

Gaining and Maintaining Access: An Army-Marine Corps Concept



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March 2012

Foreword

***From the Director, U.S. Army Capabilities Integration Center and the Commanding General,
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Sustaining U.S. Global Leadership: Priorities for 21st Century Defense highlights the continued importance of power projection in order to credibly deter potential adversaries and to prevent them from achieving their objectives. The U.S. Army and Marine Corps play an indispensable role in that effort. *Gaining and Maintaining Access: An Army-Marine Corps Concept* describes our unique contributions to the joint force commanders' ability to project and sustain power, anywhere in the world, in the face of growing challenges to access and entry.

While such challenges may exist across a range of military operations, this concept focuses on them within the context of combat. The concept nests within the broader ideas contained within the *Joint Operational Access Concept*, and fully acknowledges the importance of pre-conflict condition setting and the contributions of interagency, international and multinational partners. At the end of the day, the U.S. Army and Marine Corps provide the joint force commander with the capability for decisive action on land and in the littorals. This includes the ability, when required, to gain entry into contested foreign territory in order to promote joint force freedom of action. This concept focuses on how we conduct entry operations against a hostile foe.

This concept encompasses the views of two Services regarding an endeavor that involves the entire joint team. It is therefore published as an interim product with the expectation that the ideas herein will, in concert with the Navy and Air Force, be refined and expanded into a fully joint concept. It offers specific hypotheses upon which we will experiment and serves as a point of departure for wide-ranging discussions, wargames, and seminars.



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1. Introduction

a. The United States is a global power with global interests. As such, it has an enduring requirement to preserve a credible capability to project military force worldwide in support of those interests. As stated in *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, “in order to credibly deter potential adversaries and to prevent them from achieving their objectives, the United States must maintain its ability to project power in areas in which our access and freedom to operate are challenged.”

b. Access challenges can be categorized in a number of ways. They can be classified in terms of geographical, military, or diplomatic access issues. They can be described in terms of antiaccess challenges, capabilities designed to prevent an enemy from entering an operational area, or area-denial capabilities designed to limit freedom of action within the operational area. Categorization can also be accomplished in terms of access to the global commons and sovereign spaces. Access to the global commons and sovereign spaces requires the complementary application of all elements of national power to overcome geographic, political and military impediments. The joint force contributes to the whole of government approach through unified action.

c. *Operational access*, the military’s contribution to the whole of government efforts to gain access, is the ability to project military force into an operational area with sufficient freedom of action to accomplish the mission.¹ Joint forces will continue to be challenged in that endeavor by adaptive adversaries who will attempt to oppose us in all domains: air, maritime, land, space, and cyberspace. They range from adversaries equipped with low-end, non-integrated weapons to others that have sophisticated but non-integrated systems, to a much smaller number that possess comprehensive, layered and fully integrated defenses. However, technology proliferation ensures that more states, their proxies, and non-state actors will gain these capabilities. The emergence of adversaries who combine the structure and tactics of insurgents with high-end technologies further complicates the operating environment.

d. The US must have the ability to employ forces anywhere in the world when directed in support of U.S. national interests. Therefore, Joint forces must be capable of gaining and maintaining operational access while deploying from home stations, while en route to forward areas, and during employment throughout the area of operations. The overall concept for gaining operational access is described in the *Joint Operational Access Concept* (JOAC).

e. Recognizing that total domain dominance will rarely be obtainable, the joint force will fight for domain superiority, an advantage in time and place that need not be permanent or widespread, at critical times and places to achieve the degree of freedom of action required to accomplish objectives. Joint forces will seek to create opportunities and achieve periods of advantage in every domain to counter enemy capabilities and gain access to an operational area. They will attack enemy capabilities by conducting cross domain operations in an effort to maximize the advantages and negate the disadvantages encountered in any single domain.

¹ Doctrinal joint definitions do not exist for some often used and important terms. This concept uses working definitions and/or descriptions, used in the *Joint Operational Access Concept*.

f. Conceptually, the JOAC makes a relative distinction between antiaccess and area-denial. As used in that paper, antiaccess refers to those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area. Area-denial refers to those actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area.

g. The defeat of antiaccess capabilities is accomplished primarily through air, maritime, space and cyberspace operations conducted from the continental United States, the global commons, or friendly sovereign territory as described in the supporting concept of *Air Sea Battle*. The U.S. Army and Marine Corps contribute to a range of capabilities toward overcoming antiaccess.

h. The purpose of this concept is to describe the U.S. Army and Marine Corps contribution toward defeating area-denial capabilities within the larger context of the joint force effort to gain and maintain operational access. This includes the ability to gain entry into contested foreign territory to promote joint force freedom of action.

i. The JOAC establishes several precepts for gaining operational access. Foremost among them is “Conduct operations to gain access based on the requirements of the broader mission, while also designing subsequent operations to lessen access challenges.” Consistent with this precept, we affirm that entry operations into enemy territory are a means to military or political objectives, rather than an end in themselves. Therefore entry operations must be planned within the larger context of the campaign’s overarching purpose. Without considering the impacts of entry operations on the larger objectives of a military campaign it is possible that entry may be gained through means that decrease the likelihood of achieving U.S. political and military objectives.

2. Future Operating Environment

a. The future operating environment is expected to be characterized by uncertainty, rapid change, and conflict. In the face of growing competition, access to the global commons and to “ports, airfields, foreign airspace, coastal waters and host nation support in potential commitment areas”² will require significant effort. Future adversaries may see an antiaccess/area-denial strategy against the United States as a preferred course of action. “Those able to field layered and fully integrated antiaccess/area-denial defenses in multiple domains may attempt to deny U.S. operational access altogether, while others with less robust and comprehensive capabilities may simply attempt to inflict greater losses than they perceive the United States will tolerate politically.”³ Figure 1 depicts threats to U. S. joint force power projection and freedom of action.

² *Capstone Concept for Joint Operations*, version 3.0, January 2009, p.6.

³ *Joint Operational Access Concept*, version 1.0, 17 January 2012, p.13.

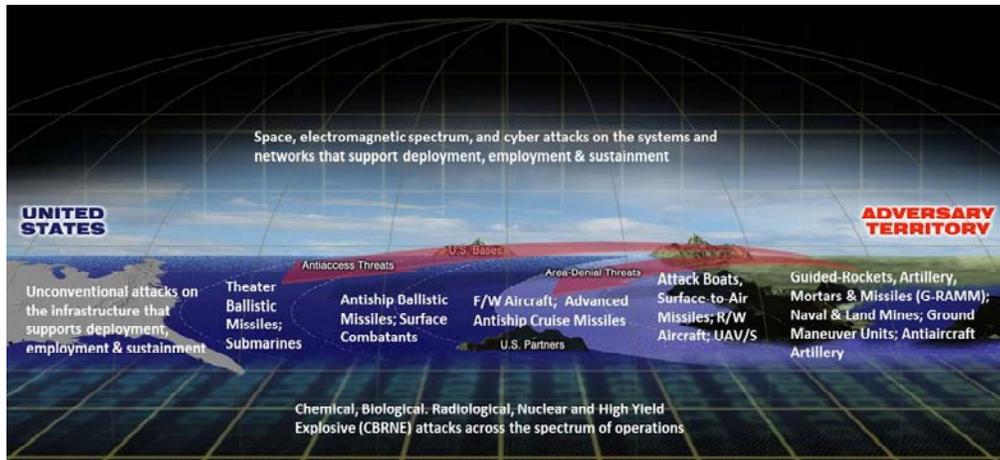


Figure 1. Range of antiaccess/area-denial threats

- b. U.S. forces are unlikely to be granted unopposed movement to and positioning in a theater for weeks and months as they have in the past. Instead, it should be anticipated that adversaries will choose to interdict or impede the deployment of forces from the continental United States forward. It is also possible that they will hold forward deployed and forward based forces at risk. Adversaries are likely to emphasize a combination of strategic preclusion (those actions which deter effective U.S. diplomatic, economic, and military action) with operational exclusion (hybrid capabilities and actions that frustrate U.S. ability to establish forward military presence and operate within a given theater). The proliferation of affordable, extended range, precision weaponry with increased lethality may force greater dispersion of forces and increased demand for a range of protective measures.
- c. U.S. political transparency combined with the instantaneous transmission of information around the world also affects access operations by increasing the difficulty of obtaining surprise. Yet the vulnerability of joint forces to increasingly lethal antiaccess and area-denial weapons during deployment and entry operations make the principle of surprise even more important.
- d. Population growth within the urban littorals and a proclivity of adversaries to embed within civilian populations will complicate gaining entry to infrastructure that supports joint force operations. The joint force will face the problem of distinguishing the enemy from the populace and effectively targeting the enemy without killing noncombatants. The ability to create nonlethal effects will continue to be important in these environments
- e. The more successful an adversary is in contesting joint forces command and control, and intelligence, surveillance, and reconnaissance efforts, the harder it will be for U.S. forces to target and engage with precision. In addition, joint forces can expect to be opposed by enemy strategic information operations designed to deter the use of force or cause the international community to counter further military operations.
- f. Due to their increased importance and joint force dependency on their use, future adversaries are likely to contest access to space, cyberspace, and the electromagnetic

spectrum. This trend will serve to decrease U.S. space and cyberspace advantages, obliging joint forces to operate in degraded environments with compromised communications, precision navigation and timing, and other space and cyberspace enabled capabilities.

3. Joint Context

a. U.S. Army and Marine Corps actions to achieve operational access occur within a joint, interagency and multinational context. Overcoming antiaccess and area-denial challenges require comprehensive joint force solutions and the application of unified action. Within this context, U.S. Army and Marine Corps forces, through human interaction and the application of littoral maneuver and land power, offer unique contributions to the joint campaign.⁴

b. Prior to conflict, U.S. Army and Marine Corps forces build partner capacity, prevent conflict and develop understanding. These shaping efforts aid in the ability to develop relationships and share capabilities, as well as the ability to secure basing, navigation, overflight rights, and support agreements from regional partners.

c. During conflict, forces ashore in an adversary's territory provide human contact to complement other intelligence in creating contextual understanding of unfolding events. This aids in the ability to locate, target, and suppress or neutralize hostile antiaccess and area-denial capabilities in complex terrain. U.S. Army and Marine Corps forces can control terrain and the associated population. They ensure that access can be maintained by making persistent or extending in duration the effects created by other elements of the joint force. These forces also deprive adversaries sanctuary ensuring the identification and defeat of targets concealed in the land clutter that threaten other joint forces/capabilities in the air, maritime, cyberspace, and space domains.

4. The Area-denial Problem. Potential adversaries will attempt to prevent joint forces from entering their territory from the sea, from the air, or from adjacent land.⁵ The means of defeating antiaccess capabilities have some applicability regarding the area-denial problem; however, they do not provide a comprehensive solution to it. Furthermore, adversaries can be expected to employ a range of area-denial capabilities using tactics designed to offset U.S. advantages in joint integration, high-tech sensors, and stand-off, precision weaponry. Such tactics may include: hiding sophisticated weapon systems in complex terrain-particularly in heavily populated urban areas; rendering fixed airfields and ports unusable or their seizure intact unlikely; and contesting air or maritime superiority to a degree with which U.S. forces have not contended for 70 years. Given the foregoing, how will future U.S. Army and Marine Corps forces contribute to defeating enemy area-denial capabilities and ensuring access throughout a campaign?

⁴ Although often referred to as land or ground forces, Marines are in fact part of the Naval Service, normally employed as Marine air-ground task forces (MAGTFs) that include command, ground, aviation, and logistics elements. In the context of entry operations, MAGTFs are primarily employed from amphibious shipping.

⁵ U.S. forces may, in some cases, be granted diplomatic access to land areas that are contiguous to hostile territory. Because such conditions cannot be guaranteed in all cases, capability development efforts must be predicated upon the assumption that U.S. forces will not have these diplomatic and geographic advantages.

- 5. Central Idea.** The U.S. Army and Marine Corps will contribute to the joint effort to gain and maintain operational access by entering hostile territory without benefit of domain dominance and by using littoral and ground maneuver to locate and defeat area-denial challenges. U.S. Army and Marine Corps forces must be capable of:
- Conducting simultaneous force projection and sustainment of numerous maneuver units via multiple, distributed, austere and unexpected penetration points and landing zones in order to avoid established defenses, natural obstacles, and the presentation of a concentrated, lucrative target.
 - Countering the effects of adversary actions against the air, sea, space and cyberspace domains by locating/seizing/neutralizing/destroying land-based capabilities that threaten those domains, thus contributing to cross domain synergy. These may include, but are not limited to, air and missile defenses, anti-shipping capabilities, guided rockets, artillery, mortars, and missiles (G-RAMM), and enemy maneuver units.
 - Seizing key terrain in order to deny it to the enemy or to facilitate the introduction of follow-on forces.
 - Rapidly projecting follow-on forces that can be employed with minimal need for reception, staging, onward movement, and integration (RSOI) or dependence on local infrastructure.
 - a. The joint force will establish a baseline set of conditions that permit conduct of entry operations. Strategically, that includes some capabilities for intermediate staging on land or sea and overflight rights. Operationally, it requires degrading adversary area-denial capabilities sufficiently at the point of attack in multiple domains. Prior to entry, targeting information will be continuously updated on all priority targets and then focus on areas identified as likely penetration points.
 - b. Multiple dispersed maneuver elements will use strategic and operational maneuver via air and sea to deploy and employ from the global system of main operating bases, forward operating sites, cooperative security locations, and amphibious and other sea-based platforms to conduct operations in the objective area. The complementary capability to employ from the air with airborne and assault forces, the sea with amphibious forces (using both surface and vertical means) and from adjacent territory when feasible, complicates the adversary's defense. By requiring the adversary to defend a vast area against our mobility and deep power projection capabilities, maneuver is expected to render some of the adversary force irrelevant while exploiting the seams and gaps created in his defensive disposition. Supporting, advanced force, and pre-assault operations will include strike operations, clandestine insertion of special operations forces and conventional reconnaissance forces, deception, counter-mine, counter-obstacle operations, and information operations. These activities will combine with efforts to gain localized air and maritime superiority over the approaches and entry areas, and subsequent axes of advance for the duration required to support the maneuver elements. Joint strike operations along with theater air and missile defense, computer network operations, and electronic attack will help provide protection and select areas of domain advantage allowing for the conduct of entry operations.

c. Entry operations involve the actual assault by various combinations of amphibious, airborne, and air assault forces for a range of purposes and under a variety of conditions. Purposes include: limited objective strikes and raids from sea-based forces; limited attacks to seize key terrain and destroy enemy antiaccess capabilities such as air and missile defenses and anti-satellite and anti-ship missiles; achieving a coup de main; seizure of existing ports and airfields, or the establishment of expeditionary facilities that enable follow-on operations. Assaults may be conducted as a rapid crisis response against less capable adversaries, where the conditions needed for the entry are quickly set with limited shaping operations. They may also be conducted where forward deployed and rapid response elements must execute forcible entry mainly with their organic capabilities and minimal reinforcement. Larger scale entry operations may be carried out where there is significant shaping required in setting the conditions for the assault(s). Joint enablers will be critical to supporting maneuver elements during initial assaults to ensure those forces achieve tactically significant effects.

d. Although they are employed in an integrated fashion, entry forces may be conceptually divided into two broad categories: assault forces and follow-on forces. Assault forces take three complementary forms: Marine air-ground task forces (MAGTFs) operating from ships at sea; Army airborne forces delivered by intertheater or intratheater airlift; and Army air assault forces operating from intermediate staging bases (ISBs) within the theater. Follow-on forces, when required, may arrive via airlift, sealift, or various combinations thereof. Traditionally, follow-on forces have included heavier units whose offload is dependent upon infrastructure that has been seized intact/quickly repaired, or expeditionary facilities that have been established. Filling the gap between assault forces and heavy units are those follow-on forces capable of rapid reinforcement with little or no reliance on infrastructure. Employment of mounted vertical maneuver (MVM)⁶ and the ability of maritime prepositioning forces to exploit the advantages of seabasing are prime examples of how that gap will be filled.

e. Forces must be prepared to fight without persistent domain superiority when conducting entry operations. They must be prepared to exploit relative advantages achieved in some domains to counter the impact of intermittent advantages or even disadvantages in other domains. Combinations of interdomain and intradomain operations are required to achieve the synergy necessary to maneuver against a determined adversary's area-denial strategy.

f. To counter the enemy's defensive capabilities, maneuver elements will seek to attack from multiple directions and dimensions throughout the battlespace with the amount of distribution or concentration of forces dependent on the nature of the enemy and terrain. Ideally, these forces will avoid enemy defenses via undefended or lightly defended entry points. Forces will exploit multiple unanticipated and austere locations along a coastline

⁶ U.S. Army and Air Force developed MVM Concept of Operation, Jan 2009. MVM is an approved concept of operations within both the joint heavy lift and joint future theater list initial capabilities documents. This document describes a conceptual requirement, and does not attempt to define the weight of the medium force. What is required is a capability to vertically insert mobile protected firepower. Weight limitations will be affected by the development of active protection and other measures that allow the lethality, mobility protection equation to shift sufficiently to enable to concept.

and/or austere landing zones ashore. These may include littoral penetration points, ports with limited draft and infrastructure, and short, unimproved runways and landing zones. By attacking via multiple directions and dimensions throughout the battlespace, maneuver forces will seek to deceive the enemy and diminish his ability to observe, orient, decide and act.

g. The capability to deploy personnel and equipment configured to quickly transition from deployment to employment is important for conducting entry operations. This includes examining the configuration and posture of prepositioned stocks and the means of transporting them ashore by air or sea.

h. When tasked to facilitate the introduction of follow-on forces, maneuver elements will secure one or more lodgments as the situation dictates. While lodgments will continue to be a key element of entry operations for sustained campaigns the absence of, or damage to, existing ports and airfields will require the ability to rapidly establish expeditionary facilities and/or repair and possibly expand local infrastructure. Additionally, significantly reducing the need for RSOI and improving the ability to operate from austere locations will decrease the vulnerability inherent in the transition of forces through a lodgment.

6. Supporting Ideas

a. The following supporting ideas enable U.S. Army and Marine Corps forces enhanced abilities to command and control, deploy, maneuver and sustain operations over extended distances to remote and/or austere locations.

b. *Exploit the Sea as Maneuver Space.*

(1) Ship to objective maneuver (STOM)⁷ facilitates credible response to crises in the littorals with tailored, scalable forces in permissive, uncertain and hostile environments, enabling successful engagement, humanitarian assistance, crisis response, and power projection. In the context of entry operations, STOM enables MAGTFs to fully exploit the sea as maneuver space, avoiding enemy defenses where feasible and focusing on the objective, including those deep inland. It seeks to remove the transition at the water's edge and create seamless littoral maneuver. STOM allows forces to operate across a wider geographic area in a more decentralized manner to gain entry when and where needed.

(2) Operating from the sea, assault forces conduct sustainable expeditionary operations until follow-on forces arrive. Entry operations may rely on sea-based assets for command and control, fires, protection, intelligence, reconnaissance, and sustainment. Under austere conditions or when overcoming area-denial challenges, seabasing helps early in an operation to reduce the requirement for large ground based sustainment stocks and extended ground lines of communication which could be vulnerable to attack and which require additional forces to secure. Marine Corps forces embarked on amphibious shipping are specifically

⁷ The Marine Corps revised the *Ship-to-Objective Maneuver Concept* in May 2011. The revised concept expands upon the proven concept and describes how amphibious forces can be applied in uncertain, complex, and often austere environments where access cannot easily be assured.

designed to provide multi-domain capabilities that are employed from the sea. U.S. Army forces may also operate from the sea in some scenarios. Sea-based forces utilize littoral maneuver (via surface and/or vertical means) to exploit gaps and seams in enemy defenses, deceive adversaries, and maneuver directly to key objectives ashore. Follow-on forces may be moved via non-amphibious ships and then transition ashore via key seabasing enablers (such as mobile landing platforms) to land without reliance on ports or airfields ashore. Key enabling capabilities include mine countermeasure capabilities, additional high-speed intratheater lift, improved connectors, improved interface between ships and connectors (to include unmanned cargo aircraft), and enhanced prepositioning capabilities for at-sea transfer and selective off-load of personnel and materiel.

c. ***Integrate Special Operations Forces (SOF) and Conventional Forces.*** Special operations forces are often the first US military presence in an area of operations. They perform a critical role in setting conditions prior to entry operations, continuing operations at depth during entry assault operations, and then assisting in maintaining access as sustained operations commence. Command structures, planning and execution must enable the integration of SOF and conventional forces at lower echelons of command.

d. ***Operate From Intermediate Staging Bases.*** Operational maneuver may require the near-simultaneous movement and support of multiple tactical formations by ground, air, and sea to locations in depth from which their combat power can be focused against critical adversary forces and facilities. As the JOAC advises, however, geography may well be the most prominent factor in the access challenge because combat power has, historically, tended to degrade over distance. Therefore ISBs may be critical for supporting and sustaining entry operations. Further, operating from ISBs provides a capability for maneuver at operational depth throughout the area of operations. U.S. Army and Marine Corps forces must be prepared to seize, defend, and employ from a combination of these bases to shorten distances and achieve an operational tempo advantage over the adversary. Absent ISBs, the joint force's ability to maintain continuous pressure in the face of area-denial capabilities could be significantly reduced, particularly if sea-based alternatives are limited.

e. ***Conduct Vertical Maneuver of Mounted Combined Arms Capability.***

(1) This capability directly addresses increasing area-denial challenges. A key enabler of operationally significant entry capability is MVM, which is the maneuver and vertical insertion of medium weight armored forces into areas in close proximity to objectives without the need for fixed airports, airfields, or prepared airheads. By avoiding predictable fixed airfields and airports, MVM increases the number of landing areas

An analysis of 11 million square kilometers of land mass in 16 countries revealed 55 million potential vertical takeoff and landing spots, with 5 times the potential for short takeoff and landing spots.
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available to the land force thereby creating defensive dilemmas for the adversary. But more significantly, vertical maneuver of mounted forces provides the means to rapidly gain positional advantage over the enemy creating and magnifying the effects of surprise.⁸

(2) Mounted vertical maneuver permits the forcible entry of forces to unpredictable areas thereby presenting an enemy with an element of surprise and multiple defensive dilemmas.⁹ MVM provides commanders flexibility in overcoming an adversary's area-denial capability through the seizure of key terrain and strong points ensuring freedom of action in the land, air, and sea domains. Air assault forces with mobile protected platforms will operate from a sea base to turn flanks or defensive positions, to seize the initiative by attacking the adversary from unexpected directions, to seize key terrain or facilities, to disrupt adversary rear operations, or to clear a littoral of antiaccess forces.

f. ***Access and Operate in Austere Locations.*** Expeditionary forces must sustain initial operations independent of local infrastructure providing the essential supplies and services necessary to keep the force sustained and equipped in austere environments. Many regional areas of strategic significance have limited ports and airfields that can support deep draft ships and C-17/C-5 aircraft. Initially by-passing ports and airfields may be prudent in order to avoid predictability. Expanding entry points gives joint forces additional access options for a range of combat and non-combat operations and presents added dilemmas to the adversary who must defend more battlespace. Marine Corps forces are specially designed for expeditionary mobility, to include being capable of accessing and operating in austere locations. While they can be configured for sustained operations ashore, these forces are not organically constituted for such operations. In contrast, most Army forces are designed to provide decisive combat power for sustained land operations. Currently, introducing these forces into an objective area is largely dependent upon available infrastructure. Without forfeiting war-winning capabilities, the Army will expand its capability to access and operate in austere locations.

g. ***Reduce Force Vulnerability.***

(1) Adversaries have greater access to weapons with increased lethality and precision, making maneuver and sustainment more vulnerable to interdiction. In addition to active measures to detect and target these weapons, the effectiveness of an adversary's area-denial weapons may also be minimized by reducing the overall signature of U.S. Army and Marine Corps forces and their logistics demand. Employing a variety of physical and technical deception means (e.g. dummy and decoy equipment and devices; emission, alteration, absorption, or reflection of energy), and dispersal tactics will permit U.S. Army and Marine Corps forces to counter the effects of adversary precision.

⁸ Mr. James R. Young, et. al. "Global Deployment Assessment: A Strategic Terrain Analysis Examining Deployment/ Employment Considerations Within the Arc of Instability." Fort Lee, VA: Deployment Process Modernization Office, 1 March 2010.

⁹ U.S. Army and Air Force developed MVM Concept of Operation, Jan 2009

(2) Reducing overall logistics demand, especially bulk liquid and energy consumption, will greatly assist in countering area-denial strategies. Efficiency for efficiency sake is not the driving factor behind reducing demand in these environments. Rather, it is a combination of enhancing mobility, agility and effectiveness while decreasing vulnerability to the increased lethality and precision characteristics of adversary weapons. By improving agility, U.S. Army and Marine Corps forces will be able to project more of the force into austere environments, increase tempo, and confront adversaries with multiple dilemmas. They will also reduce the number of lucrative targets available for adversary interdiction that could disrupt operational momentum.

h. *Fight for Information.*

(1) Information is a very powerful component of conflict and is an increasingly important element in antiaccess strategies. Accurate information is especially difficult to acquire during the early stages of entry operations. Intelligence gained through technical means is sometimes inaccurate and rarely sufficient. Forces on the ground are an important means for confirming adversary dispositions and intent. U.S. Army and Marine Corps forces must be capable of rapidly processing information during the critical hours of initial entry when combat power is being established in the objective area. Information obtained during entry operations is vital to enabling adaptive decision-making, increasing tempo and maintaining cross domain synergy. Further, entry forces must be able to rapidly transmit information to ensure that higher authorities have accurate information for use in making critical combat decisions and in prosecuting the battle of competing narratives.

(2) Key to the fight for information is retaining freedom of action in the cyberspace domain and in the electromagnetic spectrum, while denying the same to adversaries at the time and place of their choosing; thereby enabling operational activities in and through cyberspace. Cyberspace operations are an integral part of gaining cross domain advantages. Activities conducted in peacetime will help create exploitable opportunities during conflict.

(3) The U.S. Army and Marine Corps will seek to increase the resiliency of communication, navigation, intelligence, surveillance, reconnaissance, and targeting systems, and command and control processes and procedures to ensure operational momentum is preserved in spite of adversaries contesting access to satellites and attempting to disrupt computer network operations. They will also develop training programs and procedures to operate effectively with degraded communications. U.S. Army and Marine Corps systems should be designed to integrate into data networks for enhanced operations, but also be able to provide effective operations without network dependence.

7. Capability Requirements by Function

a. Movement and maneuver. U.S. Army and Marine Corps forces must have internal and cross-service diversity of capability to maximize effectiveness against a range of adversaries and should resist efforts to find one size fits all solutions that are likely to degrade overall effectiveness. Operating ashore against area-denial capabilities will necessitate a balance between mobility and protection.

(1) Project forces to positions of advantage. Entry forces must have strategic mobility¹⁰ and operational reach¹¹ to respond to a broad range of threats and challenges. This will include: MAGTFs specifically designed for operating from ships at sea to gain entry under austere conditions, sustaining operations from the sea, and U.S. Army airborne or air assault forces to seize infrastructure or austere locations for the introduction of follow-on forces.

(2) To introduce the bulk of the joint force and its logistics will require:

- Conducting forcible entry (airborne, air assault and/or amphibious operations).
- Utilizing assault forces to secure and defend developed air ports of debarkation (APODs) and sea ports for debarkation (SPODs).
- Securing and improving major air (C-17 aircraft capable) and deep draft SPODs as well as the capability to offload at locations with limited infrastructure.
- Deploying follow-on forces via APODs and SPODs.

(3) U.S. Army and Marine Corps forces must possess the following capabilities to conduct opposed and unopposed entry operations.

- Employ special operations forces to set conditions for entry operations and increase combat power during subsequent operations.
- Conduct combined arms forcible entry operations as part of the joint force by parachute, air, or amphibious assault (surface and vertical) into austere and unexpected locations with little or no advanced notice. Rapidly build combat power by increasing the speed by which follow-on forces are employed.
- Rapidly transition from entry operations, to follow-on offensive operations in expeditionary environments to defeat enemy capabilities such as command and control, air defense, ballistic missile, and shore to ship missile capabilities to enable follow on force flow and achieve initial campaign objectives.
- Conduct combined entry operations into austere locations with damaged or destroyed infrastructure.
- Conduct joint seabasing, to include at-sea transfer, selective offload, ship to shore movement, aviation operations, and sustainment.
- Use intertheater and intratheater air connectors capable of accessing austere sites and supporting mounted vertical maneuver operations.
- Employ a combination of intertheater and intratheater ships and connectors, including amphibious ships and surface connectors, capable of accessing shallow draft ports, ports with limited infrastructure and locations where ports do not exist.

¹⁰ FM 1-02. Strategic mobility – (Department of Defense (DOD)). The capability to deploy and sustain military forces worldwide in support of national strategy.

¹¹ FM 1-02. Operational reach – (DOD) The distance and duration across which a unit can successfully employ military capabilities. Operational reach is a function of protection, sustainment, endurance, and relative combat power.

- Traverse cross compartment terrain, avoiding road networks and negating some of the effects of improvised explosive devices.

b. Intelligence.

(1) Joint forces will have to fight for and collect information in close contact with the enemy and civilian populations through continuous physical reconnaissance, persistent surveillance, and human intelligence in order to develop the contextual understanding to defeat enemy countermeasures, compensate for technological limitations, and adapt continuously to changing situations.

(2) Joint forces must operate a fully integrated, collaborative intelligence, surveillance, and reconnaissance enterprise that provides timely, predictive intelligence and counterintelligence to meet expeditionary force requirements. This enterprise must be sustainable and remain responsive and adaptive, capable of addressing new challenges and opportunities as they emerge. U.S. Army and Marine Corps forces require seamless intelligence and operations integration from the small unit up through National level decisionmakers, enabling leaders at all levels to access relevant information at the time and place it is most needed.

c. Fires.

(1) Maneuver forces require fires that can be delivered on a 24-hour basis, in all weather conditions, generated from the air, land, maritime, and cyber domains even when one or more domain is unavailable. Fire support must be able to deliver timely and accurate fires with or without precision guidance.

(2) Maneuver forces require access to and direction of joint fires at lower tactical elements (company and possibly below based on the situation), including forces operating in support of indigenous forces in order to enable effective operations.

(3) Maneuver forces require organic precision and area fires capabilities and the continued ability to apply both destructive, neutralizing, and suppressive effects to support units conducting distributed combined arms operations.

(4) Maneuver forces require offensive fires (kinetic and/or non-kinetic air, ground, surface and sub-surface) that preempt enemy actions by interdicting, degrading, defeating, and destroying enemy capabilities. They also require defensive fires that defeat enemy capabilities and protect friendly forces, population centers, and critical infrastructure in order to preserve combat power and freedom of movement and action, protect the force, and allow friendly forces to gain, maintain, and exploit the initiative. These fires may include an increased variety of armed unmanned systems to complement manned systems.

d. Sustainment (logistics).

(1) Future sustainment forces require the capability to provide logistics, personnel services, health services support, civil support, consequence management, engineer and construction support, emergency management and geospatial operations to distributed force elements (military, civilian, contractors, indigenous, host nation, or third country nationals), including joint, interagency, intergovernmental, and multinational partners, that enable decisive action by leaders at lower echelons.

(2) The future force requires a planning, execution, and control capability that delivers, governs, and tracks the location, movement, configuration, and condition of people, supplies, equipment, and unit information to sustain operations.

(3) The future force must reduce overall logistics demand, especially bulk liquid and energy consumption, without reducing combat effectiveness.

e. Command and control and mission command.¹²

(1) The future force requires the capability to be interoperable (including communications, planning and operations processes, staff functionality, language skills, and cultural knowledge) with joint, interagency, intergovernmental, multinational and coalition partners to achieve unity of effort in uncertain and complex environments. This includes the ability to rapidly share time sensitive classified information with partners. Although many of the technical means to permit better interoperability exist, the commanders need appropriate authorities to exploit those capabilities.

(2) The future force requires lower tactical elements (company and possibly below, based on the situation) to have access to joint, interagency, intergovernmental, and multinational command and control resources in order to enable subordinate leaders to act with a high degree of autonomy. Specifically, the future force requires the capability to enable commanders, leaders, and staffs collaborative and battlefield visualization tools to maintain situational understanding and the ability to share the information vertically and horizontally across the force in a unified action environment. Increased access to a range of multi-domain communication infrastructures and systems is required to support distributed operations.

(3) Future forces require the capability to continue to operate when communications or networks are compromised or degraded due to deliberate or unintentional enemy or friendly actions, materiel breakdown, natural atmospheric and solar effects, or geospatial interference in order to preserve the effectiveness of the force and maintain the initiative over the enemy.

(4) Despite the necessity to interoperate with a variety of partners and their systems, care must be taken to ensure that friendly computer network defense and information

¹² The U.S. Army changed command and control to mission command in its doctrine. The Marine Corps continues to describe command and control as a function, and mission command as a form of command by influence.

assurance measures are robust enough to defeat adversary attempts to reduce the effectiveness of friendly networks via connections to “partner” systems and infrastructure.

(5) Future forces require the capability to improve battlefield visualization, understanding, coordination, and synchronized action by sharing, displaying, and integrating essential information (such as, friendly, enemy, noncombatant, weather) from dismounted Soldiers and Marines up through theater-level headquarters from a variety of joint platforms, systems, and sensors.

f. Protection.

(1) Future forces require the capability to detect and assess threats and hazards directed against personnel and physical assets to provide the situational understanding and positive identification necessary to prevent or mitigate their effects and maintain freedom of action.

(2) Future forces require the capability to disseminate timely early warning, with minimal false alarms, to achieve the desired degree of protection for personnel and physical assets.

(3) Future forces require the capability to prevent and mitigate an attack and other hazards in order to protect personnel (forces, allies, partners, and noncombatants), infrastructure and physical assets.

(4) Future forces require the capability to mitigate the effects from attack and other threats in to recover and restore mission essential capabilities.

(5) Future forces require the means to employ nonlethal capabilities to support security cooperation activities and partnerships.

g. Experimentation. The U.S. Army and Marine Corps should immediately design and begin a broad, in-depth period of experimentation across all warfighting functions to validate the conceptual ideas contained in this document. To stimulate ideas and identify a place to start, the following hypotheses are offered.

(1) If joint forces have the capability to conduct operations simultaneously in all domains, then they will more effectively achieve temporary domain superiority at the time and place of their choosing to gain and maintain freedom of action.

(2) Attacking across domains and from multiple directions will reduce the effectiveness of enemy area-denial capabilities.

(3) Conducting simultaneous force projection and associated sustainment to multiple unanticipated and/or austere locations along a coastline and and/or austere landing zones ashore using littoral penetration points, limited draft and infrastructure ports, short and unimproved landing runways and landing zones, enhanced joint seabasing and vertical maneuver of mounted combined arms capability will defeat an adversary’s defense.

(4) Seabasing will significantly enhance sustainment of early entry forces and enable them to gain initiative and maintain momentum.

(5) Adversary precision fires, especially G-RAMM, will challenge the Joint force's ability to gain and maintain access. Countering this capability through a combination of deception, maneuver, signature reduction, detection and counter-fires will be necessary.

(6) The entry phase of any operation is inherently risky, requiring highly adaptive air, land and maritime forces. Forces entering from the air and from the sea can mitigate that risk by ensuring that littoral and ground maneuver during the entry phase are conducted with maximum unity of effort. Toward that end, the concept of operations for a given mission should provide the basis for determining the appropriate force organization, with establishing unity of command at the lowest possible echelon(s) subsequently guiding the associated command arrangements. Examples include, but are not limited to, a joint force commander: establishing a subordinate joint task force to conduct entry operations under a single commander; establishing a number of such subordinate joint task forces to conduct entry operations that are separated by significant distances or geographic features; or providing a functional component commander specific forces or capabilities from another Service.

8. Conclusion

a. The U.S. Army and Marine Corps contribute to the joint force effort to gain and maintain access in part by projecting force into hostile territory. Through entrance into an adversary's territory or providing the credible threat of doing so, they contribute to overall campaign success through the following.

(1) Neutralizing landward threats to access, including those intentionally imbedded in heavily populated urban areas to negate U.S. sensors and weapons.

(2) Making persistent the otherwise temporary effects of remote fires.

(3) Providing strategic staying power - the capability for sustained, high-tempo, combat operations, or a rapid crisis response such as a raid into a sovereign territory.

(4) Seizing, occupying and/or controlling terrain, particularly in maritime chokepoints essential to protecting naval maneuver, naval movement, and/or maritime commerce..

(5) Controlling or influencing populations.

(6) Defeating enemy forces.

(7) Depriving the enemy of sanctuary.

b. The importance of overcoming access challenges cannot be overstated. "In order to credibly deter potential adversaries and to prevent them from achieving their objectives, the

United States must maintain its ability to project power in areas where our access and freedom to operate is challenged”¹³

¹³ *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, pg 4.

References

DOD

Sustaining U.S. Global Leadership: Priorities For 21st Century Defense (2012)

Joint

Capstone Concept for Joint Operations

Joint Publication (JP) 3-0

Joint Operations

JP 3-02

Amphibious Operations

JP 3-18

Joint Forcible Entry Operations

JP 5-0

Joint Operation Planning

Joint Operational Access Concept

Seabasing Joint Integrating Concept

Naval

A Cooperative Strategy for 21st Century Seapower

Naval Operations Concept, 2010

Marines

Marine Corps Operating Concepts, Third Edition

Operational Maneuver From the Sea

Ship-to Objective Maneuver, 2011

Marine Corps Concept of Operations for Combating Weapons of Mass Destruction

Marine Corps Doctrinal Publication (MCDP) 1-0

Marine Corps Operations (2011)

Army/Air Force

Mounted Vertical Maneuver Concept of Operation

Army

Deployment Process Modernization Office. (2010, March 1). *Global Deployment Assessment: A Strategic Terrain Analysis Examining Deployment/Employment Considerations Within the Arc of Instability*. Fort Lee, VA.

Field Manual (FM) 1-02
Operational Terms and Graphics (Incl. C1)

FM 3-0
Operations, (with change 1)

Training and Doctrine Command (TRADOC) Pam 525-3-0
The Army Capstone Concept

TRADOC Pam 525-3-1
The Army Operating Concept 2016-2028

TRADOC Pam 525-3-3
The U.S. Army Functional Concept for Mission Command 2016-2028

TRADOC Pam 525-3-4
The U.S. Army Functional Concept for Fires 2016-2028

TRADOC Pam 525-3-6
The U.S. Army Functional Concept for Movement and Maneuver 2016-2028

TRADOC Pam 525-4-1
The U.S. Army Functional Concept for Sustainment 2016-2028

TRADOC Pam 525-7-10
U.S. Army Contributions to Joint Land Operations from a Joint Sea Base for the Future Modular Force

Civil

Contested Commons: The Future of American Power in a Multipolar World, Denmark and Mulvenon, Center for a New American Security, (2010, January).

Abbreviations

APOD	air port of debarkation
DOD	Department of Defense
FM	field manual
G-RAMM	guided rockets, artillery, mortars, and missiles
ISB	intermediate staging base
JOAC	<i>Joint Operational Access Concept</i>
JP	joint publication
MAGTF	Marine air-ground task force
MVM	mounted vertical maneuver
Pam	pamphlet
RSOI	reception, staging, onward movement, and integration
SOF	special operations forces
SPOD	sea port of debarkation
STOM	ship to objective maneuver
TRADOC	Training and Doctrine Command
U.S.	United States