon existing C2 structures and established relationships.*

By drawing from the network of established response headquarters rather than forming new ones, Combatant Commanders can develop C2 options from a menu of ready, interconnected headquarters, forces, and capabilities. These headquarters (e.g., a CCMD subordinate organization, such as a component or force HQs), bring a shared understanding of the crisis environment, operational approach, resources, tasks, procedures, and established relationships among the mission partners. With minimal augmentation, they may provide a joint C2 capability that can rapidly transition to an operational stance capable of directing Joint Forces employment.

2. *Expand capacity and capabilities to form crisis-capable staffs.*

As in the past, sustained operations will require Combatant Commanders to expand the capacity and capabilities of their own and their subordinate commanders' staffs.<sup>47</sup> With recent and anticipated future cuts to staffs<sup>48</sup> the future force must take multiple steps to address these capacity and capability deficits. Workload elimination or reduction, improved staff efficiency, and other measures can mitigate some of the deficit and reduce additional capacity demand.

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<sup>45</sup> C2 options include: exercising C2 through Service Components, Functional Components, Subordinate Unified Commands, a JTF headquarters—formed from a Service Component or force headquarters, or through individual manning, or through a specific operational force, that because of the mission assigned and the urgency of the situation must remain immediately responsive to the combatant commander. Several of these options are clearly less desirable than others for rapid aggregation.

<sup>46</sup> Joint-Enabled Headquarters. A Service or functional headquarters that has received sufficient joint augmentation to integrate available supporting joint or other interorganizational capabilities. This can be a transitory structure leading or the objective C2 structure for the response. Smaller and quicker to form than a JTF headquarters, the headquarters may lead a primarily single-Service response as a supported command, or may grow into to a functional component command or JTF as the crisis unfolds.

<sup>47</sup> Significant augmentation of multiple echelons of military headquarters as well as those of other agencies is often required when responding to a substantial crisis. In 2002-2003 USCENTCOM received over 1,000 additional U.S. and multinational staff members and liaisons before the start of Operation IRAQI FREEDOM. In 2010, USSOUTHCOM integrated over 400 staff members in the first several weeks of the Haiti earthquake response. In 2012, USAFRICOM received over 300 staff augmentees and “shared” several hundred others with USEUCOM during the Libya response.

<sup>48</sup> While the numbers vary from organization to organization, many headquarters have or will experience cuts of 20 percent or more.

However, these measures cannot make up for capability or expertise shortfalls that often occur during a staff's transition from steady-state to crisis.

### ***A Rapid Aggregation Scenario***

*A rapidly developing crisis emerges and the U.S. responds with a whole of government effort to deter further escalation and stabilize the situation. U.S. response forces, both from within and outside of the crisis area, reorient from their pre-crisis posture and aggregate into an operational stance to address the issue. The GCC forward deploys a designated headquarters to assume the supported role for this response. Concurrently, the GCC headquarters quickly transitions to a crisis-capable footing through well-rehearsed crisis action activities, including the integration of external staff augmentation.*

*Other forward-based U.S. and partner forces are already operating in the area and have well established relationships, enabling the arriving forces to quickly connect with local and regional stakeholders. Some of these forward-based forces join the response forces, while others continue to execute on-going operations in parallel to the crisis response. Commands on multiple levels quickly establish horizontal and vertical relationships with each other via multiple networks, including the Global SOF Network, functional networks such as ISR, mobility, strike, etc., and the organizational networks of non-DOD responders.*

*In the early stages of the response, the GCC determines that formation of a JTF is either unnecessary or impractical. However, close coordination and integration of joint and interorganizational partner capabilities is still required. Rather than building a full JTF headquarters, the GCC "joint-enables" the supported headquarters with staff enhancement packages, from both within his command and from external sources such as the JECC or other sources. This staff augmentation is both physical and virtual. The supported headquarters maximizes virtual reachback to the GCC and other staffs, maximizing the ability to share staff resources, while minimizing lift, infrastructure, and protection requirements. The headquarters is structured to address the crisis as is. or it can grow into a larger JTF headquarters as the situation dictates.*

*Interorganizational partners, including other U.S. agencies and foreign militaries, are already in the crisis area or arrive at various intervals as the response builds. U.S. forces smoothly aggregate with partners as they join the effort, rapidly achieving unity of effort as the crisis unfolds. These connections occur fluidly as most of this rapidly forming team of partners has previously established relationships and coordinating mechanisms.*

**Figure 6: Rapid Aggregation Scenario**

Poorly planned, manned, or executed headquarters transitions can lead to poorly informed plans, gaps in information sharing, and reduced situational awareness, especially as a crisis unfolds and the staffs are still in transition. These issues can slow the response and lead to a loss of operational momentum.

To address these issues, this concept envisions deploying both advisory and augmentation elements to the crisis C2 structures at the CCMD and subordinate levels. Early deployment of

“assist and advise” teams can provide the forming headquarters insights and best practices regarding headquarters and force formation, potentially enabling them to mitigate or avoid recurring challenge areas. These teams may include joint and interorganizational subject matter experts as well as highly qualified experts (HQEs) that can share commander-level recommendations.<sup>49</sup>

Augmentation may come through various combinations of modular joint staffing enhancement packages. These staff enhancement packages will consist of pre-identified and trained staff augmentation, liaisons, and subject-matter experts aligned against pre-established joint manning documents. Commanders can select specific packages of staff expertise and plug them into the CCMD or supporting staffs as needed. Augmentation will often include functional teams such as the Joint Enabling Capabilities Command (JECC), cyberspace, space, military information support operations (MISO), and others, as well as teams from other CCMDs and Combat Support Agencies. Establishing an effective crisis-capable staff will require pre-crisis personnel assignment agreements from across the network of commands and response forces, staff crisis-transition plans, capability for virtual collaboration, and routine exercises to train the team. These practices will produce staffs manned with trained personnel earlier in the response cycle and facilitate faster production of responsive, integrated, and tailored plans.

To maximize contributions, external staff augmentees will require timely access to shared information. Addressing this issue is not just about developing the physical ability to share; it also requires the mindset to share, even with unconventional partners. Since interorganizational partners often have fewer resources and personnel, the future Joint Force commander may choose to place liaison elements in those organizations without reciprocation. Pre-crisis headquarters formation planning must identify where these liaison and planning personnel are most needed. Robust liaison capability must remain a part of Service and joint headquarters despite pressure to eliminate or under-resource these critical functions before an actual crisis. Where permanent or semi-permanent liaisons do not exist, rapid exchange of liaison teams among responding headquarters will be key to establishing and executing command functions and procedures. Virtual liaison may be a suitable alternative to fill gaps in the ability to locate personnel on partners’ staffs given expected advancements in collaborative tools.

3. *Accelerate the ability of subordinate operating headquarters to plan for and integrate joint capabilities while in transition.*

Complex, quickly developing situations will require early joint integration. The initial response will likely begin with the Combatant Commander in the role of Joint Force commander and with subordinate commanders in supporting and supported relationships. Since most headquarters below the CCMD level do not have the organic capability to fully integrate joint capabilities, the future force must develop the ability to plan, coordinate, and employ joint capabilities, especially during the early stages of crisis transition.

This concept proposes rapidly *joint-enabling* subordinate headquarters by augmenting

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<sup>49</sup> Assist and advise teams. A consistent best practice to improve initial headquarters and force formation has been to deploy teams of SMEs from the Joint Staff J-7’s Joint Training and Joint and Coalition Operational Analysis (JCOA) Divisions, and select others, to the various levels of response headquarters. These teams share insights and best practices early in the response so best practices from previous operations are woven into the plans and operations from the start. Highly qualified experts (HQEs), who may include retired senior officers or others with high level experiences with similar operations or situations, can share commander-level recommendations.

them with joint planning and operations cells from the CCMD headquarters, from each Service, various Department of Defense (DoD) organizations, and other supporting agencies. Chief among these augmentation packages is a deployable, cross-functional staff cell from the CCMD headquarters that can provide joint expertise and a CCMD perspective in support of crisis action planning and critical battle staff processes.<sup>50</sup> This provides the response headquarters with staff members who have the expertise and experience to assist in making informed decisions early in the response cycle. The intent is to quickly achieve joint integrating capability similar to a JTF headquarters, but with a smaller staff-manning requirement, allowing it to be formed more quickly. The headquarters will improve mobility by relying on reachback to the CCMD for additional staff capacity and joint expertise. Ideally, these headquarters will have already been designated and trained as JTF-capable before a crisis.<sup>51</sup> When necessary, the CCMD may build upon the joint-enabled headquarters to create a functional component command or a JTF headquarters.

4. *Execute a deliberate transition of the crisis C2.*

As the capabilities of the response forces expand and the situation evolves, roles among the headquarters will transition. The future Joint Force must plan for and execute a deliberate transition of C2 structures, decisions, authorities, forces and capabilities, and sustainment. These transitions are challenging and when done poorly can impede aggregation. Among the major challenges during transition are sharing situational understanding across the multiple commands and activities, and transferring the planning tasks and relationships. Commands can aid rapid aggregation by defining the transition progression from the initial set of arrangements to the objective structure. This crisis transition “playbook” will provide clarity of direction for those responding to the crisis, especially those contributors from outside of the CCMD and should include discussions on authorities of interorganizational partners.

***E. Fifth, responsively project and aggregate forces in a complex and contested environment.***

Changes to U.S. force structure and posture, greater reliance on partners, evolving technologies, and increased threats to aggregation in the future operational environment, will alter the calculus of U.S. force projection and aggregation. Future Joint Forces must not only be rapidly deployable and increasingly joint-capable, but also prepared to form while fighting. They must be mobile, but also be protected and resilient, allowing the U.S. to aggregate rapidly, demonstrate success early, and to set the strategic narrative from the outset.

1. *Responsively generate and continuously project forces to deter threats and establish the conditions for follow-on operations.*

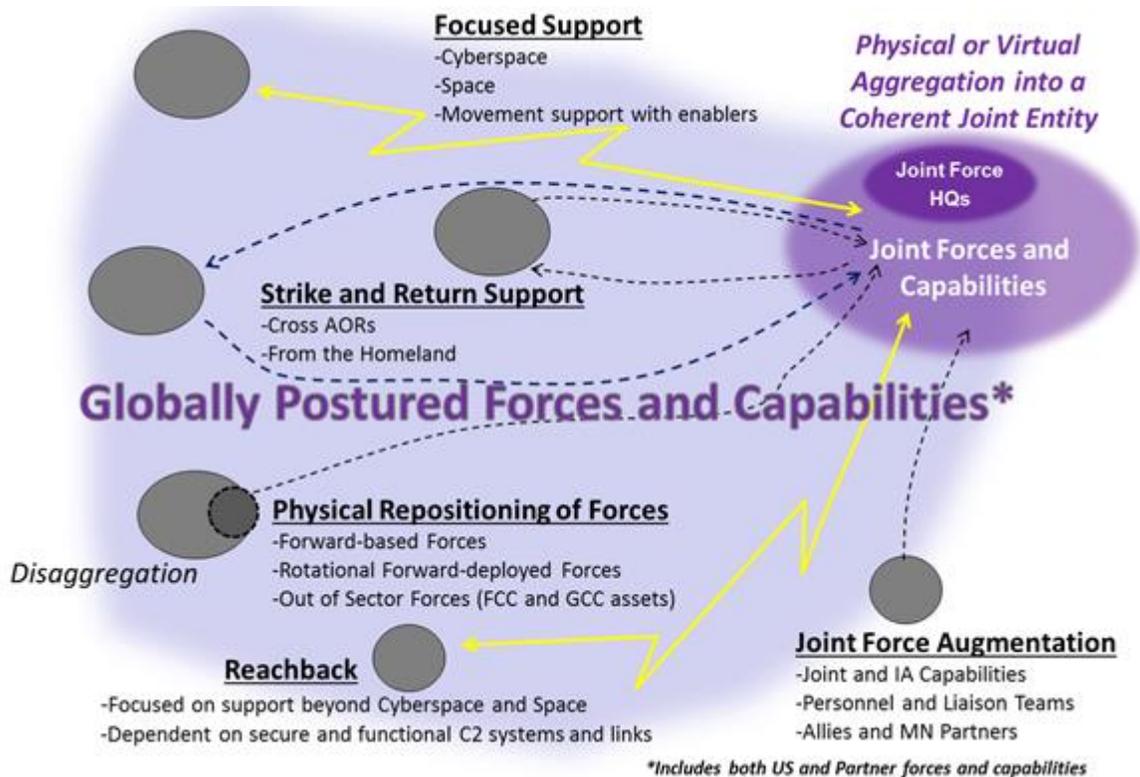
*Generate tailored force modules.* Rapid aggregation relies on the ability to compress the time necessary to generate, deploy, assemble, and integrate operationally coherent forces. Future

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<sup>50</sup> USPACOM: USPACOM Deployable Joint Task Force Augmentation Cell (DJTFAC) briefing, 6 November 2012.

<sup>51</sup>JTF-capable. As described in JP 3-33, “Joint Task Force Headquarters,” “The Unified Command Plan assigns CCDRs with responsibility for ‘designating, and establishing the readiness requirements of, assigned Service HQ to be JTF-capable HQ.’ CCDRs may select any number of Service HQs to effectively meet the JTF-capable HQ requirements in their AOR, with all risks considered. Given sufficient resources, any Service HQ may be designated to be a JTF-capable HQ by the CCDR to whom it is assigned.”

Joint Forces will achieve and sustain operational momentum through the seamless generation and delivery of forces to the operational area (Figure 7). Pre-established force modules will provide the building blocks for constructing the response force. Responsive readiness levels, strategic lift, and organizational interoperability will speed the integration of forces and capabilities as they aggregate. Increased visibility of all potentially available U.S. and partner resources, including inherent capability, capacity, availability, and readiness level will allow planners to quickly tailor response packages, dialing up or down capabilities to closely match operational requirements. Pre-crisis movement planning, training and operational relationships among the elements of the response team, and in-place access agreements, strategic positioning of logistics stocks and other “set the globe” preparations, will all serve to speed aggregation and to quickly meet the demands of the response. Early decisions to prepare forces, including timely Reserve Component (RC) mobilization within legal authorities, will allow decision makers to mitigate risk while avoiding provocative action.



**Figure 7: Physical and Virtual Aggregation of Globally Postured Forces and Capabilities**

*Project forces across multiple lines of operations.* Threats may contest strategic movements anywhere from before the point of embarkation through debarkation. This will require the future force to become increasingly agile while executing operational deployments over strategic distances. Joint Forces will maneuver independently over multiple axes of advance by air, land, and sea, maintaining the ability to aggregate into larger formations at the time and place of their choosing. Tailored joint formations will be able to deploy, operate, and survive independently. Deployment, aggregation, and employment will be a single evolution of parallel actions rather than distinct and sequential phases.<sup>52</sup> Sequencing within the force flow

<sup>52</sup> JOAC, page 21.

will include a blend of U.S. deploying forces, partner capabilities, and force protection. The flow of forces will quickly accelerate to maximize available lift, and then continue without pause between successive echelons of aggregating forces.

*Establish contingency locations to support projection and aggregation.* Contingency locations, identified and secured as part of pre-crisis preparations, and mobile pre-positioned stocks located close to potential crisis points, will reduce the time required to reposition within the geographic area and to introduce additional forces from great distances. The geographic Combatant Commander will work closely with the Department of State and other partners during steady-state to focus and align shaping efforts. These efforts, in conjunction with pre-planning and commitments by host and supporting nations, will speed the establishment of contingency locations at the onset of a crisis. Commanders will balance forward positioning of response forces and its challenges in terms of footprint, size, fidelity, and feasibility of support, with reachback and its limitations in terms of situational understanding and responsiveness. Minimizing the response force's forward footprint will reduce the lift and force protection requirements but will increase the reliance on relatively vulnerable C2 networks.

Where forward basing is an operational necessity, the Joint Force may opt to secure and operate temporary or permanent forward operating locations or operate from a seabase. These locations will permit distributed operations and sustainment throughout the operational deployment. Dispersing forces in transit and within forward operating locations will mitigate risk, but will increase demands for the support, force protection and C2 needs associated with each location. For example, establishment of multiple aerial and sea ports of debarkation and supporting inter-theater movement requires rapidly deployable port entry, opening, clearance, and closure capabilities in adequate numbers to support simultaneous operations.

*Continuously project and protect sustainment to preclude early culmination.* Because of the logistically intensive nature of force projection and aggregation and its vulnerability to enemy attack, the future Joint Force will employ new sustainment concepts that account for adversary capabilities. This will require a sustainment system that combines basing options, equipment and supplies prepositioning, and a flexible, protected distribution process.<sup>53</sup> New approaches will enable the JFC to continuously project, protect, and sustain the rapidly building force. Moving forces, associated sustainment, and frequently, humanitarian assistance stocks (regardless of the type of operation), can create challenging planning and force sequencing problems. This may require a re-evaluation of current capabilities, including platform designs, readiness posture of sustainment elements, location and content of pre-positioned stocks, and the ability for precision delivery of sustainment support before establishing fixed, in-theater distribution systems. Limited organic logistical resources may require increased use of contracted commercial service providers. Investment in mobile prepositioned stocks for tailored employment will significantly reduce force and sustainment delivery timelines.

The future force must also identify and leverage emerging science and technology that can expand the capabilities and capacity to project and support forces under expeditionary conditions. With a view towards reducing footprint, increasing responsiveness, and limiting exposure of deploying personnel, science and technology advancements can create opportunities to improve past practices and develop new ones. For example, energy-efficient future combat systems and lighter, mission tailored formations can reduce sustainment requirements. Widely

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<sup>53</sup> JOAC, page 32.

dispersed sustainment operations may require development of new capabilities for providing logistical support at the point of need. Seabasing could also provide the Joint Force with greater flexibility by decreasing reliance on airfields and other ashore sustainment infrastructure. Large-scale distribution from a seabase may require new capabilities and capacities that can deliver sustainment packages in adverse weather in support of continuous demands.

2. *Rapidly build joint capability by aggregating flexible combinations of available and arriving forces.*

*Commanders will incorporate new ways of projecting and combining forces.* This will decrease requirements for lift and in-theater sustainment without loss of effect. They will “increase flexibility and achieve required response times through shared partner capabilities, common materiel, synchronized planning, assured communications and optimized asset positioning.”<sup>54</sup> Commanders may initially build on the forward footprint by adding assets from nearby forces, deployment-ready units, and those with global reach, while making extensive use of reachback and contracted support. Aggregation may be physical or virtual. It may be for long duration, as with the formation of ground, naval, or air forces organized and positioned to prosecute sustained operations, or it may be for brief periods as with strike assets that frequently enter and exit the joint operations area (JOA).

These forces may aggregate under a variety of hybrid command and organizational arrangements as forces and capabilities blend to meet the new mission. “While they will be self-contained with respect to the envisioned mission, the Joint Force will be able to support them quickly with external capabilities as needed—principally additional air, space, electronic, and cyberspace capabilities, which can best mitigate the latency imposed by distance.”<sup>55</sup> Some early arriving forces may not be ideally suited for the mission, but due to their proximity, reach, or ease of movement, they can quickly shift to the crisis as part of the initial response. To gain maximum effect from the early arrivals, commanders must be flexible when forming and employing the force to allow for more options with a relatively small committed force.

*Receive, stage, onward move, and integrate forces that do not deploy combat-configured.* Many of the follow-on forces will not deploy into the operational area combat-configured. Assembling troops, equipment, and supplies arriving in the area of operations via multiple modes of transportation is a high-risk activity due to its complexity and vulnerability to disruption. Forward movement and staging of follow-on forces will become increasingly dependent on access agreements for basing and other infrastructure. This will be especially true for those facilities and activities associated with joint reception, staging, onward movement, and integration of forces that do not deploy combat configured. Under the most difficult threat conditions, forces and capabilities must deploy, form at intermediate staging bases well beyond the operational area, and then transfer to survivable, high-speed intermodal transportation for onward movement.

*Develop common standards and procedures for response forces.* Initial response forces must quickly form with one another and with follow-on elements re-tasked from other missions. This will require the future Joint Force to achieve greater organizational standardization than it has today. The response forces from the U.S. and core partners must be “plug and play,” interoperable in critical functional and operational areas, enabling the JFC to mold them to meet

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<sup>54</sup> JLEnt Strategic Direction, 2014.

<sup>55</sup> JOAC, page 32.

the requirements of the emerging situation. Critical areas include C2 systems and procedures, information sharing, battle rhythm, force protection systems, combat search-and-rescue, and other areas where there is a high probability that forces and systems must quickly shift from one CCMD to another. Joint and partner network and data interoperability (with multi-level security options) will facilitate a functioning C2 structure under normal circumstances; while plans for continuity of operations will allow for the rapid development of effective workarounds when operating under degraded conditions.

3. *Form while fighting threats from a complex combination of increasingly sophisticated adversaries.*

While the exact nature and timing of the activities will vary from mission to mission, the future Joint Force should continually prepare for disruptions that may begin with diplomatic, economic, cyberspace, and information operations. These activities may blend with attacks by individuals, non-state actors, and advanced anti-access and area denial weapons to frustrate aggregation and potentially disrupt the operation.

*Maneuver within protected geographic areas to facilitate aggregation and operational reach.* If contested, the force may have to fight to secure areas to aggregate forces deeper in threat territory. This may require initially aggregating far from the objective and then fighting to create a lodgment within which to deploy and aggregate subsequent forces. Initial actions may include offensive operations to secure and protect friendly C2 capabilities and basing locations that enable the subsequent assembly of decisive force. This sequence of alternately aggregating and then conducting offensive operations may be necessary to project forces deeper into the operational area. Sustaining high tempo operations will require a force that can rapidly “aggregate, reconfigure, and disaggregate”<sup>56</sup> in response to changing requirements.

*Integrate robust force protection capabilities and deception throughout movement and aggregation.* Advanced threats and a pervasive information environment will mandate the integration of force-protection capabilities during movement. Current active and passive defensive measures, operations security, and deception operations will become increasingly important, but ever more challenging. Protecting against advanced threats necessitates minimizing exposure during transit, when deploying forces and capabilities are usually the most vulnerable.<sup>57</sup> This applies especially to the protection of commercial and DoD strategic mobility assets requiring measures reminiscent of trans-Atlantic convoy escorts during World War II. Joint Forces rely heavily on global C2 and ISR systems for this protection, which also renders these systems as likely targets and thus demands emphasis during force protection planning.

An advanced threat environment, characterized by long-range interdiction of deploying forces and attacks on forward bases, will hinder the future Joint Force’s ability to concentrate forces. It will require the JFC to balance dispersion for force protection against concentration required to conduct decisive operations. Key concerns for protecting forward bases will be defending against attack by sophisticated missiles and sabotage, an inexpensive capability with the potential for disproportionately large effects. To mitigate the effects of an attack,

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<sup>56</sup> CCJO, page 5.

<sup>57</sup> JOAC, page 21. “A Joint Force will lessen its exposure by a combination of dispersion, multiple lines of operations, speed of movement, agile maneuver that reroutes around threats, deception, masking or other concealment techniques, and disruption of enemy intelligence collection through counter-reconnaissance, counter-surveillance, and other methods.”

commanders may harden bases, disperse base functions, and where possible, employ mobile seabasing. Likewise, the survivability of the joint sustainment system—logistical bases, distribution activities, and logistics networks and associated data—will also be critical.<sup>58</sup> Protecting these assets may require shifting forces from other tasks and, as a result, reduce forces available for core missions. Collectively, these threats will require the development of capabilities that are mobile and can protect rapidly moving forces, and others that can protect fixed bases from enemy fires and special operations.

## **V. Concept Required Capabilities**

After analyzing inputs from across the community of interest, the following capabilities emerged as essential to implementation of this concept. They constitute an initial proposal, not an exhaustive or authoritative listing, of concept required capabilities that, when coupled with the capabilities listed in other supported concepts such as JOAC, JCEO, and others, will enable rapid aggregation circa 2020 and beyond. Although grouped by concept key element (e.g., “Increase global management and synchronization of resources”), many of the capabilities required to implement this concept apply across multiple elements and joint functions. Following each required capability is a list of critical supporting actions necessary to achieve the capability. Following concept approval, subsequent analysis of these proposed capabilities within the various DoD development systems, such as the Joint Capability Integration Development System (JCIDS), will provide the basis for developing capability solutions that will close each of the operational gaps addressed.

### **A. Concept Required Capabilities associated with Key Element I: Increase global management and synchronization of resources.**

**Concept required capability 1:** The ability to better synchronize various plans and processes that provide strategic guidance. (Strategic direction, strategic plans, programming advice, strategic assessment).

- *Improve synchronization of the Unified Command Plan (UCP), theater posture plans, functional posture plans, and theater operations plans.*
- *Improve the synchronization of theater distribution plans and logistics overview plans.*

**Concept required capability 2:** The ability, via the UCP, Guidance for the Employment of the Force (GEF) and CCMD plans, to identify crisis response force headquarters elements, required capabilities, and associated coordinating relationships.

- *Broaden the current focus and integration of response force planning, designation, and coordination beyond the GRF to include other response forces, such as regional response forces and other known early responders.*
- *Specify in the Guidance for the Employment of the Force, Global Response Force Execute Order (GRF EXORD) and other directives, rapid aggregation missions, and requirements in sufficient detail to enable force providers to generate the required response forces.*
- *Adapt existing paradigms for presence, relative to response forces to enhance global agility. Where possible, maximize use of the GRF or other response force assets for*

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<sup>58</sup> JOAC, page 32.

*forward presence.*

- *Define conditions under which the response forces, once committed, would be reconstituted.*

**Concept required capability 3:** The ability to globally synchronize the transfer and employment of Joint Forces.

- *Adapt the Joint Staff operating procedures to better synchronize both joint planning and execution to support globally integrated operations.*
- *Implement active functional global synchronizer roles for operations (e.g., Cyber) and expanded roles for joint functional managers (e.g., ISR).*
- *Improve the ability to quickly and continuously maintain visibility of U.S. and mission partner assets and their readiness to support short notice crisis response operations.*
- *Improve the ability to identify requirements and establish contracts and other agreements to provide support, in some cases as the preferred or first source.*
- *Identify and establish properly configured prepositioned equipment sets and supplies to support the conduct of global integrated operations.*
- *Improve processes and procedures that enable cross-Service and cross-CCMD capability sharing.*
- *Improve the ability to manage and responsively move selected munitions and other High Demand/Low Density assets to meet global demands.*

**B. Concept Required Capabilities associated with Key Element II: Form a decentralized global network among U.S. joint response forces and interorganizational first responders.**

**Concept required capability 4:** The ability to fully implement the Joint Information Environment and Mission Partner Environment across the CCMDs, Services, combat support agencies, interorganizational partners, and others as required.

- *Increase the emphasis on policies and practices that enable quick integration of partners during planning and operations. (Advances in information sharing practices, foreign disclosure, and increased ability to share across functional networks.)*
- *Improve the ability to exchange physical and virtual liaison teams before a crisis. (Expanded authorities for coordination and planning.)*
- *Rapidly share information and intelligence data and products, including those associated with indications and warnings, with all relevant interorganizational partners at the start of crisis.*

**C. Concept Required Capabilities associated with Key Element III: Ready the response forces through a foundation of enhanced and focused steady-state preparations.**

**Concept required capability 5:** The ability to distribute and coordinate planning and operations actions vertically and horizontally across multiple supporting commands.

- *Provide strategic planning guidance identifying anticipated task organization and*

*supported/supporting relationships for priority crisis response operations.*

- *Distribute and coordinate planning and operations actions vertically and horizontally across multiple supporting commands.*
- *Develop robust virtual collaborative tools and the associated authorities to enable planning, information sharing, and coordination across operational and functional networks.*
- *Develop tools that provide for greater use of low-bandwidth, virtual planning forums across response networks.*
- *Adopt or develop appropriate technologies and techniques that enable greater use of social networking and digital collaboration among a broad range of stakeholders.*

**Concept required capability 6:** The ability to execute a comprehensive training and exercise program to prepare selected headquarters for short-notice joint and multinational operations.

- *Conduct annual training events to exercise rapid force generation and headquarters formation under crisis, in contested conditions, and across geographic and functional boundaries. This includes exercising the condition-based transfer of command relationships.*
- *Determine and include specific aggregation tasks and scenarios in joint training guidance and plans, e.g., CJCS High Interest Training Requirements, etc.*

**D. Concept Required Capabilities associated with Key Element IV: Rapidly transition headquarters to an operational stance.**

**Concept required capability 7:** The ability to rapidly expand existing headquarters capacity and capabilities to enable the conduct of crisis action planning with interorganizational partners and execution of joint operations.

- *Develop standard coordinating and operating procedures for integrating and employing critical forces such as SOF and joint enablers, including: cyber, integrated air and missile defense (IAMD), ISR, electronic warfare (EW), close air support (CAS), etc., so as to increase interoperability, reduce friction, and decrease the time required to form and operate effectively together in crisis without having to establish a JTF.*
- *Develop robust en route joint and interorganizational C2 visualization and planning suite capability with virtual collaborative tools to enable distributed information-sharing and coordination activities, regardless of location or operational phase. Must be able to function in a degraded environment and have the ability to access the DoD Information Network (global information grid) from any global location.*
- *Develop a detailed transition plan that includes a staff-enhancement joint manning document (JMD) to speed joint headquarters formation. These battle-rostered enhancement JMDs should document required response timelines, requisite liaison, coordination, and planning team exchanges required by the warfighting headquarters concerned.*
- *Maintain the ability to access reachback architectures (in order to task and access home-based headquarters elements, all-source intelligence, etc., and prioritize requirements)*

*including time-sensitive capabilities, both en route to and throughout operations.*

**E. Concept Required Capabilities associated with Key Element V: Responsively project and aggregate forces in a complex and contested environment.**

**Concept required capability 8:** The ability to execute operational deployments over strategic distances along multiple axes of advance.

- *Leverage the use of low-signature capabilities to establish the basis to form with or support initial aggregating forces.*
- *Establish visibility of in-place or partner assets to aid in the movement and maneuver of aggregating forces and capabilities.*
- *Improve the ability to integrate partner strategic lift assets in support of Joint Force deployment.*
- *Improve the methods and capabilities required to conduct Joint Force reception, staging, onward movement, and integration (RSOI) including partner forces, in a contested environment.*
- *Develop and maintain the ability to deploy early joint assessment teams to enable contingency base support for deployment operations.*
- *Improve the ability to rapidly provide early air and sea port assessment and damage repair.*
- *Position DoD Preposition and war reserve stocks (WRS) to enable the conduct of globally integrated operations. Develop additional mobile (afloat or flyaway packages) prepositioned stocks and WRS capabilities.*

**Concept required capability 9:** The ability to mitigate the effects of threats and hazards to personnel, equipment, and facilities while maintaining aggregation activities. These mitigation actions may include counter-air and counter-GRAMM (Guided Rockets, Artillery, Missiles, and Mortars) operations.

- *Ensure sufficient counter-air, electronic warfare, anti-submarine warfare, counter-mine and air defense capability and capacity can be deployed along key lines of communication (LOCs) and aggregation locations during critical times.*
- *Ensure the ability to employ the full range of deception means and methods, to include the ability to employ decoys across all domains.*
- *Improve force protection capacity and the ability to integrate it into the force flow as appropriate.*
- *Ensure facility hardening at potential contingency support locations to protect critical resources.*

**Concept required capability 10:** The ability to rapidly source required forces and capabilities regardless of organizational affiliation or command assignment.

- *Improve the ability to quickly form, move, and employ forces across geographic boundaries and organizational affiliations so as to leave the adversary the least amount of reaction time to strike forming forces.*

- *Improve the ability to tailor deploying force modules to minimize or reduce lift requirements—increase use of in-place assets, reachback, etc.*

## **VI. Risks of Adopting this Concept.**

Developing and implementing the ability to rapidly aggregate forces and capabilities in response to crisis brings with it some potential challenges and risks compared to feasible alternatives. The potential risks imply shortfalls in capability or capacity that subsequent evaluation can further examine and identify potential solutions.<sup>59</sup>

- ***Enhanced preparations and resourcing for the initial response forces may come at the expense of the future readiness of the later-deploying forces.*** This concept assumes that the DoD and its interorganizational partners will have reduced resources going forward. The result is that we will have to prioritize resourcing those forces and capabilities required for rapid response. Failure to properly resource critical dependencies such as reachback and force preparation may make aspects of the concept infeasible. This will create some risk in the area of force management by potentially delaying the time required to generate follow-on forces.
- ***Interorganizational partners may be unable or unwilling to provide the basing, the resources, and the access required to rapidly aggregate.*** The future operating environment is expected to necessitate a greater DoD reliance on partners. If not mitigated, this can pose operational risk. The ability of interorganizational partners to participate to the level required for rapid aggregation is driven by the same reduced budgets we face and by their own internal processes and policies (i.e., political will).
- ***An over emphasis on speed of response may lead to force development decisions that reduce the potential adequacy of response.*** Future force development efforts must take a holistic approach toward fielding response forces. An over emphasis on the development of quick or easy-to-move forces may place the development of heavier, but equally necessary, forces at risk. A response force pool that lacks ready, full-spectrum capabilities in the proper quantities to generate an operationally relevant force can place the military mission at risk.
- ***Minimizing the risk to force through increased force protection may come at the expense of risk to mission by slowing the aggregation of offensive capabilities.*** In the future operating environment, forces and capabilities will be placed at increased risk at home station, en route to the JOA and within the JOA. Operationally this may require the integration of increased force protection forces and measures throughout deployment and aggregation. This will increase overall logistics requirements and increase the time required to deploy and aggregate offensive capabilities.
- ***Emphasis on organizational flexibility may impact operational effectiveness.*** This concept relies on the ability of first-response forces to be readily tailorable to a variety of missions and to be able to rapidly integrate with a diverse set of partners. It is predicated on joint training that fosters an expeditionary mindset and organizational flexibility. This flexibility could lead to dilution of preparations, making the response forces “jacks of all trades, but masters of none.” This requirement may create operational and force management risk by decreasing readiness for a select set of core tasks, and increasing operational tempo.

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<sup>59</sup> CJCSI 3010.02D, page A-13.

- ***Centralizing critical capabilities at select sites (key nodes, prepositioned sites, etc.) may create vulnerabilities.*** Executing this concept as envisioned may require consolidation of key equipment and sustainment capabilities at select sites to facilitate our ability to rapidly aggregate. This may create operational risk by providing a more lucrative target and may create a force management risk by increasing protection requirements.
- ***Increased standardization among response forces may make them more predictable.*** Standardization in the interest of interoperability could lead to decreased diversity, flexibility, versatility, and could potentially make the response forces more tactically predictable.

## **VII. Conclusion.**

Operating in the future environment will require changes in how the future Joint Force prepares for and executes aggregation. Reduced resources, a continuing demand for military responsiveness, and the increasing likelihood that a complex and capable array of threats will continually attempt to disrupt aggregation, will each challenge current methods of operating. This concept advances the premise that an interconnected global network of joint response forces will have an improved ability to rapidly aggregate forces, achieving efficiencies and synergies not previously feasible. It postulates that the future force will leverage improved collaborative tools and practices to quickly connect with a diverse and evolving set of partners and networks. Rapid aggregation is reliant upon significant strategic and operational agility, enabled by increasingly globally integrated planning and resourcing strategies, to generate and aggregate forces for operations. By accelerating the infusion of joint capabilities into the responding headquarters, the future Joint Force will be able to more effectively employ joint capabilities earlier in the response cycle, allowing it to act quickly to seize the initiative. Finally, the future force will counter advanced threats, in part, through new force projection schemes that integrate deception, protection, and dispersion in innovative ways. Achieving the vision described in this concept will require the future Joint Force to refine or expand existing capabilities and to examine additional implications across the joint functions.

## Appendix A: Glossary

Unless otherwise stated, all definitions are from JP 1-02, *DoD Dictionary of Military and Associated Terms*, [http://www.dtic.mil/doctrine/DoD\\_dictionary/](http://www.dtic.mil/doctrine/DoD_dictionary/)

**anti-access.** Those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area. (JOAC)

**area denial.** Those capabilities, usually of shorter range, designed not to keep the enemy out but to limit his freedom of action within the operational area. (JOAC)

**assured access.** The unhindered national use of the global commons and select sovereign territory, waters, airspace and cyberspace, achieved by projecting all the elements of national power. (JOAC).

**command and control.** The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission.

**cross-domain synergy.** The complementary vice merely additive employment of capabilities in different domains such that each enhances the effectiveness and compensates for the vulnerabilities of the others. (JOAC)

### **cyberspace.**

1. A global domain within the information environment consisting of the interdependent network of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (JP 3-12)

2. Domain characterized by the use of electronics and the electromagnetic spectrum to store, modify, and exchange data via networked systems and associated physical infrastructures. (From Joint Terminology for Cyberspace Operations, VCJCS memorandum for the Service Chiefs, Combatant Commanders, and directors of Joint Staff directorates, undated.)

**force module.** A grouping of combat, combat support, and combat service support forces, with their accompanying supplies and the required non-unit resupply and personnel necessary to sustain forces for a minimum of 30 days. Also called FM. (JP 4-01.5)

**global commons.** Areas of air, sea, space, and cyberspace that belong to no one state.

**global SOF network.** A synchronized network of people and technology (U.S., allies, and partner nations) designed to support commanders through interoperable capabilities that enable “special operations.”

**line of communications.** A route, either land, water, and/or air, that connects an operating military force with a base of operations and along which supplies and military forces move.

**mission command.** The conduct of military operations through decentralized execution based upon mission-type orders (JP 1-02), where a mission-type order is defined as an order to a unit to perform a mission without specifying how it is to be accomplished. (JP 3-31)

**movement and maneuver.** This joint function encompasses disposing Joint Forces to conduct campaigns, major operations, and other contingencies by securing positional advantages before combat operations commence and by exploiting tactical success to achieve operational and strategic objectives. This function includes moving or deploying forces into an operational area

and conducting maneuver to operational depths for offensive and defensive purposes. It also includes assuring the mobility of friendly forces.

**objective area.** A defined geographical area within which is located an objective to be captured or reached by the military forces. This area is defined by competent authority for purposes of command and control.

**operational access.** The ability to project military force into an operational area with sufficient freedom of action to accomplish the mission.

**operational area.** An overarching term encompassing more descriptive terms for geographic areas in which military operations are conducted. Operational areas include, but are not limited to, such descriptors as area of responsibility, theater of war, theater of operations, joint operations area, amphibious objective area, joint special operations area, and area of operations.

**power projection.** The ability of a nation to apply all or some of its elements of national power—political, economic, informational, or military—to rapidly and effectively deploy and sustain forces in and from multiple dispersed locations to respond to crises, to contribute to deterrence, and to enhance regional stability.

**protection.** The 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.

**reachback.** The process of obtaining products, services, and applications, or forces, or equipment, or materiel from organizations that are not forward deployed.

**seabasing.** The deployment, assembly, command, projection, reconstitution, and re-employment of joint power from the sea without reliance on land bases within the operational area.

**space.** A domain like the land, sea, air, and cyberspace within which military activities shall be conducted to achieve U.S. national security objectives.

## Appendix B: Threats to Aggregation

***Enemy and Adversary Capabilities.*** In terms of specific capabilities, future adversaries may possess highly adaptive combinations of anti-access and area denial systems (A2/AD) including space, cyberspace, and potential weapons of mass destruction (WMD) capabilities that can challenge entry operations to a much greater degree than in the past. These capabilities comprise specific systems and the innovative ways in which they may be employed to counter Joint Force entry operations<sup>60,61</sup>

***Cyberspace Activities.*** Growth of opponent cyberspace capabilities is explosive with state, non-state, and individual or small group actors able to conduct offensive and defensive cyberspace actions that potentially threaten military operations in general and—more specifically—the confidentiality, integrity, and availability of key data, information and communications.

***Military and Commercial Space Assets.*** Both state and non-state actors will increasingly have access to space-based capabilities that include both military and commercially-based capabilities. These developments mean that the Joint Force will have difficulty in conducting deception, achieving surprise, masking intent, and protecting sensitive information. Enemy offensive space assets could threaten the Joint Force's space force enhancement assets and degrade the operational environment.

***Anti-access (A2).*** Widespread proliferation of very capable and long-range ISR systems; surface-launched, air-launched, and submarine-launched ballistic and cruise missile capabilities; submarines, long-range strike and bomber aircraft, SOF and terrorist assets that can threaten aggregating forces during strategic movement and while transiting or operating intermediate staging bases and sustainment sites. U.S. Joint Force dependence on space support for navigation, communications, timing, targeting, and ISR is vulnerable to the expanding space control and anti-satellite capabilities of potential adversaries.

Key anti-access capabilities may include:

- A variety of surface-, air- and submarine-launched ballistic and cruise missiles able to accurately attack forward bases and deploying U.S. Forces and their supporting logistics at ranges exceeding 1,000 nautical miles.
- Long-range reconnaissance and surveillance systems that provide necessary targeting information, including satellites, aircraft, and land and ship-based radar.
- Antisatellite weapons that can disable space systems vital to U.S. force projection.
- Submarine forces able to interdict U.S. and friendly sea lines of communications in both sovereign and international waters between U.S. bases and the theater of operations.
- Cyber-attack capabilities designed to disrupt U.S. command and control systems and critical infrastructure, both civilian and military.
- Terrorists willing to attack U.S. or partner bases and deploying forces, even at points of origin in the continental United States or other regions.

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<sup>60</sup> The Joint Operating Environment (JOE) forecasts emerging security challenges based on current trends in the world. Joint Futures Group (J59), U.S. Joint Forces Command (Suffolk, VA, 18 February 2010).

<sup>61</sup> While these capabilities could be employed for various purposes, for the purposes of this concept they are referred to as anti-access and area denial capabilities.

- Special operations forces capable of direct action and unconventional warfare in the approaches to the operational area.

As a result of improvements in these anti-access capabilities, deploying forces will find themselves at risk at ever greater ranges. Deploying to the theater while under attack is a challenge that U.S. Joint Forces have not had to deal with in recent decades. Personnel, supplies, and equipment located in rear areas once thought to be secure will be increasingly targeted.

***Area denial (AD).*** Enemy area denial capabilities have both increased in number and proliferated in scope over the last 10 years, with state and non-state actors possessing advanced AD capabilities and less sophisticated but difficult to counter AD assets such as sea mines, improvised explosive devices, mobile threats to airlift and sealift, and a variety of guided rockets, artillery, mortars, and missiles (GRAMM). Key area denial capabilities include:

- Air forces and air defense systems, both fixed and mobile, designed to deny local U.S. air superiority.
- Shorter-range anti-ship missiles and submarines employing advanced torpedoes to deny U.S. maritime superiority in the objective area.
- Precision-guided rockets, artillery, missiles, and mortars (GRAMM) designed to attack surface targets, including landing forces, with much greater accuracy and lethality than their “dumb” predecessors.
- Chemical and biological weapons to deny the use of select areas.
- Computer and electronic attack capabilities to degrade, neutralize, or destroy U.S. command and control in the operational area.
- Abundant land and naval mines capable of quickly closing straits, land passes, long stretches of coastline, or airfields.
- Armed and explosives-laden small boats and craft in cluttered and restricted coastal waters and straits.
- Land maneuver forces.
- Special operations forces capable of direct action and unconventional warfare in the objective area.
- Unmanned systems, such as unmanned aircraft and unmanned underwater vehicles, which could loiter to provide intelligence collection or fires in the objective area.

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