

Joint Concept for Entry Operations



7 April 2014

Distribution Statement A
Approved for Public Release

(INTENTIONALLY BLANK)

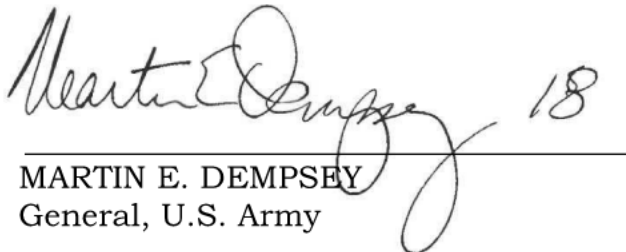
FOREWORD

The Joint Concept for Entry Operations describes in broad terms my vision for how joint forces will enter onto foreign territory and immediately employ capabilities to accomplish assigned missions. This includes conducting entry in the presence of armed opposition characterized by increasingly advanced area denial systems as well as where the environment and infrastructure may be degraded or austere.

JCEO describes the broad range of purposes for entry operations that expands this challenging set of military operations beyond the more limited scope that exists in current joint doctrine which is focused on forcible entry. Coupled with the challenge of gaining and maintaining access, operating in the presence of sophisticated missile, cyberspace, and potentially WMD armed opponents, these operations will stress the future joint force when called upon to deter or defeat aggression on foreign territory. Therefore, this concept reviews the problem of entry operations and offers key ideas to solving this set of obstacles to effectively projecting force in such situations.

Each Service has a vital role in ensuring that we can successfully conduct entry. This concept was developed with representation from each of the Services and from across the Joint Staff in coordination with the combatant commands, multinational partners, and other key stakeholders.

The need for maintaining our ability to enter foreign territory, when directed by the national command authority, is clear. Once access is achieved, we must be able to accomplish all assigned missions ashore, both in the littoral regions and further inland. The Joint Concept for Entry Operations is a critical step in ensuring that the joint force retains the ability to do so.



MARTIN E. DEMPSEY
General, U.S. Army

(INTENTIONALLY BLANK)

JOINT CONCEPT FOR ENTRY OPERATIONS (JCEO)

EXECUTIVE SUMMARY

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense requires the Joint Force to successfully project power despite anti-access/area denial (A2/AD) challenges. Guided by the *Capstone Concept for Joint Operations: Joint Force 2020 (CCJO: JF2020)*, and directly supporting the Joint Operational Access Concept version 1.0 (JOAC), this concept describes how the Joint Force will conduct entry operations in support of a broader national approach. It focuses on operations in hostile and uncertain environments where opposition is possible or expected, and where such opponents may possess advanced area denial capabilities. In opposed as well as unopposed operations, geographic and infrastructure impediments may significantly inhibit the deployment and entry of joint and multinational forces into an operational area. As a result, most of the required capabilities articulated by this concept can also be used to conduct entry in degraded or austere environments where opposition to entry operations does not exist. Finally, while overcoming anti-access threats in getting to the theater is required, it does not eliminate the need to continue to defend against these threats while overcoming area denial challenges during and after entry.

Purpose and scope of JCEO. JOAC is the Chairman's vision for overcoming A2/AD threats in the future security environment. Gaining and maintaining access to an operational area is described within the JOAC family of concepts. Exploiting the advantage of freedom of access *to* an operational area, JCEO focuses on the integration of force capabilities across domains in order to secure freedom of maneuver on foreign territory *within* an operational area. JCEO establishes a common intellectual framework for the challenge of entry in advanced A2/AD environments, informs subsequent joint and Service concepts, and identifies potential developmental actions to improve the ability of the future Joint Force to project and employ military forces onto foreign territory to accomplish assigned missions.

New framework for entry operations. Joint doctrine (JP 3-18, *Joint Forcible Entry Operations*) defines *forcible entry* as the "seizing and holding of a lodgment in the face of armed opposition," and *lodgment* as "a designated area in a hostile or potentially hostile operational area that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations." The JOAC and operational experience gained over the past three decades indicate the future Joint Force must enter onto foreign territory for a number of purposes to enable the realization of broader strategic goals. A comprehensive list of purposes includes:

- (1) To defeat threats to the access and use of the global commons
- (2) To find, control, defeat, disable, and/or dispose of specific Weapons of Mass Destruction (WMD) threats
- (3) To conduct other limited duration missions
- (4) To assist populations and groups
- (5) To establish a lodgment

Evolving trends. This concept is applicable to the future security environment described in CCJO: JF2020 and the JOAC. In particular, three trends set out in the JOAC promise to further complicate the challenge of opposed entry for U.S. joint forces. They include:

- (1) The dramatic improvement and proliferation of weapons and other technologies capable of denying access to or freedom of action within an operational area
- (2) The changing U.S. overseas defense posture
- (3) The emergence of space and cyberspace as increasingly important and contested domains

Importance of preconditions. The challenge of entry is heavily dependent upon pre-existing conditions and the effectiveness of pre-crisis operations conducted by the Joint Force. Consequently, success in entry often will depend on efforts to gain access and set entry conditions in advance, which in turn requires a coordinated interagency approach. The Joint Force will attempt to shape the operational area in advance of conflict through a variety of security and engagement activities (as described in the CCJO: JF2020, pg. 13), such as multinational exercises, access and support agreements, establishment and improvement of overseas bases, prepositioning of supplies, and forward deployment of forces. However, entry opposed by capable and determined adversaries may require advance combat or other operations by the Joint Force to establish certain minimum conditions for the entry force.

The Military Problem. The future Joint Force must be able to enter onto foreign territory and immediately employ capabilities to accomplish assigned missions in the presence of armed opposition, including advanced area denial systems, while overcoming geographic challenges and degraded or austere infrastructure. Overcoming this challenge requires capabilities from across the entire Joint Force to conduct, support, and exploit entry operations.

The Central Idea: Full integration of force capabilities across domains. To meet that challenge, future mission-tailored joint forces will establish appropriate operational conditions and conduct entry by fully integrating force capabilities across multiple domains, exploiting gaps in an adversary's defenses at select entry points to achieve operational objectives. The idea is to employ opportunistic, unpredictable maneuver, in and across multiple domains, in conjunction with the ability to attain local superiority at multiple entry points to gain entry and achieve desired objectives. This local

domain superiority may not be permanent; more often it will be temporary. After landing, the entry forces themselves may be able to achieve the operational objectives and then extract, thus not requiring the introduction of follow-on forces. In other operations entry forces may need to transition the effort to follow-on joint or coalition forces, or in some cases, non-military partners.

Conducting joint entry operations requires mission-tailored joint forces that are organized, trained, and equipped with unique capabilities. Mission-tailoring begins with a thorough understanding of the purposes for the operational task of entry that can differ in intent and duration as well as the type and quantity of forces required.

Command and control structures for these operations must allow joint commanders to integrate all forces, joint and multinational, across combatant command boundaries in order to conduct maneuver through multiple domains to achieve entry, even in immature theaters of operations.

A mission-tailored joint force capable of entry operations is comprised of integrated joint forces, and most likely multinational forces, made up of four types: Support Forces, Initial Entry Forces, Reinforcing Entry Forces, and Follow-on Forces. To be globally agile, forces capable of entry must be properly postured in order to permit rapid forming of a mission-tailored force sufficiently responsive to emerging crises. It is important to note that not all entry operations require all types of forces.

In the conduct of entry operations, mission-tailored joint forces will rely on support from the U.S. homeland, intermediate staging bases, mobile joint sea-bases, expeditionary airfields and seaports to project power. The Joint Force will then envelop, infiltrate, or penetrate in and across multiple domains at select points of entry to place the enemy at an operational disadvantage. Maximizing surprise through deception, stealth, and ambiguity, maneuvering through multiple domains during entry presents many potential threats to an adversary, disrupting his decision cycle and exploiting critical vulnerabilities. This allows the Joint Force to seize and retain the initiative while minimizing vulnerabilities during force buildup.

Required capabilities. The concept identifies 21 required capabilities the future Joint Force will need to effectively conduct entry in an increasingly contested environment characterized by adversaries equipped with advanced area denial capabilities.

(INTENTIONALLY BLANK)

Table of Contents

Foreword.....	iii
Executive Summary.....	v
1. Introduction.....	1
2. Purpose.....	5
3. Scope.....	5
4. Key Assumptions.....	5
5. Entry Operations in the Future Operating Environment	6
6. The Military Problem: Entry in an Advanced Area Denial Environment	10
7. A Concept for Joint Entry Operations	10
Establish Appropriate Operational Conditions	11
Form Mission-tailored Joint Forces for Entry Operations	14
Conduct Entry by Integrating Force Capabilities Across Multiple Domains	19
Transition to Achieve Operational Objectives	21
8. Capabilities Required by this Concept	23
9. Risks of Adopting this Concept.....	33
10. Conclusion	35
Annex A: Glossary	A-1
Annex B: Description of Challenges to Entry Operations	B-1
Annex C: Entry Operations Flowchart	C-1
Annex D: Bibliography.....	D-1

List of Figures

Figure 1. JCEO Challenges	B-4
---------------------------------	-----

(INTENTIONALLY BLANK)

1. Introduction

Guided by the *Capstone Concept for Joint Operations: Joint Force 2020 (CCJO: JF2020)*, and as a supporting concept to the *Joint Operational Access Concept Version 1.0 (JOAC)*, this concept describes how Joint Forces will conduct entry operations in an environment of advanced area denial systems possessed by a variety of potential enemies and under a variety of conditions, as part of unified action. Familiarity with the JOAC is essential to understanding the ideas expressed in this concept.¹ The concept focuses primarily on operations in hostile and uncertain environments which may contain advanced area denial systems, and includes overcoming geographic and infrastructure impediments that may inhibit the execution of joint and multinational entry operations. As a result, most of the required capabilities articulated by this concept can also be used to conduct entry in degraded or austere environments where opposition to entry operations does not exist.

This concept is based on a general review of current Joint and Service doctrine and of historical entry operations since the 1918 St. George's Day Raid on the port facilities at Zeebrugge, Belgium (see vignette on pg. 3), as well as an in-depth analysis of the entry operations conducted between 1987 and the present. The in-depth effort covered 25 case studies beginning with Operation EARNEST WILL² in the Persian Gulf in 1987-88 through Operation NEPTUNE SPEAR in Pakistan in 2011³. Additionally, the concept was informed and guided by a thorough review of Joint and Service intelligence estimates, the current CJCS Joint Strategy Review, and current concepts (Joint, Multi-Service, and Service).

Joint doctrine defines *forcible entry* as the "seizing and holding of a lodgment in the face of armed opposition," and *lodgment* as "a designated area in a hostile or potentially hostile operational area that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations."^{4, 5} Operations over the last 25 years and predictions of the future operating environment indicate that entry operations will be necessary for a number

¹ JOAC's three foundational future trends apply to JCEO: (1) Anti-access and area-denial weapons and technologies are dramatically improving and proliferating, (2) U.S. overseas defense posture is changing, and (3) space and cyberspace are becoming increasingly important and contested domains. *Joint Operational Access Concept Version*, v1.0, 17 Jan 12, pg. 14.

http://www.defense.gov/pubs/pdfs/JOAC_Jan_2012_Signed.pdf

² Overview of Operation EARNEST WILL, Wise, Harold Lee, *Inside the Danger Zone: The U.S. Military in the Persian Gulf 1987-1988*, Naval Institute Press, 2007, Annapolis, Maryland, pg. 55.

³ Overview of the entry phase of Operation NEPTUNE SPEAR, Bergen, Peter L., *Manhunt: The Ten Year Search for Bin Laden from 911 to Abbottabad*, Broadway Paperbacks, 2012, New York, pgs. 215-216.

⁴ Definition of *Forcible Entry*. *DOD Dictionary of Military and Associated Terms*, http://www.dtic.mil/doctrine/DOD_dictionary/ [accessed 5 Jun 13].

⁵ Definition of *Lodgment*. *DOD Dictionary of and Associated Terms*, http://www.dtic.mil/doctrine/DOD_dictionary/ [accessed 5 Jun 13].

of purposes. They are:

- To defeat threats to the access and use of the global commons
- To find, control, defeat, disable, and/or dispose of specific Weapons of Mass Destruction (WMD) threats
- To conduct other limited duration missions
- To assist populations and groups
- To establish a lodgment

Purposes to Conduct Entry Operations

- Defeat threats to the access and use of the global commons
- Find, Control, defeat, disable, and/or dispose of specific WMD threats
- Conduct other limited duration missions
- Assist populations and groups
- Establish a lodgment

The ideas explained here expand the discussion of entry operations to the projection and immediate employment of military forces from the sea or through the air onto foreign territory to accomplish assigned missions. Entry operations enable broader strategic goals, such as removing threats to the free flow of commerce, interdicting WMD threats, demonstrating U.S. resolve in response to a crisis which includes showing support for international mandates, deterring aggression, or when necessary, defeating enemy forces on foreign territory. Unopposed entry operations can deliver critical relief supplies, equipment, and tailored forces to repair or create the infrastructure required for follow-on support of humanitarian and disaster relief operations.

As a follow-on effort to the JOAC, this work assumes the Joint Force was successful in gaining and maintaining access to an operational area with enough freedom of action to project and maneuver forces inside it in order to accomplish the mission.⁶ Having achieved access, the entry force will maneuver onto foreign territory, potentially in the face of armed opposition. This does not mean that all

- **Entry Operations:** The projection and immediate employment of military forces from the sea or through the air onto foreign territory to accomplish assigned missions.
- **Anti-Access:** Those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area. [JOAC]
- **Area Denial:** 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. [JOAC]

anti-access threats are eliminated, rather that the primary focus of operations shifts to the generally shorter-range nature of AD threats on foreign territory.

⁶ See the JOAC supporting concept titled Air-Sea Battle (ASB) Concept, v9.0, 9 May 2012, which addresses achieving access to an operational area. ASB leverages the integration of Service capabilities to gain and maintain the advantage in the air, land, maritime, space, and cyberspace domains, including the global commons. Exploiting this advantage of freedom of access to an operational area, JCEO focuses on the integration of force capabilities across domains in order to secure freedom of maneuver on foreign territory *within* an operational area.

Entry Operations Historical Vignettes

- **Defeat threats to the access and use of the global commons:** Operation Z-O: St. George's Day Raid, 23 April 1918.
 - Overview: Operation Z-O was a direct action raid by the Royal Navy, Marines and Air Force intended to disable the enemy ports of Zeebrugge and Ostend in Belgium in the Spring of 1918 during World War I. The goal was to disable the port facilities with a Royal Marines ground attack, intentional sinking of "block ships" in the narrow shipping channels and the detonation of an explosive laden submarine under a key pier (mole) to ensure that German submarines and PT boats could not access the English Channel and threaten British use of the high seas. This operation, while not completely successful, set the stage for future successful raids to eliminate threats to the global commons, such as the World War II St. Nazaire Raid on 28 November 1942.
 - Reference: Prince, Stephen, *The Blocking of Zeebrugge, Operation Z-O*, Osprey Publishing, 20 Feb 2012.

- **Find, Control, defeat, disable, and/or dispose of specific WMD threats:** Operation GUNNERSIDE: Special Operations Executive (SOE) mission to dispose of Nazi Germany's Heavy Water Resources in Norway, 16 - 28 February 1943.
 - Overview: A World War II combined special operation whereby a select group of British-trained expatriate Norwegian commandos parachuted into occupied Norway on 16 February 1943. These commandos then infiltrated by ski to the German heavy water production facilities at Rjukan, Norway and succeeded in destroying the production equipment and all heavy water supplies on the night of 28 February 1943. The Norwegian commandos then successfully extracted by ski some 500 km to Sweden.
 - Reference: Haukelid, Knut, *Skis Against the Atom*, North American Heritage Press, 1989.

- **Conduct other limited duration missions:** Operation JUST CAUSE: Complex series of entry operations conducted near simultaneously, December 1989.
 - Overview: On 20 December 1989, the United States commenced military operations against Panama, to combat drug trafficking, to protect the integrity of the Panama Canal Treaty, and to bring General Manuel Noriega to justice. On the first day of operations, the US force of nearly 13,000 already in Panama, augmented by 7,000 personnel conducting multiple entry operations, attacked and secured 27 locations distributed across Panama. Over the next several days, US forces in Panama grew to 27,000 personnel consisting of 22,000 Soldiers, 3,400 Airmen, 900 Marines, and 700 Sailors. Forces included mechanized, airborne, light infantry, military police, and civil affairs from the Army; air mobility, attack, close air support, and information operations from the Air Force; light armored infantry from the Marines, surface craft and medical assets from the Navy; and Special Operations Forces from all Services. At the time, Operation JUST CAUSE was the largest entry operation since the end of the Vietnam War.
 - Reference: Operation Just Cause Panama, Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, 1995.

Entry Operations Historical Vignettes (continued)

- *Assist populations and groups*: Operation RESTORE HOPE: Foreign Humanitarian Assistance in Somalia, 5 December 1992 – 04 May 1993.
 - Overview: Beginning with Special Reconnaissance missions by U.S. Navy special warfare units, the U.S. Marines of 15th Marine Expeditionary Unit (MEU) conducted an unopposed amphibious assault on 9 Dec 1992 at several locations in and around Mogadishu, Somalia. The operation was a UN-sanctioned effort to ensure humanitarian assistance, relief supplies, and foodstuffs could be delivered to the starving people of Somalia. The complete breakdown of government function and the presence of numerous warring factions in Somalia in the early 1990s prevented delivery of humanitarian aid to the country by normal means. Thus multinational military forces, led by the U.S. Armed Forces, were necessary in order to establish the conditions required by civilian aid agencies to conduct humanitarian relief in the cities and the countryside. Although relief efforts continued to experience significant interference by Somali warlords and criminal elements in many areas of the country, overall the operation did provide significant aid and relief to the most needy in the population of Somalia.
 - Reference: Mroczkowski, Col Dennis P. USMCR (Retired), *Restoring Hope: In Somalia with the Unified Task Force, 1992-1993*, USMC History Division, Washington, D.C., 2005; and Stewart, Dr. Richard W., *The United States Army in Somalia 1992-1994*, Center of Military History, 25 January 2012.

- *Establish a lodgment*: Operation CHROMITE: Amphibious Assault at Inchon, 15-19 September 1950.
 - Overview: The daring amphibious assault at Inchon, Korea on 15 September 1950 by JTF-7 including the 1st Marine Division and the 7th Infantry Division, proved a critical turning point in the Korean War. It functioned as a turning movement by establishing a lodgment deep in the operational level rear areas of the north Korean Peoples' Army (nKPA), severing their logistical lifeline and reducing the pressure on the UN Forces in the Pusan Perimeter. It demonstrated the use of maneuver to achieve surprise and avoid enemy strengths by landing where he was weak. It took advantage of the UN Forces' strengths, control of the sea and air, to achieve decisive advantage over the enemy's strengths on land by building forces rapidly in his operational rear and then using those friendly ground forces to encircle and destroy enemy forces. Operation CHROMITE's success relied on an effective initial entry force supported by joint assets and by rapidly inserting reinforcing entry forces to establish a lodgment. This lodgment then brought in sufficient follow-on forces and capabilities to re-take Seoul, control the ground lines of communications on the Korean Peninsula, and to begin the counter-offensive toward the Yalu River.
 - Reference: Appleman, Roy E., *South to the Naktong, North to the Yalu (June to November 1950)*, Center of Military History, 1961.

2. Purpose

The Joint Concept for Entry Operations describes how Joint Force 2020 will integrate force capabilities across multiple domains to project forces onto foreign territory in hostile or uncertain environments. Its purpose is to guide force development by:

- Establishing a common intellectual framework for military professionals, DOD policy makers, and others interested in the challenge of entry operations.
- Invigorating interest in and study of an operational challenge that a generation of military leaders, focused on other missions, has not had to consider in recent years.
- Establishing a basis for subsequent joint and Service concepts and doctrine.
- Informing study, wargaming, and experimentation that will result in recommendations to change doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P).
- Identifying the capabilities required to achieve entry.

3. Scope

The JOAC is the Chairman's vision for overcoming A2/AD threats in the future security environment. Gaining and maintaining access to an operational area is described within the JOAC family of concepts. Exploiting the advantage of freedom of access to an operational area, JCEO focuses on the integration of force capabilities across domains in order to secure freedom of maneuver on foreign territory *within* an operational area. Thus, JCEO describes how the Joint Force could project and employ military force onto foreign territory in hostile and uncertain environments once operational access has been established. It focuses on the actions of military forces in joint and multinational operations at the operational level. It applies to combatant commands (CCMDs), Joint Task Forces (JTFs) and their subordinate commands. Joint and multinational military campaigns beyond the actual conduct of entry operations are outside the scope of this paper. This concept does not establish specific programmatic requirements, although it does identify the capabilities required to implement the described approach.

4. Key Assumptions

Key assumptions that are critical to this concept and its recommendations include:

- The JCEO must align with the operational approaches described in the CCJO: JF2020 and the JOAC.
- The future Joint Force retains the ability to conduct entry operations with both littoral and non-littoral capabilities.
- Entry operations in the timeframe of this concept (out to 2020) will be conducted with existing or programmed airlift, aerial refueling, and sealift assets.

- Overall, a larger percentage of the Joint Force will be homeland-based.
- Entry operations will likely be conducted with or in support of multinational partners.
- The Joint Force is successful in gaining and maintaining sufficient access to an operational area with adequate freedom of action to project forces inside it.

5. Entry Operations in the Future Operating Environment

During the joint operational planning process for an entry operation, commanders should focus on key entry operational characteristics.⁷ While these operational characteristics apply broadly to all military operations, they tend to be more critical during entry and serve as a useful method to analyze requirements for successful execution of these complex operations.⁸ These operational characteristics include:

- Purposes for entry operations
- Geographic and infrastructure challenges
- Capacity for entry operations
- Evolving threats
- Social media, cultural factors, and commercial capabilities
- Whole of government approach
- Multinational and coalition interface and interoperability

Purposes for Entry Operations. There are five historical purposes for conducting entry operations that will remain valid for the future operating environment. Understanding the nature of these purposes allows for a deeper understanding of entry operations in general and will inform the development of future methods of conducting them. The five purposes for conducting entry operations are:

- *To defeat threats to the access and use of the global commons.* Joint forces operating in the land domain may be required to locate and defeat a potentially wide array of land-based threats to commercial activities and/or military forces

⁷ The future security environment articulated in the CCJO: JF2020 and the JOAC describes the future operating environment in which entry operations, as described in this concept, will take place.

⁸ Success in military action is predicated on deliberate, persistent efforts to better understand the mission, threat, environment, and whole of government actions. Through education, immersion, and the study of regional responses to our actions, the Joint Force must continually seek a more thorough understanding of those cultural, geographic, and threat challenges throughout the regions which it expects to influence. Without understanding, there is the potential for significant missteps, some of which may be unrecoverable for extended periods. With understanding, the Joint Force applies force or influence at the point of greatest effect. Complete understanding of the operational environment is impossible in a fluid world. As such, the Joint Force should constantly seek to improve understanding of the adversary and environment to leverage the benefits it provides. Additionally, the Joint Force must develop and enhance this understanding through whole of government efforts in order to expand its impact on regional efforts.

and capabilities operating in the global commons. These threats could be as diverse as piracy or sophisticated A2/AD forces and capabilities.

- *To find, control, defeat, disable, and/or dispose of specific WMD threats.* Due to the catastrophic danger posed by WMD, their components and precursors, it may be necessary to isolate, secure, or seize⁹ these assets when a nation loses control or is about to lose control of them. Alternatively, it may be necessary to act swiftly against those nations or non-state actors with hostile intent in order to defeat, disable, or dispose of WMD elements before they can be employed or proliferated. This will require integrating the unique intelligence, surveillance, and reconnaissance (ISR) capabilities, handling techniques, transportation assets and crews under the control of a dedicated and specifically trained force. Given the current level of proliferation of WMD capabilities, the risk of this threat may increase in the future along with the need to conduct counter-WMD (CWMD) missions.
- *To conduct other limited duration missions.* In entry operations there are other missions where a limited objective is sought and where there is no requirement to establish a lodgment. These include missions such as a raid, special reconnaissance, show of force, demonstration, feint, or personnel recovery. They are conducted for a variety of purposes such as performing counterterrorism actions, deception, destroying key facilities, and securing information about the adversary that can only be gained through contact. It is important to understand that these operations will include a preplanned withdrawal.
- *To assist populations and groups.* In this category of operations the primary mission is not to defeat the enemy, but to provide assistance. These missions range from smaller scale assistance operations for select groups to larger scale noncombatant evacuation operations (NEO) or relief operations. The capabilities required to conduct this type of mission may be significantly more logistics-oriented than the other four purposes for entry. It is important to remember that armed opposition may be encountered in such situations. These may require an airhead or beachhead to facilitate delivery of supplies and equipment or to evacuate personnel. Frequently these operations require cooperation with other governmental and non-governmental agencies.
- *To establish a lodgment.* This mission is defined in JP 3-18, *Joint Forcible Entry Operations*. *Forcible entry* and *lodgment* are linked in joint doctrine where the entry is opposed and the Joint Force secures sufficient maneuver space and key infrastructure in order to establish a lodgment that sets the stage for a

⁹ Follows the intent of the DRAFT *National Defense Strategy for Countering WMD*, May 2013 (pgs. 13-14) and emerging joint doctrine as prescribed in the DRAFT JP 3-40, *Combating Weapons of Mass Destruction*, Chapter V.

larger-scale and longer lasting operation that requires the flow of other forces and sustainment. The overall purpose could be for any number of reasons defined by the campaign objectives.

Geographic and Infrastructure Challenges. While geographic and infrastructure challenges are universally present, due to the nature of entry operations, where the theater enablers (lines of communications, basing, logistics, ISR, communications networks, etc.) tend to be immature, they often have even greater impact. These physical challenges include:

- Distance from the homeland and/or forward basing to the operational area
- Distance inland from navigable waters to the initial objective area
- Nature of the climate and terrain in the operational area
- Conditions and capacity of the infrastructure in the operational area
- The density of urbanization in the operational area

During much of the Cold War, the United States frequently overcame geographic and infrastructure challenges with the use of forward-based forces to establish presence and to ease the deployment burden in response to potential crises. A changing defense posture, where ground forces are increasingly homeland-based and naval forces may be more forward based, may exacerbate geographic and infrastructure challenges even further.

Capacity for Entry Operations. It is important to remain cognizant of the impact of entry force capacity on the ability to execute missions in support of national policy. Entry forces capacity not only greatly impacts the conduct of entry operations, it also greatly affects the ability of the Joint Force to conduct humanitarian assistance in situations with degraded or austere infrastructure. Currently, a limited number of U.S. ground combat formations are trained and equipped for entry scenarios without the requirement for joint Reception, Staging, Onward Movement and Integration (RSO&I) at an Intermediate Staging Base (ISB) or secure lodgment.¹⁰ Taking into account the limited number of air and sea ports that can accept large capacity aircraft and ships, our ability to project power to potential crisis areas could be significantly challenged. This places a premium on entry capable forces¹¹ that can arrive using assault lift assets without the requirement for RSO&I at a secure lodgment or ISB.

¹⁰ Reception, Staging, Onward Movement and Integration (RSO&I): A phase of Joint Force projection occurring in the operational area. This phase comprises the essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting operational requirements. *DOD Dictionary of Military and Associated Terms*, http://www.dtic.mil/doctrine/DOD_dictionary/ [accessed 5 Jun 13].

¹¹ Entry capable forces must be able to deploy rapidly, arrive without the requirement for RSO&I, and employ immediately upon arrival. See definitions of Initial and Reinforcing Entry Forces, Section 7, pg. 16.

Evolving Threats. Due to the proliferation of A2/AD capabilities, as well as increasing adversary capabilities to exploit or threaten space, cyberspace and command, control, communications, computers, intelligence, surveillance, reconnaissance (C4ISR) assets, future entry operations will be more challenging and potentially involve greater risk. After overcoming the most significant anti-access threats while getting to the theater, the future Joint Force must continue to defend against these threats while overcoming area denial challenges during and after the entry. Adversaries may employ an assortment of capabilities in innovative ways to deny freedom of action within an operational area. Annex B provides a review of particularly difficult threat systems and likely methods of employment.

Social Media, Commercial Capabilities, and Cultural Factors. A particularly challenging global trend is an adversary's use of global and social media technologies that provide an additional ISR capability, challenge operational security, and exacerbate friendly forces' mistakes by widely publicizing them in public and international forums. Many of these technologies are difficult to counter because of their ubiquitous nature and due to policy limitations. Given the expanding broadcast capability of social media and global commercial communications, it is also vital that the future Joint Force understands and properly accounts for the growing influence of cultural factors on the conduct of operations. Otherwise, legitimacy as well as public opinion and international support for the operation could be negatively impacted.

Whole of Government Approach. Cooperative efforts as part of a whole of government approach help set operational conditions. They assist in preventing conflict, furthering ties with potential allies coordinating for over-flight rights and temporary basing solutions, and aiding potential force deployment options.¹² Such engagement includes Phase Zero long-term military and interagency efforts that may continue for years before a crisis occurs. Additionally, the narrative built during engagement operations can have a significant effect on the success of U.S. Government communication guidance during a crisis response. The more trust regional partners and their populations have in U.S. intentions and capabilities, the more likely they are to support joint and multinational operations when necessary.

Multinational and Coalition Interface and Interoperability. Only in rare instances will the United States act alone in future military operations. Therefore, entry operations must deliberately and continuously account for multinational partnerships. Understanding potential multinational partners' unique capabilities, national caveats (particularly Rules of Engagement [ROE] factors), and interoperability demands is essential and requires continuous planning and

¹² The Whole of Government Approach, as described in the 2010 version of the National Security Strategy, strengthens national capacity. "To succeed, we must update, balance, and integrate all of the tools of American power..." These tools include defense, diplomacy, economic, development, homeland security, intelligence, strategic communications, the American people and the private sector. *National Security Strategy*, May 2010, pg. 14.

preparation on the part of U.S. forces and partners. Additionally, military messaging must be consistent with U.S. and the coalition's strategic messaging.

6. The Military Problem: Entry Operations in an Advanced Area Denial Environment

Given this future operating environment, the future Joint Force must be able to enter onto foreign territory and immediately employ capabilities to accomplish assigned missions in the presence of armed opposition, including advanced area denial systems, while overcoming geographic challenges and degraded or austere infrastructure.

7. A Concept for Joint Entry Operations

To address the military problem above, future mission-tailored joint forces will establish appropriate operational conditions and conduct entry by fully integrating force capabilities across multiple domains to exploit gaps in an adversary's defenses at select entry points to achieve operational objectives.¹³

The aim is to employ opportunistic and unpredictable maneuver in and across multiple domains, establishing local superiority at multiple entry points to gain entry and achieve objectives. The unique context of the situation determines the size and composition of the Joint Force, form(s) of maneuver, number of entry points, level of dispersion or concentration of forces, ability to achieve tactical surprise, and degree of risk. Additionally, a Joint Force commander must have access to required enabling capabilities in all domains, fully integrated with a command and control structure, in order to effectively transition through all phases of the entry operation. This approach, employing a more interoperable and synchronized joint force, is outlined below and explained in further detail through the remainder of Section 7.

¹³ The phrase "select entry points" is used in the broader context as described in the JOAC: "Create pockets or corridors of local domain superiority to penetrate the enemy's defenses and maintain them as required to accomplish the mission. It is not necessary to achieve domain superiority permanently in a given domain throughout the operational area to accomplish the mission. Although Joint Forces in recent decades usually enjoyed such superiority—or even supremacy—future Joint Forces often may not. A Joint Force commander who waits for that condition will likely surrender the initiative and miss opportunities." JOAC, pg. 23.

Establish Appropriate Operational Conditions

Continual Pre-Crisis Unified Action and Theater Engagement. Condition setting does not occur only in response to crisis, but is a combination of continual pre-crisis unified action in association with theater campaign planning and engagement activities, followed by crisis-specific actions. Crisis-specific condition setting will normally consist of additional Intelligence, Cyberspace, and Logistics Operational Preparation of the Environment (I-OPE, C-OPE, and L-OPE, respectively). Additionally, deception actions across domains, repositioning of forces, employment of joint fires to shape and influence enemy decisions, and the neutralization or destruction of enemy forces are vital to achieving a position whereby forces can disrupt or neutralize most enemy area denial capabilities. To some extent, all joint functions require pre-crisis preparation of the environment to aid in deployment of forces and the conduct of initial operations to support entry.

The Joint Force and multinational partners will use diplomatic and informational elements of national power coupled with “Phase Zero operations,” such as special operations and security assistance, to isolate state and non-state actors in an attempt to erode their base of support and to isolate the joint operational area. Unified action, including diplomatic efforts, will facilitate setting conditions in response to a crisis; it will involve wide-ranging actions to secure access to necessary basing and sustainment and to finalize the terms of reference for multinational partners’

participation. Diplomatic and informational actions will precede and may overlap with combat operations to establish entry conditions or the entry operations

Central Idea

Future mission-tailored joint forces will conduct entry by integrating force capabilities across multiple domains, exploiting gaps in an adversary’s defenses at select entry points to achieve operational objectives.

Central Idea Framework

- **Establish Appropriate Operational Conditions**
 - Continual Pre-Crisis Unified Action and Theater Engagement
 - Crisis Specific Condition Setting
- **Form Mission-tailored Joint Forces for Entry Operations**
 - Command and Control for Entry
 - Types of Forces
 - Force Posture Categories
- **Conduct Entry by Integrating Force Capabilities Across Multiple Domains**
 - Maneuvering through multiple domains
 - Envelopment, Infiltration, and Penetration forms of maneuver
 - Unpredictability, localized capability advantages, select multiple entry points
 - Use of mobile joint sea-bases, expeditionary beachheads, and airheads
 - Integration of manned, unmanned and autonomous systems
- **Transition to Achieve Operational Objectives**
 - Entry force achieves all operational objectives and withdraws
 - Entry force transitions to Follow-on Forces or non-military partners
 - Follow-on Forces
 - In-stride transitions
 - Relief-In-Place transitions

themselves. The Joint Force will set conditions that create gaps in adversary defenses at critical times and locations which can, when exploited, increase the success of the required entry operation.

Crisis-specific condition setting. This includes operational preparation of the environment, surprise, and the repositioning of forces and the employment of joint fires. Critical to setting the conditions for entry operations is continuous *I-OPE* throughout the operating area. Synchronized ISR, along with local and regional understanding, will allow the Joint Force to anticipate points of conflict and leverage or counter the use of social and global media or other commercial capabilities. From this, the Joint Force will develop a thorough understanding of potential belligerents' critical capabilities, requirements, and vulnerabilities in order to determine centers of gravity. Once identified and understood, the Joint Force will be able to determine the best points of entry to gain an advantage over the adversary. Detailed analysis of collected intelligence focusing on A2/AD strategies and the adversary's active and passive assets will drive operational actions and decisions. This data will support lethal and non-lethal precision strikes designed to eliminate or suppress A2/AD threats in support of force projection. Passive systems such as surface and subsurface explosive devices will be of significant interest for maritime operations, threatening all types of shipping and assault landing craft. Secondly, a thorough understanding of the entry operation's logistical requirements and limitations, as well as deliberate pre-crisis preparatory actions driven by theater engagement activities, will better enable uninterrupted sustainment of forces. This pre-crisis *L-OPE* coupled with actions conducted during the emergence of a crisis ensures that the entry forces can be projected without reaching a culmination point. Logistical requirements for entry are developed during detailed pre-crisis planning and aid in further identification of the most suitable entry points as well as areas of special logistical concern. Thirdly, to optimize cyberspace support, *C-OPE* must be clearly integrated and synchronized with operations in other domains. This may require long-lead times before the actual entry operation.

In addition to OPE, the Joint Force will maximize surprise through deception, stealth, and ambiguity to counter adversary terrestrial, aerial, and space-based ISR and complicate targeting. One method the Joint Force may use to confound the enemy is to create either a dearth or overabundance of targets for the enemy to process. Social media and other cyber-enabled deception methods may be valuable contributors to gaining surprise. Where surprise is not possible due to the nature of the operating area or the duration of the operation, the Joint Force will seek to overwhelm the enemy's targeting capability. This could be done, for example, through a combination of cyberspace efforts and the use of numerous autonomous decoys employed in one or more of the other domains. The radar and electromagnetic spectrum (EMS) signatures of these systems should match that of the system they are simulating to create more targets than the enemy can process or engage. Additionally, these devices could possess the ability to attack targets autonomously as they present themselves through the use of various electronic counter countermeasures (ECCM) and seek out critical targets for attack.

Deception efforts may also result in the adversary exposing previously concealed capabilities, opening them up to joint fires engagement. Additionally, information operations¹⁴, including those enabled by cyberspace employed in either a clandestine or overt manner, may be able to move populations away from potential points of entry in order to minimize collateral damage concerns.

Finally, crisis-specific condition setting requires the repositioning of forces and the employment of joint fires. In a hostile environment, fires will be mutually supporting across all domains to develop local superiority by suppressing threats to air and maritime operations. For example, information operations, cyberspace, and space operations may be used to help a special operations unit to target, track, and conduct a direct action strike on an adversary's anti-ship system, permitting naval surface fires to engage enemy air defense assets. In turn, this engagement would allow global strike assets to eliminate key short range area denial assets that would otherwise impede the entry force.

In an uncertain environment, the Joint Force may face ROE that severely restrict ISR assets and prevent the elimination of threats through preparatory fires and direct action. Often, uncertain environment ROE does not allow the Joint Force to engage potential threats until the adversary initiates hostile action or clearly demonstrates hostile intent. In such scenarios, the Joint Force must locate and track as many of the potential adversary's area denial assets as possible, and be prepared to defend against or to destroy them as soon as they pose an active threat.¹⁵

In a permissive Foreign Humanitarian Assistance (FHA) operation, the biggest challenges to entry most likely involve infrastructure that is austere or has been severely degraded and coordinating with non-military partners (including interagency, non-governmental, and host nation actors). Degraded or austere conditions complicate the delivery of aid and relief to areas where needed. In such conditions entry forces are perhaps best suited as "first responders." They are able to provide the initial response because of their unique ability to enter and operate without dependence on significant infrastructure; assets such as rotary wing and tilt rotor aircraft, aerial delivery systems and techniques, cyber-capable combat communications units, and expeditionary sustainment assets are particularly useful in FHA situations. Entry forces using complementary multiple domain capabilities can facilitate follow-on efforts to provide life-saving assistance, deliver aid supplies, and to start repairing damaged infrastructure or overcome geographic challenges impeding FHA operations. Likewise, command and control (C2) capabilities can be

¹⁴ From JP 3-12, *Joint Cyberspace Operations*: "While it is possible some military objectives can be achieved by cyberspace operations alone, cyberspace operations capabilities should be considered during joint and operational planning, integrated into the joint force commander's plan, and synchronized with other operations during execution." (pg. vi)

¹⁵ During NEO and FHA operations, joint forces may need political approval before utilizing overwhelming firepower to defeat adversary area-denial threats even after being engaged. (Mroczkowski, pg. 98)

leveraged to coordinate with the interagency, particularly the Department of State, from initial crisis planning through the execution and eventual handoff to civilian or partner military organizations.

Form Mission-tailored Joint Forces for Entry Operations

In order to successfully execute the entry mission¹⁶, the Joint Force must be tailorable to the demands of the situation and the mission at hand.¹⁷ Tailoring the force begins with understanding the operational objectives, the overall purpose for conducting the entry. As discussed earlier, the purposes for entry are the primary factors that determine the size and composition of the entry force, as well as the expected operational duration. Additionally, due to the potential for an immature theater command structure during entry operations, mission-tailored joint forces require an entry-specific set of C2 capabilities to integrate forces and capabilities. Finally, mission-tailoring the joint force for entry operations requires careful consideration of the types of forces available and how they are globally postured. Important aspects of these C2, force type, and posture considerations are described below.

Command and Control (C2) for Entry. Effective command and control is essential to integrate the assigned, attached, and supporting forces required to maneuver through multiple domains to achieve entry. Effectively integrating and employing forces from all of the Functional Combatant Commands (FCCs) into and across multiple Geographic Combatant Commands (GCCs) demands agility and is characteristic of the idea of Globally Integrated Operations (GIO) as described in the CCJO: JF2020. The GIO-C2 structure envisioned to conduct entry operations contains the following:

- *Habitual Relationships.* While JTFs are purposefully built and are frequently temporary in nature, they should rarely be completely ad hoc, forming only as a crisis emerges. To enable more effective entry command and control, some pre-crisis habitual relationships between Joint C2 structures and joint forces is desired. These pre-crisis habitual relationships are not standing JTF requirements. Rather, they are based on common and routine joint planning, training, exercises, and wargames with CCMDs, their Service components, potential JTF headquarters and their JTF functional components and regionally and mission aligned entry forces. These activities should be aligned with existing pre-deployment exercises, where possible, in order to not interfere with Service-specific training requirements. Additionally, these habitual

¹⁶ *Mission:* The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. JP 1-02, *DOD Dictionary of Military and Associated Terms*, http://www.dtic.mil/doctrine/DOD_dictionary/ [accessed 5 Jun 13].

¹⁷ *Tailable:* Capable of being adapted to a given purpose or function. *Webster's Unabridged Dictionary*, 2001.

relationships should (where feasible) include regular planning, training, exercises, and wargames with likely interagency and multinational partners. The foundation for these habitual relationships is the ability to rapidly establish command relationships (joint and multinational) based on shared exercise experience conducting entry operations. While the relationships themselves may not endure between individuals, the exercises help develop understanding of the complexities of entry operations, particularly for the GCC and JTF staffs. Since entry operations could be conducted on short notice and will frequently be the first significant commitment of forces to an area of operations, the ability to form C2 relationships quickly with staffs that understand the intricacies of entry operations is critical and requires flexible commanders and staffs.

- *Authority.* Sufficient C2 authority to execute the entry operation effectively provides the Joint Force commander the ability to integrate and synchronize joint and multinational forces. This authority must extend to all joint functions and include the ability to globally integrate and employ FCC and GCC forces where and when needed during the entry operation.¹⁸
- *Interoperability.* A Joint Force that uses an enterprise approach to standardize DOD C2 protocols and systems will enable better interoperability. This interoperability of Service and allied C2 systems allows rapid expansion and synchronization of joint and combined forces' C2 for specific mission requirements. This flexible, redundant, and expandable cyberspace architecture creates command and control network agility. An agile network can expand and contract when needed as well as mitigate the loss of nodes or commanders within the network.
- *Mission Command.* It is expected that the electromagnetic spectrum will be contested during entry operations in the future operating environment. This will significantly challenge command and control during the entry operation. Because of this, the utilization of mission-type orders, which can better support decentralized execution, may well be imperative for mission success. Commanders must prepare to operate in a communications-denied or intelligence-denied environment.

Types of Forces. The task of conducting an entry operation involves the introduction of combinations of four types of joint forces. Each of the four types will be individually tailored based on the operational requirements. The characteristics of each of the four types are unique and carry with them specific implications to the Services' manning, training and equipping decisions. The four types of forces are: Support Forces, Initial Entry Forces, Reinforcing Entry Forces, and Follow-on Forces (See Annex C). Not all entry operations require Reinforcing Entry Forces or Follow-on

¹⁸ Unified Command Plan, 6 April 2011, The White House, pgs. 6-33, CCMD responsibilities.

Forces. In some cases, entry forces (Initial Entry Forces alone or supported by Reinforcing Entry Forces) will, with the aid of Support Forces, achieve the major operational objectives without Follow-on Forces. Given the limited capacity of entry forces, Follow-on Forces are more likely to be needed as the size of the overall operation increases.

- *Support Forces.* Potentially operating across all domains, these forces provide capabilities to set the conditions and support the conduct of entry operations. These capabilities include, but are not limited to, intelligence, surveillance, and reconnaissance assets, aerial refueling, strategic airlift and sealift, maritime mine clearance capabilities, global strike, air and missile defenses, air interdiction and close air support, space and cyberspace capabilities (offensive and defensive) as well as special operations forces.¹⁹ A critical element in future entry operations is achieving some level of surprise through deception by entering where least expected, or by entering where the enemy is unable to detect the entry force, an increasingly difficult task given modern ISR capabilities. Support Forces are critical to the conduct of deception, establishing conditions that confuse the enemy's intelligence and decision making capabilities, and blinding the enemy's ability to detect where and when the entry will take place in the critical opening phases of that entry operation.
- *Initial Entry Forces.* These are the first forces to enter onto foreign territory. They include both Conventional Forces (CF) and Special Operations Forces (SOF). Their defining characteristic is their ability to insert offset from infrastructure (such as airfields and seaports) by air, surface or subsurface assault or infiltration means as tactically coherent units and formations that are able to operate immediately upon arrival. Currently, the means of assault insertion included air assault, amphibious operations, airborne assault, and airland operations. Initial Entry Forces are able to operate for predetermined periods of time without a need for external sustainment. The concept of Initial Entry Forces (and Reinforcing Entry Forces) is scalable and applies to small entry operations as well as to larger entry operations.
- *Reinforcing Entry Forces.* These forces reinforce Initial Entry Forces shortly after the initial entry. Reinforcing Entry Forces, which may be either CF, SOF, or a combination thereof, are more heavily equipped than Initial Entry Forces in order to increase the firepower, protection, mobility, or other required capabilities to support initial operations. They do not require RSO&I upon arrival²⁰ and can operate immediately or shortly after landing. However,

¹⁹ Special operations forces or reconnaissance forces may conduct actions in support of a larger entry operation, or may conduct the entry operation themselves.

²⁰ JP 1-02 defines Reception, Staging, Onward-movement and Integration (RSOI) as "A phase of Joint Force projection occurring in the operational area. This phase comprises the essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting

Reinforcing Entry Forces must follow the Initial Entry Forces into the area of operations due to offload security requirements that must be met prior to their introduction. Closing the Reinforcing Entry Force on the initial objectives quickly is critical to ensuring the survival of the Initial Entry Force during opposed entry operations. Depending on the specific mission of the Reinforcing Entry Force, existing infrastructure may be needed to support offload, or the Reinforcing Entry Force may be the force creating the expeditionary infrastructure (such as expeditionary airfields) needed to support receipt of Follow-on Forces and replenishment of logistics for the Initial Entry Force. Some limited duration missions may only employ an Initial Entry Force and not require the capabilities of Reinforcing Entry Forces. For entry missions limited in scope and duration, a planned withdrawal with little to no use of Follow-on Forces is normally expected.

- *Follow-on Forces.* In some circumstances, entry operations will be conducted to support Follow-on Forces. These forces will deploy to a lodgment already secured by Initial Entry Forces and Reinforcing Entry Forces, and will be aided by support from the larger joint force. By incorporating the capabilities of entry forces, Follow-on Forces are able to conduct a range of missions in pursuit of a military campaign that is beyond the purpose of the entry operation itself. In general, Follow-on Forces require some form of RSO&I activities before they are able to conduct operations and must arrive using existing airfields and seaports or expeditionary airfields and seaports.²¹ If sufficient infrastructure does not exist, Follow-on Forces may need to aid the Reinforcing Entry Force in improving and expanding it. Not all entry operations will require the deployment and support of Follow-on Forces, just as the purpose of entry is not always in support of establishing a lodgment and a larger military campaign.

Force Posture Categories. An additional characteristic of Globally Integrated Operations is flexibility in establishing and employing joint forces for entry operations in short order. Across the Joint Force it is vital to properly posture forces for timely and correct responses to emerging crises. This requires ready access to a range of force postures in order to build effective entry capabilities. During deliberate and crisis action planning at all levels of command, this requires thorough understanding of the advantages and disadvantages of each category of force posture. Over time, the allocation of joint forces to these posture options can and should change to best meet national strategy and combatant commander needs. Additionally, it is possible for a force to exist in more than one of these categories at a time. For example, some

operational requirements.” This definition is not characteristic of entry forces which are expected to fight immediately upon arrival and logically then should not require any RSOI activities. However, in most cases Follow-on Forces do require RSOI activities before being able to conduct combat operations.

²¹ Typically, expeditionary seaports require the use of Joint Logistics Over-the-Shore (JLOTS) capabilities.

U.S. Army Special Forces Groups have two battalions that are homeland-based and regionally-aligned and one battalion that is forward-based. Each of these battalions is comprised of teams that are mission aligned with special training, equipment, and organizational structure.

- *Forward-based Forces.* Those forces permanently based in a forward-deployed GCC Area of Responsibility (AOR).²² Forward-based Forces provide commanders situational awareness and forces closer to a given operational area than other types of forces, easing deployment and strategic lift demands. These forces may be more expensive to maintain and will have limitations placed on them by the host nation and the U.S. Government. However, they are well suited to rapid response, theater engagement to shape and set conditions, and perform key missions like Special Reconnaissance in support of entry operations.
- *Rotationally Forward-deployed Forces.* These forces provide great flexibility to a Combatant Commander to surge for crisis response, engagement, deterrence, and entry operations. There are some considerations with force availability concerning Rotationally Forward-deployed Forces based on the ability to maintain them on-station in forward areas, whether that be on land, at sea, or in the air. These include the regular rotation of forces, the availability of strategic lift and access to temporary basing. These forces include capabilities like the Marine Expeditionary Unit (MEU) and its associated Amphibious Readiness Group (ARG), Carrier Strike Groups (CSGs), Maritime Patrol Aircraft, and submarines as well as periodic rotation to forward basing areas of other Joint Force capabilities, such as Patriot missile batteries to provide temporary air and missile defense capabilities.²³
- *Homeland-based Regionally-aligned Forces.* Allows Geographic Combatant Commanders to have a regionally-specific trained and focused list of forces available in the homeland, tailored to regional plans and problem sets. Particularly well suited for theater shaping and engagement missions and response to a “no plan” scenario in a given GCC AOR.
- *Homeland-based Mission-aligned Forces.* Allows some homeland-based forces to be specifically organized, trained, and equipped for particularly demanding missions that require specialized training and equipment, high standards of mission competency, and readiness to deploy, e.g., forces set aside to focus on entry missions such as those delineated in the Global Response Force Execution Order (GRF EXORD). However, these forces must retain the ability

²² While USNORTHCOM has an AOR that includes much of the Homeland, most of the forces therein are Service-Retained Forces or belong to one of the Functional Combatant Commands.

²³ Normally it requires at least three like units to maintain one rotational forward deployed. This includes one unit forward deployed, one unit in training and preparation for deployment, and one unit in recovery from deployment.

to perform other missions outside of their specific mission focus in order to be useful for general purpose requirements.

- *Unassigned or Service Retained Forces (General Purpose Capabilities).* Those forces and capabilities that remain truly general purpose in order to support a wide range of missions in any region.

In summary, mission-tailored joint forces are organized, trained, and equipped with unique capabilities to perform entry operations. Mission-tailoring begins with a thorough understanding of the purposes for entry, purposes that can differ in operational duration and the type and quantity of forces required. Mission-tailoring continues with the selection of the optimum mix of joint forces from all global force posture categories and is completed with effective entry-capable command and control structures to allow joint commanders to integrate selected joint and multinational forces. How specific Joint Force capabilities are employed to achieve entry is described in the next section.

Conduct Entry by Integrating Force Capabilities Across Multiple Domains

Entry forces will envelop, infiltrate and penetrate in and/or across multiple domains at select points of entry to place the enemy at an operational disadvantage. Maneuver capabilities in multiple domains present many potential threats to the adversary, overloading his decision cycle and allowing the Joint Force to seize and retain the initiative. In response to a review of Joint Force strengths and weaknesses, an adversary will be compelled to consider which investments in technology and time afford it the best opportunity for success. It may prepare for all possible forms of entry, or it may focus on just one. Either way, the adversary can be made vulnerable by exposing weakened defenses in one or more domains, allowing the Joint Force to achieve local domain superiority at one or more points of our choosing. For example, if the enemy focuses on the periphery, the Joint Force will attack in-depth. If the enemy defends in-depth, the Joint Force will concentrate at critical points. When the enemy focuses in any domain, the Joint Force will capitalize on defeating him in another where he is weaker.

When an adversary has fortified a beach, the Joint Force may use the vertical maneuver to envelop the adversary from the rear. Alternatively, when the adversary has greater strength in air defenses, the Joint Force can approach via the sea for (a surface or subsurface) entry. For this and other reasons, the Joint Force will improve the ability to maneuver via the sea and air domains. This will include the improvement of not only surface and vertical maneuver capabilities but also the expansion of subsurface maneuver. By exploiting the sea and the air as maneuver spaces, the Joint Force will be able to threaten a greater number of the adversary's critical assets as well as increase the unpredictability of the force. Maneuvering through multiple domains to multiple and potentially unexpected entry points can allow the Joint Force to minimize the likelihood of fighting into the teeth of the enemy's defenses. While it is expected that Joint Force commanders will consider all

forms of offensive maneuver, it is central to this concept that integration of force capabilities during entry operations is best suited to the use of envelopment, infiltration and penetration. Additionally, these forms of maneuver could apply conceptually to all domains during entry operations and not merely to maneuver in the land domain.

- *Envelopment.* This allows the Joint Force to utilize its advantages in mobility in each physical domain (air, land, and maritime) to maneuver entry forces into the adversary's undefended areas. From here, the Joint Force is able to strike where the adversary is weakest to gain physical and cognitive advantage and exploit critical enemy vulnerabilities.
- *Infiltration.* This may be the preferred method to insert an entry force for the purpose of affecting the adversary's rear areas, disrupt his cohesion, and to avoid or defeat area denial threats. Typically, this form of maneuver is best suited to smaller scale entry operations.
- *Penetration.* In some situations, it may be preferable to utilize penetrations to enter hostile territory. A penetration allows for the concentration of Joint Force capabilities to at least temporarily overwhelm an enemy's defenses.

Regardless of the type of maneuver, mobility and flexibility are critical and enhanced when fully integrated with cyberspace and space capabilities. Entry operations require the ability to build up capabilities as quickly as possible. Forces must be able to disperse to seize key terrain or for self-preservation, and to concentrate rapidly to exploit opportunity.

The use of maneuver through multiple domains in concert with mission-tailored forces will allow the Joint Force to minimize vulnerabilities during force buildup. Potential adversaries are aware of our reliance on infrastructure to unload the heavy equipment that the United States typically uses to achieve overwhelming force, and these enemies will seek to deny the use of such critical infrastructure. They will likely attempt to destroy facilities in order to disrupt our ability to close joint forces on the objective. By becoming unpredictable, while affecting and acting upon localized capability advantages in all domains, the Joint Force will maneuver to select entry point(s) that exploit the adversary's critical vulnerabilities while simultaneously reducing the risk to his own entry forces through surprise. When necessary, the Joint Force will conduct maneuver to seize expeditionary lodgments to allow for greater options to maneuver and close Follow-on Forces. This includes the use of sea-based forces and capabilities.

Where available, forward land bases are used to launch and support joint entry operations. Sea-basing can complement land bases, or serve as the sole means to launch and support operations. Both approaches can aggregate a variety of capabilities relevant across the range of military operations. When forward land bases are not available, sea-basing provides forward staging for entry or Follow-on

Forces, logistics support, offensive and defensive fires, ISR, and C2. Entry operations should make use of the available basing option(s) that produce(s) the greatest advantage for the Joint Force in terms of position, throughput, protection and surprise.

As required, lodgments will be rapidly established and exploited by Reinforcing Entry Forces to ensure rapid force closure with in-stream offload so that the Initial Entry Force can be quickly augmented in the initial assault objectives. These expeditionary facilities will also be rapidly disestablished and relocated as required to minimize vulnerability and increase force closure efficiencies on critical objectives.

Finally, unmanned and autonomous systems can be utilized to expand mobility, provide ISR, and precision strike for entry forces. A variety of unmanned options can be used to deceive or operate in the portion of the operational area that presents the most risk in order to saturate enemy defenses. Unmanned decoys can aid in drawing adversary fire away from critical manned assets, or in deceiving the adversary as to the critical point of attack. Unmanned systems working in concert with manned systems can be critical in overwhelming enemy defensive sensors. Unmanned ground and subsurface systems can be used to breach critical points where exposure of the entry force may be too risky. Additionally, continued development of manned/unmanned teaming and unmanned ground enablers provide ISR, mobile firepower, and precision fires to entry forces that can be used to clear critical areas without exposing the Joint Force. Unmanned sustainment capabilities able to penetrate area denial envelopes will be instrumental in sustaining an Initial Entry Force when there is no requirement for Follow-on Forces.

Transition to Achieve Operational Objectives

Achieving operational objectives will dictate the duration of an entry operation. Two types of entry transitions exist: (1) withdrawal of the entry force upon completion of operational objectives, or (2) transition to follow-on joint and multinational forces or to non-military partners and missions. Transitions must be planned in detail during campaign planning.

The first type of transition occurs with a significant number of entry operations where operations conclude with the entry force completing all objectives without any Follow-on Forces at a given location. In these operations, the entry force in concert with support forces will accomplish a preplanned extraction from the operational area. Examples include special operations or amphibious force raids to eliminate impediments to access, or evacuation and personnel recovery missions. During these operations, the withdrawal may be as or more challenging than the entry. While the entry may have the advantage of surprise, retaining it during withdrawal is much less likely, potentially requiring the entry force to fight its way out. Additionally, depending on the method of entry, alternate means of withdrawal may be required. In

particular, airborne forces utilized for this type of mission will require alternate extraction means, which may require indigenous, interagency or joint support²⁴.

Also included within this transition category are times when entry forces will be used independently in support of a broader operation and not receive reinforcement or be withdrawn for an extended period of time. Missions such as Operations GROUSE and GUNNERSIDE²⁵ in Norway, and Operation DINGSON 35A²⁶ in Brittany during World War II, fall into this category. Extended, independent operations like these require extensive sustainment planning and training to forage and survive in the environment. Such missions will eventually involve detailed extraction or relief by heavier forces. They may also utilize maneuver to develop asymmetrical advantages for entry, sustainment, and extraction.

The second type of transition consists of progressing to follow-on operations to serve the objectives of a large campaign. These can include transitions from the entry forces to U.S. Follow-on Forces, multinational forces or to interagency and non-military missions that could require assistance from entry forces to achieve operational objectives. In the latter case, the partnered agency does not have the ability to conduct an entry and relies upon joint or multinational entry forces to get into the operational area. An example may be a humanitarian mission such as Operation SEA ANGEL II²⁷ in Bangladesh during 2007-8, or a multinational peace enforcement mission. During these missions, the entry force will establish the initial beach or airhead that allows the agency to conduct its mission and then turn over responsibility to the agency or nation prior to a preplanned, time-driven withdrawal.

Follow-on Forces are employed when a transition to one or more follow-on missions is required. These follow-on missions are of two basic forms: in-stride transition and relief-in-place. During in-stride transitions, the entry force is

²⁴ Extraction may be by amphibious shipping, small boats, submarines, fixed and rotary wing aircraft in order to retrograde to intermediate staging bases, new operating locations, or home station.

²⁵ British Special Operations Executive operations to destroy the German heavy water facility at Vemork, Norway. Operation GROUSE inserted a four man Norwegian reconnaissance team on 18 October 1942 near the facility. They conducted surveillance of the facility for four months, supporting Operation FRESHMAN and later Operation GUNNERSIDE. During Operation GUNNERSIDE, nine more Norwegian commandos infiltrated into Norway to link up with the commandos from Operation GROUSE and destroyed the German heavy water facility at Vemork, Norway. After completing the mission, half of the combined team extracted to Sweden while the other half remained in hiding in Norway for the duration of the war and continued to pass intelligence to the Allies. Haukelid, Knut, *Skis Against the Atom*, North American Heritage Press, 1989.

²⁶ Operations by the Free French 4th Special Air Service to reinforce French Resistance fighters in Brittany and prevent German forces there from reinforcing the Normandy beaches during Operation OVERLORD. SAS forces remained in place until killed or eventually relieved by Allied forces in September and October 1944. Beavan, Colvin, *Operation Jedburgh: D-Day and America's First Shadow War*, The Viking Press, 2006, pg. 147.

²⁷ "U.S. Response to Cyclone Sidr: Operation Sea Angel II," Press Release, U.S. Embassy Dhaka, Bangladesh, 23 November 2007, http://dhaka.usembassy.gov/cyclone_sidr.html.

integrated into the continuing operation, such as Operation ICEBERG²⁸ on the island of Okinawa during World War II. During relief-in-place transitions, the entry force will hand over all responsibilities within the operational area to the follow-on force and extract, or reconstitute for follow-on entry operations, such as the 503rd Parachute Infantry Regiment did during Operation CARTWHEEL in New Guinea during World War II.²⁹

8. Capabilities Required by this Concept

The operational approach advocated in this concept entails potentially significant required capabilities for force development. 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 required capabilities that need additional thought and development. Although grouped by joint function for ease of understanding, many of these required capabilities apply across multiple joint functions. Furthermore, the required capabilities have implications for DOTMLPF-P as well as for integration with interagency and multinational partners. A list of initial implications follows each required capability. Following concept approval, subsequent analysis of these proposed capability requirements within JCIDS will provide the basis for developing capability solutions that will close the operational gap the concept addresses.

Command and Control:

Required Capability 1: The ability for a joint and multinational force headquarters to integrate the full range of FCC (USSTRATCOM, USSOCOM, USTRANSCOM) capabilities, GCC, and multinational partner capabilities in all threat environments while coordinating with whole of government and operating across multiple Areas of Responsibility during the execution of a range of real-world entry operations.

- a. Improve the ability to rapidly stand up a JTF for entry operations, focusing on pre-crisis deliberate planning, crisis action planning, and unity of command requirements. This could include further development and implementation of joint force aggregation protocols as recently noted in Service Title 10 wargames, e.g., EXPEDITIONARY WARRIOR 2013.
- b. Consider developing detailed Joint Manning Documents (JMDs), placed “on the shelf” to aid in entry operation crisis-action planning and JTF formation, for warfighting joint force headquarters. These JMDs should document requisite liaison, coordination, and planning team exchanges required by the entry

²⁸ Roy E. Appleman, James M. Burns, Russell A. Gugeler, and John Stevens, *Okinawa: The Last Battle*, Washington, D.C., Center of Military History, 1948, pgs. 68-79.

²⁹ Miller, John Jr., *Cartwheel: The Reduction of Rabaul*, Center of Military History, 1959, pgs. 189-217.

operations warfighting headquarters (e.g., JTF), both from and to the GCC and FCC headquarters concerned.

- c. Ensure the interoperability of all critical C2 systems using Joint Information Enterprise protocols (communications equipment, data processing, Friendly Force Tracking [FTT] and Common Operational Picture [COP] systems) to enable rapid C2 and force aggregation during entry operations. Consider pre-approved (for theater introduction) sets of standard joint and coalition systems tailored to missions to assure timely network connection approval and operation.
- d. Consider modification of deliberate and crisis action planning documents to account for the command and control requirements and challenges associated with entry operations. For example, ensure that the Global Response Force Execute Order (GRF EXORD) has fully identified and incorporated the role of FCC capabilities, GCC capabilities, as well as reserve component (RC) forces into its intent and tasking sections.
- e. Improve the ability to manage and coordinate significantly increased quantities of unmanned and autonomous systems throughout the operational area in support of entry operations.
- f. Improve the capabilities of Joint/Multinational En Route Planning and Visualization tools for Entry Forces.
- g. The ability to access the global information grid at any location on the globe.

Required Capability 2: The ability for the Joint Staff and CCMDs to prepare selected joint and service headquarters to participate in a joint and multinational entry operation by executing a comprehensive joint training and exercise program. This ability must include those JTF-level headquarters and potential JTF components for entry operations.

- a. Consider training opportunities to prepare designated headquarters to assume the Global Response Force (GRF) joint force headquarters role.
- b. Consider a series of training events that annually exercises entry operations. Focus on Joint C2, GCC and FCC liaison teams, force aggregation, interagency coordination, selected multinational partners and tactical units and assets participation. This exercise event should include a significant “live exercise” component with detailed examination of all Support Forces (including FCC enablers), intermediate staging bases, joint sea-bases, and lift assets required to realistically execute the operational scenario concerned.
- c. Conduct annual Time-Phased Force Deployment Data (TPFDD) validation events for high priority Operations Plans (OPLANs) and Contingency Plans (CONPLANs) that are likely to require an entry operation.
- d. Consider establishing an educational agenda in joint and service professional military education through courses that study historical examples of entry operations and further the study of future entry operations challenges. This educational agenda should also include a thorough review of the risks associated with the conduct of entry operations.

- e. Develop a range of online training and education modules concerning entry operations for the joint force.
- f. Expand multinational partner-U.S. forces entry operations training opportunities.

Required Capability 3: The ability to command and control forces in austere or degraded environments, including communications, intelligence, cyberspace and space force enhancement degraded environments.

- a. Expand Service and Joint training opportunities concerned with operations in, and recovering from Chemical, Biological, Radiological, and Nuclear (CBRN) effects in degraded/hostile environments.
- b. Develop procedures for operating without some or all Space Force Enhancement capabilities (combat support operations and force multiplying capabilities delivered from space) or with degraded capabilities for extended periods. Space Force Enhancement capabilities may include ISR, launch detection, missile tracking, environmental monitoring, satellite communications (SATCOM), and position-navigation-timing capabilities (PNT).
- c. The ability to maintain operational access to key portions of the electro-magnetic spectrum during entry operations.
- d. Develop procedures for rapidly identifying, operating during, and recovering from significant cyberspace attacks. Effects of some attacks, such as denial of service, may be more obvious than others.³⁰
- e. The ability to conduct training and exercises that place commanders' decision support mechanisms under stress; where there is an uncomfortable level of imperfect knowledge including missing or degraded information, intelligence, and communications capabilities.
- f. The ability to provide operationally responsive space capabilities to augment or reconstitute existing space capabilities.

Required Capability 4: The ability to execute effective and complementary Special Operations Forces (SOF) and Conventional Forces (CF) integration, where SOF or CF can be the supported force (depending on the nature of the entry operation).

- a. Routinely conduct joint training exercises between SOF and CF units, focused on the highest priority missions as described in the Guidance for Employment of the Force (GEF) and the Global Response Force Execute Order (GRF EXORD). Also prioritize this expanded integration effort by Geographic Combatant Command.
- b. Consider providing liaison teams from select Service (JTF-capable) headquarters to Theater Special Operations Commands on a permanent basis.

³⁰ JP 3-12, *Joint Cyberspace Operations*, Appendix A defines cyberspace attack as: "Cyberspace actions that create various direct denial effects in cyberspace (i.e., degradation, disruption, or destruction) and manipulation that lead to denial that is hidden or that manifests in the physical domains."

- c. Consider providing SOF plans and operations cells to select Service JTF-capable headquarters on a permanent basis.
- d. The ability to establish and maintain relationships with non-military partners for both CF and SOF units.
- e. Consider expanding the integration and synchronization of space, cyberspace, and electronic warfare capabilities that CF and SOF units can leverage across the spectrum of operations.
- f. The ability to provide operational Military Information Support Operations (MISO) capabilities in a degraded environment.

Required Capability 5: The ability to maintain sufficient C2 and liaison capability to account for interagency and multinational interoperability and interface demands, including the exchange of liaison personnel, the sharing of C2 equipment and procedures, and the ability to readily exchange information.

- a. Ensure the ability to fully implement the procedures for common C2 and security classification initiatives for joint and multinational operations, as described in the Joint Information Environment (JIE), multinational treaties and specific operational terms of reference.³¹ Additionally, the JIE and Mission Partner Environment (MPE) protocols must evolve to meet the needs of entry operations.
- b. Establish baseline C2 equipment exchanges required for the range of potential multinational partners that will not be able to fully implement C2 agreements and specific operational terms of reference for information sharing. When producing Basis of Issue Plans (BOIPs) and procurement objectives for C2 equipment, these factors should be considered.
- c. During pre-crisis planning and preparation, develop operations security (OPSEC) and information security (INFOSEC) procedures for all potential partners. Include the ability to operate multi-level security networks that enable rapid information sharing with all partners (multinational, interagency, non-governmental).
- d. When developing JMDs and joint headquarters designs for warfighting headquarters' staffs (CCMDs, JTFs, functional components), include requirements for potential multinational and interagency partners. This includes accounting for partner liaison teams and translators (especially for Level 1 cleared translators) and includes their office and billeting requirements.

³¹ Currently being developed and implemented, the JIE (a DOD-wide initiative) and the Mission Partner Environment (MPE—a multi-CCMD initiative) protocols will provide the means for commanders to effectively share their intent, communicate mission orders, and empower decentralized execution when operating with a range of mission partners. MPE, formerly known as Future Mission Network (FMN), is a federation of existing information technology systems into a single operating environment in which partners plan, prepare and execute operations on a single security classification level with a common language. MPE enables Joint and combined force commanders to execute mission partnered operations through the connection of multiple networks and national systems, with applications and tools, to enable mission partner information-sharing.

Intelligence:

Required Capability 6: The ability to provide intelligence support and manage “Tasking and Collection” intelligence capabilities sufficient to meet the needs of the Initial and Reinforcing Entry Forces, before and during the initial entry phase.³²

- a. Maintain the ability to access reachback architectures (in order to task and access all-source intelligence and prioritize requirements) including time-sensitive capabilities, both en route to and during the initial entry phase of operations.
- b. Develop manned and unmanned systems support or alternative, non-traditional ISR techniques that can deploy and operate simultaneously with rapidly deploying entry forces.
- c. Develop capabilities to detect and identify as friend or foe all systems, including small Unmanned Systems, operated by the Joint Force, adversaries, and third parties in all domains.
- d. Develop tactics, techniques and procedures (TTP) to enable non-traditional ISR in high threat environments, denied or highly contested airspace where traditional ISR could not be utilized without significant risk of asset loss.
- e. Ensure sufficient translation capability in order to support SIGINT and HUMINT activities during entry operations.

Required Capability 7: The ability to provide Processing, Exploitation and Dissemination (PED) intelligence capabilities in degraded or austere environments during entry operations.

- a. Space-enhancement based and reachback PED capabilities must be able to support or be augmented in order to sufficiently meet entry operations’ intelligence requirements en route, during initial entry, and even under degraded or austere conditions.
- b. When space-based and reachback support is interdicted, entry forces must be able to carry with themselves tailored PED capabilities sufficient to support intelligence requirements in such communications denied environments.
- c. Ensure all data dissemination methods and voice communications required by PED activities are sufficiently interoperable between Services and allocated with sufficient redundancies to ensure continuation of data dissemination in contested environments, including loss of space-enhancement or reduced access to the electromagnetic spectrum.
- d. Improve the ability to process multi-intelligence data, including that from non-traditional sources such as social media, blogs, Internet, and periodical media.

³² Much of the organic and Joint ISR developed during Operation IRAQI FREEDOM (OIF) and Operation ENDURING FREEDOM (OEF) is not rapidly deployable without access to intermediate staging bases prior to operations.

Required Capability 8: The ability to rapidly share information and intelligence data and products with all relevant joint, multinational, and interagency partners during entry operations.

- a. During deliberate and crisis action planning and preparation, identify all types of intelligence data and products that will need to be shared during entry operations and develop appropriate policies and dissemination methods.
- b. Develop multi-level security protocols and technology solutions to support rapid security downgrade requirements and intelligence sharing.
- c. During pre-crisis planning, determine all intelligence sharing requirements that require liaison team exchanges, and associated data and communication equipment exchanges, to ensure proper and timely intelligence sharing can occur during entry operations.

Fires:

Required Capability 9: The ability, at the lowest tactical echelon (potentially the platoon), to access joint fires, in a timely manner, in support of independent schemes of maneuver.³³

- a. Ensure entry forces have sufficient precision target location equipment, Joint Terminal Attack Controllers (JTAC), easily understood Rules of Engagement (ROE), and data transfer links to enable joint fire support, especially precision, to all independent units or teams operating during initial entry operations and locations.
- b. Improve ability to integrate manned and unmanned systems of varying levels of autonomy, into entry and support forces in order to provide joint fires to entry operations.
- c. Improve the ability of precision fires to generate rapid area effects.

Required Capability 10: The ability to continue to operate against A2/AD threats such as increasingly capable enemy subsurface and surface maritime threats, surface-to-air missiles (SAMs) and integrated air defense systems (IADS) capabilities, precision guided ballistic missiles, anti-ship cruise missiles, small boat swarms, landmines and maritime mines, complex obstacles, WMD and related CBRN materials, and enemy aerial systems.

- a. Ensure that Air-Sea Battle implementation plans account for the ideas and the required capabilities described in the JCEO, as required.

³³ As discussed earlier in this concept, the total size of the Initial Entry Forces conducting entry can typically, for conventional forces, range from as small as a company to as large as a brigade minus. Given this and the wide variety of scenarios in which entry operations may be conducted, for conventional forces, the lowest tactical echelon requesting fires could be a squad, a platoon, or a company.

- b. Ensure that “effects-chains analysis” and “networked, integrated, attack-in-depth to disrupt, destroy and defeat (NIA-D3)” is a part of deliberate and crisis action planning and targeting for entry operations.
- c. The ability to deny an enemy’s access to space.
- d. The ability to create denial effects within an enemy’s networks.
- e. The ability to fully integrate offensive, reactive, and defensive cyberspace capabilities to protect and project force in support of entry operations.
- f. Ensure the joint force has the mechanism to employ appropriately delegated authority to use all non-kinetic fires assets, to include cyberspace capabilities.
- g. The ability to detect, identify and engage, if required, all systems including small unmanned systems, at a rate sufficient to keep pace with the proliferation and potential simultaneous operation of unmanned systems operated by the Joint Force, adversary, and third parties, potentially employed in all domains.
- h. The ability to find, control, defeat, disable, or dispose of WMD and related CBRN materials.

Required Capability 11: The ability to plan for and integrate information related capabilities (IRC) with information operations (IO) in order to inform and influence audiences.

- a. Improve the ability to execute MISO in support of future joint and multinational entry operations.
- b. The ability of entry forces to fully coordinate themes and messages with a whole of government and expanded multinational partner approach to ensure unity of effort and consistency.
- c. Update IO and MISO capabilities to recognize all existing and emerging media types: multinational, governmental, social, and commercial.
- d. Pursue biometric masking capabilities development. This capability may aid in clandestine actions that support entry operations.
- e. Ensure there are sufficient qualified translators and personnel who are familiar with the local culture.

Movement and Maneuver:

Required Capability 12: The ability of Initial Entry Forces (IEF) to conduct the initial entry into an operational area. Generally, initial entry forces will value strategic, operational, and tactical mobility and require specialized training, organization, and equipment. The following lists specific required capabilities for the IEF:

- a. The ability to maintain an enhanced readiness status in order to deploy in accordance with the demands of the GRF operations orders and rapidly developing crisis situations.
- b. The ability to maintain a combat vehicle and equipment complement that can be lifted or moved by existing and programmed aerial and surface assault lift assets. This includes strategic lift assets when they are used to conduct entry operations.

- c. The ability to insert low-signature capabilities to form or support the initial entry force.
- d. The ability to land offset from enemy force concentrations and infrastructure using existing and planned assault lift assets.
- e. The ability to identify and clear mines and obstacles in littoral and riverine approaches sufficient to support amphibious operations.
- f. The ability to properly marshal forces and assets, such as aircraft.

Required Capability 13: The ability of Reinforcing Entry Forces (REF) to quickly deploy and maneuver onto the initial assault objectives in order to provide additional firepower, protection, mobility, and required capabilities to ensure the survival of the initial entry force and the ability to achieve entry objectives necessary for mission accomplishment or transition to Follow-on Forces. The following lists specific required capabilities for the REF:

- a. The ability to land, via aerial and/or surface means, in a timely manner in order to support the Initial Entry Force.
- b. The ability to provide enhanced lethality and force protection during entry operations without creating a force that becomes too heavy to move rapidly or that requires RSO&I activities.
- c. The ability to tailor the REF for operations by expanding the use of small units of currently available medium and heavy forces trained to deploy rapidly on strategic lift as a REF asset and not just as a Follow-on Force.
- d. The ability to employ low-signature capabilities to insert and support the REF.
- e. The ability to employ a range of CWMD capabilities integrated into REF packages to aid in the execution of the CWMD mission.

Protection:

Required Capability 14: The ability to mitigate the effects of threats and hazards to personnel, equipment, and facilities while maintaining initial entry operations.

- a. Ensure displaced personnel and captured enemy combatants are cleared and routed from the initial entry operations' locations.
- b. Ensure policing and corrections capabilities promote the rule of law, protect the force, and supports civil authorities to save lives, minimize suffering, and to protect critical infrastructure.

Required Capability 15: The ability of Reinforcing Entry Forces (REF) and/or Support Forces to counter enemy efforts to limit entry forces' freedom of action; includes counterair and counter-GRAMM (Guided Rockets, Artillery, Missiles, and Mortars) operations.

- a. Using available strategic lift assets, ensure that mobile and transportable Counter-GRAMM capabilities can protect mission critical/vulnerable areas.

- b. Using available strategic lift assets, ensure that land and sea-based IAMD capabilities are able to protect mission critical/vulnerable areas against all air, ballistic missile, cruise missile, and maritime mine threats.
- c. Ensure the ability to deploy and integrate long-range counter-fire capability in support of entry operations.

Required Capability 16: The ability to provide sufficient air and maritime advantage necessary to insert entry forces and sustain littoral and vertical maneuver during entry operations.

- a. Ensure that sufficient counter-mine capacity exists to clear areas and lanes in coastal areas in support of littoral maneuver during entry operations.
- b. Ensure that counter-mine capabilities are able to deploy in support of initial and reinforcing entry forces based on required readiness and lift factors.
- c. Ensure sufficient counterair, electronic warfare, anti-submarine warfare, and air defense capability and capacity can be deployed along key routes and entry locations during critical entry times.
- d. Ensure the ability to employ decoys across all domains to aid in the successful insertion of the initial and reinforcing entry forces.
- e. Ensure the ability to shut down Internet and cell phone connectivity in the entry operation area as required.

Required Capability 17: The ability for initial and reinforcing entry forces to operate in areas degraded by CBRN attacks and events.

- a. Update Service capabilities associated with operating in and across CBRN contaminated areas.
- b. Update Service capabilities associated with CBRN reconnaissance and agent identification to account for current and evolving CBRN threats.
- c. Update Service capabilities associated with CBRN hasty decontamination, casualty evacuation and treatment to account for current and evolving CBRN threats.
- d. Expand joint training opportunities for initial and reinforcing entry forces that will potentially operate in CBRN, including High-altitude Electromagnetic Pulse (HEMP), degraded or hostile environments.

Sustainment:

Required Capability 18: The ability to quickly access properly configured prepositioned equipment sets and relief supplies in support of entry operations.

- a. The ability to rapidly access classes of supply supporting entry operations, FHA, port opening and theater opening operations. Improving selective offload capabilities for relief supplies and port/theater opening support equipment would better prepare the operational area for theater access. The ability to rapidly access and re-distribute prepositioned assets in the theater is key.

- b. The ability to provide a multi-mission logistics prepositioning sea-based storing capability that is readily available for relief supplies and tailored port and theater opening equipment to enhance rapidly opening the initial distribution (or logistics) system.
- c. Develop an effective afloat capability that allows the future Joint Force to build up combat power in and support operations ashore from the sea-base.
- d. Improve the ability of the Joint Force to conduct selective offload of forces, equipment, and all classes of supply from sea-based assets.

Required Capability 19: The ability to assess, plan, prioritize, sequence, and disperse sustainment requirements needed by the Reinforcing Entry Forces and Follow-on Forces (JLOTS addressed in Required Capability 20) in order to present a less inviting target for enemy maneuver and fires assets, increasing the overall entry forces' survivability.

- a. The ability to provide sustainment directly to the point of need, even in denied environments, and to deep inland entry locations.
- b. The ability to prioritize and sequence sustainment into multiple, disparate logistic nodes.
- c. The ability to match strategic movement of forces with theater capabilities to receive them.
- d. The ability to prioritize, synchronize and protect logistics operations in a degraded or degraded-communications environment.
- e. The ability to ensure cargo rapidly transits all ports of debarkation en route to the end user with minimum staging and/or cross-decking.
- f. The ability to conduct long-range casualty and medical evacuation along with forward resuscitative care at multiple entry locations in the littoral and deep inland.
- g. Maintain the ability to escort and protect key sustainment assets in advanced area denial environments.
- h. Ensure the ability to access a database listing multinational partners' logistics and classes of supply capabilities and resources.
- i. Ensure the ability to rapidly repair or replace battle-damaged equipment.
- j. Ensure sufficient material handling capability is available to support the entry force.

Required Capability 20: The ability to build, open, assess, repair, and improve expeditionary airfields, seaports, or JLOTS capabilities to support entry operations, once an entry area is secured.

- a. Develop and maintain the ability to deploy early joint assessment teams in support of entry operations' expeditionary airfields, seaports, or bare beach and riverine locations for JLOTS and assault landing locations. Include the ability to fully assess austere as well as degraded conditions, such as after a CBRN attack.
- b. The ability to construct expeditionary airfields or employ JLOTS capabilities as required to support entry operations.

- c. The ability to equip the Joint Force with a capability that can deploy rapidly to provide early air and sea port damage repair.

Required Capability 21: The ability to provide a scalable and early entry, bulk fuel/liquid delivery system at multiple points, sufficient to meet the needs of entry locations in at least two separate but simultaneous operations, in both the littoral environment as well as deep inland.

- a. The ability to access commercially developed bulk fuel/liquid delivery systems in support of entry operations.
- b. The ability to fully test and access local bulk fuel/liquid resources in order to reduce the transportation burden during entry operations.

9. Risks of Adopting this Concept

Operations to disrupt, destroy, and/or defeat advanced area denial systems and entering onto foreign territory and immediately employing capabilities in the presence of armed opposition is not without risks.

- ***Joint and multinational forces may not be able to achieve the necessary command and control resiliency required to effectively integrate force capabilities across domains.*** The application of combat power in multiple domains relies on the ability to integrate as well as coordinate between domains, which may be difficult in a degraded command and control environment. The mitigation to this risk is to develop alternative procedural and technical C2 methods, maintain the ability to fall back on mission command, Service-specific capabilities, and develop training and exercise programs that focus on operating in C2-degraded environments.

- ***Maneuver capabilities in multiple domains could be misread by resource allocators to suggest significantly less need for organic self-sufficiency.*** Such an outcome would be dangerous if degraded command and control prevents integration across domains, leaving elements to their organic capabilities. Mitigating this risk requires maintaining a sensible balance between organic capabilities and those accessible only through external support, together with robust and redundant means for requesting and coordinating that support.

- ***Integrating simultaneous actions across multiple domains on multiple lines of operations could lead to joint entry operations of debilitating complexity.*** The friction of military conflict urges simplicity and punishes unnecessary complexity, but entry operations are inherently complex. On a large scale, they may be the most complex operations the Joint Force conducts. Commanders must be alert to the tension between complexity and simplicity, and continuously strive for the proper balance.

- ***Crisis-specific shaping, including deep precision strikes, to neutralize adversary anti-access and area denial weapons, particularly with respect to protecting airlift and sealift, may be unrealistic in the time frame of the concept.*** Locating, targeting and defeating such systems effectively from a distance remains a very difficult challenge, from the perspectives of both target intelligence and weaponeering. If opposing systems cannot be rapidly neutralized in key locations and for key times, the successful execution of the concept could be at risk. Mitigating this problem may require that the Joint Force adopt a sequential campaign strategy based on first defeating or neutralizing adversary area denial capabilities almost entirely, before projecting forces ashore.

- ***Failure to isolate the area concerned, during an entry operation, may preclude fully implementing the ideas proposed in this concept.*** This concept assumes access to an operational area has been achieved and that the surrounding areas have been sufficiently isolated from interfering, as to enable force projection ashore. If the conflict widens militarily, and political authorization for actions to maintain isolation of the area is not forthcoming, then the Joint Force may not be able to achieve the entry according to the ideas presented in this concept. The mitigation is to work with policy makers to ensure that all potential operational requirements are clearly understood and accounted for, particularly when there is a possibility for the conflict to widen in scope and scale.

- ***Conducting entry operations against adversaries with advanced area denial capabilities, without proper protection of sustainment forces, may reduce operational tempo to unacceptable levels.*** The future area denial environment will demand accepting higher levels of military risk. However, sustainment forces will likely be particularly vulnerable in advanced area denial environments given their lack of self-protection capabilities and the trend toward augmentation by commercial capabilities with sustainment C2 systems that are often less well protected against cyberspace attacks and signals intelligence collection. Mitigating this requires continuous risk evaluation and when necessary, the diversion of combat forces and protection capabilities to ensure sustainment forces can survive to support the entry operation. While this may reduce operational momentum, depending on the area denial threat, it may become an absolute necessity.

- ***Reliance on ISR for Joint Intelligence Preparation of the Environment in support of entry operations incurs certain risks depending on the location of the environment.*** Entry operations will be inherently more dangerous if intelligence products do not already exist for the entry location. In such a case, time will be needed to acquire proper intelligence products for planning and targeting. Without these products, much greater risk may be incurred or cause the entry operation to be delayed. In austere locations, ISR may be impacted if communications architecture is not adequate to sustain the significant bandwidth requirements.

10. Conclusion

Joint forces must be able to disrupt, destroy and defeat enemy area denial capabilities and enter onto foreign territory and immediately employ capabilities to accomplish assigned missions. This is not new, but it becomes uniquely challenging when facing advanced enemy systems that can directly threaten our capital investments in strategic lift, power projection platforms, and low-density high demand assets. Operationalizing this concept will require the future Joint Force to refine existing capabilities, develop new ones, determine proper capacities of these capabilities, and examine further implications across the joint functions.

ANNEX A
GLOSSARY

Unless otherwise stated, all definitions are from the JP 1-02, *DOD Dictionary of Military and Associated Terms*, 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]

combined arms. More than one tactical branch, arm or specialty of a single Service employed together in operations. [Adapted from AR 310-25, *Dictionary of U.S. Army Terms*]

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 memo for the Service chiefs, combatant commanders and directors of Joint Staff directorates, undated.]

domain superiority. That degree of dominance of one force over another in a domain that permits the conduct of operations by the former at a given time and place without prohibitive interference by the latter. [JOAC]

entry operations. The projection and immediate employment of military forces from the sea or through the air onto foreign territory to accomplish assigned missions. [JCEO Working Definition]

forcible entry. Seizing and holding of a military lodgment in the face of armed opposition. [JP 3-18]

global commons. Areas of air, sea, and space that belong to no one state. Access to the global commons is vital to U.S. national interests, both as an end in itself and as a means to projecting military force into hostile territory. [JOAC]

landing area.

1. That part of the operational area within which are conducted the landing operations of an amphibious force. It includes the beach, the approaches to the beach, the transport areas, the fire support areas, the airspace above it, and the land included in the advance inland to the initial objective.
2. (Airborne) The general area used for landing troops and materiel either by airdrop or air landing. This area includes one or more drop zones or landing strips.
3. Any specially prepared or selected surface of land, water, or deck designated or used for takeoff and landing of aircraft. [This term and its definition modify the existing term and its definition and are approved for inclusion in JP 1-02.]

landing force. A Marine Corps or Army task organization formed to conduct amphibious operations. The landing force, together with the amphibious task force and other forces, constitute the amphibious force. Also called LF.

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 **mission-type orders** are defined as 1. An order issued to a lower unit that includes the accomplishment of the total mission assigned to the higher headquarters. [JP 3-31] 2. 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 medium like the land, sea, and air within which military activities shall be conducted to achieve U.S. national security objectives.

tailorable. Capable of being adapted to a given purpose or function. [*Webster's Unabridged Dictionary, 2001*]

unmanned aircraft. An aircraft or balloon that does not carry a human operator and is capable of flight under remote control or autonomous programming. [Note: Includes remotely piloted aircraft, remotely piloted vehicles, unmanned aerial vehicles and unmanned aircraft systems.]

weapons of mass destruction. Chemical, biological, radiological, or nuclear weapons capable of a high order of destruction or causing mass casualties and exclude the means of transporting or propelling the weapon where such means is a separable and divisible part from the weapon. Also called WMD.

ANNEX B

Description of Challenges to Entry Operations

Challenges to entry operations include geographic and infrastructure challenges, as well as adversary threat capabilities (specific systems and their methods of employment).

Entry Lift Challenges. During the last century, the United States maintained varying amounts of lift capacity, depending on our national strategy. In a general sense, the United States has utilized either force projection or forward basing to accomplish national goals. The quantity of forces capable of conducting entry in the absence of infrastructure, both numerically and as a percentage of ground forces, has varied depending on the strategy adopted.^{34,35} Entry forces do not require deep water ports or large airfields to receive and debark the force, they arrive in theater equipped and organized to fight without Reception, Staging, Onward movement and Integration (RSO&I).

- During World War II the combination of amphibious shipping and airborne lift allowed nearly one-fifth of U.S. Army and Marine Corps divisions to conduct entry operations at strategic distance at any given time.³⁶
- During the Cold War, the combination of forward based forces as well as land and sea based prepositioned equipment allowed over a third of the U.S. divisions to be brought into action quickly against primary foes due to assured access in Europe and Asia.³⁷ Forward basing reduced the focus on entry force capabilities, causing a reduction in entry force lift capacity to barely six percent of the total U.S. divisions.³⁸
- The United States is now reducing the quantity of forward basing throughout the world due to the changing nature of the threats and fiscal constraints. This puts a premium on the capacity of entry-capable forces. Reductions in sealift and airlift have left the U.S. capacity to insert entry forces at less than four percent of all combat brigades.³⁹

³⁴ In terms of conducting the entry, this is the combination of forces manned, trained and equipped to conduct entry, paired with the sealift or airlift assets designed to insert the force over strategic distance.

³⁵ Includes airports, seaports, and suitable beach landing areas.

³⁶ Annual Report to Congress on Long-Range Plan for Construction of Naval Vessels for FY2013, Deputy Chief of Naval Operations (N8), April 2012 (30 Year Ship Building Plan).

³⁷ *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, v1.0, 17 Jan 2012.

³⁸ Work, Robert O., "On Sea Basing," The Newport Papers, Vol 26, Feb 2006.

³⁹ Hammond, James W., "A Fleet Out of Balance," Proceedings Magazine, Vol 139, Feb 2013. With respect to the USMC, it is understood that while any unit can conduct amphibious entry operations, the limitation is on the sealift to transport them. Once the amphibious lift has been loaded, it must sail to the objective area to land its forces and then return over strategic distance to load additional forces. This limits force buildup. With respect to the U.S. Army,

Army air assault forces are not counted in the equation because they require the establishment of an intermediate staging base within the area denial envelope.

Adversary Threat Capabilities. In terms of specific capabilities, future adversaries may possess highly adaptive combinations of anti-access and area denial systems, including space, cyberspace, and potentially 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.

Adversary Threat Systems. Potential adversary systems include:

- *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 entry 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 antisatellite capabilities of potential adversaries.
- *Area denial (AD).* Enemy area denial capabilities have increased in number and proliferated in scope over the last 10 years, with regular and many irregular forces possessing advanced AD capabilities as well as 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).
- *Enemy Space Assets and Use of Commercial C4ISR.* Both regular and irregular opponents will increasingly have access to space-based capabilities, 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 cause operations to be conducted in a degraded environment.
- *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

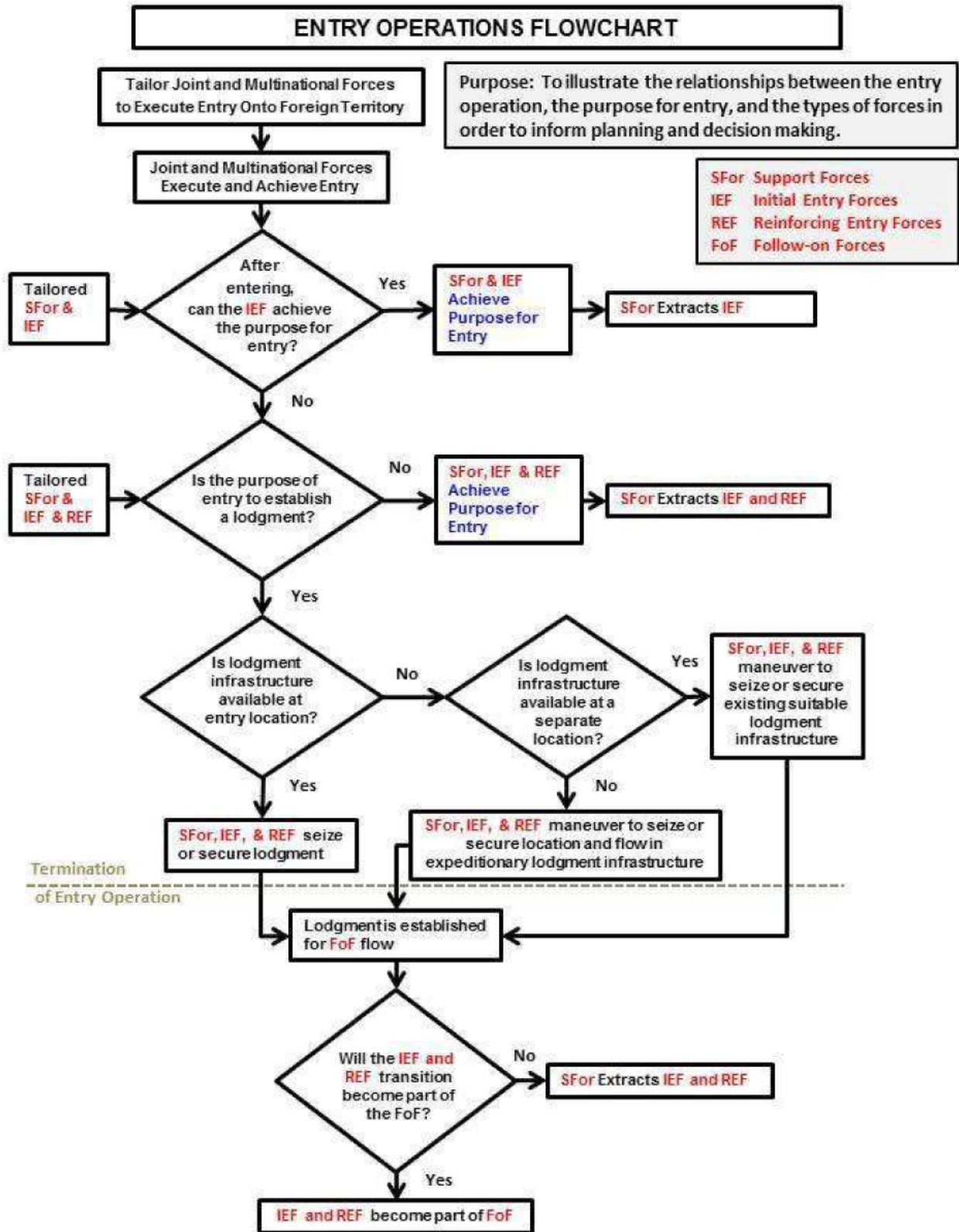
the same is true for airborne forces and associated airlift requirements. The Gain and Maintain Access (GAMA) Multi-Service Concept was approved for release by the U.S. Army and U.S. Marine Corps, March 2012.

threaten military operations in general and the confidentiality, integrity, and availability of key data, information and communications.

Adversary Employment of Threat Systems. An adversary's tactics within broad approaches may vary. Some of the more prominent tactics are:

- *Prevent:* Whether or not the adversary has any advanced anti-access capability, they may still choose to prevent joint forces from successfully landing on their territory. It can be expected the adversary may use anti-air and anti-ship area denial capabilities to disrupt, deny, or defeat joint and multinational force access to the objective area. Thanks to modern systems, it will be unlikely that this would take on the visual manifestation of the Normandy beaches, with heavy guns and machine gun bunkers on the beach. More likely, it will comprise distributed concealable air and surface area denial systems that favor attacking vulnerable delivery assets. This includes use of sea and land mines to similarly prevent access to their territory. Additional methods of prevention include conducting computer-network attack on defense and civilian infrastructure within the United States or our allies. This may shift priorities or even send the entry force or sustainment forces to the wrong location, making them easier to engage.
- *Isolate:* Adversaries may choose instead to allow the entry force to cross into their territory with minimal or no opposition in order to then cut them off. Once inserted, the adversary could use area denial assets to isolate the entry force by destroying the amphibious shipping, intermediate support bases, or air delivery assets. Once a force is isolated, the adversary could target them without concern for reinforcements.
- *Overwhelm:* Adversaries may choose to allow the entry force to enter unhindered, and then while landing, apply overwhelming area denial firepower to the landing area to destroy them as quickly as possible. This is simplified when the Joint Force approach is tied to existing infrastructure, making it more predictable and thus easier to target.
- *Undermine:* Less capable adversaries may choose to undermine the Joint Force using public protests at the entry site, coordinated via social media. This can become a delaying tactic, by slowing the Joint Force's advance or something more potent if the adversary is willing to kill protestors to discredit joint and coalition efforts. An adversary can also undermine the Joint Force by placing likely targets in sites protected by the rules of engagement where the collateral damage resulting from the destruction of them would cause an international outcry. Finally, an adversary may also resort to more traditional means such as economic or political blackmail to undermine entry efforts.

ANNEX C



ANNEX D BIBLIOGRAPHY

Articles

Crist, David B., "Joint Special Operations in Support of Operation Earnest Will," *Joint Forces Quarterly*, Autumn/Winter 2001-02.

Hammond, James W., "A Fleet Out of Balance," *Proceedings Magazine*, Vol 139, February 2013.

Work, Robert O., "On Sea Basing," *The Newport Papers*, Vol 26, February 2006.

Wright, Christopher and Mark Skattum, "Joint Task Force-Elimination: A Bridge Between Combat Operations and WMD Elimination in Theater," *CBRNAC Newsletter*, Vol 11 Number 1, 2010.

Books

Appleman, Roy E., James M. Burns, Russell A. Gugeler, and John Stevens, *Okinawa: The Last Battle*, Washington, D.C., Center of Military History, 1948.

Appleman, Roy E., *South to the Naktong, North to the Yalu (June to November 1950)*, Washington, D.C., Center of Military History, 1961.

Beavan, Colvin, *Operation Jedburgh: D-Day and America's First Shadow War*, The Viking Press, New York, 2006.

Bergen, Peter L., *Manhunt: The Ten Year Search for Bin Laden from 911 to Abbottabad*, Broadway Paperbacks, 2012.

Donnelly, Thomas, Margaret Roth, Caleb Baker, *Operation JUST CAUSE: The Storming of Panama*, Lexington Books, December 1991.

Haukelid, Knut, *Skis Against the Atom*, North American Heritage Press, 1989.

Webster's Ninth New College Dictionary, Merriam-Webster Inc., Springfield, MA, 2001.

Miller, John Jr., *Cartwheel: The Reduction of Rabaul*, Washington, D.C., Center of Military History, 1959.

Mroczkowski, Col Dennis P. USMCR (Retired), *Restoring Hope: In Somalia with the Unified Task Force, 1992-1993*, Washington, D.C., USMC History Division, 2005.

Prince, Stephen, *The Blocking of Zeebrugge, Operation Z-O*, Osprey Publishing, 20 February 2012.

Schemmer, Benjamin F., *The Raid*, Harper & Row, 1976.

Stewart, Dr. Richard W., *The United States Army in Somalia 1992-1994*, Washington, D.C., Center of Military History, 25 January 2012.

Wise, Harold Lee, *Inside the Danger Zone: The U.S. Military in the Persian Gulf 1987-1988*, Annapolis, Maryland: Naval Institute Press, 2007.

Joint and Multi-Service Concepts

Air-Sea Battle (ASB) Concept, v9.0, 9 May 2012.

Capstone Concept for Joint Operations: Joint Force 2020 (CCJO: JF2020).

Gain and Maintain Access (GAMA) Mutli-Service Concept, U.S. Army and Marine Corps, March 2012.

Joint Forcible Entry Concept, v0.95, 2004.

Joint Operational Access Concept, v1.0, 17 Jan 12.

Joint and Service Doctrine

JP 1-02, *DOD Dictionary of Military and Associated Terms*, 8 November 2010.

JP 3-0, *Operations*, 11 August 2011.

JP 3-01, *Countering Air and Missile Threats*, 23 March 2012.

JP 3-02, *Amphibious Operations*, 11 August 2009.

JP 3-02.1, *Amphibious Embarkation and Debarkation*, 30 November 2012.

JP 3-05, *Special Operations*, 18 April 2011.

JP 3-08, *Interorganizational Coordination During Joint Operations*, 24 June 2011.

JP 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear (CBRN) Environments*, 26 August 2008.

JP 3-12, *Joint Cyberspace Operations*, 5 February 2013.

JP 3-13.2, *Military Information Support Operations*, 7 January 2010, Change 1, 20 December 2011.

JP 3-18, *Joint Forcible Entry Operations*, 27 November 2012.

JP 3-29, *Foreign Humanitarian Assistance*, 17 March 2009.

JP 3-31, *Command and Control for Joint Land Operations*, 29 June 2010.

JP 3-35, *Deployment and Redeployment Operations*, 31 January 2013.

JP 3-40, *Combating Weapons of Mass Destruction*, 10 June 2009.

JP 3-40 (Coordinating Draft), *Combating of Weapons Mass Destruction*, XX May 2013.

JP 3-68, *Noncombatant Evacuation Operations*, 23 December 2010.

JP 5-0, *Joint Operation Planning*, 11 August 2011.

MCDP 3, *Expeditionary Operations*, U.S. Marine Corps, 16 April 1998.

National Strategy

National Security Strategy of the United States, 2010.

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, 12 January 2012.

National Defense Strategy for Countering Weapons of Mass Destruction, May 2013 (DRAFT—unsigned as of 22 August 2013).

Plans and Orders

Global Response Force EXORD, as of August 2013.

“Unified Command Plan,” The White House, 6 April 2011.

Press Releases and Special Reports

Annual Report to Congress on Long-Range Plan for Construction of Naval Vessels for FY2013, Deputy Chief of Naval Operations (N8), April 2012 (30 Year Ship Building Plan).

Operation Just Cause Panama, Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, 1995.

Chairman's Joint Strategy Review, 2012.

BOLD ALLIGATOR Final Report, U.S. Fleet Forces Command (N5/N5/N9), 24 May 2012.

"Joint Information Environment" White Paper, Chairman of the Joint Chiefs of Staff, 22 January 2013.

"The Lessons of the Israeli-Lebanon War (Briefing Charts)," Anthony Coordeman, The Arleigh A. Burke Chair in Strategy, The Center for Strategic and International Studies, March 11, 2008.

JROCM 026-13, "Mission Partner Environment," Washington, D.C.: The Joint Staff, 5 February 2013.

"U.S. Response to Cyclone Sidr: Operation Sea Angel II," Press Release, U.S. Embassy Dhaka, Bangladesh, 23 November 2007, http://dhaka.usembassy.gov/cyclone_sidr.html.

Regulations

AR 310-25, *Dictionary of U.S. Army Terms*.

(INTENTIONALLY BLANK)

