

Capstone Concept for Joint Operations

Version 3.0



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FOREWORD

The *Capstone Concept for Joint Operations* describes in broad terms my vision for how the joint force circa 2016-2028 will operate in response to a wide variety of security challenges. It proposes that future joint force commanders will combine and subsequently adapt some combination of four basic categories of military activity -- combat, security, engagement, and relief and reconstruction -- in accordance with the unique requirements of each operational situation. The concept is informed by current strategic guidance, but because it looks to the future, it is intended to be adaptable, as it must be, to changes in that guidance.

This concept's primary purpose is to guide force development and experimentation by: (1) establishing a common framework for military professionals for thinking about future joint operations, (2) visualizing future joint operations for policymakers and others with an interest in the employment of military force, (3) establishing a conceptual foundation for subordinate joint and Service concepts, and (4) motivating and guiding the study, experimentation and evaluation of joint concepts and capabilities.

The Armed Forces of the United States comprise the Active and Reserve components and civilian personnel of the Army, Navy, Air Force, Marine Corps, and Coast Guard. Each Service possesses its own unique traditions and competencies, which contribute to the versatility, flexibility and effectiveness of the joint force. Together we support and defend our Nation, its people, its friends, and its interests worldwide. We always seek to operate with partners, and lead where appropriate, but we will be prepared to act unilaterally when necessary to protect our vital national interests. We respond to crisis and disaster to alleviate human suffering and promote peace. When necessary, we will confront and defeat those who threaten our national security. In conjunction with other U.S. government agencies, we are engaged in strengthening and expanding relationships with international partners on a day-to-day basis. These partnerships contribute to creating and maintaining a stable environment while concurrently deterring potential adversaries.

Today's U.S. Armed Forces are, I believe, the most capable in our Nation's history, and these capabilities provide important strategic advantages with respect to nearly any situation or potential adversary. U.S. forces can conduct operations on a scale that very few others can approach. Their ability to project and sustain military power over global distances is unmatched. U.S. joint intelligence capabilities, a key factor in the success of practically any kind of military operation, are the best in the world.

U.S. military power today is unsurpassed on the land and sea and in the air, space, and cyberspace. The individual Services have evolved capabilities and competencies to maximize their effectiveness in their respective domains. Even more important, the ability to integrate these diverse capabilities into a joint whole that is greater than the sum of the Service parts is an unassailable American strategic advantage.

However, it is our people who ultimately are our greatest advantage. Their patriotism, training, discipline, leadership, and ability to adapt to any situation make us both a formidable foe and a reliable friend.

As capable as our joint forces are today, this will not be enough to meet future challenges as described in this concept. We will need to develop new capabilities and change the capacities of existing ones. We will need to create new joint and Service doctrine, tactics, techniques and procedures. We will need to establish new methods for integrating our actions, both internally and with partners. We will need to select, educate, train, equip and manage our people differently. We will need to envision and create new organizations. We will need to develop new technologies and adapt existing ones to new missions. This concept is designed to catalyze that process.

The *Capstone Concept for Joint Operations* is the most fundamental of all U.S. military concepts. It therefore speaks in terms of broad precepts and assertions that apply across a wide range of possible situations. It will be further elaborated in subordinate joint and Service operating concepts, which will apply its broad ideas to more specific situations. It is not a “how-to” manual prescribing detailed methods of execution and does not establish authoritative doctrine.

The concept progresses from describing an operational problem set to envisioning an operational solution to those problems to exploring the institutional implications of adopting that solution. Sections 1-3 envision why and under what conditions the joint force of the future will be employed. These sections reflect the *Joint Operating Environment*, a separate but companion document. Sections 4-6 describe what the joint force will do and, in broad terms, how it will do it. These sections are the core of the concept. Sections 7 and 8 explore the institutional implications and risks associated with operating this way. These sections are intended directly to guide the capabilities development process.

The *Capstone Concept for Joint Operations* describes how the joint force will operate in an uncertain, complex, and changing future characterized by persistent conflict. While the concept focuses on the future, many of its underlying concepts are timeless. Military success in the future rarely will be the product of radically new ideas, but instead will typically result from adapting these enduring truths to new requirements, conditions and

capabilities. To succeed, we need adaptive and thinking professionals who understand the capabilities their Service brings to joint operations and how to apply those capabilities in a flexible manner. It is those capabilities that enable the joint force to meet a broad spectrum of challenges. We also need professionals who understand the strengths of the joint force and can integrate Service capabilities to maximize those strengths. Above all, we need professionals imbued with a sense of commitment and honor who will act decisively in the absence of specific guidance.

In short, this concept constitutes my vision for the future joint force. I enjoin all officers to read it, think about it, and use their judgment to implement it.

A handwritten signature in black ink, appearing to read "Mike Mullen", with a long horizontal flourish extending to the right.

M. G. MULLEN

Admiral, U.S. Navy

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1. THE JOINT FORCE AS AN INSTRUMENT OF POLICY

The fundamental purpose of military power is to deter or wage war in support of national policy. In these capacities, military power is a coercive instrument, designed to achieve by force or the threat of force what other means cannot. While it may be employed in more benign ways for a variety of important purposes across a wide range of situations, these other uses should not be allowed to imperil its ultimate ability to wage war.

In a broader sense, the joint force is one of several instruments of national policy maintained to help shape the international political environment in support of U.S. interests. The preeminent requirement of all joint operations, therefore, is that they help to create or maintain the conditions sought by that policy, whether through coercion or persuasion, and whether in response to an unexpected crisis or opportunity or as part of a deliberate and proactive plan. Since, even in war, this requirement may extend well beyond defeating enemy forces in battle, to be an effective policy instrument, joint forces must provide political leaders a much wider range of competencies than just dominance in combat.

Military force is only one element of national power, moreover, and in the complex environment of the future, it rarely will succeed alone. Instead, joint forces typically will operate in conjunction with other agencies of the U.S. and partner governments, and the success of the endeavor will depend on the success of that partnership. Depending on circumstances, the joint force may lead the national or multinational effort or may support other agencies, usually by creating the security conditions that allow nonmilitary agencies to operate.

Military action tends to be the most visible and hazardous expression of national policy, and any employment of U.S. military forces, even for benign purposes, tends to have significant domestic and international repercussions. Hence, whenever possible and appropriate, joint operations should be augmented or even supplanted by other, less threatening manifestations of national power.

While military power can contribute significantly to resolving some political problems, and sometimes is essential to doing so, it rarely will do so exactly as envisioned and without unintended and irreversible consequences. Moreover, while there are many problems in the world for which military forces are not an ideal solution, they may be employed nonetheless because their readiness, discipline, resources, and deployability make them the most expedient option.

As an instrument of policy, military forces never operate in a political vacuum. Every joint force commander must accept the reality that political factors will always constrain U.S. military operations, sometimes at significant

cost in operational efficiency. But while joint force commanders must adapt their operations to the requirements of policy, policy should avoid requiring of the joint force what it is incapable of achieving. Reconciling political purpose and military means thus requires candid and continuous dialog between political and military leaders.

2. THE JOINT OPERATING ENVIRONMENT

The *Joint Operating Environment*, a companion to this concept, forecasts the trends that will shape the future environment within which the joint force will operate. This section summarizes the findings of that document. The findings describe an environment characterized by uncertainty, complexity, rapid change, and persistent conflict.

The future joint operating environment will reflect both enduring and changing conditions. The central enduring condition is the unruly nature of the international political system, a universe of autonomous polities continuously seeking to optimize their own wealth, security, opportunities, and influence in relation to each other and the system as a whole. Ultimately constrained only by their own resources and the countervailing interests of other actors, these entities pursue their various interests through a wide range of behaviors toward each other, from friendly cooperation to more or less peaceful competition to outright conflict.

The future operating environment will be characterized by **uncertainty, complexity, rapid change, and persistent conflict.**

The result is a complex interactive environment in which events are largely unpredictable and sometimes counterintuitive. Political entities will resort to aggression or threats of aggression -- some more readily than others -- to pursue their interests. Crises will occur, within and between entities, as they adapt to this environment. The forces of nature and other chance events only add to the complexity. Friction and uncertainty abound under such circumstances. Accidents and miscalculations are common, and apparently negligible events produce disproportionate and often unintended consequences. Strategic surprises inevitably will occur. Indirect effects play out and interact unpredictably over time.

Rather than occurring as a series of isolated episodes, international relations unfold as a continuous fabric in which each event is shaped by those that precede it and shapes those that follow. Competitions and conflicts, once begun, often take on a life of their own beyond the intentions or control of any of the participants. It is in the context of this enduring complexity that the tensions, instabilities, disasters, crises, and conflicts inevitably will arise that could require the commitment of U.S. joint forces.

A second enduring condition will be America's status as a global power with global interests. American security and prosperity in a globalized future will be linked inextricably to those of others. The United States will necessarily be a leader Nation to which much of the rest of the world will look for stability and security. It will continue to fall to the United States and its partner nations to protect and sustain the peaceful global system of interdependent networks of trade, finance, information, law and governance. Maintaining freedom of action and access around the globe is as much a requirement for the functioning of this peaceful global system as it is for the conduct of military operations. This will require continuous engagement throughout the world and persistent presence achieved through the forward deployment of U.S. joint forces.

Reflecting that requirement, a third condition that will continue to govern the conduct of U.S. joint operations is the need to conduct and sustain them at global distances. The most likely occasions requiring the commitment of joint forces will arise, as they have for the past half-century, in places where few or no forces are permanently stationed. America's ability to project power rapidly and conduct and sustain operations globally thus will remain critically dependent on air and maritime freedom of movement and on sufficient strategic and operational lift. Future operational success will also rely increasingly on the use of space and cyberspace. Providing adequate lift and maintaining sufficient control of the global "commons" -- areas of sea, air, space, and cyberspace that belong to no one state¹ -- thus will remain a vital imperative of future joint force design.

Of the conditions that are changing, perhaps the most significant is what one observer has described as "The Rise of the Rest"² -- the increasing ability of other states to challenge the United States for influence, if not globally, then certainly regionally. The economic and military predominance that has underwritten U.S. foreign and defense policy for the past two decades can no longer be assumed. These emerging, advanced military competitors will be able to pose significant regional military challenges in the event of conflict.

In addition, a variety of nonstate actors -- often motivated by extremist religious or ethnic ideologies -- are emerging with some of the power of states, but lacking the political discipline imposed by national sovereignty and accountability. Many of these entities already have or soon could have the capability and capacity to pursue their interests by armed force. Many operate across state or even regional boundaries. They rarely adopt the centralized structure of states, which would expose them to greater external pressure, but instead take the form of popular movements or distributed networks, usually empowered by the connectivity of the Internet.

This diffusion of power in an increasingly globalized environment, within which some actors neither recognize nor are restrained by generally accepted

conventions of international behavior, greatly complicates conflict prevention, management, and resolution. At the same time, the cultural resistance to or inability to cope with the complexity of modernity risks overwhelming some governments, producing failed or failing states. The failure of a state often makes populations more susceptible to social movements based on ethnic or religious loyalties. These conditions invite humanitarian crises and even internal or cross-border armed conflict.

The foreseeable future promises to be an era of persistent conflict -- a period of protracted confrontation among states, nonstate entities, and individual actors increasingly willing to use violence to achieve their political ends.³ The future is unlikely to unfold as steady-state peace punctuated by distinct surges of intense conflict. Rather, the major initiatives of U.S. foreign policy -- major war, strategic deterrence, foreign humanitarian assistance, security cooperation, and so on -- are all likely to unfold against a global backdrop of chronic conflict. Such protracted struggles will not lend themselves to decisive military victory, but often at best will be amenable to being managed continuously over time. Many of these conflicts may cut across national, regional, cultural, and combatant command boundaries, complicating the responses to them.

Future conflict may result from a clash of policy interests between governments, but -- as in the past -- is at least as likely to arise within states and from a wider variety of causes, including religious and ethnic passions, dysfunctional borders, societal collapse, government corruption or incompetence, and natural resource scarcity. Moreover, as demographic, economic, and other patterns shift geographically around the world, the locus of conflict and crisis likely will shift also, requiring the United States to reevaluate its global posturing of military forces.

At the same time, the means of waging conflict are becoming more lethal, ubiquitous, and easy to employ. Advanced weaponry, once the monopoly of industrialized states -- including anti-access and area-denial capabilities -- increasingly is becoming available to both less-developed states and nonstate actors. The potential proliferation among a growing roster of states and nonstate actors of weapons of mass destruction, especially nuclear weapons, is particularly dangerous, and could significantly complicate any future U.S. use of military force. Nuclear weapons will remain one potentially existential threat to the Nation.

While the U.S. has enjoyed uncontested superiority in space for several decades, ever cheaper access to space and the emergence of antisatellite and counterspace weapons have begun to level the playing field, and the use and control of space for both civil and military purposes is becoming increasingly competitive. Likewise, rapid technological improvement of cyber capabilities and the relatively low cost of obtaining them will allow states, nonstate actors,

and even individuals to threaten disruption of military, economic, and other digital networks anywhere in the world.

Meanwhile, as a result of accelerating transparency and connectivity, traditional military operations have become increasingly sensitive to popular perceptions and attitudes, both domestic and international. Thanks to pervasive media coverage and the growing ubiquity of personal communications devices, much of the population can follow, closely and practically in real time, events they previously would have learned of only after the fact, if at all. In addition to complicating the preservation of operations security, that growing transparency risks turning what once would have been inconsequential military incidents into strategically significant events. Transparency will put greater pressure than ever before on commanders at all levels, whose every decision and action will be scrutinized and critiqued in real time by media whose independent access to information will be virtually impossible to restrict.

Greater connectivity makes populations more susceptible than ever before to manipulation by a variety of actors, some of whom will not hesitate to use disinformation to achieve their objectives. Potential adversaries have already recognized the strategic importance of the narrative battle and will continue to develop and employ increasingly sophisticated methods in that battle. Influencing public perceptions of battlefield events thus will become both more important and more difficult for joint forces, and commanders even at subordinate levels will find themselves nearly as consumed with shaping the narrative of those events as with planning and conducting the operations that produce them.

The challenge of shaping the narrative will only be aggravated by changing Western attitudes about the use of military force. Pervasive visual images of human suffering can create pressures to divert joint forces to humanitarian activities on the one hand and to restrict their use of lethal force on the other -- a combination that could degrade combat readiness before battle and risk outright failure once it is joined.

Another accelerating change in the operational environment is continuing urbanization as a result of population growth in cities and their surrounding urban sprawls. Such urban areas, especially the burgeoning cities of the developing world, many of them located along the world's coasts, can be petri dishes for disease, crime, the emergence of radical ideologies, and civil conflict. They also present enormous challenges to the conduct of military operations. Operating in urban terrain, in combat or not, absorbs larger numbers of ground troops than operations in practically any other type of terrain. Moreover, urban combat tends to produce heavier military casualties, at least among ground forces, than combat in other types of terrain. It can also produce high civilian casualties and severe collateral civil damage, especially

when the enemy is a home-grown irregular force deliberately willing to exploit the protection from detection and attack afforded by concealment among the civilian populace.

Diminishing overseas access is another challenge anticipated in the future operating environment. Foreign sensitivities to U.S. military presence have steadily been increasing. Even close allies may be hesitant to grant access for a variety of reasons. Diminished access will complicate the maintenance of forward presence, a critical aspect of past and current U.S. military strategy, necessitating new approaches to responding quickly to developments around the world as well as more robust exploitation of existing U.S. advantages to operate at sea and in the air, space, and cyberspace. Assuring access to ports, airfields, foreign airspace, coastal waters and host-nation support in potential commitment areas will be a challenge and will require active peacetime engagement with states in volatile areas. In war, this challenge may require forcible-entry capabilities designed to seize and maintain lodgments in the face of armed resistance.

Resolving many challenges, especially in the developing world, ultimately will require establishing or restoring the legitimacy of indigenous governments -- something the United States cannot accomplish unilaterally. This will put a premium on the joint force's ability to work with and through partners to improve the partner's capabilities. Joint forces will almost always find themselves working with indigenous military and security forces, for whose behavior they will rightly or wrongly be held accountable.

The future operating environment has the potential to produce more challenges than the United States and its military forces can respond to effectively. This has two implications. The first is the importance of shaping developments proactively so that they do not reach crisis proportions requiring the employment of a sizable joint force. The second is the importance of establishing cooperative security arrangements to share the burden of maintaining security and stability. Both implications will again place a premium on the use of joint forces for peacetime engagement.

Together, these enduring and changing conditions will present a variety of complex security challenges, including armed aggression and threatened aggression, the rise of extremist ideologies and movements, failed governance, natural and manmade disasters, and violations of international agreements. Surmounting these challenges often will exceed the capabilities of any single agency of government, including the joint force. Instead, successful future military operations typically will require the integrated application of all the instruments of national power. Future joint forces may find themselves operating as the military element of an integrated national task force or at least in close conjunction with other agencies of government.

Moreover, in a globalized world, most such operations will tend to affect multiple international stakeholders, creating the political if not the operational need to act in concert with international partners. Such concerted action, however, inherently is much more difficult to manage than unilateral national action and usually requires significant compromise to maintain unity. Indeed, in many if not most cases, achieving a common understanding of the nature and cause of the problem may be even more difficult than, and certainly must precede, agreeing about the solution. As a result, whether prompted by cooperation, competition, or conflict, future joint operations will require far greater cultural awareness than U.S. forces have demonstrated before and greater tolerance of both inefficiencies and limits on operational choice as the price of closer interagency and multinational collaboration.

3. NATIONAL SECURITY CHALLENGES

The conditions and trends identified in the *Joint Operating Environment* and summarized in the previous section forecast five broad national security challenges likely to require the employment of joint forces in the future. These are not new challenges. They are the natural products of the enduring political environment, but they will exhibit new features in the future. None of these challenges is a purely military problem. Rather, all are national problems calling for the application of all the elements of national power. Individual joint operating concepts will address the joint contribution to dealing with each of these challenges in greater detail.

Five broad national security challenges are likely to require the employment of joint forces:

- Win the Nation's wars
- Deter potential adversaries
- Develop cooperative security
- Defend the homeland
- Respond to civil crises

Winning the Nation's wars remains the preeminent challenge and primary justification for maintaining capable and credible military forces.⁴ In the future, as in the past, war may take a variety of forms. It may erupt among or between states or nonstate entities with war-making capabilities. It may take the form of classic state-on-state war, insurgency, or civil war. Aims may range from outright conquest or revolution to secession to the extraction of limited political, geographic, or economic concessions. Combatants may range from the regular military forces of states to paramilitary or irregular forces. They may operate in identifiable military formations using advanced fighting platforms -- tanks, aircraft, ships, and so on -- or they may be largely indistinguishable from the civil population. They may employ methods ranging from combined-arms tactics to guerrilla warfare, terrorism, sabotage, subversion, unconventional warfare, or other methods usually considered "irregular." This full range of methods will be available to both state and nonstate adversaries, who are likely to adopt some combination.

Warfare against the regular forces of a sovereign state using orthodox means and methods can be called *conventional* or *regular warfare*, while warfare against predominantly irregular forces can be called *irregular warfare*.⁵ The latter tends to be protracted, favors working through partners, and revolves around the support of the population rather than solely the defeat of enemy fighting forces. These clean distinctions will rarely exist in reality; however, as often in the past, future conflicts will appear as hybrids comprising diverse, dynamic, and simultaneous combinations of organizations, technologies, and techniques that defy categorization.⁶ Likely adversaries can be expected to pursue and adopt any methods and means that confer an advantage relative to U.S. military power -- including methods that violate widely accepted laws and conventions of war.⁷ Even an advanced military power can be expected to adopt some methods considered “irregular” by Western standards, while nonstate actors increasingly are acquiring and employing “regular” military capabilities. Rather than attempting to defeat U.S. forces in decisive battle, even militarily significant states are likely to exploit increasingly inexpensive but lethal weapons in an erosion strategy aimed at weakening U.S. political resolve by inflicting mounting casualties over time.⁸

In the extreme, any of these forms could involve the use of weapons of mass destruction. Such use, especially of nuclear weapons, would likely change both the strategic and operational context of the conflict dramatically. Any form of war is likely to include an ideological element, a “war of ideas,” which might be a primary or lesser attribute of the struggle. Finally, any future war is likely to involve the exploitation of cyberspace, and war between more advanced states may well include space operations.

The scale of warfare may range from limited strikes or raids to prolonged theater or multi-theater campaigns. Given the likely limited number of permanent U.S. overseas bases and the proliferation of lethal antiaircraft and antiship weapons, future warfare may require forcible entry in the face of significant resistance. Both friendly and enemy operations may target the adversary’s civilian leadership, popular will, and the civil infrastructure that supports his fighting forces. Hence, as in the past, future war may well impose requirements to restore civil order and services and to rebuild damaged infrastructure.

Despite this wide variation, all wars share the same fundamental nature. In any form or context, war is organized, reciprocal violence for political purposes. War is essentially a violent struggle between hostile and independent wills, each trying to impose itself by force directly upon the other or upon some contested population. This struggle combines physical, mental, and moral aspects. It is simultaneously a clash of material means -- weapons, equipment, and supplies; of intellect, as manifested in opposing strategies, operations, and tactics; and of resolve and morale. War is therefore not action against an inanimate object, but is “always the collision of two living forces.”⁹

This interactive quality makes war a dynamic process of initiative and response as each belligerent adapts itself to the other.

As armed politics, war is not a thing apart but exhibits the friction, uncertainty, complexity, and fluidity common to all political interactions. As a violent form of politics, however, war tends to exhibit all these attributes in extreme measures. To these war adds lethal violence and destruction -- the qualities that distinguish war from other forms of political interaction -- which have a significant psychological impact on the people who experience them. Because war reflects a clash of opposing wills, the human dimension is central. War may involve the use of advanced technology, but it is waged by people and therefore subject to the vagaries of human behavior under conditions of extreme danger and stress. Any successful U.S. approach to war must comport with this fundamental understanding.

In preparing to meet the challenge of future war, the U.S. military faces a dilemma. Major war against another military power or group of powers presents the greatest potential threat to national security, but is less likely in the time frame of this concept than other forms of conflict. In contrast, other forms of war are all but guaranteed -- in fact, are currently ongoing -- but are unlikely to pose the same existential threat.

Since the surest way to invite a threat is to be unprepared for it, the United States must maintain its competency in large-scale conventional warfare even while it prepares for and conducts less conventional operations. And since capabilities optimized for either of these requirements may be ill-suited to the other, tradeoff decisions are inescapable. Ultimately, U.S. military forces must be able to operate across the full range of potential conflicts.

Moreover, avoiding war is usually preferable to fighting it. Hence, while the preeminent challenge for military forces is to wage war, joint forces also must contribute to meeting other critical security challenges:

- Defending national interests requires not only being able to prevail in conflict, but also *detering potential adversaries* who might threaten the vital interests of the United States or its partners.¹⁰ These threats could range from direct aggression to less openly belligerent actions that nonetheless threaten vital national interests. Deterrence convinces potential adversaries not to take threatening actions by influencing their decision making. It requires convincing those adversaries that a contemplated action will not achieve the desired result, that the cost of the action will be too great, or that an acceptable situation can be achieved without it -- or some combination of the three. Because of the gravity of potential nuclear aggression by a growing list of actors, maintaining a credible nuclear deterrent capability will remain a particular national security imperative.

State and nonstate threats both can be deterred, although deterring the latter may be more difficult and complicated. Deterrence must be pursued both during peace to prevent war and during war to prevent escalation. It involves general activities, postures, and communications intended to influence any adversary's decision making, such as maintaining credible defensive and offensive capabilities, but may additionally include more specific activities focused on a particular adversary, such as implementing a proactive deterrence campaign or executing flexible deterrent options in response to specific threats.

Since deterrence takes place entirely in the mind of another, it often is impossible to know whether it is succeeding -- although its failure tends to be unmistakable. Moreover, a potential adversary's actions are influenced not only by external deterrents, but also by other factors including his own culture and the value systems of his society and political leadership -- factors that often are not well understood outside the society in question. Deterrence thus becomes even more complicated in the future as the variety of potential aggressors increases. Actions that deter one potential adversary may have much less effect on -- or may even encourage -- another. They may even be perceived differently by the same potential adversary under different circumstances.

For all these reasons, developing better ways to measure the effectiveness of deterrent efforts is a vital requirement. Moreover, because future threats increasingly may be transregional, joint deterrence activities likely will require the cooperation of multiple combatant commands.

- In the globalized future described in the *Joint Operating Environment*, it will be increasingly important to *develop cooperative security* by maintaining or strengthening the global security framework of the United States and its partners.¹¹ Cooperative security involves the comprehensive set of continuous, long-term and integrated actions among a broad spectrum of U.S. and international governmental and nongovernmental partners that maintains or enhances stability, prevents or mitigates crises, and facilitates other operations when crises occur. Essentially it is the challenge of fostering a favorable security environment and establishing a solid base for effective crisis response. It can involve strengthening the U.S. security posture in a region, developing allied and friendly capabilities for self-defense and multinational operations, thwarting the emergence of specific state and nonstate threats, alleviating the conditions that underlie instability, and improving cooperative security arrangements for enhanced multinational cooperation. Like deterrence, cooperative security can reduce the chances of conflict, but unlike deterrence, it does not involve the threat of force. Cooperative security and deterrence should be complementary, each pursuing separate objectives but both contributing to security and preventing conflict.

- The ultimate obligation of U.S. joint forces is to *defend the homeland*.¹² Homeland defense is the protection of U.S. sovereignty, territory, domestic population, and critical infrastructure against external threats and aggression or other threats as directed by the President. Homeland defense includes a wide range of active and passive measures to prevent, preempt, defeat, and mitigate the effects of aggression. At the limit homeland defense entails outright war, but it also requires significant capabilities and actions short of war. Deterrence and cooperative security contribute to homeland defense by preventing aggression, but qualify as distinct security challenges in themselves. Threats to the homeland can range from missile or other attack by advanced regular militaries to terrorist attack, any of which could involve the use of weapons of mass destruction or cyber attack.

Homeland defense generally involves the implementation of an active, layered defense that attempts to defeat threats as far from the Nation's shores as possible. Homeland defense requires considerable interagency integration, as well as cooperation with international partners to interdict developing threats at their points of origin.

- The United States inevitably will find it necessary to *respond to a variety of civil crises* by acting to relieve human suffering and restore civil functioning, most often in support of civil authorities.¹³ These crises include any kind of disruption to civil functioning resulting from any natural or manmade disaster, civic disturbance, or endemic condition that creates a significant threat to human life or public welfare. They may be foreign or domestic. They may occur independently, as in a natural disaster disrupting an otherwise functioning society, or they may occur within the context of a conflict, such as widespread suffering in a nation embroiled in an insurgency.

Security may often be a factor in crisis response, as the result of the breakdown of civil order, even when there is no military adversary involved. Moreover, even when a civil crisis occurs independently of existing conflict, there often is the risk that violent conflict might arise out of the disorder and suffering. This challenge is likely to become more common in the future as more states find themselves unable to cope with the demographic and natural resource trends described in the *Joint Operating Environment*.

* * *

While these challenges are not uniform across the combatant commands, some of which will be focused almost exclusively on cooperative security or deterrence, while others are actually engaged in warfare, almost any mission assigned to the joint force will reflect one or more of them.

Accordingly, tomorrow's joint forces must be prepared to deal with all these challenges, anywhere in the world, potentially on short notice and for

indeterminate duration, in response to unexpected events. The specific time, location, and form of any particular challenge will be practically impossible to predict, at least in time to develop forces specifically for that threat. Any of these challenges is likely to require joint forces to project and sustain military power over global distances and for significant durations. Moreover, each challenge will tend to evolve over time. Finally, preparing for any one challenge will not necessarily prepare joint forces for another.

4. JOINT OPERATIONS AS THE INTEGRATION AND ADAPTATION OF COMBAT, SECURITY, ENGAGEMENT AND RELIEF AND RECONSTRUCTION

The national security challenges of the preceding section establish the purposes for which joint operations may be required now and in the future. This section describes in general terms how future joint forces will contribute to meeting those challenges. Subordinate operating concepts will apply these broad ideas to more specific situations.

The central thesis of this concept comprises three interrelated ideas that together describe broadly how the joint force will operate:

- Address each situation on its own terms, in its unique political and strategic context, rather than attempting to fit the situation to a preferred template.
- Conduct and integrate a combination of combat, security, engagement, and relief and reconstruction activities according to a concept of operations designed to meet the unique circumstances of that situation.
- Conduct operations subject to a continuous assessment of results in relation to expectations, modifying both the understanding of the situation and subsequent operations accordingly.

These three ideas are explained in greater detail below. Together they describe a generic process of operational adaptation designed expressly to cope with the complexity, uncertainty, and change that will define the future operating environment.¹⁴ This process applies to all joint operations even though the specific ends, ways, and means of those operations may vary widely according to the situation.

First, in designing joint operations, the joint force commander must come to grips with each operational situation on its own terms, accepting that this understanding rarely will be complete or entirely correct, but at best will approximate reality. The *Joint Operating Environment* describes complex, globalized challenges for which the underlying causes and dynamics will be

anything but obvious, while the repercussions of action often will be broad and unpredictable. The interests of various stakeholders may be unclear, and even identifying those stakeholders may be difficult. In this environment, the joint force cannot afford to apply preconceived methods reflexively, but instead must conform its methods to the specific conditions of each situation.

Those methods must reflect both the internal dynamics of the situation itself, which give the situation its basic operational nature, and the strategic context, which establishes the broad political and resource limits within which operations must be conducted. Because of pervasive uncertainty, both may require making assumptions about the situation based on the best available, but often inconclusive, information. Such assumptions must be treated as hypotheses to be confirmed or altered by the evidence developed through action.

The central thesis of this concept comprises three interrelated ideas that together describe broadly how the joint force will operate:

- Address each situation on its own terms, in its unique political and strategic context, rather than attempting to fit the situation to a preferred template.
- Conduct and integrate a combination of combat, security, engagement, and relief and reconstruction activities according to a concept of operations designed to meet the circumstances of the situation.
- Conduct operations subject to continuous assessment of results in relation to expectations, modifying both the understanding of the situation and subsequent operations accordingly.

Second, in framing a concept of operations conforming to this situational understanding, the joint force commander must consider the use of combat, security, engagement, and relief and reconstruction activities. The following section discusses these in greater detail. Suffice to say here that most joint operations will require some combination of two or more of these broad categories of military activity, which in total embrace virtually every mission the joint force could be called upon to perform. Operational art thus becomes the arranging and balancing of combat, security, engagement, and relief and reconstruction activities to achieve the objectives of the joint operation or campaign -- and their continual rearranging as that operation or campaign unfolds.

The concept does not envision these activities occurring in regular or distinct phases. While some tactical sequencing inevitably will be required, this rarely will be uniform across the operational area. Rather, it is envisioned that those activities will occur largely simultaneously across the operational area.

While the four basic categories of activity constitute the *means* of joint operations, the *ways* are the concepts by which they are arranged and

integrated. As desirable as it might be, no single such concept can prescribe that arrangement across the full set of potential security challenges. The concept for an offensive campaign to defeat the armed forces of a hostile state, for example, necessarily will be very different from the concept for helping a host nation defeat a growing insurgency, which in turn will have little in common with the concept for responding to a peacetime natural disaster.

In every operational situation, the joint force commander will have to develop a concept of operations that integrates -- and reconciles the frequently competing demands of -- combat, security, engagement, and relief and reconstruction as they apply. That concept of operations cannot be based on a rigid template, but instead must reflect the specific conditions of the situation. This has significant implications for doctrine, training and education.

Finally, the joint force commander must expect that, however carefully conceived, his initial operational design will prove inadequate in some respects. His plan therefore must incorporate explicit means of continuously assessing the results of operations in relation to expectations, and he must be prepared to modify operations when the two diverge. By probing the situation to cause it to reveal itself more clearly, operations themselves thus become a way of testing early assumptions and expectations.

To succeed, this approach requires making assumptions about the situation explicit so they can be reconsidered as events unfold. It further requires collecting information not only to monitor tactical execution, but also to provide commanders a basis from which to re-evaluate their fundamental assumptions and modify their operations accordingly.

In short, as both a concession and response to pervasive uncertainty, all joint operations are fundamentally and explicitly an adaption based on learning about the situation through action. Both understanding the situation and arranging combat, security, engagement, and relief and reconstruction become continuous activities informed by feedback. Regardless of the mission, the more quickly and appropriately the joint force can adapt itself to its situation, the more successful it will be.¹⁵

5. BASIC CATEGORIES OF MILITARY ACTIVITY

All joint forces are designed, organized, equipped, and trained to execute one or more of four broad types of military activities. These are the basic building blocks from which joint operations are constructed. As indicated above, most joint operations will require some combination of two or more of these activities arranged and weighted to accomplish the mission.

All joint operations comprise one or more of four broad categories of activity:

- Combat
- Security
- Engagement
- Relief and reconstruction

Combat aims at defeating armed enemies -- regular, irregular, or both. It concludes successfully when those enemies capitulate or are destroyed. It is the demonstration of credible combat power that primarily deters aggression.

Historically, one or both of two defeat mechanisms have been employed in combat.¹⁶ *Attrition* wears down an adversary's human and material resources. *Disruption* attacks his organizational cohesion or effective functioning so that even if elements of the enemy system remain undamaged, the enemy cannot operate as a coherent whole. Both defeat mechanisms also psychologically affect the enemy's will to fight.

When it can be achieved, disruption reduces the need for attrition, saving time and reducing human and material costs. But the vulnerability of an enemy force to defeat by disruption is sensitive to both its intrinsic character and the conditions of battle. Generally, the more rigidly structured an enemy, the greater his adherence to decipherable doctrinal patterns, and the greater his reliance on continuous command and control, the greater his vulnerability to disruption. Conversely, the more imbedded an enemy in the theater of operations, the less transparent his activities, and the less dependent on external sources of logistical support, the less his vulnerability to disruption.

Because they tend to operate dispersed on familiar terrain, avoid regular patterns, and employ episodic and often redundant command chains, irregular forces tend to be more difficult to disrupt than regular forces. More difficult does not mean impossible, however, and given sufficient time and intelligence resources to unravel an irregular enemy's tendencies and structure, even an irregular adversary can be disrupted. Too often, however, combat against an irregular enemy degenerates into a battle of attrition in which success favors the side with the greater stamina or the willingness to apply the greater ruthlessness. Given the future described in the *Joint Operating Environment*, developing knowledge and doctrine for disrupting irregular enemies comparable to that which exists for regular enemies should remain a priority.

Combat activities and capabilities can vary widely depending on context. The capabilities required to detect and defeat regular forces operating from advanced warfighting platforms can be very different from the capabilities required to defeat irregular forces that blend in with the civil population. Both will be very different from the capabilities required to detect and defeat adversaries operating in space and cyberspace.

The trends described in Section 2 promise a more varied, ambiguous, and politically volatile combat environment than U.S. joint forces have ever before encountered. While the central task of combat to impose defeat will not change, how to do so decisively will become increasingly complicated. Moreover, while combat is the essential activity in war, there is much more to winning wars than defeating enemy forces in combat. Above all, joint forces in

the future will need to be able to apply combat power in more varied, measured, and discriminate ways than ever before.

Security activities seek to protect and control civil populations and territory -- friendly, hostile, or neutral.¹⁷ They may be performed as part of a military occupation during or after combat, to help defeat an insurgency, or in response to a humanitarian disaster. Unlike combat, they seek ultimately to reassure rather than compel. Security activities conclude successfully when civil violence is reduced to a level manageable by law enforcement authorities.

Recent experiences have revitalized awareness of both the importance of security activities and the capabilities needed to conduct them effectively. There now is widespread acknowledgment that security activities may be as essential to success in war as combat; they cannot be relegated to a relatively few special-purpose units, but instead must be treated as a competency required of all U.S. general-purpose forces.

Because the premises of security are quite different from -- indeed, often opposite to -- those governing combat,¹⁸ preparation for conducting security missions requires deliberate education and training in areas ranging from cultural awareness and the laws of armed conflict to acceptable methods of population control and the administration of justice.

Effective security requires a visible and enduring security presence in the communities to be secured. Until that presence can be furnished by indigenous civil law enforcement personnel, nothing can replace sufficient trained and disciplined military personnel on the ground.

Joint forces engaged in offensive combat must be prepared to establish security in populated areas from the moment organized resistance in those areas has ceased, and must continue to do this until the threat of civil violence no longer exists or until other instruments become available to control it. Joint force commanders must consider the requirements needed to conduct both activities simultaneously while preserving sufficient flexibility for dealing with unforeseen events.

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

The scope and nature of engagement activities can vary enormously, reflecting differing strategic relationships between the United States and partner nations. Each engagement effort will be unique and must be framed to accommodate both U.S. objectives and the concerns of and constraints on the potential partners.

Even more than other categories of joint activity, engagement is subject to a myriad of laws and regulations governing everything from limits on funding and the deployment of military personnel to legislative restrictions on the tasks to which military assistance may be applied. Given these complexities, nothing can compensate for close and continuous interagency coordination at the individual country level. The key to that coordination is the country team and the U.S. Ambassador to whom it answers. As the permanent agent of the U.S. government's diplomatic relationship with the host nation, the country team alone can negotiate the access essential to effective engagement. And as the President's personal representative, only the ambassador has the authority to insure synchronization of interagency operations. Above all, by virtue of its routine political contacts with the host government and its familiarity with local conditions, the country team is uniquely placed to assess the partner nation's ability and willingness to accept military engagement and, where those differ from the U.S. appraisal, to convince the host government to modify its views. For all these reasons, the country team will be the coordinating authority in most engagement efforts, and the success of those efforts will depend on the effectiveness of the liaison between and among the regional combatant command and the country teams in its area of responsibility.

Trends suggest that engagement requirements increasingly will exceed the capacities of specialized but manpower-limited organizations such as special operations forces and permanent military assistance groups. The unique capabilities of those forces remain vital, and their capacities may well expand. But the reality is that a growing share of joint engagement tasks will fall to general-purpose forces. Accomplishing those tasks without unacceptable penalty to their combat capabilities will require innovative adjustments of joint and service doctrine, organizations, and training.

Finally, not least of the challenges associated with engagement is measuring its impact. Because engagement is for the most part a long-term undertaking, the most important results may not be visible until long after it begins. Indeed, in some cases, as for example when undertaken to help a partner nation improve its ability to deter external aggression, effects may never be clearly measurable.

Since engagement imposes both direct budget costs and opportunity costs with respect to the joint forces that conduct them, that inability to measure their impact risks undermining the legislative and political support without which no engagement is feasible. Even more than other joint activities,

therefore, engagement depends crucially on the persuasiveness of the strategic narrative underwriting it, and on the active sponsorship of political, diplomatic and military leaders. In the end, however difficult its results may be to quantify, joint engagement may be the most cost-effective of the Nation's military investments.

Relief and reconstruction activities seek to restore essential civil services in the wake of combat, a breakdown of civil order, or a natural disaster.¹⁹ Like security, they may be required in conditions ranging from military occupation to counterinsurgency to a humanitarian crisis. They conclude successfully when routine local government and commercial activities are able to meet the economic and health needs of the affected communities or when other agencies are able to take over the relief and reconstruction effort.

Absent effective local law enforcement, relief and reconstruction activities may require concurrent security activities, and often must be integrated with nonmilitary efforts, both governmental and nongovernmental. Preparation for this mission must therefore consider two cases, one in which significant civilian relief assets are present, the other in which they are not. Joint relief and reconstruction activities may involve significant contractor support; such support will have to be integrated with the other actions of the joint force.

Historically, military forces have shown little concern for the civil damage resulting from combat. That began to change in the last century as the continued conduct of combat increasingly fell hostage to the recovery of battle-damaged lines of communication and support facilities such as roads, rail lines, ports and airfields. Similarly, failure to attend to essential civil needs in occupied areas invited popular resistance, suppression of which might require the diversion of precious combat forces.

To those concerns must be added the psychological impact of untended collateral civil damage, not only on the affected population, but also, broadcast by ubiquitous visual media, on the American public and the international community at large. Such untended collateral damage can undermine the legitimacy of U.S. and partner actions. At home, a natural disaster can have the same impact, producing a similar demand for the mobility, logistical assets, command and control, and organized and disciplined manpower which, in many cases, military forces alone possess.

Relief and reconstruction activities conducted during battle differ in several important respects from those conducted during prolonged military occupations, and those, in turn, from peacetime operations aimed at assisting communities in the wake of manmade or natural disaster. Perhaps the key variable is the security conditions within which relief and reconstruction must be conducted. Where no significant security threat exists, or where local law enforcement capabilities suffice to maintain public order, relief and

reconstruction becomes primarily a logistical and engineering problem. In such cases, typical of natural catastrophes and post-conflict environments in which hostile forces have accepted defeat, military forces rarely will be alone in mounting relief efforts, and their most important contribution may be to assist other organizations in such areas as transportation, communications, logistics, and emergency health care.

Such benign conditions are unlikely to coexist with combat. Even where care has been taken to minimize civil damage, combat inevitably destroys civil facilities and disrupts social services, particularly in dense urban areas. Meanwhile, the temporary suspension of civil law enforcement risks unleashing looting, vandalism, and other manifestations of public disorder. Unless brought promptly under control, such conditions can make relief and reconstruction virtually impossible. In turn, delay in re-establishing essential social services can feed the disorder, exacerbate the security problem and, in the extreme, incite the growth of organized resistance.

That said, while security may be a prerequisite for the ultimate success of relief and reconstruction activities, it cannot be a precondition for undertaking them. Both to engage local civil populations and preempt resentment and resistance, efforts to restore essential civil services and encourage the restoration of peaceful daily routines must begin as quickly as possible after organized resistance has ended. In the context of continuing operations, in short, security and relief and reconstruction go hand in hand.

The preeminent objective of relief and reconstruction conducted during combat will be to maintain offensive momentum or defensive integrity. While that by no means precludes efforts to ameliorate the conditions of civil populations, those efforts must be carefully prioritized to avoid reducing pressure on a still undefeated enemy. In counterinsurgency operations, the tension between these competing objectives can become acute, and joint force commanders must constantly reassess and adjust the balance between relief and reconstruction efforts aimed at supporting continued combat and those aimed at improving the conditions of the population.

Where combat against organized resistance has ended or never existed, military relief and reconstruction activities typically are a stopgap measure to preserve life and property until civil and commercial efforts can be organized and brought to bear. In some cases, however, particularly in less developed areas, the interval between an initial response by joint forces and the deployment of sufficient civil relief resources to replace them can be prolonged.

Nevertheless, it is essential that military forces begin partnering with other federal agencies and local authorities as rapidly as possible, especially when nongovernmental organizations are involved. Except in the case of relief and reconstruction incident to combat, straightforward command relationships

rarely will exist, and the greater the number and variety of participating agencies, the greater the risk of misunderstanding and disputes. Military commanders must be able to tolerate a certain degree of ambiguity and inefficiency as the price of successful cross-agency collaboration. They likewise must allocate sufficient resources and effort to overcoming this challenge. Effectiveness therefore will put a premium on close and continuous liaison and communications.

The employment of joint forces in relief and reconstruction activities, unless carefully monitored and controlled, easily can begin to degrade combat readiness. Commanders responsible for such operations must be alert to signs of such degradation and take measures to sustain or restore the combat proficiency of the units involved.

* * *

Together, these four categories of activity embrace virtually every mission the joint force could be called upon to accomplish. Assisting a friendly state to defeat an insurgency, for example, might require combat against organized insurgent forces, security to protect the population from intimidation, relief and reconstruction to restore or expand civil services, and engagement to train host-nation security forces. Even a more conventional conflict typically would require joint forces to conduct, in addition to combat, security activities to control secured areas, relief and reconstruction to facilitate continued combat, and engagement to ensure effective cooperation with multinational partners. Homeland defense could involve engagement to deprive nonstate enemies of sanctuary overseas; security to detect and prevent attack by monitoring land, sea, air, and cyberspace access; combat to defeat an actual attack; and in the worst event, relief and reconstruction to mitigate the effects of a successful attack.

Deterrence is a special case because it can involve both the demonstration of capabilities and the performance of activities. Deterrence requires the credible willingness to employ defensive and offensive combat capabilities, including nuclear, to convince a potential aggressor that any attack would likely fail and would result in unacceptable retaliation. It can involve security activities that convince the potential aggressor that attack preparations likely would be detected. In conjunction with cooperative security efforts, it can involve a variety of engagement activities to convince the potential adversary that it can achieve acceptable objectives without attacking. It can also involve engagement with partners to convince a potential aggressor that an attack would result in a multinational response. Finally, it can involve reconstruction capabilities that demonstrate that even a successful attack will not achieve its desired objective because the United States will recover effectively.

How each activity will be conducted will vary with context. Combat in support of counterinsurgency will differ from combat to defeat cross-border aggression by the armed forces of a hostile state. Recovery from a natural disaster at home or abroad will differ from relief and reconstruction pursuant to combat in an occupied territory. That said, the basic aims, means, and concepts associated with each of these activities will change little from case to case.

Combat, security, engagement, and relief and reconstruction must all be competencies of the joint force. While some special-purpose forces will specialize in particular aspects of one or more, general-purpose forces must be able to operate in all four types of activity in one way or another. Currently, U.S. joint forces possess codified doctrine for the conduct of combat, but doctrine and capabilities with respect to the other activities are less robust. That imbalance must change. That said, it is important to keep in mind that while other agencies can perform security, engagement, and relief and reconstruction, only the military can conduct combat.

6. COMMON OPERATING PRECEPTS

Regardless of the combination of combat, security, engagement, and relief and reconstruction activities, several broad precepts will underlie all successful future joint operations. In effect, these precepts elaborate the central thesis described in Section 4. All flow logically from the conditions and challenges described earlier. None is fundamentally new, although the emphasis each receives and how it is implemented in the future may change. Subordinate joint operating concepts will apply these precepts in greater detail to more specific situations.

- ***Achieve and maintain unity of effort within the joint force and between the joint force and U.S. government, international,***

These precepts will underlie future joint operations:

- Achieve and maintain unity of effort within the joint force and between the joint force and U.S. government, international, and other partners.
- Plan for and manage operational transitions over time and space.
- Focus on operational objectives whose achievement suggests the broadest and most enduring results.
- Combine joint capabilities to maximize complementary rather than merely additive effects.
- Avoid combining capabilities where doing so adds complexity without compensating advantage.
- Drive synergy to the lowest echelon at which it can be managed effectively.
- Operate indirectly through partners to the extent that each situation permits.
- Ensure operational freedom of action.
- Maintain operational and organizational flexibility.
- Inform domestic audiences and influence the perceptions and attitudes of key foreign audiences as an explicit and continuous operational requirement.

and other partners. The problem of achieving and maintaining operational coherence is more important and difficult than ever before given the requirement to operate in multiple domains simultaneously in conjunction with other national agencies, international partners and nongovernmental organizations. After decades of effort, U.S. joint forces have established effective mechanisms for achieving internal unity of effort based on a single military chain of command, although the requirement to ensure that equipment, procedures, and so on are interoperable persists. The challenges of the future will require joint forces to achieve this same level of unity between different joint forces and with other governmental and nongovernmental actors, both U.S. and international, even when formal unity of command is infeasible. They also will require future joint forces to integrate with partners with whom they have never integrated before and at lower echelons than ever before. In many cases, joint forces will require the ability to integrate effectively with partners who are technologically less advanced.

Mechanisms for achieving unity of effort necessarily will differ across situations and among participants. Some actors will integrate fully with the joint force. Others, such as some international partners, may cooperate openly while requiring operational autonomy. Still others, such as some nongovernmental organizations, may find it necessary to distance themselves from military forces for reasons of their own credibility and security. The joint force will have to be extremely flexible about establishing nonstandard relationships -- an example of the direct imposition of political factors on operational conduct.

Two basic situations apply. Where military considerations predominate, the joint force likely will integrate the national effort and will have to incorporate partners into its command and control processes. Where other considerations predominate, some other government agency likely will integrate the national effort, with the joint force adapting itself to that agency's procedures. Even in this case, the joint force, because of its resources and well-established planning methods, will likely provide significant support to the lead agency. Both basic situations will have implications for communications, organization, procedures, and training.

- ***Plan for and manage operational transitions over time and space.***

This concept calls for continuous adaptation to changing circumstances, which often can be done within the context of an existing operational design. Sometimes, however, situations will undergo fundamental shifts. These will rarely be uniform in time and space across an operational area, but they can be critical periods in the conduct of operations. The future joint force commander will have to recognize these fundamental transformations in the situation and transition quickly and smoothly in response to them. Failure to do so can result in problems ranging from lost momentum or opportunities to more or less significant setbacks to outright mission failure. Conversely,

successful transition can allow the joint force to seize the initiative in a situation and garner disproportionately favorable results.

These transitions may often involve the replacement of one organization by another -- either within the joint force or between the joint force and another U.S. or international agency, but they almost always will require some fundamental reorienting of existing forces. In any event, they will require fundamental shifts in operational behavior -- such as from combat to security activities, with their potentially contradictory imperatives.

Transitions of this magnitude cannot be improvised, but must be planned, even if the precise timing of the shifts cannot be predicted -- and accepting that surprises inevitably will occur despite the best analysis. This will require efforts to anticipate potential situational transformations as well as vigilance to operational shifts as they occur. Key also will be mechanisms for quickly reorienting the force despite the natural inertia of ongoing operations. Especially vital will be retaining key commanders and commands in place during transitions, to avoid abrupt breaks in operational continuity.

- ***Focus on operational objectives whose achievement suggests the broadest and most enduring results.*** Designating operational objectives that, if achieved, generate the intended outcomes is a key task of operational design in any situation. A situation can be thought of as a system, a collection of elements interacting to perform certain functions that are essential to the continued existence of that system -- whether the system is an adversary's fighting forces, a society reeling from a natural disaster, or a collection of states creating a regional cooperative security arrangement. Some elements and functions of the system invariably will be more important to the existence of the system -- and offer the joint force greater leverage against it -- than others toward which applying effort will contribute only marginally.

The idea is to focus efforts on objectives that appear most critical to the continued overall functioning of the system rather than those that impact individual elements but leave the system unaffected. In the case of combat, this would mean attacking to disrupt the enemy's functioning as a cohesive whole, rendering him ineffective as a combat force even if whole units remain undamaged -- and exposing him to piecemeal destruction, if necessary. Conversely, in the case of relief and reconstruction, it would mean focusing on those tasks that would most efficiently create or restore some basic level of functionality in local institutions and infrastructure -- in this case to enhance rather than disrupt the functioning of the system.

Identifying critical objectives will depend more on judgment than on calculation. Full understanding of the dynamics of any operational situation will remain fundamentally unachievable, and planning for joint operations should not be predicated on false expectations of certainty. Initially,

operational objectives may have to be tentative, and commanders must be prepared to shift those objectives as the situation develops. The choice of factors on which to concentrate efforts thus should be treated as a hypothesis to be tested by action.

In many situations, the systemic nature of the problem may not be obvious. The operating patterns of irregular enemies, for example, tend to be less easily discerned than those of regular forces. Likewise, some systems are simply less vulnerable than others to system-level influence. Networks of largely autonomous elements, for example, tend to be less vulnerable to system disruption than centralized hierarchies. Such systems ultimately may have to be dealt with by dealing cumulatively with the individual elements.

Regardless of the approach, it is important to recognize that any action in a situation will change the situation. Operational design must always be alert to this, revising objectives as necessary.

- ***Combine joint capabilities to maximize complementary rather than merely additive effects.*** The Services have evolved diverse sets of capabilities to operate effectively in certain situations and physical domains. The essence of joint operations is not only to match each Service to its proper situation so that it contributes most effectively to success, but also to combine Service capabilities such that each enhances the effectiveness and compensates for the vulnerabilities of the others. Joint synergy essentially “scales up” the commonly understood mechanism of combined arms.²⁰

Achieving that sort of complementary synergy requires more than just understanding the particular capabilities and limitations that each component brings to the operation. It also requires the ability to visualize operations holistically, identifying the preconditions that enable each component to optimize its own impact and then diagnosing how the other components might help to produce them. It requires the ability to think in terms of the performance of joint functions -- maneuver, fires, intelligence, command and control, force protection, logistics -- independent of a specific Service or domain. Finally -- not the easiest challenge -- it requires the ability and willingness to compare alternative component missions and mixes solely from the perspective of combined effectiveness, unhampered by Service parochialism.

Above all, achieving joint complementarity requires mutual trust that the missions assigned to components will be consistent with their intrinsic capabilities and limitations; that those capabilities will not be risked for insufficient overall return; and, above all, that component obligations once accepted will be executed as promised. As a later precept suggests, the lower that component synergy routinely can be driven, the greater will be the prospect of developing that mutual confidence.

- ***Avoid combining joint capabilities where doing so adds complexity without compensating advantage.*** Joint synergy is not a natural outcome of multi-Service operations. The requirement to be able to operate jointly imposes constraints on the Services, which the Services willingly accept because of the demonstrated tremendous increase in collective operational impact that effective joint integration provides. That integration requires explicit effort, however, and is achieved only at a cost in increased complexity and greater requirements for training, technical, and technological interoperability, liaison, and planning.

The U.S. Armed Forces in recent decades have succeeded in driving down the costs of joint integration through a variety of organizational, procedural, technological, and training mechanisms, and the synergy achieved by combining Service capabilities usually more than offsets the added complexity. In some situations, however, the benefits of joint integration cannot compensate for that additional complexity, and requiring joint integration becomes operationally unwise.

Where a task is suited to the capabilities of one or two Services, and where involving the remaining components would merely increase complexity without compensating operational benefit, doing so should be avoided. In short, joint synergy must be understood to be a means to greater operational effectiveness, not an end in itself. The joint commander must recognize the limits of synergy in any given situation and optimize joint effectiveness within those limits.

- ***Drive synergy to the lowest echelon at which it can be managed effectively.*** The future operating environment will demand the application of military power in ever-smaller increments, which in turn will require the achievement of joint synergy at ever-lower echelons of command. Joint integration that was once achieved at the component level or slightly below will be achieved routinely in the future at drastically lower echelons -- even down to the small-unit level.

Thanks to advances in areas ranging from communications and information sharing to munitions effectiveness, it increasingly is becoming possible to achieve joint synergy at lower echelons of command without incurring the risks and inefficiencies associated with piecemealing the assets themselves. Thus, in the future, the chief prerequisites for the continued devolution of joint synergy downward will have to do with cross-Service education and training and the continued development of more flexible and adaptable joint planning and coordination mechanisms -- all of which help to lower the inherent costs of joint integration.

In addition, the more widely the premises and practices of mission command, including the encouragement of subordinate initiative, are infused

throughout the joint force, the more effective the devolution of joint synergy will be.

Above all, the further downward the commitment to joint synergy is driven, the more completely “one force, one fight” will become internalized throughout the joint force, increasing not only its operational flexibility, but also its institutional robustness.

- ***Operate indirectly through partners to the extent that each situation permits.*** In a future likely characterized by frequent and widespread military challenges, not even the United States will be able to respond directly to every crisis. In addition, any large-scale employment of U.S. military forces abroad invites political repercussions simply because it is the United States that is acting. Indeed, some will oppose almost any U.S. military commitment, no matter how limited or benign, solely to restrain the exercise of American power. In these circumstances, friendly surrogates assisted by the joint force may be able to conduct operations when the direct employment of U.S. forces would be objectionable or infeasible. In other instances, such as counterinsurgency, eventual success may depend on the indigenous government demonstrating its own sovereign power, and the overt exercise of power by U.S. forces may ultimately be counterproductive.

Even more than in the past, therefore, the future joint force may increasingly find it necessary to pursue its objectives by enabling and supporting such partners, whether friendly nations, international organizations, or some other political entity. This typically will require U.S. forces to minimize their own visibility by operating in a supporting role, allowing those partners to take the lead, even at some expense in reduced operational efficiency. Mounting such indirect operations will more likely succeed where prior engagement activities by special and general-purpose forces -- including military advice and planning, foreign military sales and other forms of security assistance -- have laid the necessary political and military groundwork.

Finally, even when the scale or seriousness of a strategic threat requires the direct employment of sizable U.S. forces, such operations will usually benefit from the operations of partners augmented by U.S. support.

- ***Ensure operational freedom of action.*** Achieving the advantage of synergy requires that joint forces maintain freedom of action on the land and sea and in the air, space, and cyberspace -- in both the operational area and the global commons. In recent decades, U.S. forces have enjoyed virtually uncontested maritime, air and space supremacy. In some future situations -- most cases of disaster relief, for example -- there will be no adversary to contest freedom of action. But as the *Joint Operating Environment* points out, a growing number of potential adversaries in the future will have the capability to

contest U.S. domain supremacy as part of a strategy of erosion, not only in the air and maritime domains, but also on the land, in space, and in cyberspace. Far from enjoying uncontested supremacy, future joint forces may increasingly find themselves fighting for temporary local superiority as a prerequisite for undertaking decisive operations against an enemy.

Although the Services necessarily will devote significant capabilities to achieving freedom of action within the domains in which they operate, the cross-domain application of combat power can be an important source of synergy, and it is essential that the Services dedicate adequate resources to these capabilities as well. The proper balance between intradomain and cross-domain capabilities within the Services will vary from case to case and will require analysis and experimentation.

- ***Maintain operational and organizational flexibility.*** Future challenges will require a rapidly scalable and organizationally flexible joint force. Technology and training increasingly are permitting the empowerment and autonomous employment of much smaller and more widely dispersed tactical formations. Based on an underlying modular structure down to small-unit levels, joint forces will routinely and smoothly aggregate and disaggregate into temporary joint formations of differing sizes depending on the nature and scale of operations. They will also similarly combine elements of different Services and even other agencies and international partners as required.

The effect will be a fluid process of task organization in which joint formations of various sizes and compositions quickly coalesce around the performance of a task and then disband, with the contributing elements reforming in other combinations to perform new tasks. This will have significant implications for organization, training, doctrine and procedures, and technology, among others.

- ***Inform domestic audiences and influence the perceptions and attitudes of key foreign audiences as an explicit and continuous operational requirement.***²¹ In the globalized, information-intensive environment described in the *Joint Operating Environment*, gaining the support of key audiences for U.S. policies and actions will be critical to success in practically any situation. In any kind of operation, from peacetime security cooperation to warfare, information will be a critical and powerful element of military power, often as important as any other. Because every action sends a signal, whether intentionally or not, joint forces will plan and execute every operation not only for the physical conditions they produce, but also for their effect on the perceptions and attitudes of key audiences. In fact, in many cases, attitudinal effects may be the primary operational consideration.

Since practically every future joint action will be subjected to scrutiny and interpretation, joint operations must routinely include an integral public

narrative explaining those operations to various audiences. It will not be enough to act appropriately; it will be just as important to engage in the debate about how to interpret those actions, and it will usually be best to initiate the debate on terms of the joint force's own choosing.

Because in an increasingly saturated information environment signals will have to compete for the attention of their audiences, it will be important for the joint force to coordinate its messages and images -- and to maintain unity of effort by integrating those messages with those of its partners. Moreover, since deeds send stronger messages than words, it is important that actions both large and small be consistent with the resulting narrative. Few things will destroy credibility more quickly than actions that are incompatible with stated intentions.

7. IMPLICATIONS OF ADOPTING THIS CONCEPT

Adopting this concept has significant implications for the way the Services organize, man, train, and equip the units that compose the joint force. Given the broad scope of a capstone concept, these implications will naturally be broad. Subordinate concepts, with their narrower scope, will derive more specific implications.

The common theme to all these implications is creating greater adaptability and versatility across the force to cope with the uncertainty, complexity, unforeseeable change, and persistent conflict that will characterize the future operating environment. These implications include:

- ***Build a balanced and versatile joint force.*** The single clearest implication of this concept is that the United States

Institutional implications of adopting this concept include:

- Build a balanced and versatile joint force.
- Improve knowledge of and capabilities for waging irregular warfare.
- Improve knowledge of and capabilities for nuclear warfare and operations in chemical, biological, radiological and nuclear environments.
- Improve knowledge of and capabilities for security, engagement, and relief and reconstruction activities.
- Renew emphasis on and understanding of strategic deterrence, including nuclear deterrence.
- Create general-purpose forces capable of operating independently at increasingly lower echelons.
- Maintain the capability to project and sustain military power over global distances.
- Improve the ability to operate in urban environments.
- Improve capabilities and capacities for covert and clandestine operations.
- Markedly increase language and cultural capabilities and capacities.
- Institute mechanisms to prepare general-purpose forces quickly for new mission sets.
- Markedly improve the ability to integrate with other U.S. agencies and other partners.
- Improve organizational solutions for protracted missions that cut across geographical boundaries.
- Develop innovative and adaptive leaders down to the lowest levels.
- Develop joint commanders who are masters of operational art.
- Develop senior leaders who are experts not only in the operational employment of the joint force, but also in the development and execution of national strategy.
- Improve Service and institutional adaptability to deal with rapid change.

must have balanced and versatile forces able to accomplish a wide variety of potential missions. This will require a broad array of forces and capabilities that can be tailored to deal with unpredictable, dynamic situations. Currently, U.S. forces are working to improve their combat capabilities with respect to irregular enemies. While this process will continue during the time frame of this concept, U.S. forces must also maintain their dominance in conventional warfare, both to be prepared to fight against another military power and to deter attack.

While combat will always remain the essential military activity, future joint forces must improve their capabilities and capacities to perform security, engagement, and relief and reconstruction activities, which can be every bit as important to successfully meeting the security challenges of the future.

The broad variety of potential challenges and the uncertainty over which will actually arise suggests that the bulk of U.S. forces should be versatile general-purpose forces capable of performing any of the four basic military activities -- albeit perhaps with adjustments to organization, training, equipment, and so on. That said, some missions, such as nuclear warfare, are so specialized that they will require dedicated *special-purpose* forces.

Ensuring a balanced and versatile force will include addressing the proper ratio between Active and Reserve forces. It will also require assessing the proper role and management of contractors and other civilians within the force.

The importance of balance and versatility applies to force posture as well as to force composition. The geographical shifting of political and economic interactions critical to U.S. interests implies the need to shift U.S. global military posture accordingly.

Another balancing consideration is redundancy, an essential attribute in military forces, which must be able to absorb losses. Redundancy can be created by building sufficient capacity of key capabilities. In many cases, however, it can also be achieved through the interchangeability of different capabilities. Ground, air, and naval fires, for example, provide functional redundancy to the extent that they can be used interchangeably.

Finally, balancing the force will require the Services to address the relationship between intradomain and cross-domain capabilities, which raises the issue of self-sufficiency versus interdependence. While the Services necessarily depend on one another, both intrinsically and as a byproduct of limited resources, the inherent friction and uncertainty of the operating environment also require that military units maintain some level of self-sufficiency to survive and operate during periods when cross-domain support

is unavailable. Resolving this tension will be an element of achieving proper balance.

Optimizing the balance of the joint force across all these dimensions has significant implications for policy, force structure, doctrine, organization, training, materiel, leader development, personnel, and facilities. Developing new capabilities and capacities may require changes to existing structure and historical budgetary percentages. Balance therefore will require thorough analysis and experimentation. Above all, it will require close and continuous coordination within the Department of Defense, especially with respect to addressing cross-domain interdependencies.

- ***Improve knowledge of and capabilities for waging irregular warfare.*** During the past several decades, the U.S. military has developed an unequalled expertise in conventional warfare, codified in a comprehensive body of doctrine, tactics, techniques, and procedures. While a good deal of theory exists concerning irregular warfare, and while U.S. forces continue to improve dramatically in this area, irregular foes will continue to pose significant challenges for the foreseeable future. U.S. forces will require the same level of expertise in irregular warfare that they have developed for conventional warfare.

- ***Improve knowledge of and capabilities for waging nuclear warfare and operating in chemical, biological, radiological, and nuclear environments.*** Similarly, while a good deal of theory exists concerning nuclear warfare and operations in chemical, biological, radiological, and nuclear environments, doctrine and training in those areas is less current. The *Joint Operating Environment* forecasts that joint forces will not have the luxury of contemplating future warfare free of these significant operational challenges, but will have to develop the same level of expertise with respect to them that they have developed for conventional warfare.

- ***Improve knowledge of and capabilities for security, engagement, and relief and reconstruction activities.*** Likewise, despite considerable historical experiences with these activities, the U.S. military during the past few decades has allowed doctrine, tactics, techniques, and procedures for conducting them to lapse. To succeed across the full set of national security challenges, U.S. forces will need to readdress themselves to these noncombat, but equally vital, activities.

- ***Renew emphasis on and understanding of strategic deterrence, including nuclear deterrence.*** In the future, multiple states and nonstate actors will possess the capabilities to threaten U.S. vital interests in a variety of ways, often on a catastrophic scale. Deterrence in this environment will be a much more complicated challenge than was deterrence of a very small number of states during the Cold War. Joint forces will play a major role in meeting the

national security challenge of deterrence and will require a body of knowledge and deterrent capabilities equal to that challenge. Key among these will be nuclear capabilities, the failure to maintain which will encourage potential aggressors. That said, the joint force and the Nation cannot rely solely on their nuclear capabilities for strategic deterrence, but must have a flexible range of options for deterring a wide range of threats short of nuclear warfare. Future deterrence will also require a greater level of coordination with other U.S. agencies and partners.

- ***Create agile general-purpose forces capable of operating independently at increasingly lower echelons.*** This concept suggests the imperative for general-purpose forces increasingly to possess attributes commonly associated with special operations forces. These attributes include agility, speed of command and control, cultural sensitivity, the aptitude for highly discriminate action, and the ability to operate independently at lower echelons while possessing the access to a wide array of support. As an example, independent small units may be required to advise and operate alongside partner security forces in a broad range of missions.
- ***Maintain the capability to project and sustain military power over global distances.*** The ability to operate indefinitely at the end of long lines of operations has been a historical requirement for U.S. forces, and nothing in this concept suggests that joint forces can surrender that ability for the future. Joint forces will require the ability to ensure at least local and temporary maritime and air superiority in both the operational area and the global commons—and, increasingly, space and cyber superiority -- as a prerequisite for the successful conduct of practically any expeditionary operation. They will require a mix of air and sea strategic and operational lift capable of delivering forces and materiel to their destinations, often in the absence of capable airfield and port facilities. They will require the ability to construct the expeditionary infrastructure needed to support operations in an austere theater. Finally, they will require the ability to conduct forcible-entry operations in the face of increasingly lethal antiship and anti-aircraft weapons that will be available to a greater number of potential adversaries.
- ***Improve the ability to operate in urban environments.*** The *Joint Operating Environment* forecasts that future operational areas increasingly will be urban. Urban environments present significant and unique challenges for all categories of military activity, in terms of both the complex physical terrain and the concentrated and intermeshing flows of social activity. Urban combat presents challenges to target identification and discrimination, weapons employment, sustainment, force protection, and ground movement. Urban combat also takes a heavy toll on ground troops and equipment. Security activities in urban environments are complicated by dense populations interacting in a myriad of social, economic, religious, and other patterns. Engagement activities must deal with the variety of social, government, military

and other institutions characteristic of urban environments. Finally, relief and reconstruction activities must deal with dense populations under duress and with the specialized and complex infrastructure upon which they depend.

- ***Improve capabilities and capacities for covert and clandestine operations.*** The future increasingly will require the ability to employ military power in ways that minimize political repercussions -- something that will be very difficult to do overtly because of the transparency of the future operating environment. In many cases, it may be desirable to act preemptively before a developing situation reaches a level of crisis requiring the overt deployment of a large joint force. In some cases, partner nations may welcome U.S. military assistance but may not be able politically to acknowledge that assistance. In still other cases, it may be in U.S. interests to act militarily even though overt action is politically unacceptable. Hence, a joint force with improved capability and capacity to operate covertly and clandestinely will be a more flexible and effective instrument of policy.

- ***Markedly increase language and cultural capabilities and capacities.*** Several parts of this concept point directly toward the requirement for greater language and cultural proficiency within joint forces. The idea of understanding each operational situation in its unique political and strategic context will require a higher level of cultural attunement than joint forces currently possess. Similarly, increased emphasis on security, engagement, and relief and reconstruction activities implies even more extensive contact and interaction with indigenous agencies and populations than does combat. Effective multinational cooperation, a political and operational imperative identified in the *Joint Operating Environment*, likewise relies heavily on cultural awareness and proficiency in foreign languages.

That acknowledged, it is not reasonable to expect the entire force to be culturally and linguistically knowledgeable about every geographic locale to which joint forces might be committed. Future force development therefore must make provision for rapid assembly of liaison teams with the requisite expertise, and military educational institutions must be able on short notice to conduct targeted language and cultural familiarization courses for leaders and other key personnel expected to deploy to areas about which such knowledge is not widespread in the force.

- ***Institute mechanisms to prepare general-purpose forces quickly for mission changes.*** The concept asserts the need for joint and Service general-purpose forces to be able to transition quickly among fundamentally different types of operational activities. For example, units that have been engaged in intense combat may need to transition into effective security forces. Standing mechanisms that facilitate and accelerate these transitions would dramatically improve the adaptability of joint forces.

Equally important will be improved means of augmenting transitioning units with specialized equipment and personnel as required. For example, combat formations committed to relief and reconstruction activities might require augmentation with logistical, engineering, and medical support. Pre-configured packages enabling rapid assembly and integration of such additional capabilities would significantly improve transition responsiveness. In turn, that urges maximum modularization and interoperability of those capabilities.

- ***Markedly improve the ability to integrate with other U.S. agencies and other partners.*** This concept identifies the requirement for integrated national and multinational operations, which in turn will require close cooperation with partners with potentially very different organizational processes and cultures in a variety of standard and nonstandard relationships. This broad implication has potentially dramatic impact on manning, communications and other technological interoperability, common techniques and procedures, and interagency and multinational training, among other requirements.

Organizational procedures and technologies that improve collaboration within ad hoc groups of diverse, often geographically dispersed members will help. But the most important requirements of this implication are frequent coordination and exercises with interagency and international partners and the development of common procedures before an occasion for commitment arises.

- ***Improve organizational solutions for protracted missions that cut across geographical boundaries.*** The future will likely produce protracted, geographically dispersed challenges that cut across national, cultural and regional boundaries. Dealing effectively with these challenges may require innovative organizational solutions that allow standing joint task forces or other organizations to operate routinely across combatant command boundaries without disrupting the integrity of those commands.

- ***Develop innovative and adaptive leaders down to the lowest levels.*** The broadened range of situations future joint forces will confront, and their increased complexity, will put a premium on leaders at all levels who are able to respond quickly and flexibly to the unexpected. The quality of their leaders must be one of the universal advantages -- if not *the* enduring advantage -- of U.S. joint forces regardless of operational requirements.

Leaders down to the lowest levels must be comfortable acting on their own authority based on an understanding of the larger situation and an appreciation for the broader implications of their actions. The U.S. military's longstanding rhetorical commitment to mission command must be matched by action. That includes sharing information through all ranks, granting subordinates discretion as wide as strategic conditions will tolerate, and

encouraging a culture more tolerant of errors of commission than errors of omission.

The Services must recruit, develop, and reward leaders who acquire and demonstrate these skills. Leader development, professional military education in particular, must specifically provide training and education that facilitates flexible and creative problem solving.

- ***Develop senior leaders who are experts in commanding at the operational level.*** Joint operations take place at the operational level, at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas. Because of the growing complexity of the operating environment, future operational-level command will be more challenging than ever before, requiring the integration of the diverse military capabilities inherent in the components of the joint force, as well as the coordination of these capabilities with those of interagency and international partners.

The commander's role in this process is absolutely critical. He must drive the process of operational design, which conceives the framework that underpins all planning and execution, based on an understanding of each unique situation in its political and strategic contexts. He must be expert in the arranging, balancing, and rearranging of combat, security, engagement, and relief and reconstruction activities. He must create a command climate that inspires cooperation and trust. He must promote joint synergy by establishing proper relationships among the components of the joint force, and he must do the same with interagency and international partners.

These skills must be developed over a career. There are significant requirements here for joint leader development separate from development of command and leadership skills within a particular Service.

- ***Develop senior leaders who are experts not only in operational art, but also in the development and execution of national strategy.*** While operational expertise is essential, it is not enough. In a future requiring integrated national effort, joint force commanders cannot afford to focus narrowly on achieving assigned operational objectives, but must contribute to the development of strategic objectives as well. They must be knowledgeable about the use not only of the military instrument, but also all the other elements of national power, how those elements interact with military force, and how they ultimately might supplant the need for military force. Development of that broader strategic understanding must begin early in the military education process and continue throughout every military officer's professional development. Incorporation of issues requiring strategic dialog with civilian decision-makers should be routine in every major joint exercise.

- ***Improve Service and institutional adaptability to deal with rapid change.*** This concept has identified environmental conditions of pervasive uncertainty and rapid change. It has also proposed an approach based on operational adaptation by the joint force. But there are limits to how adaptive joint forces can be with the capabilities they are provided. To support these joint forces, the Services and broader Defense institutions must be equally agile in addressing new doctrinal, organizational, training, educational, and material requirements and lessons learned.

8. RISKS OF ADOPTING THIS CONCEPT

Adopting this capstone concept carries with it certain potential risks.

- Adjusting joint force capabilities and capacities to provide greater emphasis on security, engagement, and relief and reconstruction activities risks reducing combat capabilities and capacities. This risk can be mitigated, although not eliminated, by requiring general-purpose forces to transition among those activities routinely in training and exercises, and by improving the modularization of enabling capabilities such as logistics to facilitate rapid mission transitions without permanent organizational reconfiguration.
- Adjusting joint force combat capabilities and capacities to provide greater emphasis on fighting irregular forces risks reducing combat capabilities and capacities with respect to regular forces, a less likely but potentially more dangerous security threat. This risk will be mitigated to the extent that combat capabilities and organizations are designed from the outset for maximum versatility and specialized capabilities essential for success against regular forces or for deterrence are preserved. It can also be mitigated by the development and application of training techniques and technologies that help leaders and their subordinates master new skills more quickly than more traditional training methods.
- The concept's emphasis on engagement and relief and reconstruction activities could lead to overuse of joint forces in these activities, usurping the rightful roles and authorities of other governmental agencies, or to the perception that the military routinely can succeed in these activities without the contributions of other agencies. Mitigation of this risk cannot be assured by the joint force alone, but instead will depend on the decisions of political authorities and the behavior of other government agencies.
- Conversely, the emphasis on integration with other government agencies could lead to the expectation by military forces that other agencies and organizations will always be present and that the joint force can therefore concentrate on security and combat activities. Mitigation of this risk requires doctrinal and training acknowledgment of the requirement for joint forces to be

able to conduct all of the four categories of military activity for some period of time without interagency assistance.

In sum, while none of the foregoing risks can be wholly eliminated -- while each, in fact, is an inescapable byproduct of the future operating environment -- all can be mitigated by the application of good judgment to the institutional implications discussed above, and especially by education and training that prepare leaders and those they lead for the challenges these risks present.

9. CONCLUSION

Reflecting the conditions forecast by the *Joint Operating Environment*, this concept envisions a future characterized fundamentally by uncertainty, complexity, rapid change, and persistent conflict, a future in which a broad set of compelling national security challenges in peace, crisis, and war will require the employment of U.S. joint forces. The most important of these for U.S. Armed Forces is war, the ability to wage which should never be sacrificed. These challenges are not fundamentally new, but their future occurrence will manifest features that are both novel and currently unpredictable. As a result, the joint force must be prepared to contribute to the national effort to deal with all these challenges, even though preparing for any one may be of limited help in preparing for the others -- even, in fact, when preparing for one presents problems in preparing for others.

This concept proposes a generic process of operational adaptation that can apply universally to all joint operations despite the wide variety those operations may take. This approach is based on: understanding each operational situation on its own terms, in its unique political and strategic context; arranging some combination of combat, security, engagement, and relief and reconstruction activities based on this understanding; and assessing the effects of operations and adjusting the operations accordingly. A key precept of this approach will be synergizing the complementary capabilities that the Services contribute to the joint force. The construct of four basic types of military activity -- combat, security, engagement, and relief and reconstruction -- provides the basis for capability development.

The institutional implications of taking this approach are potentially dramatic. In one way or another, all of them involve making the Armed Forces a more adaptive and versatile instrument of national policy. Fundamental among them will be building greater competence across all four types of military activity and greater effectiveness in dealing with a wider range of regular and irregular threats.

Ultimately, it is the men and women -- Active, Reserve, and civilian -- who make up the joint force that provide its greatest operational strength. It is incumbent on the capability development process to ensure they are provided with the doctrine, training, education, and materiel they need to fulfill their mission successfully.

¹ Barry R. Posen defined global commons as areas of air, sea, and space that “belong to no one state and that provide access to much of the globe.” “Command of the Commons: The Military Foundation of U.S. Hegemony,” *International Security*, Vol. 28, No. 1 (Summer 2003), p. 8. The same description can be applied to cyberspace, which provides access to much of the globe’s information. Posen attributes the origin of the term to Alfred Thayer Mahan, who described the sea as “a wide common, over which men may pass in all directions.” *The Influence of Sea Power upon History: 1660-1783*. (Boston: Little, Brown and Co., 1890), p. 25.

² Fareed Zakaria, “The Rise of the Rest,” *Newsweek*, 12 May 2008.

³ Field Manual 3-0, *Operations* (Washington: Headquarters, Department of the Army, Feb08), foreword.

⁴ The *Major Combat Operations* (v2.0, Dec06) and *Irregular Warfare* (v1.0, Sep07) joint operating concepts address the challenges of warfare. The *Military Support to Stabilization, Security, Transition and Reconstruction Operations* joint operating concept (v2.0, Dec06) describes military actions in response to a wide range of situations that cause instability, including insurgency and factional conflict. Pp. i-ii and 3.

⁵ Several terms are used to refer to the type of warfare generally waged between standing state militaries. *Conventional warfare*, perhaps the most commonly used term, suggests warfare according to established conventions, which is generally accurate. Conventional warfare is not defined in doctrine, however, although conventional *forces* are: “**conventional forces**—1. Those forces capable of conducting operations using nonnuclear weapons. 2. Those forces other than designated special operations forces.” *DOD Dictionary of Military Terms*, <http://www.dtic.mil/doctrine/jel/doddict/> [accessed 8 October 2008]. Based on this definition, conventional warfare thus would include irregular warfare not conducted by special operations forces. Joint Publication 1, *Doctrine for the Armed Forces of the United States*, uses the term *traditional war*, which “is characterized as a confrontation between nation-states or coalitions/alliances of nation-states. This confrontation typically involves small-scale to large-scale, force-on-force military operations in which adversaries employ a variety of conventional military capabilities against each other in the air, land, maritime, and space physical domains and the information environment. The objective is to defeat an adversary’s armed forces, destroy an adversary’s war-making capacity, or seize or retain territory in order to force a change in an adversary’s government or policies.” (Washington: Joint Chiefs of Staff, 14 May 2007), p. I-6. *Traditional warfare*, however, implies military methods based on time-honored cultural history, which routinely has included irregular warfare and which may have little in common with future warfare between regular military forces. The logical alternative to irregular warfare is *regular warfare*, which suggests warfare between regular, uniformed state militaries -- although one would be hard-pressed to find an historical example of a completely regular war. “Regular” is defined as “of, relating to, or constituting the permanent standing military force of a state <the regular army> <regular soldiers>.” *Merriam-Webster’s Online Dictionary*, <http://www.merriam-webster.com> [accessed 8Oct08]. Compare all these to: “**irregular forces** -- Armed individuals or groups who are not members of the regular armed forces, police, or other internal security forces.” [*DOD Dictionary*, accessed 8Oct08.] And: “**irregular warfare** -- A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary’s power, influence, and will. Also called IW.” [*DOD Dictionary*, accessed 2 October 2008]. All of which points to the ultimate futility of trying to describe warfare in terms of definitive categories.

⁶ Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, December 2007). “Hybrid threats incorporate a full range of different modes of warfare including conventional capabilities, irregular tactics and

formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder. Hybrid Wars can be conducted by both states and a variety of non-state actors.” [p. 8.]

⁷ Including the popular term *asymmetric warfare*, defined as “armed conflict between belligerents having different strengths and weaknesses.” Wiktionary, http://en.wiktionary.org/wiki/asymmetric_warfare [accessed 8 October 2008].

⁸ In classical military theory, the term is *strategy of attrition*, which is contrasted with *strategy of annihilation*. See Hans Delbrück, *History of the Art of War Within the Framework of Political History*, trans. by Walter J. Renfro, Jr. (Westport, CT: Greenwood Press, 1985), vol. 4, chap. IV.

⁹ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), p. 77.

¹⁰ The *Deterrence Operations* joint operating concept (v2.0, December 2006) discusses the military contribution to the challenge of strategic deterrence.

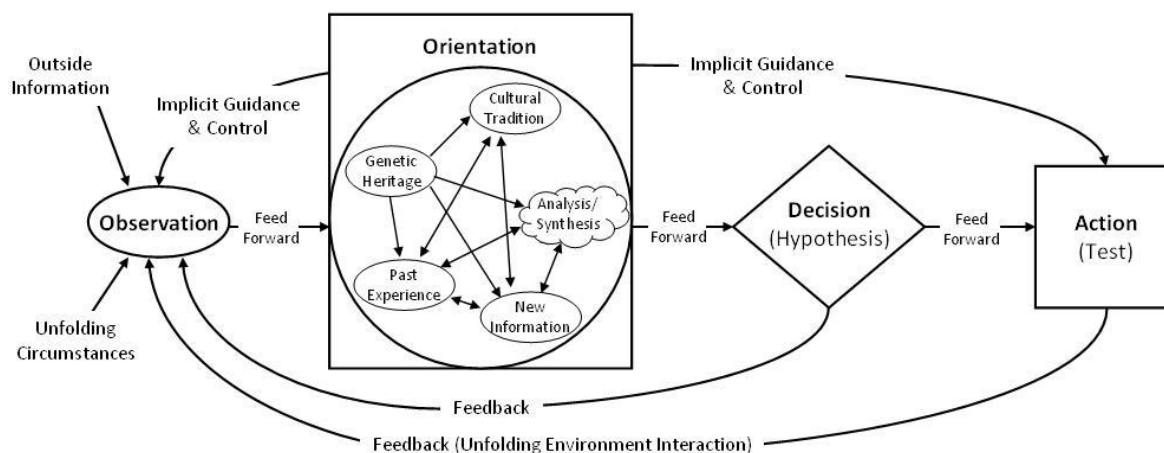
¹¹ The *Military Contribution to Cooperative Security* joint operating concept (v0.99, March 2008) describes the joint role in establishing cooperative security.

¹² The *Homeland Defense and Civil Support* joint operating concept (v2.0, October 2007) describes the joint contribution to the challenge of defending the homeland and providing civil support.

The Department of Defense is responsible for the homeland defense mission, with other agencies in support. Homeland defense differs from homeland security, which is “a concerted national effort to prevent terrorist attacks within the United States; reduce America’s vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur.” *DOD Dictionary of Military Terms*, <http://www.dtic.mil/doctrine/jel/doddict/> [accessed 7 October 2008]. The Department of Homeland Security is responsible for the homeland security mission, with other departments and agencies, including the Department of Defense, in support. The U.S. Coast Guard is the lead federal agency for maritime homeland security per the Homeland Security Act of 2002.

¹³ Ibid.

¹⁴ The best-known model of operational adaptation is John Boyd’s observation-orientation-decision-action cycle, or OODA loop. See John R. Boyd, “Patterns of Conflict” and “A Organic Design for Command and Control,” *Patterns of Conflict*, unpublished briefing slides, 1988; and “The Essence of Winning and Losing,” unpublished briefing slides, 1995. On slide 4 of the last, Boyd produced his only diagram of the OODA loop:



¹⁵ That said, it is possible for the joint force to become too adaptive, changing its operations precipitously in response to every operational incident. Perseverance and steadfastness in the face of difficulties often are also important elements of success. Judgment is required.

¹⁶ Current U.S. Army doctrine identifies four defeat mechanisms: destroy, dislocate, disintegrate, and isolate. Destroy essentially equates to attrition as described in this concept. Dislocation, disintegration, and isolation are different forms of disruption as described here. Army doctrine also identifies four “stability mechanisms”: compel, control, influence, and support. Field Manual 3-0, *Operations* (Washington: Headquarters, Department of the Army, February 2008), paras. 6-42 through 6-48 and 6-49 through 6-53.

¹⁷ The U.S. military has conducted security operations since the birth of the Republic, from the Whiskey Rebellion in 1794 to today’s insurgencies in Iraq and Afghanistan. Federal forces occupied the defeated South from 1865 until 1877, and military activities associated with America’s westward expansion included many aimed at enforcing law and order in rough frontier communities lacking effective civil enforcement. More recently, military forces have performed domestic security missions ranging from riot control and counterdrug operations to border control. Since the attacks of 11 September 2001, the military’s role in homeland security only has expanded. Abroad, security operations have been required in nearly every war the Nation has fought, both during hostilities and incident to post-war occupations. The duration of these operations occasionally has been controversial but, until fairly recently, not the need for them. During the Cold War, however, with U.S. joint forces tasked largely with helping to defend allied nations that would be responsible for securing their own populations, security capabilities such as civil affairs personnel and military police units were curtailed or shifted to the Reserve Components, and both the doctrine and training associated with security operations tended to lapse.

¹⁸ As evidenced by “The Paradoxes of Counterinsurgency Operations” in the recent Army/Marine Corps counterinsurgency manual. FM 3-24/MCWP 3-33.5, *Counterinsurgency* (Washington: Headquarters, Department of the Army & Headquarters, Marine Corps Combat Development Command, 15 December 2006), paras. 1-148 through 1-157.

¹⁹ A distinction must be made between relief and reconstruction as a basic category of military activity and stabilization and reconstruction operations, which are coordinated U.S. government operations in countries emerging from conflict or civil strife. The latter are a responsibility of the State Department’s Office of the Coordinator for Reconstruction and Stabilization. They tend to be long-term efforts. The joint force contribution to a larger stabilization and reconstruction operation likely will include relief and reconstruction activities, but may also include security, engagement, and even combat. See “About S/CRS,” U.S. State Department Web site, <http://www.state.gov/s/crs/c12936.htm> [accessed 8 October 2008].

²⁰ MG David Fastabend, “Mechanism of Joint Synergy, v2 (unpublished paper, 31 March 2008), p. 4.

²¹ This precept generally coincides with the area of *strategic communication*, defined as “focused United States government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power.” *DOD Dictionary of Military Terms*, <http://www.dtic.mil/doctrine/jel/doddict/> [accessed 6 October 2008].

The U.S. Information and Educational Exchange Act of 1948 (Public Law 402), popularly referred to as the Smith-Mundt Act, prohibits domestic distribution of information intended for foreign audiences.