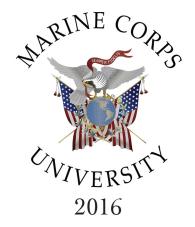
The Breckinridge Papers

SELECTED STUDIES FROM THE MARINE CORPS UNIVERSITY

Volume 1, Number 1



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Quantico, Virginia

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President's Foreword

arl von Clausewitz made well-known the axiom that the nature of war is unchanging, but its character is in constant flux. As our nation confronts a world of increasingly complex threats, enemies, and environments, Marine Corps University offers *The Breckinridge Papers: Selected Studies from the Marine Corps University* as a forum where students from the Marine Corps War College (MCWAR), the School of Advanced Warfighting (SAW), the Command and Staff College (CSC), and the Expeditionary Warfare School (EWS) can engage in professional dialogue across the defense community in the United States and with friends and allies abroad. This annual publication builds upon the university's strong commitment—recognized in the Wilhelm Report, as well as in others more recently—to developing creativity and critical thinking, and will serve to advance those traits for decades to come.

Lieutenant General James C. Breckinridge is a distinct and fitting choice for the title of this series. A product of the Marine Corps' growing commitment to professional military education, having graduated from the Army War College, Breckinridge served as commanding general of Marine Corps Schools (the predecessor to the president of Marine Corps University) twice in the 1930s. In this role, he directly presided over preparation and eventual publication of the Marine Corps' first-ever doctrinal statements, the most renowned of which are the *Tentative Landing Operations Manual* (1935), the *Small Wars Manual* (1940), and the study dealing with advanced base defenses in the Pacific. The resulting doctrinal and organizational breakthroughs enabled the successful amphibious campaigns of the Pacific war. Mid-level officers participated in, thought about, and wrote about these innovations in warfighting, often while attending the schools that became the Expeditionary Warfare School and the Command and Staff College. Their writings filled the pages of the *Marine Corps Gazette* and the U.S. Naval Institute *Proceedings*. Today, as then, sharing such critical thinking and creativity improves both the individual author and the Service as a whole.

This inaugural issue comprises award-winning offerings written over the past two academic years by Marine Corps officers, an Army officer, a French Foreign Legion officer, and by interagency authors serving in the Central Intelligence Agency, and the Department of State. An editorial board oversaw the process of selecting the most outstanding offerings for this publication in an organic continuation of the writing award process conducted by each individual school. Marine Corps University will continue this selection method in future academic years, collecting the most provocative, thoughtful, and relevant papers by university writing award recipients for the editorial board's consideration.

The Breckinridge Papers: Selected Studies from the Marine Corps University celebrate and continue the inquisitive spirit of such professional scholars as Lieutenant General Breckinridge. Semper Fidelis.

Helen A. Fratt H.G. Pratt

Brigadier General, U.S. Marine Corps Reserve President, Marine Corps University

Before the Bounce Defense Reorganization for the Twenty-First Century Global Security Environment

by Colonel Anthony C. Bolden, USMC¹

ABSTRACT

ritten as a future history, this monograph is set before a Conference Committee of the U.S. Congress convened to address the topic of defense reorganization. The global challenges of the first two decades of the twenty-first century have highlighted and underscored the reality that the Department of Defense (DOD) has continued to satisfice a twentieth-century force that is not optimized to confront current security challenges. The protracted and unsystematic employment of U.S. military forces in Iraq and Afghanistan, the inability of the United States to ensure regional security and stability following the 2016 collapse of the Venezuelan government, and the coordinated attacks of 2 May 2018 have combined to uncover gaps in our defense organization. The DOD's self-selected roles and responsibilities reflect a desire to preserve the traditional "familiar" force structures as the status quo. In the aftermath of recent events, Secretary of Defense Mary Hays has conducted an indiscriminate reassessment of roles and missions, leading to the following recommendations: trifurcate ground force roles and missions to better address the range of military operations, reform civilian oversight, and reassign the National Guard to the Department of Homeland Security. This monograph depicts her prepared remarks, and subsequent testimonial discussion.

SECRETARY OF DEFENSE TESTIMONY Wednesday, 20 March 2019

U.S. Congresss, Conference Committee on Defense and Security

The conference committee met, pursuant to notice, at 1002 in room SR-222 in the Russell Senate Office Building, Senator F. Emmanuel Peterson Jr. presiding.²

Chairman Peterson:

The meeting will come to order. This committee will examine the roles and missions of the armed forces and discuss potential reorganization within the Department of Defense.

The chair will recognize himself for the purposes of making a short opening statement. Without objection, the opening statements

¹ Col Bolden is a graduate of the Marine Corps War College and currently serves as the Federal Executive Fellow at the Brookings Institution in Washington, DC. This paper won the LtGen Paul K. Van Riper Writing Award for Academic Year 2014–15.

² LtGen Frank E. Peterson Jr., USMC, was the first African-American to achieve the rank of general officer in the Marine Corps. Having held command at every operational level, he is the embodiment of leadership and his namesake gives the character the professional credibility to lead this joint committee.

of other committee members so choosing will be included in the record.

I would like the record to show that the following persons are present: Secretary of Defense Mary L. Hays, Secretary of Homeland Security Crispus Attucks, and Chief of the National Guard Bureau General Jack Endecott.³

Three significant events have led to today's hearing. First, the unsystematic and protracted generational involvement of our military in Iraq and Afghanistan resulted in a hollowing of our forces.⁴ Our military was tasked with roles and missions they were neither organized nor equipped to conduct, highlighting current inefficiencies in our defense organization.⁵

The second being the 2016 collapse of the Venezuelan government and subsequent international humanitarian crisis. Our lack of nonmilitary capacity to provide security and stabilization forces left the door open for Chinese "peacekeepers"—prepositioned People's Liberation Army (PLA) soldiers posing as refinery workers and vendors—to fill the void.

The latest event was on 2 May of last year, when sequential terrorist attacks on the Army Corps of Engineers' Mississippi River lock and dam system and the Columbia River hydroelectric system unleashed events that left the country in shock and disbelief for the second time this century.⁶ Growing waves of river water acted like a "water hammer" and inflicted significant damage to cities and towns along the Mississippi and Columbia Rivers. A delayed and inco-

³ Note that, for our purposes, the following historic personalities have been used to forward the discussion. Mary Ludwig Hays is believed to be the subject of folklore that gave rise to the pseudonym Molly Pitcher. It is reported that Mary Hays, with little regard for her own safety, delivered water and supplies to revolutionary soldiers at Valley Forge and during the Battle of Monmouth. The author chose her character in acknowledgement of her strength, courage, and commitment to freedom and liberty. Crispus Attucks was the first casualty of the Boston Massacre. Reportedly of African descent, he was thought of as the first martyr of the American Revolutionary War, and became an icon for the antislavery movement. The author chose his character as symbolic of the role the Department of Homeland Security plays in securing the freedom of the nation. John Endecott was a colonial magistrate in Massachusetts and one of the original Minutemen during the Pequot War in 1636. The author chose his character as the embodiment of the Minuteman spirit at the heart of the National Guard.

⁴ Gen Raymond T. Odierno, USA, spoke at a press conference at the annual Association of United States Army Conference. See Adam Ashton, "Top Army General Warns of an Army 'Breaking Point' as Drawdown and Deployments Accelerate," *News Tribune*, 14 October 2014, http://www.thenewstribune.com/2014/10/14/3432370/ausa -roundup-odierno-warns-of.html. Commandant of the Marine Corps Gen James F. Amos spoke on the topic at Brookings Institution. See James K. Sanborn, "Dwell Time Dwindling: Corps Expects Intensifying Operational Tempo," *Marine Corps Times*, 5 August 2014, http://www.marinecorpstimes.com/story/news/2014/08/04/dwell-time -dwindling-/13563657/. Gen Mark A. Welsh III, ASAF, discussed how the Air Force might revamp their operations. See SrA Jason J. Brown, "Air Force Revamps AEF," U.S. Air Force, 5 September 2014, http://www.af.mil/News /ArticleDisplay/tabid/223/Article/496862/air-force-revamps-aef.aspx. LtGen Jon M. Davis, USMC, discussed the Marine Corps air element. See Andrea Shalal, "U.S. Marine Corps Aims to Boost Aircraft Readiness," Reuters, 9 April 2015, http://www.reuters.com/article/2015/04/09/us-usa-military-marines-idUSKBN0N021O20150409.

⁵ See Maj Matthew J. Slinger, "Degradation of Artillery Skills" (master's thesis, Marine Corps University, 2009); and James Dunnigan, "Sailors Serving as Soldiers Has Changed The Navy," Strategy Page, 30 August 2014, http://www .strategypage.com/dls/articles/Sailors-Serving-As-Soldiers-Has-Changed-The-Navy-8-30-2014.asp.

⁶ The Army Corps of Engineers built and maintains a series of locks and dams along the Mississippi River to manage the flow of water and for hydroelectric provision of power. These systems are monitored via the Lock Performance Monitoring System. Similarly, the Federal Columbia River Power System has altered the seasonal flow of water for the purposes of power provision. Any disruption to either of these systems would have infrastructure implications to their respective regions.

herent national response contributed to uncertainty and confusion, leading to chaos and lawlessness on American streets, and uncovered significant resource shortfalls and capability gaps to maintain peace and security in times of crisis.

The totality of these events has exposed a defense apparatus out of balance. It lacks the capacity to provide persistent preventative presence, the resilience to sustain combat operations, and the preparation to conduct security and stabilization operations. The DOD, once rife with combat-proven experience in stabilization and reconstruction operations following operations in Iraq and Afghanistan, finds that expertise "aging out" due to an intentional focus away from counterinsurgency and low intensity conflict.⁷

Madame Secretary, I understand the challenges facing the nation, as well as the challenges you face as DOD's leader. Our military has repeatedly proven its worth as the finest fighting force in the world, but that does not alleviate us of the responsibility to ensure we are allocating our resources—mainly the young men and women who have volunteered to defend this nation—in the most judicious manner. To best enable you to communicate your needs, we will limit today's discussion to our ground forces. We will create another occasion to host you to discuss similar issues concerning our air and naval forces.

Unless anyone else has a statement to make, Secretary Hays, you are recognized for your opening remarks.

Thank you, Mr. Chairman. Chairman Peterson, Ranking Member Brewer, and members of the committee:

As stated by the chairman, recent events have led to a watershed moment for our national defense. We find our national interests inextricably linked to regions of enduring conflict and our strategic path continues to be sidetracked by "tactically dark moments" those events that are sensational, disruptive, episodic, and unpredictable.⁸ State-on-state conflict is not the dominant challenge to our national interests; at this time, armed nonstate actors; stressed, failing or failed states; and violent/transnational criminal organizations pose more likely threats.⁹ Today's environment is constantly being altered and redefined by uninterrupted population development, urbanization, littoralization, and the interconnectedness of the global society, and there are few indicators to imply the future will be any

Secretary Hays:

⁷ *Quadrennial Defense Review 2014* (Washington, DC: Department of Defense, March 2014), vii, hereafter *QDR*; and Barack H. Obama, National Security Strategy (Washington, DC: Office of the President, February 2015), 8.

⁸ William J. Lynn III and Adm James Stavridis, USN (Ret), "Eighth Annual Conference: Creative Disruption: Strategy, Technology and the Future Defense Industry," Center for New American Security, video, 32:20, 16 June 2014, https://www.youtube.com/watch?v=2vh3PF0Fi4A.

⁹ Author assessment based on trends as outlined in successive National Intelligence Council Global Trends reports. See *Global Trends 2015: A Dialogue about the Future with Nongovernment Experts* (Washington, DC: National Intelligence Council, December 2000); *Mapping the Global Future: Report of the National Intelligence Council's 2020 Project* (Washington, DC: National Intelligence Council, December 2004); *Global Trends 2025: A Transformed World* (Washington, DC: National Intelligence Council, November 2008); and *Global Trends 2050: Alternative Worlds* (Washington, DC: National Intelligence Council, December 2012).

different.¹⁰ It would be a strategic failure to continue to operate a twentieth-century organization to combat twenty-first-century challenges; we need to be more imaginative.¹¹

In the midst of a hangover from two long and costly wars, our inability to respond in Venezuela, and in the shadows of encroachment from a near-peer competitor, our nation endured another attack on the homeland. Our response reflected moderate, but limited, security and stabilization capabilities.¹² After the attacks of 2 May, we retooled and accelerated our *Defense Strategy Review*.¹³ Using the chairman's risk assessment, open source analysis, as well as inputs from academia, think tanks, and the private sector, we determined that our existing structures and policies are not optimized for the current global security environment.¹⁴ Our resources are stretched thin as we constantly add responsibilities, tasks, and missions; yet, we continue to fund and field stagnant or redundant capabilities.

Informed by the review's findings, the department has developed clear-cut recommendations to enable the full integration of capabilities across the total force. After direct consultation with the president, review by the National Defense Panel, and with the concurrence of two of the primary stakeholders most affected—Secretary Attucks of Homeland Security and General Endecott of the National Guard Bureau—I am requesting the authority to reform and reshape the defense enterprise.¹⁵

The traditional obstruction to change is, in and of itself, tradition. Many of the following recommendations appear to defy long-standing customs and truisms, but—just as in 1947, 1973, and 1986—the relevance of the threat and an uncertain security environment demand adaptation.¹⁶

Our review identified gaps and highlighted the need for a para-

¹⁰ David Kilcullen, "Out of the Mountains: The Coming Age of the Urban Guerrilla" (lecture, Marine Corps War College, Quantico, VA, 8 January 2015).

¹¹ Michael P. Noonan, "Foreign Policy Research Institute Roundtable on The Future of the Reserves and the National Guard: A Conference Report," Foreign Policy Research Institute, 6 December 2004, http://www.fpri.org /articles/2005/01/future-reserves-and-national-guard-conference-report. Frank G. Hoffman states that "Despite the consequences of 9/11, we have not examined obsolete assumptions about the way we are organized nor admitted that the enemy and this entire way of war challenges our mind-set and approach to security, all of our little institutional boundaries, blinders, and stovepipes." Also see Lynn and Stavridis, "Eighth Annual Conference."

¹² In the context of current combat classifications, combat support capabilities mirror many of the required capabilities necessary for security and stabilization operations, most notably: engineering; chemical, biological, radiological, nuclear, and high explosive; military intelligence; military police; signals; and aviation.

¹³ National Defense Authorization Act of 2014, 10 U.S. Code § 118a (2014) mandates a Defense Strategy Review every four years, during a year following a year evenly divisible by four.

¹⁴ See *Global Trends*.

¹⁵ Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act of fiscal year 2015, H.R. 3979, 113th Cong. (2014). "Eighth Annual Conference: Strategic Risk and Military Power: A Briefing to the Next President," Center for New American Security, video, 22:00, 16 June 2014, https://www.youtube.com/watch?v =PH03VhwEZy0.

¹⁶ Over the course of the last century, the nation has taken transformative steps to improve the defense and security architecture to better counteract shifts within the global security environment. Three milestones in particular—the National Security Act of 1947, Melvin Laird's Total Force Concept, and the Goldwater-Nichols Department of Defense Reorganization Act of 1986—are evolutionary changes that had a direct impact on the military primacy of the United States. Arguably, each were distinctive post-traumatic recoveries following major military action that were emblematic of acute national policy shifts and assumed a certain level of risk with respect to the contemporary threat.

digm shift in the way we organize and employ our forces. There are three distinct challenges to our national interests: (1) physical defense of the homeland; (2) stressed, failing, and failed states; and (3) international security and stability.¹⁷ As a result, we have reassessed the method by which we categorize military capabilities and their applicability from one that was sequential to one that was based on readiness and sustainability.¹⁸

Evaluating our capabilities on a temporal scale—via a phased continuum of military operations—is no longer viable. Events of the last two decades have demonstrated that civil unrest can rapidly escalate to open conflict or peaceful protests can lead to the collapse of government. Assessing the entirety of our military capabilities, we determined they could be delineated into three unique, yet overlapping areas of competency: special operations and low-intensity conflict, force projection and sustained combat operations, and security and stabilization operations.¹⁹ These competency areas will intersect when operationally necessary.²⁰ Within the total force, each capability would be evaluated by its own metrics of readiness and sustainability and applied appropriately within the spectrum of conflict.²¹

Therefore, I ask that you consider these recommendations for legislation and implementation.

First, I recommend the trifurcation of U.S. ground forces and modification of force structure according to roles and missions.²² The Marine Corps will return to its pre-9/11 roots, maintaining primacy as the nation's 911 force. It will focus on special operations and low-intensity conflict and advance its naval roots to generate enduring presence to enable prompt global engagement, operating environment awareness, and strike capability if necessary.²³ The Army will operate as the conventional force and focus on decisive combined arms operations.²⁴ The National Guard will transition to a support force, geared toward security and stabilization.

Second, I recommend organizational restructuring civilian oversight to better support advocacy and resourcing. We should

¹⁷ Author assessment based on trends as outlined in successive National Intelligence Council *Global Trends* reports. ¹⁸ Dr. Nora Bensahel, "Citizen-Soldiers in a Time of Transition: The Future of the U.S. Army National Guard," Center for Strategic & International Studies, video, 49:00–57:00, https://www.youtube.com/watch?v=TglJ72xS79M#t=11. Dr. Bensahel postulates that the structure of the Army and the role of the National Guard are outdated and need revision. She suggests that the Army exercise some creative organizational imagination to rethink how units are deployed. ¹⁹ DOD Directive 5100.1, Functions of Department of Defense Components (December 2010). Military capabilities derived from directed roles and missions found in Title 10, U.S. Code.

²⁰ Peter W. Singer, "A Vision of the Roles, Missions, and Composition of the United States Armed Forces" (unpublished manuscript, Brookings Institution, 20 March 2009), 4.

²¹ LtCol Brian D. Jones, USA, "The Abrams Doctrine: Total Force Foundation or Enduring Fallacy?" (master's thesis, U.S. Army War College, Carlisle Barracks, PA), 13.

²² A similar recommendation, particular to the U.S. Army, was recommended by Robert H. Kupperman Jr. and William J. Taylor, *Strategic Requirements for the Army to Year 2000* (Lexington, MA: Lexington Books, 1984), 514.

²³ Operational employment in line with B. H. Liddell Hart's "indirect approach," categorized by upsetting the adversary's equilibrium through oblique or unexpected avenues and methods, or lines of least resistance. See B. H. Liddell Hart, *The Strategy of Indirect Approach* (London: Faber and Faber, Ltd., 1954).

²⁴ This can be theoretically categorized by the operational concept of the direct approach, and is the antithetical to the indirect approach. The direct approach is exactly as the name implies, and relies on superior or overwhelming capabilities, tactics, or resources.

establish a Department for Special Operations and Low Intensity Conflict (SO/LIC), which "shall be separately organized under its own Secretary and shall function under the authority, direction, and control of the Secretary of Defense."²⁵ This department will include the Marine Corps and all special operations forces (SOF), combining resourcing and budgeting from both and applying to the Department for SO/LIC.

Third, I recommend that the National Guard be reassigned from DOD to the Department of Homeland Security. This would allocate greater resources in support of the homeland security mission, better delineate security and stabilization capabilities from combat competencies, and clearly define resourcing and tasking to that effect. This will require amendment and realignment of U.S. Code to assign the proper authorities necessary to conduct security and stabilization operations, both at home and abroad. All budgeting and resourcing appropriate to the National Guard should follow those forces. While the mission and focus of the National Guard will change, it will maintain basic combat skills necessary to transition as strategic reserve, operating under Title 10 authorities when directed by the president of the United States.²⁶

These recommended changes serve two main purposes: the first is to address the conceptual, operational, and institutional inconsistencies that presently exist across the enterprise.²⁷ The U.S. military performs three primary functions: (1) provide the forces, (2) integrate the forces, and (3) employ the forces. Title 10 instructs the Services to "organize, train, and equip," which satisfies the first function, adding capability and capacity to the larger enterprise. Goldwater-Nichols enabled greater unity of effort within DOD, particular to the functions of integration and employment, but issues of coherency still exist inside the individual Services.

Historically, culturally, and conceptually, the Services have existed as independent and unique domains and mission-specific organizations. Service doctrine and operating concepts are stand-alone; yet, they overlap to the point of redundancy. *SOCOM 2020, Win in a Complex World*, and *Expeditionary Force 21* tout missions and skills across the spectrum of conflict.²⁸ SOCOM's portfolio had tripled in the last decade, which requires greater enabler support to execute.

 $^{^{\}rm 25}$ DOD Directive 5100.1, 3.

²⁶ Military reserves are those forces that are not initially committed to a fight or battle so that the commander has the flexibility to reinforce existing forces as they tire, or to execute a complementary action not previously available or foreseen. The concept of a strategic reserve implies that forces are organized, trained, and equipped to an acceptable level to facilitate activation in time of protracted war. Status as a strategic reserve carries the implication of a lower level of readiness and training.

²⁷ Linda Robinson, *The Future of U.S. Special Operations Forces*, Council Special Report No. 66 (New York: Council on Foreign Relations, 2013), 13. Examination of shortfalls is a reflection of analysis conducted by Ms. Robinson, who applied this analysis to SOF; however, this author has expanded the concept to the total force.

²⁸ SOCOM 2020: Forging the Tip of the Spear (Tampa, FL: U.S. Special Operations Command, 2013); The U.S. Army Operating Concept: Win in a Complex World, 2020–2040, TRADOC Pamphlet 524-3-1 (Fort Eustis, VA: U.S. Army Training and Doctrine Command, 2014); and Expeditionary Force 21: Forward and Ready–Now and in the Future (Quantico, VA: Marine Corps Combat Development Command, 2014).

The Army has expanded its expeditionary operations in the Pacific, which requires more naval shipping to achieve that end. And the Marine Corps is organizing, training, and equipping for a high-end fight against a major adversary, which makes it too heavy for amphibious shipping and less attractive to geographic combatant commanders for routine crisis response.

While many of the resourcing issues are due to budgetary constraints, a significant part can be attributed to redundant or stagnant programs. This proposal exploits the unique contributions of each Service, while simultaneously addressing the operational shortfall of limited resourcing. We cannot afford disparate "jacks of all trades."

The second purpose is to better prepare our armed forces to manage crises. Whether to deter aggression, prevent conflict, or recover from catastrophe, our military brings distinctive capabilities to help resolve crises prior to their inflection point or to provide a timely and adequate response past the tipping point. For example, the Marine Corps and SOF—by the nature and size of these forces—use persistent forward engagement to take advantage of the space before Winston Churchill's proverbial "bounce."²⁹ Be it as pervasive and unobtrusive elements to act as a low-key deterrence or as task organized elements to provide the lead-in for larger scale forces, they are optimal deterrence tools and will be resourced to maintain persistent, forward presence, and facilitate forcible entry for follow on forces should our efforts fail to stabilize hot spots.³⁰

Members of the committee, the changes outlined here are significant and not without consequence. However, I feel they are necessary to develop an organization that gives us the absolute advantage to secure and defend our national interests. Our preeminence as a global power is predicated on our ability to enforce security and stability and use force if necessary in the promotion of our national interests.

Lieutenant General Victor Krulak recognized the difficulties of overcoming Service parochialism and biases, which are the greatest obstacles to change. Sometimes, we do not know what is in our best interest. That is where you come in. Almost 40 years ago, Krulak stated:

To be sure, the role of the Congress will be central to success in achieving reform. Without its vigorous action, there is little hope and less likelihood that we will mend our ways before the brutality of war forces change upon us, and that may well be too late.

The proposals herein are intended to initiate a necessary, if modest, move on the road back from stultifying bureaucracy to lean, survival-oriented professional leadership

²⁹ Reference to Winston Churchill's speech on mutually assured destruction, "If you go on with this nuclear arms race, all you are going to do is make the rubble bounce." In the context of this testimony, the "bounce" would be combat operations or all out war. Actions that deter conflict could be considered "before the bounce."

³⁰ SOF Vision 2020 (Tampa, FL: U.S. Special Operations Command, 1997), 11.

	 in military affairs. These proposals will be seen by some as excessive; by others as inadequate If, from the disagreements generated, there flows a succession of responsible and comprehensive Congressional investigations of the problem, the study will have gained its minimum objective. If those investigations result in changes which increase the likelihood of our national survival, it will have achieved its optimum purpose.³¹ Thank you again for the continued support and the commitment to our Armed Forces. I look forward to answering any questions you
Chairman Peterson:	may have. Thank you, Madame Secretary. I commend your conviction and willingness to buck tradition, but I certainly do not envy your po- sition. I suspect that this is going to get a little rough, so I hope you
Secretary Hays:	are hiding TALOS under your suit. ³² [Laughter] Mr. Chairman, I think it was Seneca who said, "It is a rough road that leads to the heights of greatness." ³³
Chairman Peterson:	A rough road, indeed. I think the committee will challenge some of your assumptions and assertions, but let us take a few questions prior to the lunch break. To my knowledge, no previous review has proposed to upend the DOD like this. ³⁴ Hell, even Donald Rumsfeld's 2001 <i>QDR</i> —and its "transformation pillars"—did not attempt a wholesale restruc- turing as you have proposed. ³⁵ Certainly, Venzuela16 and 2 May were catalysts for national introspection concerning stability and security; by no means were these existential crises requiring a com- plete restructuring of the DOD. Is it possible you are being overly aggressive?
Secretary Hays:	Mr. Chairman, this department exists "to provide the military forc- es necessary to deter war and to protect the security of this coun- try." ³⁶ This IS an aggressive plan wholly intended to strengthen our defense enterprise through a more thoughtful application of re- sources. ³⁷
Chairman Peterson: Secretary Hays:	What do the Services say about this proposal? Fundamentally, they are all onboard and have been integral to the formulation of this plan. That is not to say there are no bruised egos or hurt feelings. The consequence of such an ambitious concept is the inevitable "zero-sum" obstinance that results when challenging iron rice bowls. ³⁸ Each Service and SOCOM had to let go of some

³¹ LtGen Victor H. Krulak (Ret), *Organization for National Security: A Study* (Washington, DC, U.S. Strategic Institute, 1983), 132.

³² Tactical Assault Light Operator Suit.

³³ Lucius A. Seneca, 50 AD.

³⁴ 1993 Bottom-Up Review; 1997, 2001, 2006, 2010, and 2014 QDRs; 2009 and 2012 Quadrennial Roles and Missions Reviews.

³⁵ QDR 2001 (Washington, DC: Department of Defense, 2001), 32.

³⁶ "About the Department of Defense: Mission," U.S. Department of Defense, www.defense.gov/about/#mission.

³⁷ Gen James E. Cartwright, "Eighth Annual Conference," Center for New American Security, video, 32:15, 16 June 2014, https://www.youtube.com/watch?v=PH03VhwEZy0.

³⁸ For our purposes, the phrase *rice bowl* means "in the military, a jealously protected program, project, department, or budget; a fieldom." See Double-Tongued Dictionary, www.waywordradio.org/rice_bowl/.

long held beliefs. But they did so with the acknowledgment that it was for the greater good.

With the implementation of this plan, the separate Services will lose the autonomy of isolated planning and their ability to conduct independent operations. The Army will lose the mirror imaging of its strategic reserve. The National Guard will lose the ability to leverage the Army as a resource sponsor.³⁹ The Marine Corps will lose Navy advocacy for big dollar aviation programs.⁴⁰ And the SOF community will lose the independent Service cultures that gave birth to domain specific special operations. The paradox of this plan is it challenges the paradigms of the individual Services and SO-COM to validate their relevance and to create a sum that is greater than the parts.

Chairman Peterson: SOCOM was legislated by this Congress to address a coordination and unity of effort problem with respect to special operations.⁴¹ It appears that you are changing their charter. How does this simplify your "math" problem?

Secretary Hays: Over the last three decades, SOCOM has grown in both scope and size, transcending the traditional definition of combatant command and achieving Service-like stature.⁴² During that time, the culture and environment of SOF have changed.

When Nunn-Cohen was passed, it empowered the SOCOM commander with unique Title 10 authorities normally reserved for Service chiefs.⁴³ As SOCOM has grown, so have the organizing, manning, and equipping requirements of our SOF. Today, the commander of USSOCOM is limited to an oversight role, while the individual Services are responsible for promotion, career management, and advancement of Service SOF personnel. The first truth of SOF, "people are more important than hardware," requires superior management of our human resource capital. By consolidating all SOF into an existing Service, those Title 10 responsibilities are streamlined, ultimately freeing the commander USSOCOM to focus on the integration and employment of the SOF capability.

As a functional combatant command, the SOCOM commander's responsibilities are to synchronize planning for global SOF op-

⁴¹ National Defense Authorization Act for Fiscal Year 1987, S. 2638, 99th Cong. (1986).

³⁹ Army National Guard 2014–2020: Strategic Planning Guidance (Arlington, VA: National Guard Bureau, 2013), 27.

⁴⁰ As defined in Marine Corps Order P3121.1, *Marine Corps Planning and Programming Manual*, "blue-in-support-of-green dollars" (BISOG) are those resources programmed jointly by the Navy and the Marine Corps. The amount of Department of Navy (DON) resources in this category is not fixed. It depends on particular circumstances during program objective memorandum (POM) development. These resources primarily support our aviation requirements under the broader classification of naval aviation, and generally provide assets used directly by Marines. Certain items of communications gear may also fall into this category. BISOG can be classified in three ways: (1) Navy assets programmed into Marine programs (aviation), (2) Navy assets programmed to support the Marine Corps mission (amphibious shipping), and (3) Navy assets programmed to support jointly shared Navy and Marine Corps requirements.

⁴² Yasotay, "Does the United States Still Need a U.S. Special Operations Command? How Effective Has USSO-COM Been in Fighting the Long War," *Small Wars Journal*, 2009, http://smallwarsjournal.com/blog/journal/docs -temp/330-yasotay.pdf.

⁴³ Nunn-Cohen refers to the Nunn-Cohen Amendment to the National Defense Authorization Act of 1987, 10 U.S. Code § 167 (2011). Andrew Feickert, U.S. Special Operations Forces (SOF): Background and Issues for Congress (Washington, DC: Congressional Research Service, 2014), 2.

erations and provide SOF in support of the geographic combatant commanders (GCC). The growth of component theater special operations commands has better enabled the GCC's ability to integrate planning and execution of regional SOF operations, and has given the USSOCOM commander more tools to fight a global combatant command.

Chairman Peterson: SOF provides the nation with a unique, low footprint, high-returnon-investment asset that is organized and equipped to conduct some very specialized missions. The Marine Corps is our expeditionary force-in-readiness, able to thrive in any environment, against any threat. How does your plan reconcile these two different capabilities intended for two different contexts?

The Marine Corps and SOF share instrinsic commonalities. Both Secretary Hays: are expeditionary in the purest sense of the definition. Forwarddeployed and forward-engaged, they provide a persistent presence that acts as a deterrent as well as an enabler for follow on actions. In the past, their shared characteristics were a point of competition. Today, they promote a level of interoperability that is unparallelled. Existing capabilities of the Marine air-ground task force, or MAGTF, can enable and enhance our SOF.44 As a byproduct of the merger, due to legislated authorities of the Commandant of the Marine Corps, SOF inherits Service-level advocacy, doctrine development, and policy; improved promotion and advancement opportunities; and institutional depth that will help with resilience issues.⁴⁵ Ultimately, this combination addresses a documented weak link for SOF-integration-while at the same time strengthening the menu of options of the MAGTF, making it a "unique mechanism for extending U.S. influence, ideals, and values."46 Chairman Peterson: Does this fundamentally change the Marine Corps? Secretary Hays: The functions of the Marine Corps will not change, just the manner

in which they are executed. Currently, the Corps considers itself a middleweight force capable of operating across the full spectrum of conflict. In truth, that is somewhat contradictory considering the differing capabilities required in the transition from the low to the high end of conflict.

The Marine Corps occupies an exclusive space within the DOD. First, its principal mission and basic structure are explicitly laid out via legislation.⁴⁷ Second, it epitomizes the joint operating

⁴⁴ The Marine air-ground task force consists of four elements: command, ground combat, aviation combat, and logistics combat. Depending on the size of a MAGTF, it is inherently self-sufficient for a finite amount of time due to the inherent characteristics of organic combat support and combat service support enablers.

⁴⁶ Cathy Haverstock, "Congressional Request for Information–SOCOM POTFF Specifics" (memorandum, SO-COM response to congressional inquiry [RFI 15-077], Office of Senator Bill Nelson, 26 February 2015).

⁴⁶ LtGen Jon Davis, interview with the author, 17 December 2014; MajGen Vincent R. Stewart, interview with the author, 15 October 2014; and *SOF Vision 2020*, 25.

⁴⁷ Douglas-Mansfield Act, Pub. L. No. 416 § 206(c) (1952), otherwise known as the "Marine Corps Bill," legislated "the United States Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein, and except in time of war or national emergency hereafter declared by the Congress the personnel strength of the Regular Marine Corps shall be maintained at not more than four hundred thousand."

	concept of interoperability by virtue of its basic combat organiza- tion, the MAGTF. Lastly, the Marine Corps lives and works best in the seams between domains, namely the littorals. To provide a true force-in-readiness, we need a force that is lighter and more agile to better respond at a moments notice. By capitalizing on its unique- ness, the Marine Corps' capability and readiness will deepen our
Chairman Peterson:	total force capacity. And how does adding a new department to the DOD help?
Secretary Hays:	In 1947, the nation decided it needed a Department of the Air
Secretary mays.	Force to execute resource management and oversight for a distinct air-centric warfighting capability. In 1986, we recognized the unique contribution of special operations in the greater context of full-spec- trum operations. Today, the relevance of special operations and low intensity conflict dictate we maintain a high level of oversight in that arena. Presently, every Service has a role to play, and every Service chief has responsibilities to that effect. By clearly assigning the mission set to one Service, it relieves the other Services to better execute their domain-specific missions. Currently, the assistant secretary of defense performs a supervi- sory role and lacks the statutory authority to provide resource and policy oversight on a critical capability, while a unified combatant commander executes policy and resource functions. ⁴⁸ That violates one of our first democratic principals, objective civilian control of the military. By elevating SO/LIC to department status and consoli- dating all SOF under one Service secretary, we streamline resource and acquisitions responsibilities, consolidate and shorten force man- agement processes, and clearly delineate core competencies to better provide the president with a more capable armed forces and more
	options in defense of our values.
Ranking Member	
Brewer: ⁴⁹	Madame Secretary, I commend you for the audaciousness of your proposals, but I have a few concerns that maybe you can clear up for me. First, when you say security and stabilization force is that the same as SASO or SSTR?
Secretary Hays:	Stability and support operations, or SASO, and stabilization, secu- rity, transition, and reconstruction operations, or SSTR, are previ- ous terms that have been thrown around as we struggled to codify a lacking capability. For the sake of simplicity, you can consider those concepts synonymous, and I will refer to the overall concept as se- curity and stabilization operations, or SSO. During the formulation of this proposal, I routinely heard senior leaders say "we don't have a good grasp on SSO." In the early stages of the Cold War, the Arms Control and Disarmament Agency was instrumental in establishing arms control as a foundational piece of

⁴⁸ Robinson, *The Future of U.S. Special Operations Forces*, 17.

⁴⁹ BGen Margaret A. Brewer was the first female to achieve the rank of general officer in the Marine Corps. Her character is emblematic of the resilience and fortitude necessary to achieve the exemplary status of ranking member of a joint committee.

U.S. national security policy.⁵⁰ This plan serves to achieve a similar end with respect to SSO. Since the end of the Cold War, the United States has been involved in more than 20 operations dominated by SSO.⁵¹ It is a vital capability to our national interests.

Ranking Member Brewer: It sounds like you are relegating the National Guard to the role of a constabulary force.

Secretary Hays: If by constabulary force, you mean one capable of conducting security and stabilization operations-yes.⁵² However, I do not see it as relegation in any sense of the word. An SSO force needs military police; military intelligence; signals intelligence; engineering; chemical, biological, radiological, nuclear, and high explosive; and logistical aviation. In contemporary parlance, this equates to combat support. The combination of these technical skills would form the basis of the security and stabilization force, and carry relevance into both routine National Guard missions as well as national defense and security missions. The breadth and depth of expertise in the National Guard is well documented, and assumption of this primary role will only add to its legacy. For almost four centuries, the National Guard has developed a strong history of performance and professionalism in defense of the nation. I have no reason to doubt this will continue.53

Ranking Member Brewer: At one point, a few years back, it was not uncommon to hear military leadership decry "No more Task Force Smiths."⁵⁴ Does our military leadership continue to oppose the thought of establishing a constabulary force?

Secretary Hays: I think those that use Task Force Smith as a negative example of constabulary forces misrepresent the facts. I do not intend to get into the entire history of the Battle of Osan, but suffice it to say that the outcome was not due to the constabulary nature of American forces. Rather, it was an ill-advised employment of an underresourced unit that was subject to poor command at the highest levels. That said, the men of Task Force Smith acquitted themselves in an exemplary fashion and defended against advancing North Korean forces more effectively and much longer than they should have.⁵⁵

As to the efficacy of dedicated security and stabilization forces,

⁵⁰ Arms Control and Disarmament Act, Pub. L. 87-297 (1961). Records of the U.S. Arms Control and Disarmament Agency (ADCA), U.S. National Archives, Record Group 383, 1962–82, http://www.archives.gov/research/guide-fed -records/groups/383.html.

⁵¹ "Armed Conflict Database," International Institute for Strategic Studies, www.iiss.org/publications/armed-conflict -database/; and "U.S. Army War College," Strategic Studies Institute, http://www.strategicstudiesinstitute.army.mil/ ⁵² Maj Paul Contoveros, "United State Constabulary in Post-World War Two Germany: What Can cowboys Tell Us about Stability Operations Today?" (master's thesis, Marine Corps Command and Staff College, Quantico, VA, 2011), 9. Contoveros defines constabulary forces as "government forces that provide force protection and law enforcement through the coordination of lethal firepower and the utilization of police skills. It is the combination of policing and firepower that makes constabularies unique."

⁵³ "The Guard dates back to 1636, when Citizen-Soldiers formed militias to defend community and country." See National Guard: Legacy," National Guard, www.nationalguard.com.

⁵⁴ Task Force Smith was the first American unit to enter into ground combat in Korea.

⁵⁵ Maj John Garrett, USA, "Task Force Smith: The Lesson Never Learned" (master's thesis: School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2000).

it would be better to reference the Circle C Cowboys of post-World War II Germany: a unit organized, trained, and equipped to conduct security and stabilization operations. The Circle C Cowboys are representative of a capability that was severely lacking in recent conflicts and operations, such as Venezuela16.

Truthfully, I cannot lay claim to this idea. The U.S. Commission on National Security/21st Century, otherwise known as the Hart-Rudman Commission, suggested the need for constabulary forces.⁵⁶ In addition, several national security scholars and think tanks have further advocated this concept.⁵⁷ What I have inferred from their research and analysis is that existing capability within the National Guard could assume an SSO, or constabulary, role while maintaining the ability to transition those competencies in support of Title 10 tasking.

Ranking Member Brewer: Madame Secretary, do you have any idea of the visceral response this proposal is going to elicit from every governor in the union? Secretary Hays: I anticipate initial reservation. However, once the details are explained, I believe this is a concept they can embrace. We suffer no shortage of crisis response incidents of the SSO nature, both domestically and abroad. The business of defense and security is just as much about maintaining the peace as it is about winning the war. This plan emphasizes the relevant nature of SSO as a critical component of our total force capability.

> Adjutants general and governors can maintain the confidence that the National Guard remains an inextricable component to the total force.⁵⁸ SSO is an identified capability required across the range of military options, and despite common assertions amongst many within our traditional combat arms specialties, the skillsets required to conduct the SSO mission are not easily attained and maintained.⁵⁹ They require a high level of maturity and experience, both of which are prevalent in the National Guard. In conjunction with traditional SSO skills, the National Guard retains a significant level of experience in public planning, corrections, and civil engineering.⁶⁰

Ranking Member Brewer: Without the National Guard, would the Army still have the capacity

⁵⁶ Warren B. Rudman et al., "Transcript: National Security in the 21st Century: Findings of the Hart-Rudman Commission Transcript," Council on Foreign Relations, 14 September 2001, http://www.cfr.org/homeland-security /national-security-21st-century-findings-hart-rudman-commission/p4049.

⁵⁷ See Honorable Michele Flournoy and Tammy Schultz, "Shaping U.S. Ground Forces for the Future: Getting Expansion Right," Center for New American Security, 27 June 2007, http://www.cnas.org/publications/reports /shaping-u-s-ground-forces-for-the-future-getting-expansion-right#.V21jijbaifc; James Jay Carafano, "Shaping the 21st Century Role of the National Guard and Reserves" (testimony, Commission on the National Guard and Reserves, 4 May 2006), "Security" paragraph; Tammy S. Schultz, "Ten Years a Week: The Warrior's Transformation to Win the Peace," Vol. 1 (PhD dissertation, Georgetown University, Washington, DC, 2005), 10, 24, 29; and Roger A. Beaumont, "The Constabulary Function Dilemma," *Military Review* 79, no. 1 (March/April 1999).

⁵⁸ Jones, "The Abrams Doctrine," 13.

⁵⁹ William P. Hamblet and Jerry G. Kline, "Interagency Cooperation: PDD 56 and Complex Contingency Operations," *Joint Forces Quarterly* (Spring 2000): 94.

⁶⁰ Congressman Tim Walz, "Citizen-Soldiers in a Time of Transition: The Future of the U.S. Army National Guard," Center for Strategic and International Studies, video, 5:35, 29 May 2014, https://www.csis.org/events/citizen -soldiers-time-transition-future-us-army-national-guard.

to conduct the full range of military operations in a complex environment?

Secretary Hays: Global force management remains the same, and still depends on accurate readiness reporting and proper allocation of forces based on capabilities and readiness.⁶¹ Today, we can provide a combatant commander with a complete force list, but the units on that list could potentially be deficient in both areas. This is largely due to the nature of an ever-growing task list; units do not have the time or resources to train for every mission.⁶² As a result, tiered readiness is a current reality, which reduces the effectiveness of a significant portion of our force to respond to crisis.⁶³ With this proposal, we can better identify units that are organized, trained, equipped, and ready to perform missions as the president directs.

By narrowing the mission focus, we also narrow acquisitions and resource decisions. The resultant resource savings could be reapplied toward readiness efforts, across the total force. I anticipate a need to reevaluate the mobilization authorities for the National Guard to ensure we can have the spectrum of capability available, but it is my sense that the National Guard will enjoy a similar relationship with the Army as we have between the Coast Guard and the Navy.

Senator Daly: 64	Secretary Hays, do you have deep-seated animus for the Army?
Secretary Hays:	No, senator, I do not.
Senator Daly:	To the casual observer, it would appear that you do. You are proposing the Army abdicate its control of some highly accomplished and culturally significant units. ⁶⁵ To add insult to injury, you want to reduce their strategic reserve.
Secretary Hays:	I am aware that, on the surface, some Services look to gain from this proposal. I can assure you that each Service will experience emotional, physical, or metaphysical sacrifice in the execution of this plan. Programs will be adjusted. Personnel will be affected. Poli- cies will be changed. This proposal is an equal opportunity agitator. [Laughter]
Senator Daly:	How does this meet with existing concepts and strategies of the Na- tional Guard?
Secretary Hays:	It is consistent with stated objectives of the National Guard's <i>Strate-</i> <i>gic Planning Guidance</i> and multiple testimonies by its leadership, and provides tangible and achievable outcomes inline with several cam-

⁶¹ Judge Graham Jr., "Global Force Management" (presentation, Deputy Director Joint Force Coordination, 18 June 2012). Global force management "allocates limited resources against competing demands by balancing operational, institutional and Combatant Commander's risk within the overall National priorities."

⁶² Military Readiness: Data and Trends for January 1990 to March 1995 (Washington, DC: Government Accountability Office, 1996), 13.

⁶³ Sydney J. Freedberg Jr., "Tiered Readiness Returns in Army 2015 Budget; Not all Brigades Ready to Fight," Breaking Defense, 4 March 2014, http://breakingdefense.com/2014/03/tiered-readiness-returns-in-army-2015-budget -not-all-brigades-ready-to-fight/.

⁶⁴ Phyllis Mae Daly was the first African-American to be admitted into the Navy Nursing Corps. The author chose the character in acknowledgement to the diversity and opportunity within the military and the Department of Defense.
⁶⁵ For example, U.S. Army Special Forces Groups, 75th Ranger Regiment (a.k.a. Army Rangers), and 160th Special Operations Aviation Regiment.

paign and major objectives of the National Guard.⁶⁶ Specifically, it would support homeland defense and defense in support of civil authorities, improve soldier employment opportunities, build and sustain soldier and family resilience, and equip the force for domestic and unified land operations, to name a few.⁶⁷

Representative Bucklew:⁶⁸ Much of the way our DOD works is based on legislative structure and authorities. How do your recommendations match up with some of those laws?

Secretary Hays: Many of today's challenges do not fit neatly into any preconception or formula. In many cases, the limited authority of our Title 10 forces has constrained our ability to take action. This reality heavily influenced some of the more "nonconventional" recommendations of the review. Ultimately, our goal was to organize our armed forces to create a more adaptable organization, and realize a more efficient use of national resources. That said, this proposal would require legislative action.

> Many laws remain unaffected, but some would require amendment or even repeal. The Militia Clause and the Dick Act, which draw a distinction between state and federal control, go unchanged.⁶⁹ Some state statutes will need to be amended to allow use of the National Guard prior to the occurrence of a crisis, disaster, or declaration of imminent threat.⁷⁰ This would allow the Guard to plan, train, and exercise as part of the National Response Plan infrastructure.⁷¹ Title 32 gives the National Guard the legal authority to respond quickly against threats to the homeland.⁷² However, it will be incumbent on those in the National Guard Bureau and the Department of Homeland Security to develop doctrine, leadership, and training programs on how Posse Comitatus affects their ability to participate in domestic security.⁷³ I cannot rule out the possibility that Posse Comitatus can be amended and updated to reflect the contemporary needs of national security. However, that requires an additional study and debate. I would recommend that Title 6 (domestic security) be examined and evaluated for use by the National Guard. Additionally, there may be units or components of the National Guard that might fall under Title 18 (crime and criminal procedure).

Title 10 will require amendment and a new subtitle for SO/LIC

⁶⁶ See *Strategic Planning Guidance*; and 2015 National Guard Bureau Posture Statement: Trusted at Home, Proven Abroad (Washington, DC: National Guard Bureau, 2015).

⁶⁷ Strategic Planning Guidance, 11–28.

⁶⁸ Phil H. Bucklew is considered the father of naval special warfare. The author chose the character in acknowledgment of the dedication and professionalism of all special operators.

⁶⁹ U.S. Const. art I, § 8, cl. 14. The Militia Act of 1903, commonly known as the "Dick Act" for its sponsor Representative Charles W. F. Dick, a major general in the Ohio National Guard. See 10 U.S.C. §311(b)(1) (1903).

⁷⁰ MajGen Timothy J. Lowenberg, "The Role of the National Guard in National Defense and Homeland Security," National Guard Association of the United States, 4, http://www.ngaus.org/sites/default/files/pdf/primer%20fin.pdf. ⁷¹ Ibid.

⁷² Jack Spencer, "The National Guard and Homeland Security," Heritage Foundation, 29 July 2002, http://www .heritage.org/research/homelandsecurity/em826.cfm.

⁷³ Eric V. Larson and John E. Peters, *Preparing the U.S. Army for Homeland Security: Concepts, Issues, and Options* (Santa Monica, CA: Rand, 2001), 244.

added. The Douglas-Mansfield Act will need to be modified to reflect realignment under the Department for SO/LIC and include the conduct of special operations in conjunction with amphibious warfare. The Nunn-Cohen Amendment would be tailored with new amendments to delineate the responsibilities of the Commandant of the Marine Corps and Commander, USSOCOM. Lastly, Title 22 (foreign relations and Intercourse) and Title 50 (war and national defense) require additional clarity to better enable SO/LIC forces. You make it sound so easy. [Laughter] I think this is as good a place as any. How about we break for lunch? We will reconvene at 1300 hours.

Bridging the Gap The 2024 MAGTF in the Pacific

by Major Brendan P. Sullivan, USMC¹

s the world's premiere amphibious and expeditionary force, the Marine Corps should be well placed to fill a prominent role in the U.S. military's force laydown in the Asia-Pacific in 2024. And yet it has struggled to explain the role that the Marine air-ground task force (MAGTF) will fill and the operating concepts it will use to succeed. On one hand, the MAGTFs, such as the Marine expeditionary unit (MEU) and the Marine expeditionary brigade (MEB), are proven performers in crisis contingencies ranging from humanitarian assistance to combat missions. It is certain that U.S. Pacific Command (USPACOM) will call on Marines to address these crisis contingencies with the same or greater frequency in the future. On the other hand, Marine units have shown an impressive ability to conduct distributed operations in Operation Iraqi Freedom and Operation Enduring Freedom, as well as in MEU contexts. Distributed operations will be a necessity in the expansive Pacific region that includes a capable antiaccess/area denial (A2/AD) threat and also requires the same force size to be in more places at once to accomplish an increasing amount of partner engagement.

However, being proficient at distributed and aggregated operations will not be enough to meet the future challenge if the force is incapable of rapidly transitioning between the two. For the Marine Corps to present a coherent and relevant operating concept for the Pacific operating environment in 2024, it must develop a way for the flexibility and capability of larger MAGTFs to coexist with dispersed force laydown that geography and the emerging operating environment require by being able to rapidly transition between the two. Bridging the gap between dispersion and aggregation will require a new approach to intratheater mobility. A network approach that leverages all assets available, both surface and air, will facilitate the type of intratheater mobility essential to achieve the level of flexibility and speed that the MAGTF of the future will require.²

INTRODUCTION

As the United States withdraws most of its forces from Afghanistan later this year, it will conclude more than a decade of strategic focus on the Middle East and South Asia. The postwar foreign policy landscape has already begun to take shape. In a speech given to the Australian Parliament on 17 November 2011, President Barack H. Obama unveiled a new American strategic initiative that has since become known as "rebalance to the Pacific." According to the president, the initiative would include enhanced economic engagement, protection of emerging democracies, promotion of human rights, and increased military presence and partnership.

¹ Maj Sullivan is a distinguished graduate of the Marine Corps University Command and Staff College. This paper won the Col Franklin Brooke Nihart Writing Award for Academic Year 2013–14.

² Marine Corps Operations, MCDP 1-0 (Washington, DC: Headquarters Marine Corps, 2001), 43-55.

Many of the world's fastest growing economies are found in Asia, and therefore the region is expected to play a central role in future American economic growth. The region is also home to five of the world's eight nations with publically acknowledged nuclear weapons programs. Three of the world's six largest militaries are also found in the region.³ A dynamic economic landscape combined with widespread military development is something the United States cannot ignore.⁴

It is unclear how the U.S. military will fulfill the president's promise to increase its presence and partnerships while also meeting regional mission requirements and addressing emerging threats. The most obvious challenge to developing a comprehensive operating concept for the Asia-Pacific region is the distances over which U.S. forces will be required to operate. The other significant challenge is contested access. Since World War II, no other nation has been able to compete with America's strategic and operational mobility. The U.S. military has enjoyed virtually uncontested global access since the conclusion of the Cold War. However, the strength and reliability of U.S. power projection has recently become subject to an increasing level of doubt. Other nations have begun to develop relatively inexpensive, yet highly effective, means to deny access to or limit mobility within their regions. Discussion on these topics exploded in the latter part of the previous decade as military leaders and defense academics began to wrestle with the future of military operations in the Pacific. The Department of Defense at large and the military Services individually have struggled to define the emerging operating environment and their place within it.

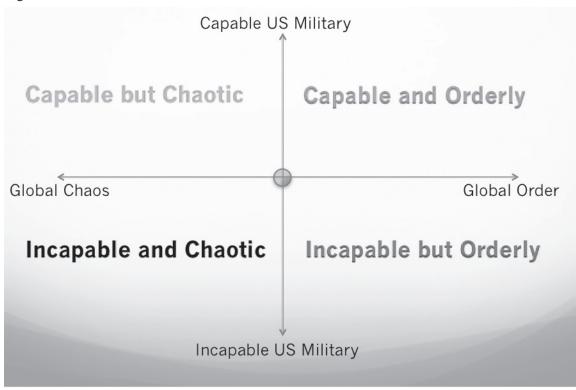
FUTURE WORLDS

To develop an effective concept for the future, one must be careful not to assume that the future world in which the concept must exist will reflect the status quo of today. The Advance Studies Group at Command and Staff College conducted a future worlds modeling exercise in an attempt to understand the environment in which the MAGTF of 2024 would need to exist and succeed. The model is based on two axes that reflect the most comprehensive and likely drivers of future uncertainty. The vertical axis in figure 1 describes future U.S. military capability, while the horizontal axis reflects global stability. The intersection of these two axes creates four distinct world models that could exist based on the how the drivers of future uncertainty trend. A look at each quadrant provides a better understanding of what is possible and what is probable.

The right half of the model reflects orderly international environments with two different versions of U.S. military capability. The upper right quadrant describes a "capable and orderly" version of the future world. This quadrant reflects the most positive version of the future. In this model, global economic recovery picks up movement and markets thrive. Rising powers such as China have recognize that U.S. economic and military strength have made a full recovery from the 2008 economic crisis and are unwilling to further challenge American primacy. U.S. strength continues to underpin the legitimacy of international organizations and norms. In the lower right quadrant, or "incapable but orderly," the U.S. economic recovery fails, resulting in a loss of international influence and credibility. Although the United States has receded to the backgroun, the international institutions and norms it established are maintained by other rising powers, preserving the existing international order. The U.S. military remains formidable but loses ground quickly to China, who is able to continue heavy investment in its national security infrastructure. As result, many former regional partners shift away from the United States and

³ David J. Berteau et al., U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment (Washington, DC: Center For Strategic and International Studies, 2012), 13, http://csis.org/publication/pacom-force-posture-review. ⁴ Barack H. Obama, "Remarks by President Obama to the Australian Parliament" (speech, Canberra, Australia, 17 November 2011), http://www.whitehouse.gov/the-press-office/2011/11/17/remarks-president-obama-australian -parliament.

Figure 1. Four worlds model



toward China. U.S. forward deployed presence sharply decreases as overseas basing access and military spending decline.

The left half of the model reflects how strong and weak versions of the U.S. military interact with a world characterized by disorder. The upper left quadrant, entitled "capable but chaotic," paints a familiar picture. Violent extremism and terror networks thrive in the developing world, contributing to regional instability in the Middle East and Africa. Although the U.S. economy has recovered from the 2008 economic crisis and is relatively strong, the deployment of the U.S. military to the Middle East and Africa to combat terrorism and to support partner nations strains the force and threats its ability to remain engaged in the Asia-Pacific region. The cost of sustaining indefinite, large-scale overseas military deployments creates unsustainable debt and saps public support for overseas interventions. The lower left quadrant, or "incapable and chaotic," presents the grimmest of the four future worlds. A replay of the 2008 economic catastrophe or continued fiscal irresponsibility causes financial collapse within the United States. America cannot afford a forward deployed military, and therefore alliances and credibility quickly erode. The international organization and norms created by the United States, such as the UN and the Treaty on the Nonproliferation of Nuclear Weapons, are weakened without the backing of U.S. power. The ensuing shifts in regional and global balances of power lead to widespread conflict and a growth in violent extremism.

A look at current global stability trends indicates that any model that is trying to predict the world 10 years hence and is relying on international stability is unlikely to materialize. Although there are simmering problems in many corners of the globe, Africa and Central Europe to name a few, there is at least one that will continue to demand U.S. attention going forward—a U.S. presence in the Middle East. Since the end of the Cold War, it has dominated the nation's strategic thinking like no other region.

The root of the problem has been an explosive mix of vital energy resources, political instability, strategic choke points, and terrorism. Despite 30 years of strategic focus, including two recent and costly wars, little has changed for the better in the region. In fact, it appears as though it could get much worse in the near future. Stability in Iraq has steadily deteriorated since U.S. combat forces withdrew in late 2011. Rising sectarian violence fueled by a resurgent al-Qaeda in Iraq makes civil war seem an imminent possibility. Afghanistan is unlikely to fare any better after the American-led NATO forces pull out at the end of 2014. The Arab Spring has had a profoundly destabilizing effect on the region by destroying long established and predictable authoritarian regimes. Religious extremists are scrambling to exploit the situation. As Cameron Graham points out in his *Small Wars Journal* article, a Middle Eastern "Pandora's Box" could be on the verge of opening, making a major regional conflict very likely.⁵ All of these points suggest that the two worlds that correspond to global order can be eliminated.

The question then becomes, how capable will the U.S. military be in the future chaotic world? Decline in defense spending has already caused a decrease in the modernization and structure of the force. The result will be an end-strength reduction of roughly 13 percent for the Army and Marine Corps. Since they are expected to play a larger role in the Pacific, the Navy and Air Force will see a smaller reduction in resources.⁶ But despite recent reductions in budget, the United States will still spend a huge amount of money on defense compared to the rest of the world over the next 10 years. For example, the 2014 National Defense Authorization Act calls for a total defense budget of \$641 billion, which is more than six times the amount spent by the previous year's next highest spender, China.⁷ And although the Budget Control Act of 2011, commonly referred to as the sequester, required a decease in overall defense spending between 2012 and 2021 based on the Department of Defense's FY2012 10-year plan, the Congressional Research Service projects annual spending to increase each year during that period.⁸ So, although the future U.S. military will be somewhat smaller, it will continue to be a ready and capable force.

Therefore, the most likely future world will include a capable, if smaller, U.S. military operating in an increasingly unstable and chaotic world. In spite of these factors, the most recent *National Security Strategy* reports that "Going forward, there should be no doubt: the United States of America will continue to underwrite global security . . ."⁹ The combination of broad defense strategy objectives and shrinking defense resources indicates an imbalance between strategic ends and means, suggesting the possibility of strategic insolvency.¹⁰ To mitigate this problem, the military will need to do more with less. This will require forces versatile enough to operate across the range of military operations, flexible enough to disperse in more places at once, and agile enough to move rapidly and reaggregate as needed within the operational environment.

⁵ Cameron Graham, "The Middle East's Outlook and America's Evolving Security Conundrum," *Small Wars Journal*, 29 February 2012, http://smallwarsjournal.com/jrnl/art/the-middle-east's-outlook-and-america's-evolving-security -conundrum.

⁶ Stephen Daggett and Pat Towell, *FY2013 Defense Budget Request: Overview and Context* (Washington, DC: Congressional Research Service, 2012), 7, http://www.fas.org/sgp/crs/natsec/R42489.pdf.

⁷ Sarah Tully, "U.S. Defense Spending vs. Global Defense Spending," Center For Arms Control and Non-proliferation, 14 May 2015, http://armscontrolcenter.org/u-s-defense-spending-vs-global-defense-spending/.

⁸ Pat Towell and Amy Belasco, *Defense: FY2014 Authorization and Appropriations* (Washington, DC: Congressional Research Service, 2014), 17, 30, http://www.fas.org/sgp/crs/natsec/R43323.pdf.

⁹ National Security Strategy (Washington, DC: White House, 2010), 1, https://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.

¹⁰ Michael J. Mazarr, "The Risks of Ignoring Strategic Insolvency," *Washington Quarterly* 35, no. 4 (Fall 2012): 8, http://csis.org/files/publication/twq12FallMazarr.pdf.

DESCRIBING THE PROBLEMS, ASSUMPTIONS, AND CAPABILITIES REQUIRED

Having examined the future world model to gain a better understanding of what the global environment and U.S. military capability of 2024 will look like, it is time to take a closer look at the specific problems and contingencies that the MAGTF of the future will most likely be called on to address. To understand what the MAGTF will need to do, a more detailed understanding of the future problem must be achieved. The problem's context, including strategic, geographic, and threat capability, must be established to arrive at a solution that will be feasible, acceptable, and complete. The following scenarios will present problems and contexts that the MAGTF of 2024 will need to be able to address.¹¹

Most Likely Operating Scenario: Crisis Response in a Tense and A2/AD-Capable Region

The political environment in the Asia-Pacific region has developed a tense status quo as China's military presence in the East and South China Seas continues to grow. Although the sweeping reforms announced at the third plenary session of the 18th China's Communist Party (CCP) Congress in 2012 never led to an integrated joint force, modern platforms continue to be fielded, such as two new Chinese made aircraft carriers. Regional partners continue to build and modernize their militaries in response and seek greater theater security cooperation interaction to enhance their capabilities and interoperability with the United States and other regional powers. Steady-state operation normally has the 31st MEU and a unit deployment program (UDP) battalion conducting numerous simultaneous company-size training support center (TSC) exercises, as well as participating in counterpiracy operations in the vicinity of the Strait of Malacca.

A massive typhoon hits the Philippines in the vicinity of Southern Luzon. Initial reports indicate Manila could have sustained as many as 10,000 fatalities, with thousands more in the surrounding areas. The Filipino government is unable to deal with the humanitarian disaster. Joint Task Force Luzon has been established and will be built around 3d MEB. The UDP battalion currently has two companies conducting training in South Korea, one training at Camp Fuji, and one on Okinawa. The 31st MEU is conducting split amphibious ready group operations, with elements conducting TSC training in Singapore, Thailand, and Malaysia. The Marine Rotational Force–Darwin is conducting training in northern Australia.

This most likely scenario reflects many of the future operating environment characteristics that the Amphibious Capabilities Working Group highlighted in the 2012 report entitled *Naval Amphibious Capability in the 21st Century.* In this case, we see forward deployed, small footprint Marine forces distributed around the area of operations, conducting engagement with regional partners to favorably shape the environment. These forward deployed forces will remain the primary crisis response force while also being heavily engaged in TSC activities.¹²

Most Dangerous Operating Scenario: Limited Objective Action

Tensions in the East and South China Seas continue to rise as China's stature in the region grows and the People's Liberation Army (PLA) becomes more aggressive about its contested territorial claims. The military reforms announced in 2012 by the CCP served as a bellwether

¹¹ John F. Schmitt, A Practical Guide for Developing and Writing Military Concepts, Working Paper # 02-4 (McLean, VA: Hicks & Associates, 2002), 16.

¹² Naval Amphibious Capability in the 21st Century: Strategic Opportunity and a Vision for Change (Quantico, Virginia: Amphibious Capabilities Working Group, 2012), http://www.defenseinnovationmarketplace.mil/resources/MC _Amphibious_Capabilites.pdf.

for the ensuing decade's military transformation.¹³ The development of advanced technology and platforms has continued. Establishment of joint theater commands has created new synergy with the PLA and helped to operationalize a more effective A2/AD capability. Since 2014, the People's Liberation Army Navy (PLAN) has introduced two new aircraft carriers, bringing the total up to three. China's power projection capability has matured, as evident in its annual naval and amphibious training exercises.

In an effort to establish greater control of navigation, PLAN has increased its presence within the first island chain. The situation dramatically escalated when the PLAN began to board and search Philippine and Japanese merchant vessels. The United States and Australia deployed additional naval forces to the region to prevent further escalation. A chance encounter between a Japanese and PLAN vessel led to a collision in which loss of life occurs. Since the incident happened in what China claims are territorial waters, it viewed Japan's actions as an act of war. China immediately announced that it was closing the East and South China Seas to Japanese, Philippine, Australian, and U.S. shipping and then sank two small Japanese naval vessels; one with a medium range antiship ballistic missile and one with a *Song*-class attack submarine. Further, China seized and occupied the Senkaku Islands and appeared to be making preparations to seize Scarborough Shoal. In the years leading up to this incident, China clearly demonstrated an operational cross-domain A2/AD capability.

The Association of Southeast Asian Nations (ASEAN) condemns the Chinese aggression. The Japanese and Philippine governments both expressed a desire for the United States to honor its treaty obligations and come to their assistance with direct military support. The United States responds by demanding China relinquish control of the seized islands and lift access restrictions to the East and South China Seas. Since the situation developed suddenly, US-PACOM forces were in the midst of steady state operations and never had the opportunity to transition to a phase one footing. USPACOM issues a warning order to Marine Corps Forces, Pacific (MARFORPAC), which directs them to prepare 3d MEB to reinforce Filipino forces in the vicinity of Scarborough Shoals and to develop courses of actions for seizing the Senkaku Islands. MARFORPAC units are spread throughout the region conducting numerous TSC exercises, including 31st MEU companies in the Philippines, Thailand, and Guam. The UPD unit has forces on Okinawa, at Camp Fuji, and is conducting bilateral training in South Korea. The Marine Rotational Force–Darwin just completed a joint training exercise in northern Australia.

Although this type of Chinese aggression and force projection may seem unlikely, regional partners, including Japan, see such a scenario as possible and increasingly likely. From Japan's perspective, China's rapid military modernization and evolving regional foreign policy suggest that it actively seeks the ability to project force beyond its own borders. Given the rate of China's military modernization and the current trajectory of Sino-Japanese tension, such a scenario is well within the realm of possibility.¹⁴

This most dangerous scenario shares many similarities with the most likely scenario. Once again, Marine forces are distributed throughout the region conducting numerous TCS missions. Similar to a natural disaster, the crisis unfolds rapidly without the opportunity to transition from phase zero to phase one.¹⁵ The dispersed MARFORPAC units will form 3d MEB, which will

¹³ Rogier Creemers, "Communiqué of the 3rd Plenum of the 18th Party," *China Copyright and Media* (blog), 12 November 2013, http://chinacopyrightandmedia.wordpress.com/2013/11/12/communique-of-the-3rd-plenum-of-the-18th-party -congress/.

¹⁴ Mateo Dian, *The Transformation of the US-Japan Alliance and the "Pivot" towards the Asia Pacific Region*, (London: The London School of Economics and Political Science, 2013), 15-19, http://www.academia.edu/2473499/Japan_and _the_US_Pivot_to_the_Asia_Pacific.

¹⁵ The six phases of the continuum of military operations are shape, deter, seize the initiative, dominate, stabilize, and enable civil authority.

likely become the major element of the combined joint task force that will respond to the crisis.

These scenarios suggest a future operating environment governed by the following assumptions and capabilities.

Assumptions

- The destabilizing effect of China's rise as a preeminent political and military power in the region will continue.
- China's military modernization and external focus will continue as A2/AD and regional power projection capabilities improve.
- Although direct hostilities with China are possible, ground combat operations on mainland China will not occur.
- Due to time and budgetary constraints, any solution for succeeding against an A2/AD enabled enemy will need to be primarily conceptual rather than material in nature.
- The ability of MARFORPAC forces to reaggregate in the face of an A2/AD-enabled enemy will rely on joint force shaping actions to help create and maintain seams, particularly in the longer range, antiarea portions of the enemies' defense.
- The Marine Corps will continue to develop concepts, such as operational maneuver from the sea (OMFTS), ship-to-objective maneuver (STOM), and seabasing, to provide the joint force with a viable amphibious forcible entry capability.
- In light of the strategic emphasis on the Asia-Pacific region, MARFORPAC force size will not decrease within the next 10 years despite the Marine Corps' reduced end strength and instability in other regions.
- The strategic rebalance to the Pacific will cause an increased volume of partner engagement in the form of bilateral and multilateral training. This increase will occur without a corresponding increase to MARFORPAC force structure.
- The strategic rebalance to the Pacific will increase the U.S. desire to participate in noncombat crisis response missions for which MARFORPAC will be a primary responder.

Capabilities

- An increase in TSC missions will make distribution down to the company level common.
- If tensions with a Pacific region A2/AD-enabled adversary, such as China, grow, Marine forces may be distributed to complicate enemy targeting and support prehostility-shaping activities.
- Noncombat crisis responses will be the most common MAGTF missions, including such large-scale missions as Operation Tomodachi in response to the 2011 earthquake and tsunami in Japan and Operation Damayan following the 2013 typhoon that struck the Philippines.
- The Marine Corps, as part of a joint force, will need to have the ability to conduct forcible entry against an A2/AD-enabled enemy.
- For MARFORPAC units to support frequent distributed operations, while also being able to respond to large-scale crisis response or combat operations, responsive intratheater mobility will be an essential capability.
- The U.S. Navy will maintain 33 amphibious ships for the next 10 years.

EMERGING CONCEPTS AND THOUGHTS

The Department of Defense at large and the military Services individually have struggled to define the emerging operating environment and their place within it. The Marine Corps, as the world's premiere amphibious and expeditionary force, ought to be well placed to fill a prominent

role in the nation's future concept of operational access. Yet it also has struggled to define the role that the MAGTF will fill and the operating concepts it will use to succeed. A brief review of prominent literature regarding the future operating environment will examine the emerging and existing operational concepts, starting broadly at the joint level and then focusing more specifically on the Marine Corps, thereby developing a clearer idea of where the MAGTF will fit and how it will succeed in the Asia-Pacific region of the near future.

The first stop for anyone who is trying to understand how the United States intends to operate the emerging Asia-Pacific environment is with the *Joint Operational Access Concept (JOAC)*. Published in January 2012, the *JOAC*'s specific purpose is to offer a concept that will allow the joint force to succeed in a contested access environment. Overcoming A2/AD is just one of many capabilities that will be required and is only a means to an end, not an end in and of itself.

However, operational access is the fundamental requirement for power projection and enables all other military capabilities. Therefore, the operational access concept described by the *JOAC* has become the capstone concept for the host of emerging Asia-Pacific operating concepts.¹⁶ The document defines operational access as "the ability to project military force into an operational area with sufficient freedom of action to accomplish the mission."¹⁷ It suggests that the conditions established before hostilities begin are among the most important aspects of operational access.

These shaping actions include multi- and bilateral exercises, prepositioning of supplies, and forward deployment of forces. Once the adversary's A2/AD defenses are active, the primary challenges become projecting forces into the operating area and sustaining them while they are there. *JOAC* proposes to overcome these challenges with "cross-domain synergy," where all of the elements of the joint force are complementary rather than simply additive. The document offers 11 general principles, referred to as precepts, which offer a distinctly conceptual (rather than material) vision for dealing with the A2/AD challenge. Although the document does not offer any specifics, it does provide unmistakable direction that could be summed up by saying that the joint force will solve this problem by achieving an unprecedented level of joint cohesion and innovation. The *JOAC* is not specific about the role each Service will play. Perhaps the lack of the specificity is a way to provide the Services with the maneuver space necessary to cohere and innovate effectively.¹⁸

Air-Sea Battle (ASB) is an example of the cross-domain synergy and inter-Service innovation envisioned by *JOAC*. A close relative of the Cold War's AirLand Battle, ASB emerged as a means to overcome evolving A2/AD threats. The summary states that the ASB concept is applicable across the spectrum of conflict, and would be an effective deterrent to potential adversaries as well as reassurance to allies and partners. The concept assumes that some U.S. forces will be within the A2/AD envelope when hostilities commence with little or no warning, and those forces must respond immediately with high tempo operations. It also assumes that all domains will be contested, and no domain can be completely given over to the adversary. The summary refers to ASB as a limited-objective concept that leverages a networked and integrated "attack-in-depth" to eliminate an adversary's A2/AD capability. The concept is well nested with the *JOAC* in terms of emphasis on joint force synergy and seems well equipped to deal with the deep fight, antiarea aspect of the problem. However, it is unclear how this concept is applicable across the spectrum of conflict or how it could be referred to as a limited-objective concept. In

¹⁶ Joint Operational Access Concept (JOAC) (Washington, DC: Department of Defense, 2012), 1–2, http://www.defense .gov/Portals/1/Documents/pubs/JOAC_Jan%202012_Signed.pdf.

¹⁷ Ibid., 1.

¹⁸ Ibid., 1–36.

a China scenario, an attack-in-depth would likely require strikes against the Chinese mainland, which would open the door for a response in kind, thus creating a "tit-for-tat" exchange that could escalate rapidly toward employment of nuclear weapons.¹⁹

T. X. Hammes' *Offohore Control* leverages U.S. strengths, as they exist today, while reducing the likelihood of nuclear escalation or other widespread physical destruction. Hammes, a distinguished research fellow at the Institute for National Strategic Studies at National Defense University and a retired Marine Corps officer, based his concept of offshore control on center of gravity/critical vulnerability analysis. Instead of striking at the A2/AD systems of a potential adversary, such as China, he suggests that the United States apply its unrivaled naval power to block the long sea lines of communications (SLOCs) on which China depends for importing vital energy resources and exporting consumer products. Denying China navigation within the first island chain and blocking access to strategic choke points, like the Strait of Malacca, would accomplish this objective. The concept would protect and assure regional partners while asking for very little in return unlike ASB, which would likely include the United States using partners' territory to launch attacks against the adversary.²⁰ A similar concept, called "War at Sea," seeks to achieve similar ends but emphasizes the use of the superior U.S. undersea force in conjunction with maritime interdiction and employment of Marine expeditionary forces to seize key pieces of terrain among and adjacent to vital Pacific SLOCs.²¹

The intellectual tug-of-war between ASB, offshore control, and other concepts has dominated the operational access conversation for more than a year now as supporters on each side argue relative strengths and weaknesses. Instead of viewing the concepts as an either/or proposition, they should be viewed as complementary components of a broader operational access strategy. Frank Hoffman, a national security analyst now serving as a senior research fellow at the Center for Strategic Research at the National Defense University, makes this point in his recent article, "The Simmering Pottage: Air Sea Battle and QDR 2014." He suggests that a strong deterrent deep-strike concept like ASB is a "necessary precondition" if the United States intends to maintain forward presence in areas where antiaccess capability is present. However, such a capability would only be employed in situations where the United States is willing to risk all-out war with a near-peer adversary. Offshore control and war at sea concepts are much better suited to deter or address small-scale issues, such as territorial disputes. As Hoffman points out, ASB and offshore control only deal with the deeper antiaccess dimension of the problem. He criticizes the "land power community," including the Marine Corps, for not offering concepts for dealing with the closer operational maneuver problem posed by area denial.²²

The suggestion that the Marine Corps has not offered anything to overcome the area denial problem is flatly incorrect. In fact, the Marine Corps was the first Service to recognize the emergence of the new age of contested access. Operating concepts, such as OMFTS and STOM, have existed since the mid-1990s and were well ahead of their time. More recently, General James F. Amos tasked the Amphibious Capabilities Working Group, later renamed the Ellis Group, to revisit existing amphibious concepts in the context of the post-Afghanistan Marine Corps. Their 2012 report framed the problem that an A2/AD-capable enemy creates and articu-

¹⁹ Air-Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges (Washington, DC: Air-Sea Battle Office, 2013), 1–13, http://archive.defense.gov/pubs/ASB-ConceptImplementation-Summary-May-2013.pdf.

²⁰ T. X Hammes, "Offshore Control Is the Answer," *Proceedings* 138, no. 12 (December 2012), http://www.usni.org /magazines/proceedings/2012-12/offshore-controlanswer.

²¹ Jeffrey E. Kline and Wayne P. Hughes Jr., "Between Peace and the Air-Sea Battle: A War at Sea Strategy," Naval War College Review 60, no. 4 (Autumn 2012): 35–40, https://www.usnwc.edu/getattachment/e3120d0c-8c62-4ab7 -9342-805971ed84f4/Between-Peace-and-the-Air-Sea-Battle--A-War-at-Sea.

²² Frank Hoffman, "The Simmering Pottage: Air Sea Battle and QDR 2014," *War on the Rocks*, 14 November 2013, http://warontherocks.com/2013/11/the-simmering-pottage-air-sea-battle-and-qdr-2014/.

lated insightful assumptions about the future operating environment based on research and the results of a series of contested access amphibious wargames.

The Ellis Group report introduces several new concepts, such as single naval battle (SNB) and the naval expeditionary system (NES). SNB views "The maritime domain as singular battlespace," and seeks to integrate "all elements of sea control and naval power projection into a cohesive whole."²³ Similarly, "NES describes the principle of bringing the many components of the expeditionary force into predictable, practiced, packages that can be rapidly applied to the requirements of the security situation."²⁴ Both of these concepts address the need for the Navy and the Marine Corps to develop a closer and more synergistic relationship in training, planning, and executing to achieve the type of littoral agility that will be necessary in an area denial environment. It appears that these new concepts were developed to facilitate the implementation of the existing littoral maneuver concepts—OMFTS and STOM. The report strongly recommends that seabasing in steady-state operations become operationalized and highlights the need to embrace the distributed operations MAGTF and company landing team task organization.²⁵

In August 2012, the Ellis Group published an article titled U.S. Amphibious Forces: Indispensible Elements of American Seapower, which reviews much of what had been published in the original Amphibious Capabilities Working Group report, but does so with amplifying detail. While discussing the relationship between SNB and ASB, it suggests that the concepts are complementary, and that SNB contextualized ASB for the nation's naval force by striving to achieve greater levels of synergy among the naval services. In fact, SNB could facilitate vital power projection in the form of raids or lodgments to allow for other area access activities. Unlike ASB, SNB is a concept that is applicable across the full range of military operations.

The Ellis Group article goes on to say that littoral maneuver will be essential in shaping battlespace geometry and controlling operational tempo. It gives the joint force commander options to pit strength against weakness and to present a threat to the enemy commander across the breadth of the battlespace. However, to achieve a balanced set of littoral maneuver options, one must have a balanced set of platforms, including but not limited to aircraft, surface connectors, and tracked amphibians.²⁶

Robert O. Work, deputy secretary of the Navy and retired Marine colonel, wrote *Post-Afghanistan Marine Corps* in response to doubts Secretary Gates publicly expressed in 2010 regarding the future of amphibious operations. In the article, Work describes what a post-Afghanistan Marine Corps should look like and what missions it should be able to perform. He thinks the future Marine Corps will need to reconnect with its naval roots; it will be lighter, more distributed, and increasingly reliant on unmanned platforms. It will also be required to perform amphibious assaults with the support of the joint force. In a future where bases and ports may not be readily available, the ability to seize a lodgment will be vital. In large joint force "theater entry missions," the Marine Corps will contribute littoral maneuver, which he describes as "the ability to project ready-to-fight cohesive combat forces from the sea to shore in order to achieve a positional advantage over an enemy." This implies use of modern Marine Corps warfighting doctrine in an amphibious context, by using the air, sea, land, and cyberdomains to avoid the opponent's strength, while attacking his weakness with surprise, speed, and focus.²⁷

The operational environment of the near future is changing dramatically. Potential adver-

²³ Naval Amphibious Capabilities, 4.

²⁴ Ibid., 23.

²⁵ Ibid., 7–37.

 ²⁶ Ellis Group, "U.S. Amphibious Forces: Indispensible Elements of American Seapower," *Small Wars Journal* (August 2012), http://smallwarsjournal.com/jrnl/art/us-amphibious-forces-indispensible-elements-of-american-seapower.
 ²⁷ Robert O. Work, "Post-Afghanistan Marine Corps," *Marine Corps Gazette*, November 2012, https://www.mca-marines.org/gazette/2010/11/post-afghanistan-marine-corps.

saries have punctured the existing equilibrium through the development of sophisticated crossdomain A2/AD networks. The Department of Defense has recognized this and developed the *JOAC* to guide the joint force as it adjusts to the new operational environment. Existing and emerging amphibious MAGTF concepts are well nested within the *JOAC* and other intermediate concepts, such as ASB or offshore control. However, they lack specificity, and it is uncertain how shrinking defense budgets will impact implementation. Furthermore, it is unclear if the Marine Corps will be able to adequately distribute and sustain its forward deployed force to meet steady-state requirements, and then rapidly reaggregate them into the larger formations that will be necessary to meet any number of potential crises. These limitations indicate the need for a further conceptual development that can provide such operational flexibility.

CONCEPT FOR MAGTF 2024

As the future operating environment in the Asia-Pacific region begins to take shape, one cannot help seeing a future in which the Marine Corps is well suited to operate and succeed. The expeditionary doctrine and "any clime and place" culture of the Marine Corps are a perfect match for the emerging challenges in the Pacific. The MAGTF, the physical manifestation of the Corps' culture and doctrine, is a proven organizational method tailor-made for both current and future operations in the Pacific. Since its inception, the MAGTF has been described as a flexible and agile force that specializes in operating across the spectrum of conflict in expeditionary and austere environments. In fact, demand for these qualities in the Pacific of the near future will be higher than ever. The MAGTF will be required to conduct operations across the full range of military operations faster and over greater distances than ever before.²⁸ Fortunately, many of the operating concepts necessary for the MAGTF of 2024 to succeed already exist. However, they exist in isolation, at various points along the range of military operation. What is required now is a way to connect the dots so seemingly disparate operating concepts can coexist within the same force at the same time.

Distribution

Distributed operations across the range of military operations (ROMO), to include combat and noncombat activities, will be a vital capability for future MAGTFs in the Pacific region. Fortunately, conducting distributing operations with company-size units over larger distances is nothing new. In General Michael W. Hagee's 2005 work, *A Concept for Distributed Operations,* the concept is characterized by company-size or smaller units operating across the "breath and depth of the battlespace . . . focused on achieving a common aim."²⁹ The Marine Corps frequently applied the concept to varying degrees at the company level in Operation Iraqi Freedom and Operation Enduring Freedom. It has also been successfully applied in a MEU setting, such as in 2010 when the 26th MEU simultaneously conducted humanitarian assistance missions in Pakistan, combat operations in Afghanistan, and counterpiracy missions in the Gulf of Aden.³⁰ Although these examples do not include an area as potentially expansive as the Pacific that may contain near-peer adversaries, they do demonstrate that company-level distributed operations are viable.

The ability to distribute company-size MAGTFs will be necessary to meet the requirements of the future Pacific environment in both the most likely and most dangerous operating scenarios. In the most likely scenario, the ability to disperse MARFORCPAC elements operating in

²⁸ Marine Corps Operations, 43–55.

²⁹ Gen Michael W. Hagee, A Concept for Distributed Operations (Washington, DC: Headquarters Marine Corps, 2005), i. ³⁰ Col Mark Desens and Commo Pete Pagano, "KEARSARGE Amphibious Ready Group, 26th Marine Expeditionary Unit, Post Deployment Brief" (presentation, Camp Lejeune, NC, 16 June 2011), http://www.slideshare.net /robbinlaird/26th-meu-post-deployment-brief.

the Asia-Pacific area (one or more MEUs, a UPD battalion, and a battalion supporting Marine Rotational Force–Darwin), and maintain that dispersion as a steady-state condition, will be invaluable. This type of small unit would be well suited to conduct low-intensity operations, such as limited raid profiles and other operations in support of counterpiracy and counterterrorist operations. Dispersed company-size MAGTFs would provide the combatant commander with a greater number of units to support the training and assist missions that are embedded in theater security cooperation programs. MAGTFs scaled to this level will be capable of touching more regional partners, building greater interoperability, and helping to establish more infrastructure without a corresponding increase to force structure. Such a capability would decisively contribute to the favorable prehostility conditions that *JOAC* states are necessary to assure access.³¹

As Lieutenant General Robert E. Schmidle Jr. pointed out in a 2004 article, "Distributed operations present a complex puzzle to the adversary . . . [which] induces confusion and ambiguity and produces a competitive advantage for our force."³² This is exactly the type of challenge that a forward deployed force will need to present an A2/AD enabled enemy in a most dangerous operating scenario. Such an effect will complicate targeting, limit the effects of long-range precision strikes, and maintain an ambiguous yet credible threat across the breadth of the battlespace that will have a deterrent effect on the adversary. Additionally, dispersed forces will make it easier for expeditionary forces to support such concepts as offshore control that emphasize the importance of seizing key terrain to control SLOC choke points. Such a force, if equipped accordingly, could even present the adversary with a mirror A2/AD problem to complicate even further, or deter altogether, his ability to project force within the operating environment.

Concentration

In a *Marine Corps Gazette* article published in 2013, the Commandant of the Marine Corps outlined the importance of more sizable MAGTFs in meeting the challenges of the emerging operational environment. General Amos described how combatant commander demand and future security environment requirements would increasingly lead to the "deployment and initial employment" of the middleweight MAGTF—the MEB.³³ This size force will be vital in fulfilling many of the prehostility shaping missions envisioned in the *JAOC* by providing a force large enough to assist regional partners in dealing with and recovering from the large-scale natural disasters that occur in the Asia-Pacific with undeniable frequency.³⁴ Conducting such operations within the A2/AD threat ring of a potential adversary will require the acceptance of risk, but can be supported by the capability to transition rapidly from a distributed posture to a larger reaggregated posture at the decisive point and time. The deterrence and shaping potential offered by the long-range strike capability associated with such concepts as ASB will directly enable MEB operations, both before and during hostilities.³⁵

The *JOAC* also envisions the need to conduct forcible entry missions in an area-denied environment. Such missions could include "raids to eliminate land-based threats to friendly air and naval forces, to seize a lodgment."³⁶ The Marine Corps anticipated this challenge 20 years prior to the *JOAC* and has been wrestling with it since. The result was the Expeditionary Maneuver Warfare (EMW) capstone concept, which included operating concepts such as STOM,

³¹ *JOAC*, i.

³² Robert E. Schmidle, "Distributed Operations: From the Sea," *Leatherneck*, July 2004, https://www.mca-marines .org/leatherneck/distributed-operations-sea.

³³ Gen James F. Amos, "Resourceful Force Design," *Marine Corps Gazette,* December 2013, http://www.spa.com /MarineCorpsGazetteArticle.pdf.

³⁴ JOAC, 18–19.

³⁵ Hoffman, "The Simmering Pottage."

³⁶ JOAC, 6–7.

OMFTS, and seabasing. As time has passed, these concepts have moved closer to reality. Task Force 58's 400-mile movement from the North Arabian Sea to seize Camp Rhino in the opening days of OEF is an example of a rudimentary application of STOM in the real world.³⁷ Furthermore, strides are being made in operationalizing the seabase with introduction of Exercise Bold Alligator, which focuses on improving the ability to conduct MEB-level amphibious operations from a seabase in an A2/AD environment and occurs on an annual basis.³⁸ Although these EMW concepts are not mature enough to be considered an operational reality, they are becoming more viable and will be much more viable in 10 years if they remain on their current trajectory.

Bridging the Gap

Thus, MAGTFs operating in the Pacific of 2024 will need to perform across the range of military operations in both a distributed and aggregated manner. These MAGTFs must be capable of executing a broad set of missions, both combat and other crisis response profiles, from distributed and aggregated postures. Due to established and emerging concepts, such as Distributed Operation, STOM, and seabasing, it is reasonable to assume that the MAGTF of the future will be capable of succeeding at either distributed or aggregated operations when they are only required to accomplish one or the other.

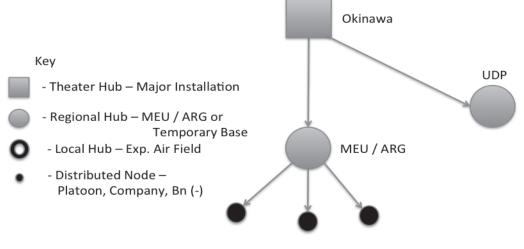
However, the Pacific of the future will present a chaotic and nonlinear problem that will require the MAGTF to transition rapidly across the range of operation and aggregation. Operational requirements on the distributed end of the spectrum are likely to include a high volume of military-to-military engagement, counterpiracy, and counterterrorist operations that could include visit, board, search, and seize (VBSS) missions and raids. Distributed operations could also include seizure of key terrain and other missions in support of counter-A2/AD efforts. Aggregated missions will include large-scale humanitarian assistance and disaster relief (HADR)/ crisis response missions, forcible entry and other combat missions. Being proficient at distributed and aggregated operations will not be enough to meet the future challenge if the force is incapable of rapidly transitioning between the two. Although the MAGTF of today is characterized by agility and flexibility, it will need to push these qualities even further to meet the requirements of the future. To achieve the type of agility necessary to transition from distributed and small to aggregated and decisive, a new way of thinking about intertheater mobility will be necessary.

The current model for intratheater mobility is essentially linear and one-dimensional, relying almost exclusively on 31st MEU and its associated amphibious shipping (figure 2). Although UDP units do periodically travel from Okinawa for off-island training, those occasions are rare and have not been used for crisis response in recent memory. Other MARFORPAC units, such as the battalions supporting UDP or Marine Rotational Force–Australia, have very limited ability to contribute to distributed or aggregated operations because the current approach to intratheater mobility does not allow for distribution of forces beyond the 31st MEU. In fact, even the MEU's mobility is frequently compromised due to the fact that it only has one ARG's worth of shipping to support year-round contingencies. If at any time the amphibious helicopter assault carrier dock (LHD) is down for repairs, the MEU is ineffective. In short, the current model lacks capacity and flexibility and is dangerously brittle.

No single platform, whether amphibious ship or intratheater lift platform, exists in enough quantity to support timely reaggregation of a MEB's worth of units dispersed across the Pacific. Yet, there have been recent additions to the inventory that could provide parts to a larger

³⁷ Col Vincent Goulding, "Task Force 58: A Higher Level of Naval Operation," *Marine Corps Gazette,* August 2011, https://www.mca-marines.org/gazette/2011/08/task-force-58-higher-level-naval-operation.

³⁸ Exercise Bold Alligator 2012: Final Report (Norfolk, VA: Expeditionary Warfare Collaborative Team, 2012), http://www .usni.org/sites/default/files/BA%2012%20Final%20Rep't%20Condensed.pdf.



Distributed MEU Elements

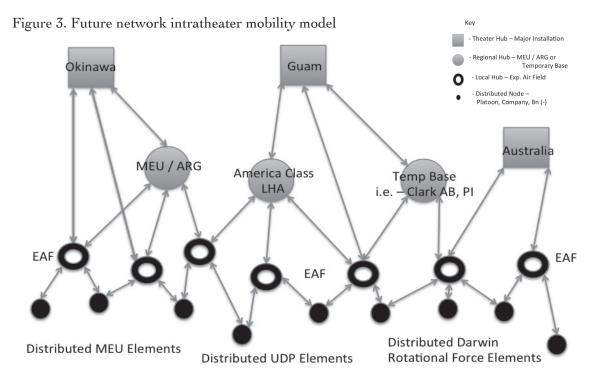
solution. The Bell Boeing MV-22 Osprey, for instance, is a vastly more capable aircraft than its predecessor, the Boeing Vertol CH-46 Sea Knight. The MV-22 can fly twice as fast, carry almost three times as much cargo, and travel six times as far.³⁹ The joint high-speed vessel (JHSV) is significant intratheater mobility platform designed for the rapid transportation of troops and equipment. It is capable of moving more than 312 passengers at speeds up to 32 knots, and can land both Sikorsky CH-53 Sea Stallions and MV-22s.⁴⁰ Although it has been a much-maligned program, the littoral combat ship (LCS) will be a reality, even if somewhat truncated. One of the LCS's original missions was to deploy and recover Marines and special operations forces.⁴¹ Finally, there are the two *America*-class land helicopter assault (LHA) ships that will not have well decks. While its hard to image how such a ship would fit into the MEU/ARG configuration, it would certainly be a highly capable platform if the proper niche could be found. Although none of these options represent an easy material solution to the overall challenge, they are new and highly capable platforms that could decisively contribute to the challenge of bridging the gap between distribution and aggregation.

A network approach to intertheater mobility that uses all available platforms within their capabilities could provide a more practical and resilient solution. The example provided in figure 3 is intended to demonstrate what such a mobility network might look like. It depicts several battalions' worth of units distributed across the Pacific region, and the associated mobility network that would facilitate a rapid transition between distribution and aggregation. The first link in the reaggregation chain for these distributed units is the expeditionary airfield. Although there has been much discussion about the expeditionary airfield as it relates to the future employment of the Lockheed Martin F-35 Lightning II, the same concept could be critical in the transition between distribution and aggregation. The distributed nodes would be connected to this local hub primarily through MV-22 and CH-53 lift. These platforms would also provide the

³⁹ Paul D. Shinkman, "The V-22 Osprey May Have Climbed Out of Controversy," U.S. News & World Report, 29 March 2013, http://www.usnews.com/news/articles/2013/03/29/the-v-22-osprey-may-have-climbed-out-of -controversy.

⁴⁰ Jessica F. Alexander, "USNS Spearhead: Fast, Flexible, First in Class," U.S. Navy's Military Sealift Command, March 2013, http://www.msc.navy.mil/sealift/2013/March/spearhead.htm.

⁴¹ Loren Thompson, "Navy Has Few Options If Littoral Combat Ship Falters," *Forbes*, 7 March 2014, http://www .forbes.com/sites/lorenthompson/2014/03/07/navy-has-few-options-if-littoral-combat-ship-falters/.



link between expeditionary airfield to the regional hubs, which could include ARG shipping, an *America*-class LHA, or a larger temporary airfield at an existing partner nation facility. However, the expeditionary airfields could connect directly back to a theater hub if it is capable of supporting Lockheed C-130 Hercules or can link with JHSVs. This ability to connect local hubs to theater hubs is an important factor that will enhance the network's flexibility and resiliency. And finally, the amphibious ships serving as regional hubs would self connect with theater hubs, while larger temporary airfields could connect to theater hubs via Boeing C-17 Globemaster IIIs or other joint air support.

A number of important challenges would need to be overcome to make a network approach to intratheater mobility successful. Command and control is an obvious issue. Numerous distributed Marine units relying on a continuous and cohesive relationship with naval shipping for mobility and rapid reaggregation would require a new type of command and control structure. Applying the logic of SNB, which seeks to integrate "all elements of sea control and naval power projection into a cohesive whole," to command and control architecture will be the only way to achieve the type of synergy that the Navy and Marine Corps team will need to realize an agile mobility network.⁴² The ACWG pointed out in Naval Amphibious Capability in the 21st Century that "refinement of JFMCC [joint force maritime component command] concepts presents significant opportunities" for reaching a greater level of operational level cooperation among the elements of the naval force.⁴³ In fact, a standing JFMCC-type structure that is built around 3d MEB and Expeditionary Strike Group 7 staffs would probably be needed to implement the network concept. This type of organization would have the cohesive relationships, interoperability, and shared operational vision necessary to manage the complexity of theater-wide distributed operations while also being capable of a rapid transition to a reaggregated force able to be projected at the decisive point, at the decisive time.

Another challenge associated with the future operating environment is sustainment of dis-

⁴² Naval Amphibious, 22.

⁴³ Ibid., 41.

tributed forces across the great expanses likely to be encountered in the Pacific region. Viewed through the lens of current sustainment practices that rely on a structure similar to today's linear mobility model, the problem takes on an insurmountable appearance. However, if one takes a network approach that leverages the same flexible and interconnected mobility architecture for sustainment purposes, the problem appears to be more manageable. In short, if the mobility potential exists to distribute and rapidly reaggregate units over great distances, then the same potential should also be able to make sustainment possible. Additionally, Maritime Prepositioning Squadron 3 (MPSRON-3), which operates out of Guam and Saipan, has begun experimenting with techniques to "logistically support and sustain multiple, non-contiguous tactical units from a sea base." The integration of the *Lewis and Clark*-class (T-AKE) maritime prepositioning ship, with its selective offload capability, further demonstrates that there is a concerted effort underway to further leverage MPSRON capability in support of distributed operations.⁴⁴

CONCLUSION

The operating environment of the near future in the Asia-Pacific region will require flexible and agile forces capable of operating across the full range of military operations. In short, it will be an environment for which the MAGTF is well suited. Fortunately, many of the concepts that will enable the success of MAGTF 2024 already exist. Marines have successfully applied distributed operations in both land and maritime settings as a matter of routine over the past decade. Furthermore, the Marine Corps has been developing concepts and platforms to achieve amphibious forcible entry against modern area-denial enabled defenses for the past 20 years and is clearly making progress toward that end. However, being proficient at distributed and aggregated operations will not be enough to meet the future challenge if the force is incapable of rapidly transitioning between the two. To achieve the type of agility necessary to transition from distributed and small to aggregated and decisive, a new way of thinking about intratheater mobility will be necessary. A network concept that uses all available platforms within their capabilities could provide a more practical and resilient solution. By relying on existing technology and platforms, it would provide a solution well suited to the austere fiscal environment likely to be encountered in the future. A network approach to intratheater mobility will bridge the gap between distributed and aggregated operations by enabling rapid transitions in force posture to ensure that the MAGTF of 2024 can be projected at the decisive point, at the decisive time.

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⁴⁴ Shon Brodie, "Marine Corps Seabasing: Assured Access for the 21st Century" (lecture, Marine Corps University, Quantico, VA, October 2013).

Fighting for Information Improving the Development of the U.S. Army's Maneuver Reconnaissance and Security Doctrine

by Major David B. Niederauer, USA¹

For an Army whose doctrine revolves on information dominance to overwhelm an enemy through combined arms maneuver and precision effects, the importance of mounted maneuver reconnaissance—and the related debate regarding its nature—cannot be understated. It is in the Army's interest to determine the optimal reconnaissance organization, materiel, and training programs.²

~Robert S. Cameron, PhD

he U.S. Army's reconnaissance and security formations, operations, and doctrine have been the subject of much debate, experimentation, and change over the past one hundred years. Since the interwar era, between the two World Wars, the U.S. Army has developed and implemented several dismounted and mounted reconnaissance formations designed to collect information.³ Advancements in technology and materiel along with creative thought and leadership have contributed to an evolving combined arms approach to reconnaissance operations and subsequent contrasting views throughout the Army regarding the organization, training, and equipping of reconnaissance formations.⁴ Consequently, the doctrine covering reconnaissance and security formations and their operations has also evolved. Despite the attention given to the development of reconnaissance and security formations and their operations, the institutional process of developing and writing the Army's reconnaissance and security doctrine is not a topic to which much attention or discussion has been devoted. Once reconnaissance and security concepts are developed and approved and formations are created, much of the development and production of this doctrine goes largely unnoticed and misunderstood. A general assertion frequently made by soldiers and leaders is that doctrine is broken or that it has not caught up with the needs of the training or the operating force.

As the Army rebalances from Operation New Dawn and Operation Enduring Freedom and prepares for a dynamic and challenging future, many of the experiences from these operations are captured and implemented at the brigade level and below. Too often, the experiences and lessons learned regarding reconnaissance and security operations are not widely disseminated

¹ Maj Niederauer is a graduate of the Marine Corps University Command and Staff College. This paper won the Gen John A. Lejeune Writing Award of the Marine Corps League for Academic Year 2013–14.

² Robert S. Cameron, *To Fight or Not to Fight? Organizational and Doctrinal Trends in Mounted Maneuver Reconnaissance From the Interwar Years to Operation Iraqi Freedom* (Fort Leavenworth, KS: Combat Studies Institute Press, U.S. Army Combined Arms Center, 2009), xviii.

³ Ibid., xvii. ⁴ Ibid.

³³

to the larger force. Contributing to this problem is the fact that the Army has several separate functional proponents that develop and write reconnaissance and security doctrine. These functional proponents are not inherently integrated or synchronized with each other and generally operate in a compartmentalized manner. Despite the goals of the Army's Doctrine 2015 strategy and its efforts to improve the content, clarity, volume, and accessibility of doctrine, the Army does not have a system in place that ensures collaboration, unity of effort, and continuity among the functional proponents of reconnaissance and security doctrine.

A cursory search of reconnaissance doctrine on the official Department of the Army Publications and Forms website reveals 20 doctrinal publications from more than seven separate Army proponents with the word "reconnaissance" in the title.⁵ This situation highlights the fundamental point of this paper; the Army's reconnaissance doctrine is developed and produced by a diverse collective body of functional proponents that are not inherently integrated and synchronized. In addition to the Armor School at Fort Benning, Georgia, the Army proponent branches that develop and produce reconnaissance doctrine include Infantry, Aviation, Military Intelligence, Engineer, Chemical, and Special Operations Forces Branches. Reconnaissance and security doctrine is applicable to all of the brigades in the Army's modular brigade combat team (BCT) structure. Each BCT has a reconnaissance squadron that utilizes reconnaissance and security doctrine to conduct its operations. Additionally, BCTs inherently operate as combined arms teams and can task any of their maneuver formations to conduct reconnaissance and security operations.

The Army's structure for developing and writing reconnaissance and security doctrine should be reorganized from its current functional and compartmentalized system to one that incorporates a combined arms approach and promotes collaboration, unity of effort, and continuity through the integration and synchronization of the collective expertise of each of the Army's reconnaissance and security proponent branches and professional military education (PME) schools. By incorporating a combined arms approach, the Army's reconnaissance and security doctrine could be developed comprehensively among its proponent branches and PME schools with consistent input and feedback from the training and operating forces. A combined arms approach to developing and producing reconnaissance and security doctrine supports the goals of the Army's Doctrine 2015 strategy and promotes the establishment of standardized communication networks and habitual relationships that facilitate collaboration, unity of effort, and continuity among the Army's reconnaissance and security doctrine proponents.⁶

This paper provides an overview of Army doctrine, combined arms maneuver, and reconnaissance and security operations. An organizational overview of the Army's Training and Doctrine Command, the Combined Arms Doctrine Directorate, the Doctrine and Collective Training Division, and the Cavalry Branch is also provided to establish a general understanding of the Army's organizational hierarchy for writing doctrine. This paper provides an overview of the Army's Doctrine 2015 strategy and recommendations for the implementation of a combined arms approach to the development and production of the Army's reconnaissance and security doctrine.

DOCTRINE

Doctrine is the concise expression of how Army forces contribute to campaigns, major operations, battles, and engagements. It is a guide to action, not hard and fast rules. Doctrine provides a common frame of reference across the Army. It helps standardize operations, facilitating readiness by establishing common

⁵ Official Department of the Army Publications and Forms, http://www.armypubs.army.mil.

⁶ "Doctrine," U.S. Army Training and Doctrine Command, www.tradoc.army.mil.

ways of accomplishing military tasks. Standardization means that Soldiers transferring between units do not need to learn new ways to perform familiar tasks.

Doctrine facilitates communication among Soldiers, contributes to a shared professional culture, and serves as the basis for curricula in the Army education system. The Army is a learning organization. It has evolved with the Nation through societal changes, technological advancements, and ever changing international circumstances. It continually revises its doctrine to account for changes, incorporating new technologies and lessons from operations. It improves education and training processes to provide Soldiers with the most challenging and realistic experience possible. It aims to impart to Soldiers and units the individual and collective skills, knowledge, and attributes required to accomplish their missions.

Doctrine links theory, history, experimentation, and practice. Its objective is to foster initiative and creative thinking. Doctrine encapsulates a larger body of knowledge and experience. It provides an authoritative statement about how military forces conduct operations and a common lexicon with which to describe them. Doctrine furnishes the intellectual tools with which to diagnose unexpected requirements. It also provides a menu of practical options based on experience from which self-aware and adaptive Army leaders can create their own solutions quickly and effectively.⁷

RECONNAISSANCE

Army Doctrine Reference Publication (ADRP) 3-90, *Offense and Defense*, defines *reconnaissance* as "... a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographical or geographical characteristics and the indigenous population of a particular area ..."⁸ ADRP 3-90 further explains that

Reconnaissance primarily relies on the human dynamic rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after other operations to provide information used in the intelligence preparation of the battlefield process, as well as by the commander in order to formulate, confirm, or modify a course of action.⁹

Figure 1. Fundamentals of reconnaissance

- 1. Orient on the reconnaissance objective;
- 2. Gain and maintain enemy contact;
- 3. Report information rapidly and accurately;
- 4. Develop the situation rapidly;
- 5. Ensure continuous reconnaissance;
- 6. Retain freedom of maneuver; and
- 7. Do not keep reconnaissance assets in reserve.

Source: Offense and Defense, ADRP 3-90, 5-1.

⁷ The Army, FM-1, (Washington, DC: Department of the Army, 2005), 1-80.

⁸ Offense and Defense, ADRP 3-90 (Washington, DC: Department of the Army, 2012), 5-1.

⁹ Ibid.

Reconnaissance missions are assigned a specific objective. The reconnaissance objective is something the commander has identified that he or she needs more information about to make a decision. Reconnaissance objectives can orient on a specific location or structure, a geographic area, the location and strength of an enemy unit, or the activities of the civilian populace.¹⁰ ADRP 3-90 clarifies an important point about the conduct of reconnaissance operations by stating, "The responsibility for conducting reconnaissance operations does not reside solely with specifically organized units. Every unit has an implied mission to report information about the terrain, civilian activities, and friendly and enemy dispositions."¹¹ ADRP 3-90 goes on to explain that, "Although all units conduct reconnaissance, those specifically trained in reconnaissance tasks are ground cavalry, aviation attack reconnaissance units, scouts, long-range reconnaissance units, and special forces. Some branches, such as the Corps of Engineers, Civil Affairs, and the Chemical Corps, have specific reconnaissance tasks to perform that complement the force's overall reconnaissance effort."12 ADRP 3-90 makes an additional clarification by stating that "... brigade combat team (BCT), division, and corps commanders primarily use their organic or attached reconnaissance—ground or air—and intelligence elements to conduct reconnaissance operations."¹³

Figure 2. Forms of reconnaissance

- 1. Route reconnaissance is a directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route.
- 2. Zone reconnaissance is a form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries.
- 3. Area reconnaissance is a form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area.
- 4. Reconnaissance in force is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information.
- 5. Special reconnaissance includes reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces. These actions provide an additional capability for commanders and supplement other conventional reconnaissance and surveillance actions.

Source: Offense and Defense, ADRP 3-90, 5-2-5-3.

SECURITY

ADRP 3-90 defines *security operations* as ". . . those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation

¹⁰ Ibid., 5-1.

¹¹ Ibid.

¹² Ibid., 5-2.

¹³ Ibid.

to allow the commander to effectively use the protected force."¹⁴ ADRP 3-90 distinguishes security operations from reconnaissance operations by clarifying, "The main difference between security operations and reconnaissance operations is that security operations orient on the force or facility being protected, while reconnaissance is enemy and terrain oriented."¹⁵ Similar to reconnaissance, all maneuver forces can conduct security operations. All maneuver formations have the inherent responsibility for their own security and can provide early warning to their parent unit. However, most maneuver formations require augmentation from other branches of the combined arms in order to conduct larger security operations for the main body such as a guard or cover.¹⁶

Figure 3. Fundamentals of security

- 1. Provide early and accurate warning;
- 2. Provide reaction time and maneuver space;
- 3. Orient on the force or facility to be secured;
- 4. Perform continuous reconnaissance; and
- 5. Maintain enemy contact.

Source: Offense and Defense, ADRP 3-90, 5-4.

Figure 4. Security tasks

- 1. Screen is a security task that primarily provides early warning to the protected force.
- 2. Guard is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and support assets of the main body.
- 3. Cover is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a cover mission operate independently from the main body and provide their own fires and support assets.
- 4. Area security is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area.
- 5. Local security is a security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy.

Source: Offense and Defense, ADRP 3-90, 5-3-5-4.

¹⁴ Ibid., 5-3.

¹⁵ Ibid.

¹⁶ Ibid., 5-4.

COMBINED ARMS

ADRP 3-0, Unified Land Operations, defines combined arms as, "the synchronized and simultaneous application of arms to achieve an effect greater than if each arm was used separately or sequentially."17 Reconnaissance and security operations are inherently combined arms in nature due to the integration of air and ground assets, such as armor, infantry, artillery, engineers, aviation, and military intelligence. The Army Capstone Concept (ACC), TRADOC Pamphlet 525-3-0, describes combined arms maneuver and wide area security as the Army's two core competencies. The ACC states, "Army forces use combined arms maneuver to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy. They also use wide area security to deny the enemy positions of advantage, consolidate gains, and protect populations, forces, activities, and infrastructure." The ACC further states, "Army forces must be capable of developing the situation through action, in close contact with the enemy and civilian populations, fighting for information, and reassessing the situation to keep pace with the dynamic nature of conflict."18 Historically, the Army has used reconnaissance formations to develop the situation in close contact with the enemy and civilian populations, fight to answer the commander's information requirements, and reassess the situation to keep the commander informed, facilitate decision making, and shape the operating environment.

Regarding the future of the Army, the *ACC* states, "Looking to the future, the Secretary of the Army has challenged the institutional Army to become more innovative and efficient." Regarding doctrine development and production, the *ACC* states, "To truly revolutionize the way the Army develops and shares its doctrine, it must first restructure the body of knowledge and identify the principles critical to the Army as the Nation's land force of decisive action."¹⁹ A combined arms approach to developing and writing the Army's maneuver reconnaissance and security doctrine supports the secretary of the Army's challenge and the *ACC*'s vision of making the institutional Army more innovative and efficient and revolutionizing the way the Army develops and shares its doctrine. A combined arms approach to developing and producing maneuver reconnaissance and security doctrine would integrate the collective knowledge and resources of the Army's reconnaissance and security doctrine proponents and promote the establishment of standardized communication networks and habitual relationships that facilitate collaboration, unity of effort, and continuity.

TRADOC

The U.S. Army Training and Doctrine Command (TRADOC) was established on 1 July 1973.²⁰ Following the Vietnam conflict, TRADOC was instrumental in transforming the Army into a professionally trained, equipped, led, and organized modern land power.²¹ According to the official website, TRADOC shapes the Army through four primary functions: recruiting and training soldiers and supporting unit training; training and developing leaders; guiding the Army through doctrine; and shaping the Army by building and integrating formations, capabilities, and materiel.²² The creation of TRADOC as a separate command was considered an innovative approach, enabling the Army to narrow its focus to the generating and training force.²³ Today, TRADOC is responsible for creating and implementing training and education for all soldiers

¹⁷ Unified Land Operations, ADRP 3-0 (Washington, DC: Department of the Army, 2012), 1-14.

¹⁸ The U.S. Army Capstone Concept, TRADOC Pamphlet 525-3-0 (Fort Eustis, VA: Department of the Army, 2012), 14–15.

¹⁹ Ibid., 19.

²⁰ "The TRADOC Story," TRADOC, http://www.tradoc.army.mil/About.asp.

²¹ Ibid.
²² Ibid.

²³ "TRADOC Command History: Frequently Asked Questions," TRADOC, www.tradoc.army.mil/historian/faqs.htm.

as well as writing and maintaining doctrine. Called the "architect of the Army," TRADOC is the "think tank" behind the Army's structure, equipment, capabilities, and identifying future threats and conflict.24

Headquartered at Fort Eustis, Virginia, TRADOC's mission is "to develop, educate, and train Soldiers, civilians and leaders; support unit training; and design, build and integrate a versatile mix of capabilities, formations, and equipment to strengthen the US Army as America's force of decisive action."25 The execution of its mission occurs through six major subordinate centers and commands, with oversight of 32 Army schools organized under eight separate centers of excellence. Within the Army, each center of excellence focuses on specific functional areas of expertise, some of which include intelligence, fires, and maneuver. In all, training of more than 500,000 soldiers and other servicemembers occurs each year.²⁶ According to the 2013 Annual Report on Army Business Transformation, TRADOC is one of the largest educational institutions in the world given its sheer size in volume and frequency of training.²⁷ Much time and consideration is given in ensuring that lessons learned from more than a decade at war are captured and used in training the future Army.²⁸

TRADOC's key tasks are "to adapt the institutional Army to prepare the Army Force for the future; mentor agile and adaptive leaders for complex, uncertain, and changing environments; develop, evaluate, and integrate capabilities for the Joint Force Commander; design concepts for the force of the future, and develop doctrine to adapt to evolving conditions; train and educate Soldiers, leaders, and units through lifelong learning."29 TRADOC's goal is to build a lethal, versatile, and adaptive Army. As detailed in the overview brief, TRADOC "shapes the Army by connecting ideas to organizations through leader development, training, and equipping; strengthening the foundation of the Army profession; developing agile and adaptive leaders for an uncertain future; modernizing our doctrine; revolutionizing learning throughout the Army; and improving training."30

The U.S. Army Combined Arms Center (CAC), located at Fort Leavenworth, Kansas, is a subordinate headquarters under TRADOC. CAC's primary mission is soldier preparation.³¹ Known as the "Intellectual Center of the Army," CAC "develops and integrates Army leader development, doctrine, education, lessons learned, functional training, training support, training development, and proponent responsibilities in order to support mission command and prepare the Army to successfully conduct unified land operations in a joint, inter-agency, inter-governmental, multinational government."32 Within CAC's Mission Command Center of Excellence (MCCoE) is the Combined Arms Doctrine Directorate (CADD).³³ While CAC is the proponent for Army doctrine, CADD "serves as the Executive Agent for doctrine development and

²⁴ Corinne Reilly, "Army's Newest Four-Star General Takes the Helm," Virginian-Pilot, 15 March 2014, http://pilotonline .com/news/military/army-s-newest-four-star-general-takes-the-helm/article_f8531b50-8314-50c5-91e6-8770d2fc 79a8.html.

²⁵ "TRADOC: Design and Build the Future Army" (brief, Training and Doctrine Command, Fort Eustis, VA, March 2014, www.tradoc.army.mil/FrontPageContent/Docs/TRADOC%20COMMAND%20BRIEF.pdf. ²⁶ "The TRADOC Story."

^{27 2013} Annual Report on Business Transformation: Providing Readiness at Best Value (Washington, DC: Department of the Army, 2013), https://www.army.mil/e2/c/downloads/284284.pdf.

²⁸ Ibid.

²⁹ "TRADOC: Design and Build the Future Army."

³⁰ Ibid.

³¹ "About CAC: Combined Arms Center–Overview," U.S. Army CAC, http://usacac.army.mil/CAC2/overview.asp. ³² Ibid.

³³ "Combined Arms Doctrine Directorate (CADD)," U.S. Army CAC, http://usacac.army.mil/organizations/mccoe /cadd.

integration across the force."³⁴ As this lead agent, CADD is responsible for developing and integrating "operational and tactical doctrine and organizational solutions in coordination with the other TRADOC and Army organizations to provide the current, future Army, and Joint, Interagency, Intergovernmental, and Multinational (JIIM) the Doctrine, Organization, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF) solution for all levels of command."³⁵ As part of its doctrine integration, CADD is consistently involved in doctrine publication development for both joint multinational services, represents the Army at doctrine forums, and provides doctrine subject matter experts (SMEs).³⁶

Although there are multiple divisions within CADD, two are specific to doctrine. The Operational Level Doctrine Division (OLD) and the Army Doctrine Proponent Division.³⁷ The Army Doctrine Proponent Division serves as the lead agent for "managing the staffing, editing, and publishing" of the Army's doctrinal publications.³⁸ CADD is also responsible for creating and distributing products, providing guidance on doctrine and policy, providing oversight for doctrine budget, and serving as TRADOC's Quality Assurance Program.³⁹ The OLD is responsible for "the Capstone level of doctrine for the Army;" the "basis for all other Army doctrine."⁴⁰ In addition, OLD is responsible for creating any supporting doctrine for unified land operations and decisive action and is charged with linking its capstone doctrine to various other Service's doctrine as well as to joint and multinational forces.⁴¹

Within TRADOC are eight centers of excellence each responsible for a specific functional area of expertise.⁴² One of these centers of excellence is the Maneuver Center of Excellence (MCoE) based at Fort Benning, Georgia. Part of the MCoE's mission states that the Maneuver Center will "provide Trained, Adaptive, and Ready Soldiers and Leader for an Army at War, while developing Future requirements for the Individual Soldier and the Maneuver Force."⁴³ To accomplish this mission, MCoE oversees the Directorate of Training and Doctrine (DOTD) and one of its divisions, the Doctrine & Collective Training Division (DCTD). The MCoE oversees DOTD and DCTD and has a coordinating relationship with CADD and CAC.⁴⁴

DOTD's mission is to "develop and sustain Doctrine and Training Products and Services to enhance the combat effectiveness of the current and future Maneuver Force."⁴⁵ Under DOTD, DCTD's mission is to "provide the field relevant combined arms doctrine supported by modern collective training plans and products."⁴⁶ Among its many key functions, DCTD is responsible for maneuver doctrine development and production at the echelons of BCT and below.⁴⁷ This development occurs through six doctrine branches. The Cavalry Doctrine Branch, located within DCTD, is responsible for developing and writing the Army's maneuver reconnaissance and security doctrine. Specifically, the Cavalry Doctrine Branch develops and writes reconnaissance

³⁴ "Digital Publications," U.S. Army Combined Arms Center, http://usacac.army.mil/cac2/digitalpublications.asp.

³⁵ "Combined Arms Doctrine Directorate (CADD): Mission," U.S. Army Combined Arms Center, http://usacac.army .mil/CAC2/CADD/Mission.asp.

³⁶ Ibid.

³⁷ "Combined Arms Doctrine Directorate."

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

 $^{^{\}rm 42}$ "The TRADOC Story."

⁴³ "Mission and Vision," U.S. Maneuver Center of Excellence, http://www.benning.army.mil.

⁴⁴ "Combined Arms Doctrine Directorate."

 ⁴⁵ "Directorate of Training and Doctrine (DOTD)," U.S. MCoE, http://www.benning.army.mil/mcoe/dotd/.
 ⁴⁶ Ibid.

⁴⁷ "DOTD: Subordinate Units—Doctrine & Collective Training Division," U.S. MCoE, http://www.benning.army .mil/mcoe/dotd/.

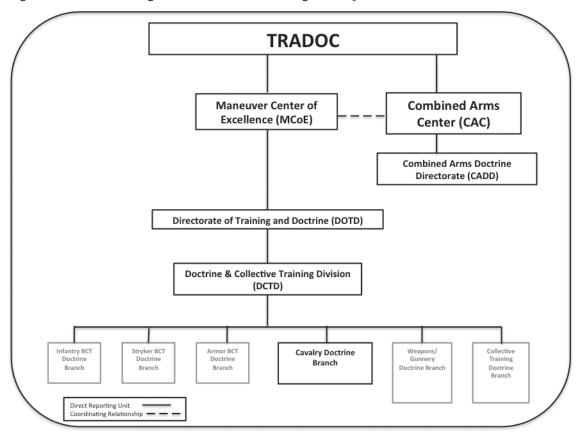


Figure 5. TRADOC organization chart, including Cavalry Doctrine Branch

and security doctrine for all maneuver reconnaissance platoons, troops, and squadrons in Armor (ABCT), Infantry (IBCT), Stryker (SBCT), and Battlefield Surveillance Brigades (BfSB).⁴⁸

DOCTRINE 2015

In 2009, TRADOC conducted a comprehensive review of the Army's doctrine. The Doctrine Re-engineering Project specifically looked at reducing the number of the Army's field manuals (FMs), restricting the maximum page count of FMs to 200 pages, eliminating redundancy, standardizing content, and establishing a more efficient system to manage doctrine.⁴⁹ A conspicuous problem with the Army's doctrine management prior to the 2009 Re-engineering Project was the existence of 625 publications in the doctrinal library. Many of these publications were legacy manuals that had not been updated and contained obsolete or redundant material.⁵⁰

Doctrine 2015 was created to advance the initial progress and lessons learned from the 2009 Doctrine Re-engineering Project. Doctrine 2015 was designed to minimize redundant information within manuals, minimize overall page count, eliminate obsolete manuals, and reduce the total amount of publications in the Army's doctrinal library. Doctrine 2015 was intended to foster collaboration and coordination between doctrine proponents, PME schools, and the operational force.⁵¹ Doctrine 2015 was also designed to provide the force with the ability to provide input to the doctrine development and writing process and provide users with digital access to

⁴⁸ "DOTD: Doctrine & Collective Training Division," U.S. MCoE, www.benning.army.mil/mcoe/DOT/DOTD /content/pdf/DCTD_Org.pdf.

⁴⁹ 2012 Army Posture Statement: The Nation's Force of Decisive Action (Washington, DC: Department of the Army, 2012), https://www.army.mil/e2/rv5_downloads/aps/aps_2012.pdf.

⁵⁰ Ibid.

⁵¹ Ibid.

the Army's doctrine.⁵² Through Doctrine 2015, the chief of staff of the Army directed TRADOC to develop and implement a comprehensive strategy to categorize and manage doctrine more efficiently, reduce the redundancy, length, and total number of publications, and incorporate emerging technology to make the process and the product more collaborative and accessible.⁵³

Doctrine 2015 is designed to capture and integrate experiences and lessons learned from recent operations into the doctrine development process and the PME system.⁵⁴ The doctrine development process is facilitated through the conduct of umbrella weeks, combat training center (CTC) after action reviews (AARs), and other unit training events. Umbrella weeks and AARs are planned training events hosted by units that share the lessons learned and best practices gained from a recent deployment or training rotation. These training events capture decisionmaking processes and critical leader insights regarding mission essential tasks, doctrine, and organizational challenges and solutions. Because of the interaction between doctrine writers and units at these events, the Army's doctrine development process is more interactive, relevant, and applicable to the force. Doctrine writing teams are also more responsive to revisions because of their ability to capture and incorporate lessons learned from recent deployments and training rotations.

Doctrine 2015 is comprised of four doctrinal categories that consist of Army doctrine publications (ADPs), Army doctrine reference publications (ADRPs), field manuals (FMs), and Army techniques publications (ATPs).⁵⁵ ADPs contain basic fundamental doctrine principles and provide a general overview of Army operations. There are 15 ADPs and they are limited to 10–12 pages. ADRPs are designed to support each ADP. ADRPs are limited to 100 pages and provide more information on their respective doctrinal subjects.⁵⁶ FMs are restricted to 200 pages and discuss tactics and procedures for the employment of Army units. Under the doctrine 2015 strategy, there are a total of 50 FMs.⁵⁷ ATPs are not limited by page length and they discuss techniques or nonstandard methods to conduct missions or tasks.⁵⁸ Finally, electronic digital applications will be developed to provide digital access to doctrinal publications through smart phones, tablets, and other mobile devices.⁵⁹

The Doctrine 2015 strategy is revolutionary in its scope and in its approach to the development, production, and accessibility of doctrine.⁶⁰ The needs of the force in a demanding and changing operational environment and advances in technology necessitate the changes that the Doctrine 2015 strategy incorporates. Doctrine 2015 is the Army's method for capturing its vast institutional knowledge and experience.⁶¹ In their article "Doctrine at the Speed of War," Lieutenant General David G. Perkins and Captain Nathan K. Finney highlight key features of Doctrine 2015. Specifically, that Doctrine 2015 will "transform the doctrinal base," streamline manuals, leverage current technology, and provide an opportunity to capture recent combat experience and contemporary knowledge.⁶² The importance of Doctrine 2015 goes beyond simply

⁵² Kenneth T. King, "Implementing Army Doctrine 2015," *Military Intelligence Professional Bulletin* 38, no. 2 (April 2012): 4–7.

⁵³ Ibid., 6.

⁵⁴ Ibid., 5.

⁵⁵ 2012 Army Posture Statement.

⁵⁶ King, "Implementing Army Doctrine 2015," 4.

⁵⁷ Ibid.

⁵⁸ Ibid.

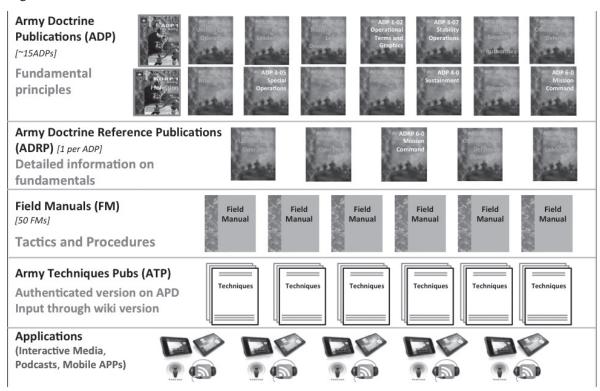
⁵⁹ 2012 Army Posture Statement.

⁶⁰ LtGen David G. Perkins and Capt Nathan K. Finney, "Doctrine at the Speed of War: A 21st Century Paradigm for Army Knowledge," *Army* (March 2012): 34–36, 38, http://www1.ausa.org/publications/armymagazine/archive /2012/03/Documents/Perkins_0312.pdf.

⁶¹ 2012 Army Posture Statement.

⁶² Perkins and Finney, "Doctrine at the Speed of War," 36.

Figure 6. Doctrine 2015 overview



rewriting and restructuring the Army's doctrinal library. As Perkins and Finney note, "From this effort we are establishing a foundation for training, education and equipment that will affect our Army for decades to come."⁶³

RECOMMENDATIONS

The Cavalry Doctrine Branch at the Army's MCoE is staffed with one armor officer (major/O-4), a field artillery officer (captain/O-3), a military occupational specialty (MOS) 19D cavalry scout (sergeant first class/E-7), and a Department of the Army (DA) civilian doctrine writer. The organizational structure of the Cavalry Doctrine Branch highlights several significant challenges. First, while this small team has a vast amount of expertise in mounted and dismounted maneuver reconnaissance and security operations, its lack of experience in the reconnaissance operations of other functional proponents, such as military intelligence, engineer, and aviation units, reinforces the need for an integrated combined arms team to develop maneuver reconnaissance and security doctrine. The addition of these functional proponents in the Cavalry Doctrine Branch would facilitate collaboration, unity of effort, and continuity among the Army's reconnaissance and security doctrine proponents by integrating the combined arms expertise of their respective warfighting functions. Having a combined arms team in the Cavalry Doctrine Branch would also provide a larger benefit to DCTD by providing the diverse expertise of other functional components to all of the doctrine writing teams in the division.

Second, because the Cavalry Doctrine Branch is such a small team, it struggles to accomplish the myriad demands of developing and writing doctrine. Consistent challenges include coordinating and collaborating with the Army's functional reconnaissance proponent branches, PME schools, and operational units. Another persistent challenge for the Cavalry Doctrine ⁶³ Ibid., 38.

Branch is its ability to participate in working groups for doctrine development and staffing, and to coordinate with and participate in concept development and wargaming exercises with other proponent organizations. More significant challenges include the ability of the Cavalry Doctrine Branch to travel to and participate in unit umbrella weeks and observe training and AARs conducted at the Army's CTCs, such as the National Training Center (NTC) in California, the Joint Readiness Training Center (JRTC) in Louisiana, the Joint Multinational Readiness Center (JMRC) in Germany, and through the Mission Command Training Program (MCTP) at Fort Leavenworth.

In addition to expanding the Cavalry Doctrine Branch to include members of other functional reconnaissance and security doctrine proponents, the position of the Cavalry Doctrine branch chief should be elevated to an armor lieutenant colonel (LTC) instead of the current assignment of a major (MAJ). The primary reason for this recommendation is that an LTC has more professional experience, training, and education to contribute to the branch and to the overall process of doctrine development and production. An LTC has served as a member of a battalion, brigade, or division staff, and has more experience with staff planning and operations. An LTC also has participated in more training exercises at these levels and has more experience with CTC rotations, often having served as a member of a rotational training unit (RTU) during the exercise and also as a guest trainer/mentor that augments and assists the CTC cadre at the tactical and operational levels.

Another significant reason why the Cavalry Doctrine branch chief should be an armor LTC is because an LTC presumably has more professional gravitas. In reality, a MAJ, regardless of having the title of branch chief, is constrained by rank when interacting with and attempting to motivate and synchronize action from peers and superiors across many diverse doctrinal proponents and organizations. Commanders of reconnaissance squadrons in BCTs along with battalion commanders of reconnaissance PME schools are LTCs. The assignment of an LTC as the Cavalry Doctrine branch chief permits the professional interaction of peers at battalion and higher levels, and fosters collaboration, unity of effort, and continuity among the Army's reconnaissance and security doctrine proponents. Simply stated, an LTC has more experience and influence across the broader reconnaissance and security community to coordinate, shape, and synchronize action and to foster relationships with subordinates, peers, and superiors.

Additionally, the position of the DA civilian should be formally titled as the deputy Cavalry Doctrine branch chief. This title change promotes continuity within the branch in several ways. A civilian deputy provides continuity within the branch and mitigates the disruption of frequent military personnel turnover. Furthermore, the DA civilians are often retired officers or noncommissioned officers (NCOs) who bring extensive knowledge to the team that can be leveraged since the military personnel are assigned to this team for approximately one to three years. In many cases, the DA civilians have the most experience and knowledge with reconnaissance and security doctrine, the MCoE, PME schools, the organizational structure of Fort Benning, TRA-DOC, and the larger body of Army doctrine.

Several PME schools exist within the Army's Infantry and Armor Schools that contribute to the development and production of maneuver reconnaissance and security doctrine. These PME schools include the Maneuver Captain's Career Course (MCCC), the Infantry Basic Officer Leadership Course (IBOLC), the Armor Basic Officer Leaders Course (ABOLC), the Henry Caro Noncommissioned Officer Academy (NCOA), the Ranger Training Brigade (RTB), the Army Reconnaissance Course (ARC), the Cavalry Leaders Course (CLC), and the Reconnaissance and Surveillance Leaders Course (RSLC).

Despite the fact that these schools are consolidated at Fort Benning and contribute to the development and production of maneuver reconnaissance and security doctrine, habitual orga-

nizational relationships do not exist between these schools and the Cavalry Doctrine Branch. This is not to say that relationships do not exist or that interaction between these schools and the Cavalry Doctrine Branch does not occur. The crux of the problem is that these long-term coordinating and collaborating relationships are not inherently part of the organizational structure. When these relationships are established, they are typically the result of personal initiative, meeting engagements at PME events, or by chance. Furthermore, the lasting benefits of these relationships (i.e., collaboration, unity of effort, and continuity) are typically lost when personnel and key leaders move on to their next assignments. The consistent turnover of military and civilian personnel is a persistent challenge to all of the organizations that contribute to the development and production of maneuver reconnaissance and security doctrine.

CONCLUSION

Through the *ACC* and Doctrine 2015, the Army has identified and defined the larger concepts of combined arms maneuver, wide area security, reconnaissance and security operations, and their connection to the future development and production of maneuver reconnaissance and security doctrine. Despite the attention given to these subjects in the *ACC* and in Doctrine 2015, there is little discussion regarding the details of how the development and production of reconnaissance and security doctrine can be improved and how doctrine writing teams, such as the Cavalry Doctrine Branch at the MCoE, can and should be organized to incorporate the combined arms expertise of the functional proponents that develop and write reconnaissance and security doctrine. Currently, a gap exists between the goals of the *ACC*, Doctrine 2015, and the organizational processes for the development and production of maneuver reconnaissance and security doctrine. This paper identifies some of the contributing factors to this gap and offers recommendations for implementing a combined arms team approach to improve the development and production of the Army's reconnaissance and security doctrine.

Organizing the Cavalry Doctrine Branch to reflect the combined arms nature of reconnaissance and security operations highlights the central idea that reconnaissance is a mission and not a specific platform or system. Reconnaissance and security operations integrate the warfighting functions of mission command, intelligence, movement and maneuver, fires, protection, and sustainment through the diverse talents and expertise of a combined arms team. The development and production of the Army's maneuver reconnaissance and security doctrine should be organized to reflect the manner in which the operating force executes this doctrine.

First to Teach Every Marine Officer a Teacher

by Major Wilbur S. Oles, USMC¹

hen entering the General Alfred M. Gray Research Center at Marine Corps University, Marine Corps Base Quantico, Virginia, one cannot help but notice the quote printed quite visibly in gold letters above the front desk that reads:

It is incumbent upon the Marine officer to be constantly teaching his men, his junior officers and himself.

~General Leonard F. Chapman Jr. 24th Commandant of the Marine Corps

Without doubt, this quote serves to motivate students attending resident professional military education (PME) institutions at Marine Corps University to utilize the vast amount of information and resources contained therein to further their education as Marine officers. More importantly, it serves as a call for leadership. General Chapman's words imply that it is the duty and responsibility of Marine officers to teach their subordinates, both enlisted and officer alike. However, it is a calling that many officers are ill-prepared to meet. The concept of teaching as a fundamental part of being a leader is one that is overwhelmingly present in both doctrine and publications, and yet receives a relatively light touch in much of officer leadership development and PME. An officer's ability to teach, specifically the capacity to educate and pass beyond the scope of basic military instruction and training, should be foundational, lasting, and internalized. It begins with an effective military education for its leaders to be educators. By ensuring all officers receive a formal education in teaching as a fundamental part of their initial officer training and education, the Marine Corps will improve leadership abilities, effectiveness, and the overall quality of its officers and of the Marine Corps as a whole.

The value of teaching as a fundamental part of leadership is hardly a new concept nor is it limited to a quote by the 24th Commandant. One need look no further than Marine Corps Warfighting Publication (MCWP) 6-11, *Leading Marines*, for inspiration.² Contained within *Leading Marines* are portions of the *Marine Corps Manual* (1921 Edition), written by then-Major General John A. Lejeune, who defined the ever-famous relationship between officers and enlisted men as one of "teacher and scholar." General Lejeune stated that this teaching relationship "should partake of the nature of the relation between father and son, to the extent that officers . . . are responsible for the physical, mental, and moral welfare, as well as the discipline and military

¹ Then-Capt Oles graduated with distinction from the Expeditionary Warfare School, Marine Corps University. This paper won a *Marine Corps Gazette* Professional Writing Award for Academic Year 2013–14.

² Leading Marines, MCWP 6-11 (Washington, DC: Headquarters Marine Corps, 2002).

training of the young men under their command."³ This relationship is clearly an important one, where officers are expected to serve as "fatherly teachers" to their "scholarly sons," yet interestingly enough, the word *educate* is not mentioned. Thus, an interesting discussion arises concerning the need for all Marine officers to understand the difference between training and education, their relationship to each other, and ultimately, their value in being a successful teacher.

In *Educating America's Military*, author Dr. Joan Johnson-Freece, a professor of national security affairs at the Naval War College, offers a detailed examination of the PME system in the United States. She argues that those at all levels of military education could profit from spending more time thinking about education versus training, perhaps a challenge as military careers often emphasize training, and so, unfortunately, "training and education are often seen . . . as almost synonymous."⁴ Her statement is a bold one and also begs the question of how training and education should be defined. Dr. Johnson-Freece contends that training deals with "right and wrong answers that allow immediate measurement; education is incremental and involves ambiguity" and "requires thinking and reflection."⁵ She goes on to finalize her thoughts on the comparison by drawing on the idea that, "In the simplest terms, training is the process of skills acquisition, while education is the process of knowledge acquisition. Both have value, but they are not the same."⁶ What is interesting is that while Dr. Johnson-Freece's observations concerning training and education in the military can sometimes be seen as controversial, they, along with her definitions and concepts, are neither strikingly new nor profound. In fact, they are remarkably similar to ideas already present in Marine Corps doctrine and literature.

Within Marine Corps Doctrinal Publication (MCDP) 1, *Warfighting, training* is described as developing forces to win in combat and achieving proficiency in drills and exercises, while *education* seeks to develop creative, thinking leaders that encompass a broader range of subjects, with a talent for military judgment, not knowledge through rote memorization.⁷ Both these definitions run parallel to those described by Johnson-Freece.

They are also to found in the *Maneuver Warfare Handbook* by William S. Lind. Chapter 5 is aptly titled, "Education and Training," and Lind offers his own observations regarding education. "Virtually any sort of instruction," he argues, "is assumed to have 'educational value'."

But education is more than the learning of skills or the acquisition of facts. It includes acquiring a broad understanding of one's culture, its development and the principles upon which it is founded. Education develops the ability to put immediate situations into larger context built on history, philosophy, and an understanding of the nature of man. Inherent in education is the ability to think logically, to approach problem solving methodically, but without a predetermined set of solutions.⁸

Lind's tone is vaguely similar to that of Johnson-Freece. In terms of clarifying the difference, relationship, and value of training and education, Lind insists, "Training is the application of education . . . If you want to think of education as the classroom, training is the lab. It is the place where you put your education to work."⁹

After gaining a solid understanding of the relationship between training and education, as

³ Ibid., 97; and *Marine Corps Manual* (Washington, DC: Headquarters Marine Corps, 1921).

⁴ Joan Johnson-Freece, Educating America's Military (New York: Routledge, 2013), 20–21.

⁵ Ibid., 22.

⁶ Rebecca L. Frerichs and Stephen R. DiRienzo, "Establishing a Framework for Intelligence Education and Training," *Joint Forces Quarterly* 62, no. 3 (2011): 70–71, as quoted in Johnson-Freece, *Educating America's Military*, 23.

⁷ Warfighting, MCDP-1 (Washington, DC: Headquarters Marine Corps, 1997), 59-63.

⁸ William S. Lind, Maneuver Warfare Handbook (Boulder, CO: Westview Press, 1985), 41.

⁹ Ibid., 44.

outlined in both military doctrine and civilian academic perspective, there are indeed many parallels, but one cannot ignore one blaring observation. Despite the fact that both *Leading Marines* and *Warfighting* place a high value on education, both Johnson-Freece and Lind present a rather critical view of a military culture that does not value education in the same manner as training. Lind pulls no punches, asserting that "Military education, when defined in terms of how rather than what to think, conflicts with current Marine Corps educational concepts. The Marine Corps education system is, in reality, one devoted to techniques."¹⁰ This observation, while made three decades ago (and certainly not one all readers will agree with), may nonetheless be useful in pointing out the gap between the ability to educate and the ability to train. Moreover, it brings to light a major assumption among officers and their perceived ability to teach.

In Military Brass vs. Civilian Academics at the National War College, Dr. Howard Wiarda, professor of international relations and founding head of the Department of International Affairs at the University of Georgia, identified this assumption while observing the military faculty during his tenure at the National War College. Wiarda notes that the selection process for military teachers was a "mystery," identifying that, "Most of them were inexperienced and sometimes neophytes in teaching," and that, in the view of the military faculty, "teaching experience was unnecessary because 'every officer is a teacher'."¹¹ It stands to reason that somewhere along the line, a perception emerged that military experience, and an officer's ability to train, became a substitute for educational experience, and thus the true measure of a leader's ability to teach. Perhaps Johnson-Freece puts it best when she argues, ". . . not all military officers are good teachers. While many might be excellent at imparting training skills, that does not always translate into ... teaching."12 True leaders need to remove the idea from their minds that they are teachers (good teachers) simply because they are highly proficient at their jobs. Truthfully, this proficiency may succeed in producing excellent trainers, but the Marine Corps has fallen short of providing the education required to equip an officer with the foundational ability to teach. This gap between expertise and proficiency is critical in explaining why Marine officers are deficient as teachers. If officers do not understand what it means to educate, it then follows that officers do not understand what it means to be an educator. In 1994, Captain Michael F. McNamara wrote an insightful article in the Marine Corps Gazette championing better educational opportunities for Marine educators, in which he addressed these educational shortfalls. McNamara, having been an instructor at both The Basic School and Infantry Officer Course, as well as having lectured at both West Point and Annapolis, states, "Institutions must arm their educators with something more than the sum of his military and civilian education and professional experience. These two elements entitle few to educate . . . "13

THE PME PROCESS:

EDUCATING LEADERS TO BE EDUCATORS

With any foundational approach toward education, instruction must begin early on in officer development as a true aspect of Marine leadership in keeping with MCDP-1, where PME "...should be viewed as a continuous progressive process of development."¹⁴ It is from this point that I move one step further than McNamara. Wherein, McNamara proposed "an institutionally sponsored instructor education program ... for all new instructors ... as a method of raising

¹⁰ Ibid., 42.

¹¹ Howard J. Wiarda, *Military Brass vs. Civilian Academics at the National War College: A Clash of Cultures* (Lanham, MD: Lexington Books, 2011), 71.

¹² Johnson-Freece, Educating America's Military, 24, 71.

¹³ Capt Michael F. McNamara, "The Price of Remaining Amateurs in the Field of Education," *Marine Corps Gazette* 78, no. 2 (February 1994): 58.

¹⁴ Warfighting, 62.

the quality of academic activity at resident military educational institutions" to essentially, "educate the educator," my desire would be to implement an education program on a broader scale.¹⁵ Instead the program would seek to "educate all leaders to be educators," thereby making all officers educators, not just resident school instructors. The attractiveness of such a program is that it serves as the foundational basis for all other institutionalized education programs that, in turn, become more advanced educational development courses to further improve the quality of the educator. With this in mind, two primary leadership development opportunities present themselves as prospects for review of their curriculums to include a formal teaching program: the Commissioning Programs and The Basic School. Certainly, each option presents their individual challenges but, before the options are weighed, a tentative vision and curriculum must be presented. This curriculum would define the educational goals Marine Corps officers need to achieve to provide a solid foundation to serve as teachers.

To begin, the target audience is identified: qualified officer candidates, midshipmen, or junior officers. Obviously, they are college students in the process of receiving a degree or are already college graduates. Considering these levels of education, a Teaching and Learning Certificate program provides a basic model for a military teaching program. As an example, Norwich University's Teaching and Learning Certificate provides "The foundation to teach at a two- or fouryear university or in a military or corporate educational setting in a wide range of professional positions within and outside the field of education . . ." and teaches students to ". . . examine the roles and responsibilities of teachers and students and acquire skills for effective teaching . . ."¹⁶ This level of expertise is obtainable for a junior or senior college student, and certainly as a junior officer, and serves as an excellent foundation for future development as a military educator.

Next, there is the need for qualified and effective faculty. Previous discussions of Johnson-Freece and Wiarda point toward using a civilian professor, but the opposing argument naturally arises that some coursework, to be truly "nested" within the supporting leadership program, might also demand a military figure at the head of the classroom. The Marine motto $\partial uctus$ *exemplo*, or lead by example, comes to mind. McNamara's insight into the type of educational environment and instructor best suited for this job is spot on when he suggests, "Education should be designed deliberately . . . there is nothing haphazard about this process when done by a professional. It is educational weaponeering, with education delivered . . . to ensure a specific effect on the desired target (i.e., the students)."¹⁷

The final planning factor (and possibly the most contentious) is time. Of note, the timeline associated with the online certificate program mentioned above is a 12-credit program, made up of two 11-week courses of six credits each, requiring six months to complete, and is provided as a potential outline for a comparable military program (figure 1).¹⁸ Realistically, six months is probably the maximum amount of time that could be devoted to the officer teaching program. The program must strike the perfect balance of being "weighted" to serve as a meaningful part of the officer development program, without adversely effecting combat readiness. Having laid out a tentative vision and curriculum model, let us revisit our leadership development opportunities.

First, there are the Commissioning Programs. Specifically, the programs that would best support this effort are Platoon Leaders Class (PLC), Naval Reserve Officer Training Corps (NROTC), and the U.S. Naval Academy. For both the NROTC program and the U.S. Naval Academy, midshipman curriculum need only be modified to include a teaching component, no-

¹⁵ McNamara, "The Price of Remaining Amateurs in the Field of Education," 56.

¹⁶"Teaching and Learning," Norwich University, http://online.norwich.edu/continuing-education/certificates/certificate -teaching-and-learning/overview.

¹⁷ McNamara, "The Price of Remaining Amateurs in the Field of Education," 57–58.

¹⁸ "Teaching and Learning Certificate Curriculum," Norwich University, http://online.norwich.edu/continuing -education/certificates/certificate-teaching-and-learning/curriculum.

tably on a "not to interfere" basis with the student's major. For PLC students, augmentation of an existing teaching program within the college or university, or potentially supported by an NROTC or ROTC department, would satisfy the "framework" for the required teaching education. In any case, the implementation of an education program will require curriculum review on the part of the educational institution, as well as a possible hiring or assignment of personnel to support the program.

Second, there is The Basic School. Up front, the established leadership and training curriculum (six months) marries up nicely with the teaching program timeline. Additionally, with a well-structured staffwork and relatively good continuity, a teaching program could be supported, implemented, and improved throughout time. However, established curriculum could also hamper the implementation of a teaching program where time within a military training cycle is consistently viewed a "zero-sum game," where some other aspect of training will have to be compromised to support a teaching program. Some may argue that already established periods of instruction, specifically the Formal Schools Instructor Course (FSIC), provided to faculty at both Officer Candidate School and The Basic School, could easily be modified and adapted for students. The course is relatively short and specifically focuses on, "Preparing and Delivering Instruction," and becoming, "well versed on the techniques used by the Marine Corps to teach in the Formal School environment."¹⁹ Though an excellent course, the underlying purpose of the course cannot be denied just by looking at the front cover, where the words, "Train the Trainer School," and "Training Leaders to Train" are emblazoned across the school's crest. In any case, this course would serve as a classic example of a "reinforcing" course for instructors as they are assigned to a resident institution, having already completed the formal education school as part of their officer development.

THE WAY FORWARD:

FIGHTING EDUCATIONAL COMPLACENCY

With all these grand ideas to reform and implement better officer education, critics may argue that "the institution has survived" or that "the system is not broken, so don't fix it." There is no doubt that the Marine Corps has done an excellent job developing its officers to be subject matter experts (SME) in their military occupational specialty (MOS), thereby serving as highly qualified trainers and allowing the Marine Corps to be a successful organization, both in garrison and in combat. Likewise, the various educational institutions continue to graduate officers who continue on in their military careers to lead successfully.

Truly, educational ignorance is bliss. It is what McNamara refers to as "institutional dogma," where the answers (doctrine) "greatly inhibit a student's ability to think and also risks the credibility of the educator as the students begin to see through the thin veil of smoke that surrounds most institutional dogma."²⁰ Perhaps it is fitting that McNamara published his article 20 years ago, challenging the educational institutions to provide better educational opportunities for its educators. Sadly, this challenge has gone unanswered, and officers have instead allowed years of honing their skills as SMEs MOS fields to serve as their "credentials in the classroom." The reality is that there are no true "credentials" for the military educator. High school and college diplomas, as well as military training certificates, do not equate to an officer's ability to teach in the classroom. Likewise, Lind urges Marine officers to never be satisfied, even if educational institutions improve, noting, "Education is a continuing process. It cannot be restricted to the relatively small amount of time officers spend in school. There is far more to be learned than the

¹⁹ "FSIC Student Binder" (classroom materials, Train The Trainer School, Camp Lejeune, NC, 2010), 1.

²⁰ McNamara, "The Price of Remaining Amateurs in the Field of Education," 57.

schools can hope to teach."²¹ Are Marine officers wholeheartedly satisfied with their teaching abilities? Or will Marine officers simply ignore the basic leadership principle to "know yourself and seek self improvement."

CONCLUSION:

THE MARINE TEACHER

During the rapidly approaching next interwar years, Marine officers will be called to be more than SMEs who can teach through training. They will be required to personify General Lejeune's words by establishing and maintaining a "teacher and scholar" relationship with their Marines, ensuring they "... fill each day with useful and interesting instruction ... " with teaching that is "... intelligent and not perfunctory ... "22 Officers must develop a deeper understanding of what it means to be a teacher and the value of education. A belief perpetuated among officers who believe "every officer is a teacher" by virtue of their credentials is false and artificial at best. Moreover, it is misleading, and potentially robs other Marines of the level of teaching and instruction they deserve, provided by officers who develop and take ownership of a curriculum they genuinely believe in. Consider any period of instruction that was provided by an officer in a classroom environment that you received that you felt was subpar. Maybe you were that officer. Now imagine you or that officer had entered the classroom confidently, ready and prepared to teach, relying on a formalized educational program received in conjunction with initial officer training that provided the tools and capability to be a teacher of Marines. With renewed efforts to better educate officers to serve in the teaching role described by General Lejeune, William Lind, and Captain McNamara, there will certainly be improvement to the Marine Corps. Not only will there be a more professional and effective officer corps, but it will endow future leadership with a renewed value for military education. Marine teachers will move beyond the training environment and will train a Marine on what he is expected to $\partial \rho$ as a Marine, serving as teachers who educate a Marine about *knowing* what it means to be a Marine.

²¹ Lind, Maneuver Warfare Handbook, 44.

²² Leading Marines, 98.

Integration, Collective Identity, and Assimilation in the French Foreign Legion

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omewhere between myth and reality, the French Foreign Legion has inspired many writers, filmmakers, poets, and artists who have been trying to understand the complex—and somehow mysterious—alchemy of a unique troop made up with almost 150 different nationalities.

Today, the French Foreign Legion remains the world's unique example of a troop composed of foreigners, legally recruited during peacetime to bear the arms of France wherever the French government would want to deploy them. While the Foreign Legion is part of the French Army, its key feature is derived from a specific status related to "armed forces personnel serving as foreigners," lastly renewed by a political decree in 2008. This decree highlights the three key characteristics of the Legion: it is a combat formation, composed of foreigners, under a French command. Even though the presence of foreigners is the only difference that distinguishes the Legion from the rest of the French Army, it has a lot of implications, especially with regard to the integration process.

Concretely, the Foreign Legion today represents a strength of about 7,500 men composed of the command headquarters and 11 regiments or units forming its corps (8 in metropolitan France, 2 in the overseas departments, and 1 abroad). Among them, eight regiments are placed for operations under the Land Forces Command, within their combined arms brigades. The other three formations have specific purposes and are directly subordinate to the command of the Foreign Legion (one administrative regiment, one basic and advanced training regiment, and one recruiting group).²

But, more importantly, what makes the Legion is the legionnaire. The individual who voluntarily decides to travel to France to start a new life and the legionnaire he becomes during his first contract are almost two different people. With the provision of a new identity, one tends to become a new person, especially when amalgamated among others with different cultures and social backgrounds. How can the paradox between the heterogeneity and the unity of the legionnaire's population be explained? What is the secret of this extraordinary cohesion, solidarity, and dedication that has made the Foreign Legion so famous?

The comparison between the Legion and a religious order has often been made, since it works as an asylum—either punctually or for a lifetime—and somehow contributes to isolating the legionnaire from the society. According to General Paul-Frédéric Rollet, probably one of the most famous officers who served within the ranks of the Foreign Legion who has been called the

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² For more information, visit the Legion's website http://www.legion-etrangere.com.

"Legion's father," this comparison echoes the exceptional feature of the Legion: "a cloister, there is no better word to define what is the Foreign Legion . . . A haven for hopeless, for those who cannot stand with the society of their time but whose heart is too pure to go against it . . . The country which created this asylum definitely served humankind."³

Besides the mysticism one could associate with the Foreign Legion and those who join its ranks, the challenge remains the same: to make unity from diversity. Indeed, while every legionnaire has a personal reason to join, he then has collective reasons to stay. The integration process ensures that individualities are not denied but mutually strengthened thanks to a unique esprit de corps, tied to a brotherhood that makes the legionnaires consider the Foreign Legion as a true family. Because of the extraordinary diversity of legionnaires, the Legion needs to maintain a strong collective identity that works as a framework to rally singularities around the unique purpose of serving the Legion.

This process, which I will argue oscillates between integration and assimilation, has institutional, social, emotional, and cultural drivers. Combined together, these leverages institutionally enforce the integration process, as well as facilitate an unconscious endorsement of collective identity and assimilation. Because of this double feature, not every explanation could be found in official publications, but had to be logically deduced from sociological studies, mainly based on the impact of culture and collective identity in re-socialization. The result is therefore the author's personal interpretation, associated with his own experience as an officer who served many years in the ranks of the Foreign Legion.

Further, this paper does not intend to give an updated and exhaustive understanding of the Foreign Legion but to focus on what constitutes its ability to exist and function efficiently. The writer therefore apologizes if some aspects of the Foreign Legion, whether historical, organizational, or operational, are excluded from this paper. Yet, for those looking for more information, the bibliography provided should offer additional resources. Of note, most of the quotations in this paper are directly translated from French sources.

Above every question about the Foreign Legion stands the fact that, from its creation, legionnaires' collective identity has enabled them to stand together in many wars and, for more than 40,000, they were willing to make the ultimate sacrifice by giving their life for a country that was not theirs. While it can sound anachronistic in a contemporary society that promotes self-accomplishment, I want to explain the drivers of such a phenomenon.

> Who knows whether the unknown man who sleeps under the great Arch, Merging his epic glory to the pride of History, Is not this foreigner who became a son of France, Not by the blood received but by the blood spilled⁴

ABOUT THE PROCESS: BETWEEN INTEGRATION AND ASSIMILATION

The impression of an unshakable troop that the Foreign Legion gives to the neophyte and the external watcher does not necessarily reflect reality since a man does not become a legionnaire in a day. Indeed, signing a contract does not make one a new person. This is a steady process, based on a voluntary adhesion, an institutional and social integration, and a cultural assimilation enabled by a collective identity developed amongst legionnaires.

³ Jean Hallo, Monsieur Légionnaire (Paris: Lavauzelle, 1994), 142.

⁴ Pascal Bonetti, "Le Volontaire Étranger, " in *Légion Notre Mère: Anthologie de la Poésie Légionnaire, 1885–2003* (Paris: Italiques, 2003), 51.

Conceptual Framework

Integration and *assimilation* are often misused terms that actually refer to different political and sociological philosophies. Therefore, it is important to clarify these notions for the direct purpose of the follow-on study.

Integration is, by definition, a dynamic process based on interactions between different individuals as part of a bigger group. It involves evolution, movement, and transformation. While it etymologically refers back to the process of completing a whole, sociological sciences define it as the incorporation of new elements into a system.⁵ In this process, individuals therefore agree to become part of a group and to follow its rules without giving up their cultural background and beliefs.⁶ Émile Durkheim (1858–1917), a French sociologist who deeply studied this notion, underlined integration as a social phenomenon. Further, he highlighted that integration is a top-down process, meaning that individuals do not control their integration since it is the group they try to join that decides whether or not to integrate these individuals. Applied to the Foreign Legion, integration should then be understood as the fact that new legionnaires would have to adapt to the institution by following rules, laws, and orders without necessarily abandoning their native cultural background and beliefs. The direct purpose would be to ensure efficiency by sharing the same understanding of their new environment. Considered through the prism of an institution, integration is the prerequisite that enables the promotion of an organizational culture, as developed by Edgar H. Schein, since it creates the conditions for common assumptions and shared values, as well as multiplying the power of artifacts.⁷ The mandatory use of French as the common language of the Legion will be further developed as a key for integration.

Assimilation goes deeper into the renouncement of individualities. It can be defined as complete adhesion to the norms of the joined group with all the expressions of sociocultural identity contained to the private sphere. While integration enables someone to live and function in a new environment, assimilation enables him to melt in it, meaning that individuals abandon their original beliefs to fully adhere to the ones of the joined group. Assimilation is a longer process that can be enforced with difficulty, since it mainly depends on the will of the subject. Applied again to the Foreign Legion, an assimilation process would mean that legionnaires voluntarily give up their native beliefs after a period of time to entirely merge within the cultural standard of the Foreign Legion.

Between these two concepts sits the idea of *collective identity*. It can be defined as "a feeling of belonging to a social group, as a strong connection with social category, and as an important part of our mind that affects our social perceptions and behavior."⁸ This collective identity provides a sense of protection to the members of a same group and contributes to an interpersonal enrichment. Further, this concept is also connected to the idea of *self-representation*, meaning that the members of a group positively identify themselves with an ideal-type.⁹ It can then be argued that collective identity is the step that allows moving from integration to assimilation. In the Legion, this step is crucial, since it acknowledges the primacy of the institution upon the individuals, *id est* the development of an esprit de corps.

At this step, these succinct definitions help to illustrate that the Legion, as an organization that deals with such heterogeneity with regard to its recruits, constantly navigates from insertion to assimilation. The former step starting at the very first moment when a volunteer presents himself to a recruiting station, the latter being the optimal situation of a legionnaire fully dedicated

⁵ Definition provided by La Documentation Française.

⁶ Ibid.

⁷ Edgar H. Schein, Organizational Culture and Leadership: A Dynamic View (San Francisco, CA: Jossey-Bass, 1992), 9.

⁸ Karina V. Korostelina, Social Identity and Conflict: Structures, Dynamics, and Implications (New York: Harper Collins, 1991), 15.

⁹ Ibid., 22.

to the Legion. Considering this process, the purpose of the Foreign Legion is at least to achieve integration, since it ensures the ability of the Foreign Legion to function as an organization, and at best to enable assimilation because it favors an unfailing commitment. However, assimilation can hardly be enforced by the Legion as an institution and, when achieved, is mainly the result of a legionnaire's personal will. That is why it is argued here that assimilation is essentially enabled by the development and sustainment of a strong collective identity, which appears to be the Gordian knot of this process and the targeted objective, since it is the best guarantee of Legion cohesiveness and resiliency and is the basis for what can be institutionally achieved.

This Foreign Legion collective identity did not rise automatically but was forged over time throughout a dynamic and recursive process, stimulated both by the legionnaires and by the rules set up by the Legion to facilitate the process, the first one being the amalgam.

A Major Cornerstone: The Amalgam in 1835

An unprecedented decision in Foreign Legion history was made on 20 June 1835. Indeed, at this date, the Legion was sold to Spain so that Queen Isabel II could use it for the devolution war she was conducting against her uncle Don Carlos. Further, this period was the frame of a major decision that transformed the Legion and represented one of its main historic cornerstones: the amalgam. From its creation, the Legion's battalions were organized along national lines, meaning that the legionnaires were regrouped by nationalities into fairly homogeneous national battalions. This organization resulted in some dangerous oppositions and rivalries along those same lines, so it was almost impossible to create a cohesive behavior or any collective esprit de corps at the Legion level. National pride was the main driver of the legionnaires' behaviors. Therefore, the high command realized that they would rather mix units with different nationalities to improve both the cohesion and the efficiency of this foreigners troop.¹⁰ The resulting mix is known as the amalgam. Three major consequences resulted from this new organization.

The first one was that the amalgam became a golden rule that still prevails today. To make it even more effective, the Legion decided that no nationality should represent more than 30 percent of the legionnaires. Experience has demonstrated that every time this ratio has been exceeded, it resulted in national tensions that affected the cohesion of the battalions, since it created an unbalanced relationship between legionnaires and the enforcement of the leading nationality's culture, language, and beliefs.¹¹

The second was the use of French as the only authorized language. Indeed, as long as the battalions were organized by nationalities, the legionnaires were using their native language. With mixed units, communication became a major concern to ensure both efficiency and cohesiveness. Even without any specific French lessons, legionnaires rapidly learned to speak French, even if it somehow was closer to a "legionnaire Esperanto," or a mix of all the different languages.

The third consequence was the most significant with regard to the integration of legionnaires. The human benefit of the amalgam was to replace rivalry by emulation. Indeed, the Legion officers quickly realized that, with this new organization, most of the legionnaires were still motivated by the will to outlast the other nationalities, except that these different nationalities were now fighting side by side and were relying upon each other. The salient identity source became the Legion instead of their native country. As stated by George Manue in *Têtes Brûlées*:

It was actually the same men I had seen in the Middle-Atlas and in the Rif, each

¹⁰ Douglas Porch, The French Foreign Legion: A Complete History of the Legendary Fighting Force (New York: Harper Collins, 1991), 28.

¹¹ Alexis Neviaski, *Képi Blanc, Casque d'Acier et Croix Gammée: Subversion au Coeur de la Légion Etrangère* (Paris: Fayard, 2012), 18–22, 338.

one willing to prove to his fellows that he had no fear, because Russian, German, or Turkish, they were truly convinced that they had to represent their country into the fight.¹²

The final result of the amalgam, far beyond its initial purpose, has been to allow all these different nationalities to integrate within the larger whole that is the Legion and to develop a collective identity. From this moment, the high command realized how crucial these two stages were to ensure the cohesiveness of the legion.

Integration and the Primacy of Community "The Legion does not change men, It just magnifies them and reveals them to themselves"¹⁵

The French Foreign Legion has generated abundant literature, mainly created to illustrate its campaigns, exploits, and sometimes its romanticism through singular profiles. Nonetheless, the real challenge of making all these different nationalities work together has always been quite elusive, however crucial. Indeed, the French Foreign Legion remains a human catalyzer of worldwide tensions, crises, and miseries. Those who decide to join often look for a better life while they also try to escape their past. Thus, the Foreign Legion naturally reproduces all the troubles that occur in the world during a specific period. How does the Legion ensure that it can create from this heterogeneity a common fate and a common will to fight with legionnaires ready to die for a country that is not theirs? It steadfastly insists on one golden rule: the primacy of community over individuals.

However, the process is much more involved than simply enforcing a rule. On the surface, everything seems to oppose homogeneity in the Legion: nationalities, ages, social and professional backgrounds, etc. As described in a famous officer song, "there are some lawyers, some doctors, some judges, nobles and cops, even some priests who easily swear all day long, in the Legion!"¹⁴ Yet, instead of being a burden, this variety is actually a benefit. That is why the purpose of integration is not to deny individualities, which would generate a sense of frustration and be counterproductive, but to tie them into the consciousness of a now common fate and the sense of community. Further, this diversity has always been a strength that the Legion would madly ignore. Colonel Jean-Luc Carbuccia stated that "I could have built an entire city. I had in my regiment some architects, engineers, artists. When I was looking for a savant, a writer or a painter, I was formulating my request to my Command Sergeant Major and the next morning I had ten names instead of one"¹⁵ Drawn from a time when the Legion was spending as much time building cities in Algeria as fighting rebels, this feature is still a great advantage since it enables the Legion to take benefit from a huge set of skills and cultural awareness, whatever the mission and wherever it deploys.

¹² "C'était bien les mêmes hommes que j'avais vu dans le Moyen-atlas et dans le Rif, chacun d'eux éprouvant le besoin de montrer à son camarade de rang qu'il n'avait pas peur et cela parce que Russe, Allemand ou Turc, obscurément il se sentait investi de la charge de représenter son pays au feu." Georges R. Manue, *Têtes Brûlées* (Paris: Nouvelle Société d'Éditions, 1929), quoted from Hallo, *Monsieur Légionnaire*, 21.

¹³ "La Légion ne transforme pas les hommes. Elle les révèle à eux-mêmes." Prince Aage de Danemark, Souvenirs de la Légion Etrangère, 1922–1926 (Paris: Bernard Giovanangeli Editeur, 2009), 187.

¹⁴ "Il y a des avocats, des médecins, des juges, des marquis, des roussins, d'anciens notaires. Même des curés qui sans façon baptisent le Bon-Dieu de sacrés noms, ô légionnaire !" Translated from the original French version.

¹⁵ "J'aurais pu construire une ville. J'avais dans mon régiment des architectes, des ingénieurs, des artistes. Quand j'avais besoin d'un savant, d'un écrivain ou d'un peintre, je le demandais par la voie de l'ordre et le lendemain matin, les sergents-majors m'apportaient dix noms au lieu d'un." Quoted by Roger de Beauvoir, *Légion* Étrangère (Paris: Firmin-Didot, 1897).

Therefore, integration has become from the Amalgam an institutional purpose, aimed at preserving diversity within unity. The sense of community and social belonging is crucial for the institution. By joining the Legion and moving away from their socializing environment, the recruits join a new community and thus accept not only to become combatants but also to integrate what will naturally become their substitute family, as stated in the second article of the Foreign Legion honor code: "Each legionnaire is your brother in arms, whatever his nationality, race or religion. You always show him the close solidarity which unites the members of a family."¹⁶

Beyond Social Integration, a Cultural Assimilation

"Two pieces of wooд in as a cross, a name, It is not important if the name is gooд, That is a Legionnaire"¹⁷

Beyond the institutional focus on integration, time and culture affect this process and enable it to move closer to assimilation. Indeed, this process is part of a resocialization. While all the sociological studies agree on the inherent nature of socialization for any individual living among a group, some key features can help to understand specific aspects that apply to legionnaires and how it is possible to go from integration to assimilation. Pierre Bourdieu (1930–2002), a French sociologist who specialized in the study of the socialization process, developed the concept of *habitus* in line with the Freudian concept of *superego* or with Emile Durkheim's representation of *social facts*. According to this theory, habitus is a "system of durable, transposable dispositions and principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them."¹¹⁸ Applied to the Legion, it means that, over time, legionnaires will tend to think and act in accordance with the group mindset as their legionnaire status becomes their salient identity. As opposed to institutional enforcement, individualities are gradually smoothed as individuals naturally conform to an ideal type, a mental representation of how a legionnaire should be and act.

Another key feature is that socialization generally refers to different groups that each have a specific identity: family, friends, work, leisure, hobbies, etc. What makes the Foreign Legion unique is that all these aspects are either excluded from or inherent in the daily life of the legionnaire. Indeed, the Legion, as a socializing institution, concentrates all these key aspects to make one identity. Because it is a time-based process, most legionnaires develop after a certain period of time, usually five years, a sense of "we-ness" as a result of this holistic social relationship. This is symptomatic of assimilation. This five-year development process is obviously neither automatic nor clearly delineated but usually corresponds to the end of the legionnaire's first contract and the moment when he needs to ask himself whether he should quit or continue. It is also a timeframe that generally ensures a significant amount of shared experience, whether in France or in deployment.

Karina Korostelina wrote that "this feeling of identity cements a group as a social aggregate and leads to common forms of thinking and behaviors."¹⁹ One legionnaire's will to break with his past, and therefore to operate a deep cut with his roots, can even more reinforce this process. This "new start," as sometimes portrayed, can strengthen this socialization process by allowing the development of an almost new identity. Indeed, the new recruit consciously and

¹⁶ Foreign Legion *Code d'Honneur*, appendix B.

¹⁷ "Deux morceaux de bois en croix, un nom, qu'importe si ce nom là n'est pas le bon, c'est un légionnaire." Translated from the original French Foreign Legion song.

¹⁸ Pierre Bourdieu, The Logic of Practice (Cambridge, UK: Polity Press, 1990).

¹⁹ Korostelina, Social Identity and Conflict, 19.

unconsciously transforms his identity by mirroring the others and by becoming a member of his new brotherhood. As analyzed by Henri Tajfel in the 1970s, one's group identity largely conditions individual fates. The more structured the group, the more pressure it puts on individuals to comply with the collective identity since the sociocultural norm is more clearly defined and controlled. Applied to such a group as the Foreign Legion, it can lead to a phenomenon of depersonalization, which means that individuals do not define themselves by personal features but by their social belonging. This sense of social belonging often transcends previous identities, even those as significant as religion or family. For example, a Muslim legionnaire was once asked whether he would agree to fight against a Muslim country and he replied, "I am not a Muslim, I'm a legionnaire." Another asked me to give him a picture of my wife and I, so that he could tattoo it on his chest, arguing that I was his family.

Finally, this transformation of individuals through a deep adhesion to a group is reinforced by the fact that, by positively identifying oneself to a group, one tends to reject or undermine other groups. This is the cornerstone that leads to assimilation. Indeed, by pushing the socialization process to such a holistic system, legionnaires not only develop a collective identity through the perception of similarities within their "ingroup," but also in contrast with the differences of other groups or categories.²⁰

About the Level of Assimilation "Legionnaire, you are a volunteer Serving France with honor and fidelity"²¹

The fact that the Legion is a troop made up of so many different nationalities is not the only feature that makes it unique. It is also the fact that these men, coming from all over the world, all for different reasons, do not have at the beginning anything in common but joining the Legion. Fighting for a country that is not theirs makes the idea of homeland irrelevant to legionnaires, while it is usually the main motivation of military troops.

The level of assimilation to France of these legionnaires can therefore be argued. While they undoubtedly bear the arms of France and fight on its behalf, one will hardly hear a legionnaire ever singing the national anthem. What they sing instead is "le boudin," the traditional anthem in the Foreign Legion. Even though legionnaires are ready to get rid of their past, it appears that they always remain proud of their native heritage and acknowledge that what make them unique is the fact that they are foreigners. For instance, only a few request French citizenship at the end of their contract. Therefore, while they agree to be loyal to France by signing their contract, the sense of community hardly goes beyond the Foreign Legion itself.

They had not died for France, that was clear. Most of them had never been to France. The fact, the astonishing fact, was that they had died for the regiment itself, and by doing so had made a strange metamorphosis which was to haunt the Legion to the rest of its days. They had become French "not by birth" as the Legion began to say, "but by the blood they shed."²²

As stated, most of the legionnaires had never been to France before the Legion was first stationed in Corsica in 1962. France was therefore a diluted idea in the legionnaire mindset. They were thankful for France to offer them a new life but the Legion was their daily homeland. How-

²⁰ Ibid., 24.

²¹ Foreign Legion *Code d'Honneur*.

²² Geoffrey Bocca, La Légion!: The French Foreign Legion and the Men Who Made It Glorious (New York: Thomas Y. Crowell Company, 1964), 26.

ever, a deep sense of recognition remains obvious by noticing the consideration France bears to its legionnaires. For instance, since 1999, every legionnaire wounded in an operation can systematically claim French citizenship according this principle of the "blood shed for France." In case he should die, the same law applies for all his minor children.

Therefore, the relationship between France and its legionnaires needs to be considered through a double prism. Serving France with honor and fidelity, thankful for harboring them, legionnaires first construct their collective identity by identifying themselves to the Legion, as an exclusive system. On the other side of the scope, the Foreign Legion, as a regular French military force, integrates its recruits with a two-step priority: the Legion, then France. But, as discussed, while collective identity is the crucial step that allows legionnaires to go from integration to assimilation within the Legion, it will hardly go beyond integration in regard to France. This can be explained by how one legionnaire answers the question: "do you serve France or the Legion?" He states, "I serve the Legion, which serves France."²³

Desertion: Integration Failure?

Integration is not an exact science or an immediate process. It has principles but no law, so that the same process can have different results depending on the legionnaires. During the initial period of training, problems may arise. One such problem is desertion. Indeed, although people join for individual reasons, it is often the result of a spontaneous decision. This can then make their choice difficult to sustain when they are confronted with the basic instruction and the roughness of their new life during the first few months. Legionnaires are thus naturally affected by melancholy, which is known as the legionnaire's disease, the *cafard*. Therefore, integration works as a way to keep them focused on the present instead of being hung up with their past. Similarly, everything is made to prevent idleness and to give them short-term objectives as well as a tense daily routine so that they do not have time for depression. Typical military disciplinary processes that prevent desertion are not applicable in the Legion. Without any social tie in France outside the Legion, the young legionnaire does not really care about the judicial consequences of desertion, so he is not afraid of any repressive system. That is why the main solution to address desertion is to tie the legionnaires closely each other and to keep them highly focused on training and operational deployments.

When idleness gets too high and cannot be prevented, a legionnaire is inclined to desert. This can be for different reasons but still potentially represents a failure since it is proof that the sense of community was not fully developed. That is why desertions mainly happen during the first six months of a legionnaire's contract, at a time when integration is still an ongoing and immature process. The Legion does not pretend to avoid all desertion, since it is fully aware that not every recruit can succeed and adapt to this completely different environment. However, desertion remains a matter of importance because it helps to question the integration process and to check, case by case, whether something went wrong through this process or if the legionnaire's decision to desert is independent from any Legion actions or processes. For instance, every time a legionnaire deserts, every leader — from his team leader to his company commander — needs to fill in a form to determine whether he was well integrated or not. This information includes friends, hobby, frequency of mails received from his country, etc.

²³ Quoted from Général Christophe de Saint Chamas, "Legio Patria Nostra, la Légion Etrangère, une exception Française" (presentation, Regards croisés sur la Légion Etrangère, 12 October 2012).

ABOUT THE LEVERAGES: A TAUGHT AND INHERITED PROCESS A New Start

The Foreign Legion offers its recruits the opportunity of a new start, which can have different results with regard to the resocialization process, depending on the legionnaire's expectations of the Legion. Arguably, the more one legionnaire is willing to break with his past, his sociocultural framework, and his family environment, the more he is going to transfer onto the Legion his desire of a new life, carrying his ideals and willing to correct his deceptions. Between the legionnaire who consciously joins for a limited period of time and the one who resolutely buys a one-way ticket, the resocialization process will have different results. Both will first go through the integration stage, but only one will steadily be assimilated because of the exclusiveness of the Legion as a sociocultural system. Such legionnaires then consider the Legion their one and only family.

Considered as a powerful tool for integration, as well as a necessary condition or assimilation, this new start is institutionally enforced. By joining the Legion, the new recruit "bypasses the barriers of a society where he was paining to find his place," and steps into a new world that marginalizes his beliefs and mainly considers his will to serve and to start anew.²⁴ To do so, the particularity of the Foreign Legion is that it affords the recruit an opportunity to get a new identity — Thomas Riou will become Thibault Romeo — with the provision of a military ID as the only certificate of this new identity. This key institutional aspect can help a legionnaire break with his past and kick off his new life almost as a brand new person. It provides a second chance to those who want to turn a page in their life and who need or want to make a new start. Upon joining the Legion, every legionnaire merges into a protective, anonymous, and undifferentiated community.²⁵

However, this process requests some cautions. The possibility the Legion offers to those who apply to obtain a new identity requires vigilance. First, the Legion is not designed to harbor criminals, so it has to carefully check the legionnaire's past in close coordination with national and international security organizations. Second, the Legion only selects recruits who are considered able and willing to adapt to the rules of community life. These two cautions are both a moral barrier and the insurance that no asocial individual will threaten the integration process.

As a result, this new start is the genesis of integration, and further of assimilation. In effect, the Legion works as a real asylum that allows any legionnaire to become someone else. The break with the past, coupled with a strictly disciplined life, ensures that the legionnaire will be entirely dedicated to his new life. The relationship he creates from then on with the Legion and his fellows ties him to his new identity.

Training and Shaping

According to command headquarters directives, the objective of basic training is double: formation and education.²⁶ While formation intends to develop skills and refers to tactical efficiency, education is more complex. Indeed, education in the Legion not only means to morally prepare the recruit for deployment in operation but also primarily to ensure integration of the young legionnaire with his peers and the overall institution. That is why, as stated by a former commanding general, some of the end states of the basic training are to "facilitate the quick integra-

²⁴ Colonel de Villebois-Mareuil, Revue des Deux Mondes, 15 April 1896.

²⁵ Ana Pouvreau, Le Système Légion: un Modèle d'Intégration des Jeunes Étrangers (Sceaux: L'esprit du Livre, 2008), 18.
²⁶ Stéphane Jarlaud, "La Formation de Base des Engagés Volontaires de la Légion Etrangère" (master's thesis, Political Studies Institute of Toulouse, 1992), 108–9.

tion of the new legionnaire within his unit [and] to constitute the cement of a resilient cohesion, vanguard of the strength and efficiency of the Foreign Legion as an operational tool."²⁷

To ease this integration, the Legion centralizes the entire basic instruction within one unit the 4th Régiment Étranger, an exclusive formation and training regiment for the entire Foreign Legion. This regiment, called the melting pot of the Legion, is the key step of the equalizing and resocializing process. It has the mission of ensuring that the legionnaire finishes his training having personally endorsed the values of the Legion, as depicted by the Foreign Legion *Code* $\partial'Honneur$ (see appendix B). Again, it is crucial according to the commanding general to insist on "the pride of being a legionnaire and to be part of a cohesive and highly operational unit . . . the cult of effort that has to be developed in every circumstances . . . the sense of solidarity, to inculcate and to expand by all means, especially during combat training."²⁸ Concretely, this integration of the legionnaire throughout his basic training will be achieved through three main pillars, as described in the institutional directive for initial training: learning French as a way to facilitate the recreation of a socio-affective intercultural relationship between legionnaires, tactical and physical training based on collective effort to strengthen a collective identity, and education to deepen the sense of belonging to a spiritual community.²⁹

First, because of the obvious foreign nature of the legionnaires, the main concern during the initial training is to learn French. Indeed, as developed earlier, French is the only authorized language within the Legion. The reason is undoubtedly operational efficiency and the fact that any legionnaire who cannot speak French at the end of the basic training risks becoming marginalized by the rest of the group. Sociological studies have proven that a common language is one of the key requirements for a group to move toward a collective identity. For instance, Philippe Chasseriaud demonstrated in a 2003 psychological survey that the more the legionnaires were able to understand and speak French, the more they were inclined to move away from their cultural background to adhere to the Legion as a new socio-affective reference frame.³⁰

Second, before it is deployed to overseas operations and strengthened by shared traumas and glories, the cohesiveness of the Legion needs to be forged during instruction. Indeed, beyond integration, cohesiveness is the guarantee of the collective identity that the Legion wants to institutionally enable. To start developing it from the day they join, all the recruits do every activity as a group so that they perceive solidarity and interdependence as vital to succeed with very demanding training in rough conditions. Steadily, the individual disappears behind the group; the individual identity behind a collective identity. The strict discipline, which rules the entire training, limits selfishness and individualism. This collective valor, which is not argued to be specific to the Legion but to most elite troops, refers back to the idea that most of the legionnaire's actions are not primarily tied to patriotism or individual instinct but to a sense of belonging to a group that is more important than the individual.³¹

Lastly, the educational aspect of the training helps the legionnaires to create unshakable ties as members of a new brotherhood. The Foreign Legion teaches traditions and history in a way that the new recruit measures the burden and the legacy of his predecessors, as depicted by the Legion motto "More Majorum."³² Focused on the emotional scope of the sense of identity, these values taught during the training process work as a booster for integration, helping the individual to positively identify to the group. Olivier Rochereau stated in his analysis of the Legion in

³¹ Pouvreau, Le Système Légion, 133–35.

²⁷ Ibid.

²⁸ Ibid., 110.

²⁹ French Foreign Legion directive on initial training, 18 August 2014.

³⁰ Philippe Chasseriaud, "L'évolution des Relations Socio-affectives intra et Interculturelles à la Légion Étrangère" (master's thesis, Enseignement Militaire Supérieur Scientifique et Technique, 2003), 125.

³² Translated roughly as "Like the elders did."

2000 that "the sacred feature of the mission, the veneration of elders and heroes, rigour in the job as well as in the behavior, unswerving fidelity to brothers in arm, are the unshakable bases of the Legion."³³

As a result, the initial training period is crucial to shape the new legionnaire and functions as a trinity: acculturating by enforcing the use of French as a unique language, interculturating by merging different nationalities altogether, and enculturating by developing a new sense of identity.³⁴

Norming: Daily Life, Discipline, and Hierarchy

"They stand altogether, They stand against the outside world"⁵⁵

The anonymity provided by a new name directly contributes to the development of the collective identity and the sense of community. However, three aspects reinforce this "we-ness" and are used as institutional leverages: the austerity of the daily life, discipline, and the sense of hierarchy.

Concerning the daily life, many caveats come with the benefit of a new identity and the Legion's asylum role. Indeed, legionnaires serving under false identity have limited citizen rights. These restrictions help both to protect a legionnaire from compromising his real identity and to ensure that he does not improperly use this false identity. For instance, legionnaires serving under a false identity cannot subscribe to any contract (phone, bank, etc.), nor can they buy a car. Further, every legionnaire during his first contract of five years must live within the barracks, cannot get married, and needs to wear his uniform every time he goes off base. These rules, which can appear quite strict, do not serve any purpose other than integration. Indeed, they force the new legionnaires to be entirely dedicated to the Legion and to their peers, spending their time all together and cutting the bridges that would make them dependent on the outside world.

The discipline then, strict but never brutal or unfair, contributes to the development of the brotherhood since it ties all the legionnaires to the same rules and constraints. As related by legionnaire Antoine Sylvère, "this justice of discipline did not tolerate any favoritism. Here [in the Legion] the definition of individual liberty was a true reality. Everyone was participating to common tasks and drudgeries and there was no privileged."³⁶ Further, discipline not only helps enforce rules but also teaches rigor and exemplarity. Indeed, these two principles apply to the young legionnaires as well as to the officers contribute to bring discipline to the level of a shared value that helps to develop positive identification. This discipline helps the legionnaire remain focused and not lean back on what he tried to escape when he joined the Legion. One legionnaire stated that "a man joins the Legion to forget. The object of Legion discipline is to give him no chance to remember. That is why we [Legion's noncommissioned officers] are so tough."³⁷ Everything is scheduled, organized, and controlled. Finally, being endorsed as a value by the legionnaires themselves, discipline is almost self-regulating. Legionnaires who fail to be exemplary

³³ "Le caractère sacré de la mission, le culte des anciens et des héros, la rigueur dans la forme et dans le fond, la fidélité indéfectible au compagnon d'armes, font les fondements essentiels de la Légion." Quoted from Pouvreau, *Le Système Légion*, 138.

³⁴ Chasseriaud, "L'évolution des Relations Socio-affectives intra et Interculturelles à la Légion Étrangère," 129.

³⁵ "Ils sont solidaires les uns vis-à-vis des autres, ils sont solidaires vis-à-vis du monde extérieur." Hallo, *Monsieur Légionnaire*, 92.

³⁶ "Cette justice de la discipline n'admettait pas le favoritisme. Ici la définition de la liberté individuelle correspondait à une exacte réalité. Chacun apportait sa contribution aux tâches communes et il n'y avait pas de privilégiés." Antoine Sylvère, *Le Légionnaire Flutsch* (Paris: Plon, 1980), as quoted from Hallo, *Monsieur Légionnaire*, 92.

or try to bypass the rules tend to be excluded from the group and warned by their peers. Thus, discipline becomes related to a sense of honor that makes the legionnaire voluntarily comply with the constraints instead of resisting them. Indeed, cohesiveness and collective identity stand in the subtle balance between individual freedom and sense of community.³⁸

Lastly, it can be argued that the sense of hierarchy is paroxysmal in the French Foreign Legion. The fact that the legionnaires mostly break with their former ties, either patriotic or familial, pushes them to recreate some new relationships and allegiances. It can even lead some legionnaires to relate to their officer as a redeemer. While commanding legionnaires requires complete dedication from the officers, which can sometimes dissuade some of them from joining the Legion, legionnaires pay it back with a true sense of confidence and affection for the one seen as the concrete actor of their salvation. Many books emphasize this unique relationship between legionnaires and officers. The legionnaire Silbermann wrote at the end of the nineteenth century:

What you will find here [in the Legion] are strict leaders but a strictness full of benevolence, and from that comes the extreme devotion of legionnaires for their officers. All are thankful for the constant care they bear for them in every circumstance. For a legionnaire, his leader is God. Do not have any wrong word about God with a priest, nor to a legionnaire about his officer.³⁹

Even today, these notions of discipline, comradeship, and loyalty toward leaders are crystalized in the code of honor that the legionnaires will learn and apply from their basic training up to the end of their contract: "Respectful of traditions, faithful to your leaders, discipline and camaraderie are your strength; courage and loyalty your virtues."⁴⁰

Social Pressure and Socialization Over Time

Socialization is a dynamic, life-long process that relies on social identity and cultural "indoctrination." Pierre Bourdieu, a French sociologist, believes that socialization is both "constructivist" and "structuralist," meaning that while one cannot deny any individual his own temperament and ability to think and act, individuals are a social construct driven by society. In comparison to the notion of *babitus*, he defines the *illusio* as the fact that an individual thinks according to his social environment.⁴¹ To explain how social groups model personal judgment and actions, he stresses that socialization corresponds to an accumulation of capitals—economic, social, cultural, and symbolic—over time.⁴² Applied to the specific case of the Legion, the more time a legionnaire spends in the Legion, the more his way of thinking and behaving will be unconsciously influenced by it. Moreover, what reinforces the sense of community and favors assimilation in the Legion is that almost the entire capital is accumulated within the same social group. While outside the Legion, people usually belong to different social groups (school, work, leisure, family, etc.), almost the entire professional, social, cultural, and symbolic aspects of a legionnaire's life are concentrated within a single social group: the Legion.

This sociological perspective helps us understand the level of assimilation taking place, which depends on whether a legionnaire voluntarily joins the Legion for a short period of time or really seeks a new start, if not a new life. While the former often looks after a professional

³⁸ Hervé Pierre, "Discipline et Esprit de Corps," *Revue de la Défense Nationale*, May 2012.

³⁹ "Tu trouveras ici des chefs sévères mais d'une sévérité pleine de bienveillance, et de là vient le grand dévouement de ceux-ci pour leurs officiers. Tous leur sont reconnaissants des égards qu'ils ont pour eux en toutes circonstances. Pour un légionnaire, son chef c'est son Dieu. Ne dis pas à un curé du mal de Dieu, ni à un légionnaire du mal de son chef." Hallo, *Monsieur Légionnaire*, 96.

⁴⁰ Foreign Legion *Code d'Honneur*.

⁴¹ Habitus roughly translates to body build or constitution. Pierre Bourdieu, *Raisons Pratiques: Sur la Théorie de l'Action* (Paris: Seuil, 2014), 153.

⁴² Ibid., 121.

experience or can simply be moved by curiosity but with no reason to escape his past, the latter deeply ties his life to the Legion with no will to turn back to his previous life. This fundamental difference affects assimilation in the sense that this process is not enforced but rather the result of a voluntary and exclusive identification to a group. Therefore, the tighter a legionnaire will be willing to tie his life to the Legion, the more assimilated he will be over time.

In addition to this social assimilation process, David Romer, an American economist and teacher at University of California-Berkeley, talks about "social pressure" as a conscious constraint on actions in contrast to Bourdieu's focus on the unconsciousness of socialization. What Romer argues is that an individual can hardly act differently than the group he identifies with since his positive identification depends on his compliance with the collective mindset and actions of that group. Moreover, this tendency is even higher in a community that shares the same culture and educational process, which is precisely the case in the Legion. By norming the key aspects of a legionnaire's life, the Legion exerts a social pressure that steadily favors assimilation.

*The Kepi Blanc and the Importance of Rites "One is not born a man, he becomes a man."*⁴³

On 14 July 1939, during the French Bastille Day military parade, legionnaires proudly marched for the first time in Paris with their white kepi, the Legion's distinctive headgear. From this moment, it became the distinctive mark of this exceptional troop.⁴⁴ This white kepi, famous all over the world, has its own history. At the beginning of the twentieth century, French troops campaigning in Africa used to put a cover over the kepi to protect it, as well as their neck, from dust and sun. Originally khaki, it became white because of the sun and the repeated washings. The older the legionnaire, the whiter his kepi cover became. It became a proof of experience.

This white kepi became such a symbol that its delivery to the young recruits, who actually become legionnaires from the exact moment they first wore it, can be compared to a rite of passage. They only receive it after the four-month basic training period, during a solemn ceremony, which in many ways mirrors a dubbing rite and represents the first transformative step from a recruit into a new person. This ceremony systematically occurs after a 40-mile raid, which is intended as a final test of the recruits' will and can represent a redemptory track that helps them to expiate their past. From an institutional perspective, this ceremony created in 1968 officially serves three objectives: "feeling welcome in a new family, the Foreign Legion, highlighting recruits' will by letting them put on the white kepi themselves, and having them resay their oath of serving France with honor and fidelity by reciting the code of honor aloud altogether."⁴⁵ According to Elisabeth Ferrand, these objectives explicitly make this ceremony a passage and initiatory rite, a rebirth as a legionnaire, and a crucial step to create a collective identity.⁴⁶

Further, the white kepi becomes the paramount of the legionnaire's uniform and immediately reflects his identity. Being distinguishable from another group strengthens the Legion's collective identity. As stated by Pierre Mac Orlan, the "uniform reflects who they are. From the time a legionnaire will look like any infantry soldier, legionnaires will not exist anymore."⁴⁷ How le-

⁴³ Maxim from Desiderius Erasmus Roterodamus (1466–1536), a Dutch Renaissance humanist, Catholic priest, social critic, theologian, and teacher.

⁴⁴ Pierre Sergent-Bertrand de Castelbajac, La Légion (Paris: Lafayette, 1985), 304.

⁴⁵ "Leur donner le sentiment d'être accueillis au sein de leur nouvelle patrie, la Légion Etrangère; de marquer leur volontariat en les faisant se coiffer eux-mêmes de leur kepi; de leur faire renouveler la promesse de server la France avec Honneur et Fidélité en récitant ensemble le code d'honneur." Elisabeth Ferrand, "Un Cérémonial Legionnaire: la Remise du Képi Blanc" (master's thesis, Political Studies Institute of Toulouse, 1968), 40.

⁴⁷ "L'uniforme reflète ce qu'ils sont. Le jour où un légionnaire ressemblera à s'y méprendre à un soldat d'infanterie, il n'y aura plus de légionnaires." Pierre Mac Orlan, *Légionnaires* (Paris: Éditions du Capitole, 1930), 208.

gionnaires perceive themselves is then a strong structural factor to promote their identity. This is explicitly reflected in the honor code: "proud to be a legionnaire, you display it in your impeccable uniforms, your always worthy, but modest behavior and your always neat living quarters."⁴⁸ This statement illustrates that becoming a legionnaire is more than signing a contract. It involves a deep social and cultural restructuration that can be ideally expressed by a legionnaire himself.

A Legionaire's Testimony about the Legion

Right before Christmas 2014, the story of a U.S. Army officer who had deserted his unit to join the Foreign Legion hit the news.⁴⁹ After five years spent in the Legion, he finally decided to turn himself in to the American justice system to face the consequences of his actions. I had the privilege to be his company commander from 2009 to 2011. With his authorization, I want to reproduce here a part of the personal statement he made during the trial since it provides wonderful insights to what the Legion tries to achieve with regard to the structuration of a collective identity. According to his own words, "this is not merely a story about unauthorized absence nor of the French Foreign Legion. This is my testimony about survival and redemption."⁵⁰

Although I had left for the Legion in 2009 seeking intense physical hardships, my mental health also improved due to the Legion's strict and regimented lifestyle. According to the Legionnaire's Code of Honor, a Legionnaire's strength is discipline and camaraderie. This discipline and camaraderie kept me not only physically strong but also rendered me very mentally tough. Therefore, although I was still secretly depressed in the Legion, I never allowed myself to entertain suicidal fantasies. I could not let my comrades down. We Legionnaires were extremely close knit and always looked out for one another. If somebody seemed to be having a bad day, we volunteered to take their guard shift, to help clean their weapon, to do their laundry, to do whatever it took to keep our comrades strong of body, mind, and spirit. We policed each other. Extremely disciplined, we always took pride in our personal appearance, our barracks, weapon, equipment, and vehicle maintenance, and especially in our physical fitness. We considered mediocrity, laziness, and especially a lack of discipline to be attributes unbecoming a Legionnaire. I also never had time to brood or feel sorry for myself. For the last five years, I was rarely alone but instead was almost always with fellow Legionnaires. Even if I was reading books in my barracks, there were at least three or four others next to me in the same room. There was always somebody who wanted to go for a run, work out at the gym, help me iron my uniform, lend me some kit or gear, or share a hot coffee or a cold brew. We shared good times and hard times, embracing them both. However, we never spoke of emotions. That wasn't our way, as we considered weakness - physical, mental, and/ or emotional-to likewise be traits unbecoming a Legionnaire. We expressed pain and heartache in a different manner. At least three times a day, we marched singing melancholic odes to our beloved homelands, families, and lovers. We also sang of sacrifice and of bravery. By marching and singing in step, each and every Legionnaire was allowed to vent in the anonymity of a squad, platoon, or company in formation. It was as if the unit's collective sorrow replaced the

⁴⁸ Foreign Legion Code d'Honneur.

⁴⁹ Dave Philipps, "Army Deserter Is Jailed for Chasing the Conflicts that Steadied His Mind," *New York Times*, 15 December 2014, http://www.nytimes.com/2014/12/16/us/a-deserter-who-chased-conflict-is-jailed-for-shirking-duty .html?_r=0.

⁵⁰ 2dLt Lawrence J. Franks Jr., statement to the military judge and panel prior to sentencing, 15 December 2014, Fort Drum, NY.

Legionnaire's personal sorrow. Did I miss home? Did I miss my family? Did I miss my friends? Did I miss my country? Of course I did, immensely in fact, and I sang about it daily with my comrades who shared the same pain yet never voiced it in person. We were more than a military unit or fraternity of men; we were a family. The Legion saved my life because its Legionnaires shouldered me along the way. I was weak and broken, and they made me strong because we were strong together. During the last five years I found my will to live. I lived with them, I lived for them, and above all I lived for the day that I would be honorably discharged from the Legion and finally be able to surrender to US military control. And at my goodbye dinner, I told my fellow Legionnaires that I was a West Point graduate and a US Army Officer.⁵¹

COLLECTIVE IDENTITY: SHARED VALUES AND ARTIFACTS The Legion Is Our Country

"In the pride of their status, in the esteem of their leaders, in the ties of brotherhood, legionnaires have found reasons that justify an endless courage and devotion."⁵²

Just like the kepi provides the legionnaire with an individual symbol of identity and personal significance, there are tokens, symbols, and historical events that define and reinforce the Legion's identity. Defined by Edgar Schein as artifacts, they are "attributes that can be seen, felt and heard by the uninitiated observer."⁵³ These are tangible aspects that relay the cultural meaning of a collective identity. While artifacts serve a unifying purpose, they also help to differentiate one group from another. Therefore, the Foreign Legion tends to develop its own artifacts that strengthen the legionnaires' collective identity by sustaining meaningful differences with the rest of the French Army.

On every French military unit flag appears the inscription "Honor and Fatherland," except in the Legion where motto "Honor and Fidelity" is displayed instead. This fidelity a legionnaire has for his fellow legionnaires, his leaders, and the institution nourishes the Foreign Legion esprit de corps and a sense of exclusive belonging. Deeply tied to such values as honor and commitment, it can then turn into another form of patriotism. This is why the motto *Legio Patria Nostra*, or the Legion is our country, makes sense. As well as the notion of homeland, this motto implies a common will, but is here closely related to the Foreign Legion traditions and collective identity.

Colonel Rollet first initiated the display of this motto on the Foreign Legion's flags at the end of the First World War. The purpose was clearly to state that "fidelity acts as a fatherland for these stateless legionnaires who joined the ranks of the Legion to find a haven to their miseries, to give a chance to their fate, to give some adventures to their dreams."⁵⁴ By substituting the word "fidelity" for "fatherland," it appears that this fidelity goes to the Legion and its officers, which only indirectly personify France. Further, a legionnaire who eventually gets French citizenship is only then officially told that he "now has to obey French laws." This declaration

⁵¹ Ibid.

⁵² George R. Manue, Le Monde, 30 April 1963, 3.

⁵³ Schein, Organizational Culture and Leadership, 9.

⁵⁴ "La fidélité militaire tient lieu de patrie aux durs 'heimatlos' venus chercher dans les rangs de la légion, un havre à leurs misères et donner une activité à leur fougue, du pain à leur faim, des aventures à leurs rêves." Emile Henriot, *Vers l'Oasis en Algerie* (Paris: Plon, 1935), 199.

proves that, before naturalization, the legionnaire's unique references are the orders he receives from his officers, and that before becoming French his citizenship is the one of a legionnaire.⁵⁵

The motto *Legio Patria Nostra* finally illustrates that the Foreign Legion represents an exclusive system, if not a real country, that influences its members' identities. From Pierre Mac Orlan's words, "men who join the Legion are not always exceptional. Only traditions, esprit de corps, and regimental pride make these soldiers some stateless conquerors who only obey the motto displayed on their flags: Honor and Fidelity."⁵⁶

The Role of Celebrations in the Legion

Explicit rules and artifacts contribute to forge a collective identity. The purpose of celebrations in the Foreign Legion is to sustain this identity. Christmas, as one of those celebrations, naturally develops the sense of family within the Legion and is a good opportunity for every legionnaire to remember that one day his fellows welcomed him as a newborn. In most societies, family is usually the main integration cell and refers to blood as well as legal ties. By celebrating Christmas together, legionnaires promote their unity as an indivisible cell. That is why every year, starting in early December, the mood changes and all legionnaires focus on this merry upcoming event. Secretly, every platoon, every company, and every service does its best and uses all its skills to build and expose a giant crib that displays the unit's cohesiveness and tells about key aspects of the legionnaires' lives. Christmas Eve is a pure moment of familial joy that commissioned and noncommissioned officers enjoy with their legionnaires instead of their personal family. For instance, I remember all the Christmases spent in my unit as an officer. Every 24 December, if not deployed, I was wishing my wife and kids a merry Christmas before leaving my home to join my legionnaires in the barracks. I well remember my children incredulously staring at me, as well as the sadness of my wife, but the Legion was truly my main family at this time. This celebration is definitely a powerful way to share intimacy and to develop even more ties between a legionnaire and his leaders.57

While Christmas celebrates the family, the commemoration of the Battle of Camerone highlights the soldiering virtues of the Foreign Legion and every 30 April represents its biggest annual celebration. During this battle that occurred during the Mexican campaign in 1863, 62 men under the command of Captain Jean Danjou made an oath to fulfill the mission at all cost while they opposed more than 2,000 Mexican soldiers. Only five survived, yet the mission was a success. Beyond facts, this battle became the symbol of courage, dedication, and fidelity to the given word. More than a celebration, Cameron is the annual opportunity for every legionnaire to renew his oath of fidelity to his fellows and leaders. It is part of the overall educational process that contributes to the permanent strengthening of legionnaires' cohesiveness and collective identity.⁵⁸ Further, in the command headquarters, this celebration is the occasion to exhibit the wooden hand of Captain Danjou as a sacred relic that legionnaires venerate as a tangible proof of their dedication.

These two examples highlight how the Legion uses celebrations to enforce the collective identity narrative. These shared beliefs, once understood and voluntarily adopted, punctuate a legionnaire's life and contribute to reinforce the Foreign Legion collective identity and the

⁵⁵ Général Christophe de Saint Chamas, "Legio Patria Nostra, la Légion Etrangère, une exception Française" (speech, Regards Croisés sur la Légion Etrangère, 12 October 2012).

⁵⁶ "Il faut bien le répéter, les hommes qui viennent à la Légion ne sont pas toujours d'une essence exceptionnelle. Ce sont les traditions, l'esprit de corps, l'orgueil particulièrement sensible du régiment qui font de ces soldats des conquérants sans patrie qui n'obéissent qu'à la devise brodée sur leurs drapeaux: Honneur et Fidélité." Mac Orlan, *Légionnaires*, 87–88.

⁵⁷ de Saint Chamas, "Legio Patria Nostra."

⁵⁸ Ibid.

legionnaire's positive identification with it. As members of the same corps, legionnaires cannot be separated from the Legion. Thus begins the esprit de corps as defined by its genitor, Colonel Charles Ardant du Picq.⁵⁹

Physical Identification: Tattoos in the Legion "We, the damned from the entire world"⁶⁰

Tattoos are physical marks of belonging that contribute to permanently emphasize the sense of collective identity. Jean-Eric Lundy, a French psychiatrist who studied the links between tattoos and the Legion's collective identity, noticed that legionnaires usually get tattooed at the end of basic training, a period characterized by promiscuity, rusticity, and an intense collective identification to a new status.⁶¹ Young legionnaires are then inclined to explicitly display their belonging as a form of allegiance.⁶² These tattoos symbolize a life-long engagement so important that it is worth permanently marking one's flesh to ensure it will never be forgotten. Psychologically, tattoos signify life-long acceptance that one will have of a decision made at a single moment in time. Andrew G. Lang (1844–1912), a Scottish mythologist, highlighted in a 1905 study that tattoos first appeared in primitive tribal societies as a way to prevent incest, $i\partial e_i t$ to identify members of a same family.⁶³ Thus, the psychological process that leads a legionnaire to get tattooed reflects identification to a new familial lineage.⁶⁴ With this new skin, the legionnaire realizes a symbolic identification to the Legion as an overarching structuring group.⁶⁵

While tattoos are not exclusive to the Foreign Legion or the military, it is interesting to note that most of the legionnaires' tattoos refer to a redemptory process or a painful life: *March or die; Suffer and shut up; Come on, death;* etc. As a result, these tattoos reinforce the mental perception that they all share the same burden through this redemption process, without any remission other than death.

They tattooed their faces with death's heads, snakes, beetles and other hideous designs, maiming themselves to prevent any hope of return to civilization. There were cases of men tattooing the word "Merde" [crap] on the palms of their hands, automatically insulting any officer they saluted, and deliberately condemning themselves to a lifetime of suffering in the penal battalions. In this "monastery of the damned" they placed themselves in the same class as those eccentric early saints of the Church who achieved the odor of sanctity by forswearing to wash themselves for a lifetime, or by never changing their line.⁶⁶

Romanticism in the Legion

Beyond every rational explanation, the integration process in the Foreign Legion still partially relies on mysticism and romanticism. Indeed, an idealized and almost chimeric vision of the Legion influences the legionnaires' collective identification. Myth and legend have an important role to play in the creation of the legionnaires' collective identity by providing ideals and strengthening positive identification to the Legion. While the way the cinema and popular fiction depict the

 ⁵⁹ Charles Ardant du Picq, *Etudes our le Combat : Combat Antique et Combat Moderne* (Paris: Editions Ivrea, 1999), 75–76.
 ⁶⁰ Translated from the original French Foreign Legion's song.

⁶¹ Jean-Eric Lundy, "Rapports du Tatouage au Contrat Narcissique dans la Légion Etrangère" (master's thesis, Centre d'Études Spécialisées de Psychatrie de Paris, 1989), 56.

⁶² Ibid., 57.

⁶³ Andrew Lang, *The Secret of the Totem* (London: Longman, Greens and Co, 1905), 35.

⁶⁴ Lundy, "Rapports du Tatouage au Contrat Narcissique dans la Légion Etrangère," 119.

⁶⁵ Ibid., 120.

⁶⁶ Bocca, La Légion!, 37.

Legion is somehow far from reality, it still provides a romantic and heroic image to which the legionnaires tend to adhere. Every legionnaire is a participant in the collective myth, which in return favors a positive identification. "The legionnaires are mythomaniacs, inventors of fables which they are the first to believe in,"⁶⁷ wrote Georges Manue, a former legionnaire. Adrian Liddell Hart, son of the famous military writer and a former legionnaire, even acknowledged that the Legion had "inspired a legend, a moral climate affecting those who are not refugees in the legal sense."⁶⁸ Further, he stated that "it [the Legion] exists in the situation of the moment; it responds to a challenge. It is influenced more by what people think it is than what it has been. ... Its survival is due at least as much to its human mystique as to any military genius."⁶⁹

Such artifacts as songs, poetry, and celebrations permanently reinforce this romance. For instance, singing is popular in the Legion. Every unit has a song that is supposed to depict its cohesiveness and valor. Most of the time, when deployed on the field, legionnaires gather around a fire after sunset and sing as a way to explate their sins and to renew their oath to the Legion. As a result, it unconsciously conditions the legionnaires' mindsets and makes them primary apostles of the values and beliefs the Legion advocates to ensure integration, cohesiveness, and collective identity.

CONCLUSION

This study about the Foreign Legion ultimately explores the complex process that makes this troop what it is today. However, this is also a study of the hearts of men and how they build a collective identity while sharing a traumatic experience. Everything is engineered by the Legion to institutionally integrate the legionnaires and build a kind of unity out of diversity. Amalgam, discipline, and the exclusive use of French are some of the key drivers of integration. Beyond these structural factors, the narrative used by the Legion helps to develop a strong collective identity that steadily reinforces the brotherhood of its members. As a result, the process is both enforced and inherited by the legionnaires themselves. Initially driven by the Legion to ensure crucial integration, the process assumes an almost independent dynamic with the legionnaires as the main actors working to develop a collective identity. The challenge for the Legion is to sustain this dynamic to preserve the cohesiveness of the unit, as well as the dedication of its members. With the benefit of this study, it is also easier to understand the slough of any recruit transforming into a legionnaire as an enduring process whose results can vary depending on time and individual temperaments. In return, the Legion is obliged to constantly enforce the primacy of the community upon individuals.

Overall, the secret alchemy of this process perhaps also relies on the legionnaires themselves. These men, whose fate has led them to choose the Legion, whatever the risks and the sacrifices, may have in common a similar "gene" that inherently favors their collective identity. This enigma is emphasized by former legionnaire George Manue, who described legionnaires as

Ardent characters, tempted by misfortune, weak souls crushed by liberty, searching for a framework for their dreams, aristocrats or paupers, leveled by the uniform, all legionnaires are united by the same pride, the same secret aspirations, the same desires, the same needs; Pushed by the same male forces, physical and moral, they are united outside of ordinary conventions upon the plan of the great human laws.⁷⁰

⁶⁷ Manue, *Le Monde*, 107.

⁶⁸ Adrian Liddell Hart, as quoted in Porch, The French Foreign Legion, 427.

⁶⁹ Ibid., 439.

⁷⁰ Ibid., 427.

Pursuit to Victory A Model to Leverage U.S. Marine Corps Combined Arms Armor and Aviation Capabilities to Achieve Decisive Results at the Operational Level of War

by Major A. P. Bariletti, USMC¹

Klotzen, nicht kleckern! "Hit with the fist, don't feel with the fingers!"²

That is the role of armor in the U.S. Marine Corps in the present and into the future? Exploration of the question unfortunately yields varied and often times conflicting results. Responses typically include "armored protected firepower" and "shock action," with little reflection on the true definition of the terms and of the impact they have at the operational level of war. A decade of stability operations has bemused the question further, as the tactics of tank-infantry integration dominated training and combat operations. Even within the armor community, consensus does not exist regarding the most effective means of employing armor within the Marine air-ground task force (MAGTF). There now exists a dependence on armor providing infantry support in urban and stability environments down to the small-unit level, with the potential of tactical benefit superseding the requirement for armor to penetrate deep into the enemy rear; thereby, attacking the enemy will instead achieve mere local combat power supremacy. However, if the Marine Corps believes that conventional operations are still within the scope of the MAGTF, serious consideration must be taken to determine the most effective means of employing armor to achieve decisive results.

Contemporarily speaking, armor employment in the Marine Corps is conducted piecemeal in a manner that prohibits concentration, and to ensure equal distribution across each infantry division. Unfortunately, this prohibits the concentration of armor necessary to achieve decisive results. At the outset of armor doctrine development, Generaloberst Heinz W. Guderian identified this parochial proclivity of maximizing support to infantry at the detriment of operational impacts. Guderian argued that "concentration of the available armoured forces will always be more effective than dispersing them, irrespective of whether we are talking about a defensive or offensive posture, a breakthrough or an envelopment, a pursuit or a counter-attack."³

The complexity of modern defense systems (arrayed in-depth and requiring the attacker to

¹ Maj Bariletti is a graduate of the Marine Corps University's School of Advanced Warfighting. This paper won the Gen Clifton B. Cates Award of the Navy League of the United States for Academic Year 2014–15.

² Karl-Heinz Frieser, *The Blitzkrieg Legend: The 1940 Campaign in the West* (Annapolis: Naval Institute Press, 2005), 157. Quoting Heinz Guderian.

³ Heinz Guderian, Achtung Panzer !: The Development of Tank Warfare (London: Orion Publishing Group, 2012), 15.

break through beyond the depth of supporting fires) creates a significant problem when applied to modern conventional offensive operations that the past decade of stability operations has obscured. Historic antecedents suggest that the most complex problem attacking units will have to face is penetrating the labyrinth of these defenses. As antiaccess/area denial (A2AD) technologies proliferate, the depth of defenses will extend beyond the coast to disrupt combat power projection in the littorals. As expeditionary operations remain a principal focus of the Marine Corps, intellectual rigor must be applied to determine how best to employ the contemporary and future capabilities of the MAGTF to achieve a breakthrough and subsequent exploitation.

The main distinction between ship-to-shore movements of previous generations and the contemporary concept of ship-to-objective maneuver (STOM) is the avoidance of the task to establish a beachhead in order to achieve a lodgment ashore. Conceptually, bypassing defenses expected in the vicinity of the beachhead enables attacking forces to leverage the surprise gained by using the sea as maneuver space to rapidly attack to the ultimate objective of the operation without having to address the tactical problem of breaking through defenses established along the force beachhead line (FBHL) or at the shoreline itself. Though convenient, current amphibious lift capability shortfalls preclude the realization of the concept. Further, even if adequate over the horizon (OTH) lift capability existed, the shortfalls of operational reach would necessitate an operational pause within the modern defense in-depth of the enemy ashore. Bypassing this defensive scheme with vertical envelopment, though conceptually appealing, would fail to provide the combat power and subsequent mobility necessary to truly exploit the initial surprise achieved.

The growing desire to shift MAGTF warfighting focus to an aviation combat element (ACE)-centric model (as implied in *Expeditionary Force 21*) with a heavy emphasis on lightening the MAGTF to enhance operational maneuver from the sea (OMFTS), runs the risk of eliminating or reducing other required combat capabilities.⁴ Though an ACE-centric MAGTF might enable the realization of OTH maneuver, the inherently light nature of such a future expeditionary force will not provide a deep exploitation maneuver capability with adequate combat power to face a conventional foe. Although heavy armor and light armored reconnaissance capabilities pose difficulties for ship-to-shore movement and operational reach beyond the coastline, a task-organized force of air, cavalry, artillery, and armor could directly contribute to decisive success in exploitation and pursuit operations. Further, historical precedent suggests that this form of combined arms team is highly successful in achieving asymmetric results, turning tactical victories into operational successes.

The phases of amphibious operations in the future will still demand the fundamental requirements of penetration of the defense in depth and exploitation of that penetration, followed by the achievement of the ultimate objective. Despite the difficulties of ship-to-shore movement, which undoubtedly slows the establishment of armored combat power ashore, retaining armor and cavalry as an exploitation force in reserve directly enables pursuit operations beyond the FBHL without requiring an operational pause after the breakthrough. Further, this task-organized team (designated in *Operational Exploitation and Pursuit Force*) can provide self-sustaining operational-level maneuver that will directly contribute to tempo generation, complementing the ACE-centric capability with armored protected firepower. A task-organized force developed with a tank battalion as its base, with a ground reconnaissance capability, a mobile artillery capability, an engineer capability to provide mobility for the maintenance of speed, and an air cavalry capability to identify and pursue the enemy until decisive victory is achieved.

To have a decisive operational impact, pursuit of the enemy force to its defeat should be seen as the best way of exploiting the advantages of surprise achieved by using the sea as maneuver ⁴ *Expeditionary Force 21* (Washington, DC: U.S. Department of the Navy, Headquarters Marine Corps, 2014).

space. Organizing self-sustaining armor and cavalry to conduct exploitation and pursuit best exploits the advantages of concentrated armor and maximizes its operational impact. Therefore, developing a task organized operational exploitation and pursuit force — a combined arms, air, and ground team — is the best use of armor in the modern system of warfare. However, to achieve this potential gain, disaggregating armor for the benefit of local combat power supremacy must be abandoned and true concentration must be preserved.

BREAKING THROUGH THE MODERN DEFENSE IN DEPTH

"The defense in depth must be attacked in depth"5

The essence of the tactical problem associated with A2AD is that modern defenses rely on depth to defeat attackers through forcing culmination within the heart of the intermediate zone; in this instance, the area in which the preponderance of firepower is arrayed to achieve decisive result, and is contemporarily referred to as the main battle area. Though the weapon systems have improved over time, the fundamental challenge associated with overcoming the inherent supremacy of the defense has not. Breaking through the defense has therefore become a tactical problem with operational impacts. A *breaktbrough* attack, in a contemporary sense, is best defined doctrinally as a penetration that is "a form of maneuver in which an attacking force seeks to rupture defenses on a narrow front to disrupt the defensive system."⁶

History is replete with examples associated with this challenge dating back to the First World War. Fear of failing to achieve a breakthrough had consequences for the organization of forces, specifically with respect to armor. The experiences of WWI seemed to indicate that achieving breakthrough by the use of armor, specifically employed in piecemeal fashion across the front, failed to achieve a decisive breakthrough at Cambrai in 1917. Where penetration was achieved, subsequent exploitation was impossible due to attacker culmination. Breaking through the defense in depth is a race in which the attacker must project combat power into the rear of the enemy defense system through the gap created to maximize the advantage of the penetration. Without a highly mobile, self-sustaining force to exploit these local breakthroughs in WWI, Guderian argued, "the defenders always had the time to seal off the locations of the break-ins before the attacking troops, advancing step by step, could exploit their initial successes."⁷

Guderian gleaned a valuable lesson from this historical analysis. Employing armor in "penny packets" (i.e., small units) to achieve a breakthrough was not in keeping with the inherent advantages of the weapon system. To defeat the defense in depth, the system had to be attacked in depth with a ready force capable of flowing through the gap created to achieve an asymmetric advantage. Stated succinctly by Stephen Biddle, a leading military historian and senior fellow in defense policy at the Council on Foreign Relations: "Breakthrough and exploitation is designed to induce systemic collapse of a defense while fighting through only a fraction of it directly."⁸ Flashing forward to the resounding German success at the Battle of Sedan in May 1940, Guderian would later explain that "the essence of the success at Sedan was not to be found in the 'breakthrough action' as such but rather the immediate exploitation of the breakthrough by the thrust of the Panzer Force deep into enemy territory."⁹ In this example, primarily due to the

⁵ Bradley J. Meyer, "The Breakthrough Battle" (unpublished paper, Marine Corps University, School of Advanced Warfighting, August 2008).

⁶ Tactics, FM 3-90 (Washington, DC: U.S. Department of the Army, 2001), 3-25.

⁷ Guderian, *Achtung-Panzer!*, 43.

⁸ Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2004), 40.

⁹ Frieser, The Blitzkrieg Legend, 194.

challenges associated with crossing the Meuse River, the breakthrough itself was conducted by the infantry, which freed the armor to conduct an exploitation of unparalleled success.¹⁰

EXPLOITATION INTO VICTORY

"The exploitation of success is the key to victory."¹¹

Exploitation gets to the heart of the concept of attacking in depth. According to U.S. Army's *Offense and Defense*, exploitation is "a type of offensive operation that usually follows a successful attack and is designed to disorganize the enemy in depth."¹² The previous version of this manual, *Tactics* (2001), went further to state that "Exploitation is the *primary means of translating tactical success into operational advantage*."¹³ Upon completion of the breakthrough, attacking forces must quickly transition to the exploitation and subsequent pursuit if the combat power generation race is to be won and systemic collapse is to be achieved.

Success in exploitation is predicated on task organization. Culmination is the Achilles' heel of the attack, whether in exploitation or otherwise. Operational reach can negate the expenditures associated with conducting a breakthrough if culmination occurs at the inopportune time when the enemy defense can recover. By task organizing forces to be reserved for the sole purpose of the exploitation, tempo can be achieved. As the mobile counterattack is the defeat mechanism for the modern defense in depth, exploitation forces must be weighted with enough force to destroy the inevitable counterattack and to continue the attack deep into the enemy's rear.

Exploitation traditionally transitions to pursuit if in fact the exploitation accomplishes the desired operational success it is aimed to achieve. Pursuit is "an offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it. . . . Bold action, calculated initiative, and accounting for the associated risks are required in the conduct of a pursuit."¹⁴ The very tenants of Marine Corps maneuver warfare doctrine seek to achieve the asymmetric results associated with the collapse of the enemy system by targeting his will to resist.

At the field army level this designation of mobile exploitation and pursuit forces may not be a bridge too far due to the scale of the forces available for tasking. However, the Marine expeditionary force (MEF) may find itself in a unique position where it requires this capability but traditional concepts of employment prohibits execution. During the conduct of amphibious operations, the MEF conducts tactical actions that endeavor to achieve operational impacts. Traditionally, Marine Corps forces have task organized in such a manner that establishment of the FBHL was the primary and initial task to combat power build-up, with an inevitable operational pause required to reorganize forces to continue the attack inland. In essence, the FBHL enables the defender to reorganize his defenses and necessitates a breakthrough if operational objectives are to be achieved. Despite the fact that STOM seeks to leap the FBHL in stride without the requirement for additional breakthroughs, technological limitations prohibit the realization of this concept. Therefore, if the MAGTF is to breakthrough can be achieved by those forces historically proven to be best postured to do so—the infantry-aviation team—while motorized and mechanized forces are poised for rapid exploitation and pursuit without the requirement to

¹⁰ In describing the radical German success at Sedan, Meyer concludes that "Once through, the German exploitation was dramatic. A Panzer Group under Guderian drove from southwest of Sedan to the Swiss border, cutting behind the Maginot Line to trap the three French armies and 500,000 men."

¹¹ Guderian, Achtung-Panzer!, 198.

¹² Offense and Defense, ADP 3-90 (Washington, DC: U.S. Department of the Army, 2012), 9.

¹³ Tactics, 9-1. Emphasis added by author.

¹⁴ Offense and Defense, 9.

pause at the FBHL. As FM 3-90 suggests, "the use of an operational pause generally results in the abandonment of the pursuit because the enemy is able to use that time to organize a coherent defense."¹⁵ Therefore, it is incumbent on the attacking force to task organize and plan in advance of the attack for this critical phase in the enemy's defeat. Eliminating the operational pause will directly lead to operational success.

THE ROLE OF ARMOR IN BREAKTHROUGH, EXPLOITATION, AND PURSUIT

To this point, the central theme of the argument presented is that certain forces are predisposed to success in conducting the breakthrough. Breakthrough is an infantry and artillery task. Though a decade of counterinsurgency operations may have obscured perspective, breaking through a modern defense in depth against a near-peer competitor will require local air superiority and concentration of fires at the decisive point to set conditions for subsequent exploitation. Without breakthrough, there is no exploitation. However, disagreement exists as to where the limited Marine Corps armor should be placed to achieve success, especially in light of the logistics requirements inherent to heavy forces. In sum, what is the current role of armor in the Corps, and is this the most effective use of the resource? The answer revolves around the subject of mass versus decentralized armor support to infantry. After a decade of penny packeting armor to support the infantry division in extended battlespace, a look back into history is illustrative.

Guderian is seen by many as the father of armor employment. To him, the mission of armored forces was to provide surprise through concentrated strength, with the sole view of gaining the decision.¹⁶ From the inception of the tank, two schools of thought emerged as armor employment concept developed. First, that the tank should be employed purely in support of infantry, and second, that armor (with mechanized/motorized infantry) should be used to attack deep into the enemy rear, maximizing shock action to achieve the decision.¹⁷ Both schools developed doctrine and organization to support either end of the spectrum, with the French largely subsuming the former and the Germans employing the later.

The results of these two doctrines clashing in conflict are telling. The French, adapting to the positional warfare theories of the World War I, could not cope with the revolutionary employment of Blitzkrieg by the Panzer divisions during the outset of World War II in Operation Sickle Cut in May 1940 (the battle of Sedan highlighted above). From this, Guderian concluded: "Modern tank forces must not be developed merely with the object of using them in direct support of the slow, laborious attack of the infantry. On the contrary, there should be tests to see whether it is possible to utilize the characteristics of the tank more fully, so that its effect may be more beneficial to operations as a whole." Further, he stated that to maintain speed, "the auxiliary weapons of tank units must be as fast as the tank themselves." ¹⁸ Finally, Guderian concluded that employing tanks merely as support to infantry provides merely "limited tactical utility" with no operational impact whatsoever.¹⁹

Though armor at the point of penetration may be conventional wisdom (the proverbial "lead with armor, not with flesh"), historically speaking, this does not hold true. *Stosstruptaktik*, or infiltration tactics, as applied to modern breakthrough operations, suggest the viability of massing artillery, infantry, and aviation at the point of penetration without armor to free armor forces for exploitation and pursuit, where their shock action can be maximized to achieve the true deci-

¹⁵ *Tactics*, 7-7.

¹⁶ Guderian, Achtung-Panzer!; Heinz, Achtung Panzer!; and Armored Forces, FMFRP 12-35 (Washington, DC: Headquarters Marine Corps, 1989).

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Guderian, Achtung Panzer!, 12.

sion. Guderian concluded that, to maximize the potential of the speed that armor provides, tanks should be concentrated in formations designed to exploit that maneuver capability.²⁰ On the other hand, "slaving" armor to infantry in a purely support role in the breakthrough itself denies the benefit of the post-breakthrough exploitation and pursuit, and operational pause becomes unavoidable. Trying to be strong everywhere by disaggregating armor to the infantry division results in being exceptionally strong nowhere and removes opportunities for exploitation thereafter. Mass is the key, and must be levied at the decisive point. As Guderian warned, *Klotzen, nicht kleckern!* – "Hit with the fist, don't feel with the fingers!"²¹ Mass in exploitation is the best contribution of an armored force.

Transitioning to pursuit, armor again can deny the operational pause the opponent requires to avoid absolute destruction. Therefore, it is incumbent on the attacking force to task organize for this critical phase in the enemy's defeat. Complete destruction of an enemy is perhaps the single most difficult task of military operations and has eluded many great captains in history. Carl Von Clausewitz, in deep reflection of this complexity, suggested that three "various degrees of immediate pursuit" in an attempt to provide insight towards solving the problem. Those "degrees" are Cavalry Pure, "A strong vanguard of all arms," and "Whole victorious army."²² With strengths and weaknesses inherent to each form, this analysis suggests that, by task organizing the OEPF, the MEF can develop "a strong vanguard of all arms" that could achieve this daunting task.

THE PROPOSED OPERATIONAL EXPLOITATION AND PURSUIT FORCE

The OEPF is the proposed solution for how current elements of the MAGTF could be employed to create a combined arms team capable of exploitation and pursuit, while avoiding the common pitfalls of culmination. Though heavily weighted, this could be a commander's operational bid for success, and therefore, risk may have to be accepted elsewhere to form the mass required to deal the decisive blow. However, to mitigate this risk, separate structure can be added to the Marine Corps to support two independent OEPFs (one for each MEF) that is directly under the operational control (OPCON) of each MEF commander.

This independent unit reporting directly to a corps headquarters is similar in both structure and purpose to Task Force (TF) Butler operated under U.S. Army Major General Lucian K. Truscott Jr. during Operation Dragoon (the amphibious invasion of Southern France) in August 1944. TF Butler was a task-organized, corps-level exploitation force that was held in reserve specifically for the purpose of launching forward post-breakthrough. Consisting of much of the same capabilities advocated in this paper for the OEPF, TF Butler can be viewed as a historical antecedent for a successfully organized exploitation force conducting amphibious operations and working directly for a corps commander.

Adding structure to support the task organization of the OEPF avoids the pitfalls common to the establishment of ad hoc organizations, though would require modifications across doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOT-MLPF). As all MAGTFs are scalable to suit commanders' needs, the OEPF is no exception, and therefore two additional models are suggested though the common elements of the force do not change with scale. However, although a smaller scale OEPF can be established using current Marine Corps structure, reducing the scope of the capabilities required impacts the task force's ability to accomplish the deep penetration advocated here. The OEPF is a force that should complement the infantry division, not rob from it.

²⁰ Ibid., 15.

²¹ Frieser, *The Blitzkrieg Legend*, 157.

²² Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret (New York: Knopf, 1993), 313–14.

The common elements to each OEPF model presented include: armor (as the backbone of the exploitation and pursuit), engineers, armored cavalry, air cavalry and close air support, mechanized infantry, a combat logistics element, and mobile high mobility artillery rocket system (HIMARS). First, a model of the OEPF with an independent O-6 level command element will be explored as a foundational base, followed by a brigade-size OEPF with a MAG command element, and the smallest-scale OEPF with a tank battalion (-) as the base element.

To provide adequate command and control necessary for the independent nature of deep exploitation and pursuit operations, a separate O-6 level headquarters is necessary. In TF Butler, U.S. Army Brigadier General Frederick B. Butler (commander of TF Butler) experienced considerable friction establishing this type of organization in an ad hoc manner. Additionally, the VI Corps would have to operate without its assistant corps commander, as Brigadier General Butler was forced to vacate his current assignment to execute command. Instead, a separate headquarters should be established to avoid the pitfalls of ad hoc organizations in combat, especially if the OEPF is considered the MEF commander's bid for success.

The Marine tank battalion provides the robust shock action capability that is lost when armor is disaggregated to support other formations in the division. To achieve these effects of mass, while balancing the needs of armor support to the division, two additional tank battalions (one for each MEF OEPF) should be added to Marine Corps structure to allow the infantry division to retain its armor capability. The tank battalion, however, can form the base of the OEPF, providing the ground force's primary striking capability. Additional tank companies can be augmented by reserve or joint forces, if additional armor capacity is desired to weight this effort.

Engineers form the second essential requirement of the OEPF. A mobile assault company of the combat engineer battalion, augmented with bridging capacity from the engineer support battalion (not currently organic to the ground combat element [GCE]), would provide mobility to the OEPF and enable river crossing and in-stride breaching to facilitate the maintenance of tempo essential to this concept.

Tactical ground reconnaissance is an essential element of the pursuit, in both finding the enemy and protecting the greatly exposed flanks of the OEPF. A light armored reconnaissance (LAR) battalion is used in this concept to screen the front of the OEPF in a reconnaissance pull, enabling the rapid encirclement and destruction of withdrawing forces. All logistics requirements of the above mobile forces could be internally provided by a combat logistics battalion (CLB) OPCON to the OEPF, except where scalability reduces the requirement to the extent in which logistics requirements can be sourced by the armor and/or LAR capability.

Much like ground cavalry, but with extended range for employment and observation, air cavalry provides a unique opportunity that perhaps has been lost since the formation and employment of the air cavalry regiment (ACR) by the U.S. Army in Vietnam. Adding depth to the attack in depth, air cavalry can be employed in a reconnaissance pull, further directing rapidly maneuvering ground forces deep into the enemy's rear. By using a small force of heliborne infantry to seize key terrain (bridges, observation posts, etc.), tempo can be maintained by the maneuvering forces on the ground. The use of a Marine light attack helicopter squadron (HMLA) in direct support (DS) of the OEPF could provide the close air support capability to shape deep, in close complement with the ground forces, while enabling the air cavalry component as suggested. Though this may require the establishment of forward arming and refueling points (FARPs) dependent on the depth of the exploitation, this requirement would be fulfilled by close coordination with the Marine aircraft group (MAG) headquarters (though the use of the MAG as the command element, as explained further below, provides a potential solution). In the end, this essential element of the OEPF provides the capability to seize vital points in the rear of the hostile front to enable mobility once ground assets arrive, protects the flanks of deeply penetrating ground forces that are relatively blind, identifies routes for encirclement for the penultimate defeat of the enemy force being pursued, and perhaps most importantly, locates and shapes the enemy operational reserve attempting to counterattack to meet the exploitation force.²³

Mechanized infantry is another manner in which the OEPF can expand in size as required. Mechanized Infantry is used by the OEPF to seize infantry objectives, as required, and provides flexibility to the force. Though reinforcements can be vertically enveloped to the OEPF as required, maintaining internal ground mobility is essential.

Mobile artillery is vital to completing this combined arms pursuit. However, as contemporary Corps artillery is not self-propelled, HIMARS is suggested to provide the speed of employment and range necessary to fully realize the potential of the OEPF. However, cannon artillery may be used as a substitute for HIMARS if the enemy threat is predominantly dismounted, entrenched infantry. Ada programming language systems, though limited in number and not organic to the GCE, could be used to protect this deeply penetrating force that is sure to threaten the enemy so completely as to warrant a significant aviation response that must be defended against. Additionally, defensive counter air (DCA) is recommended as tasked through the standard air tasking order (ATO) process.

Though the above is presented as an independent, ground-centric element, it is easily scalable to meet the conceptual framework of the OEPF. Though atypical in thought, the use of the MAG as the command element for a ground-based force reinvigorates the concept of the ACR, while complementing the inherent strengths of the MAGTF. Used in this manner, the OEPF would receive an O-6 commander (captain), and can grow considerably to a regimental- or brigade-size task force. All other components of the OEPF remain unchanged except in potential size. If a choice must be made between the two alternatives of a completely independent OEPF with added Marine Corps structure, the MAG model is preferred over the smaller, less decisive tank battalion model. Finally, if span of control is an anticipated strain on the independent model, the OEPF can be organized into a MAGTF, with either the tank or LAR battalion headquarters serving as the GCE commander. However, the headquarters of two battalions operating within the ground scheme with only one as the overall commander may cause internal friction. Still, this option should be considered in that it facilitates overall command and control.

EMPLOYMENT OF THE OEPF IN OMFTS

This organization can be used in amphibious operations to achieve the desired effects conceptually outlined in *Expeditionary Force 21*. The main distinction between ship-to-shore movements of previous generations and the emerging concept of STOM is the bypass of a beachhead. Conceptually, this bypass enables attacking forces to leverage the surprise gained by using the sea as maneuver space to rapidly close onto the ultimate objective without having to address the tactical problem of breaking through defenses established along the FBHL. Bypassing this defensive scheme with vertical envelopment, though conceptually appealing, would fail to provide the combat power and subsequent mobility necessary to truly exploit the initial surprise achieved. Operation Market Garden, the unsuccessful Allied attempt to envelop the Siegfried Line and force a crossing of the Rhine into Germany, remains a historic case of the shortfalls of airborne

²³ This idea was advocated by Guderian in *Armored Forces* to be used by "parachute troops," perhaps on a grander scale. However, the same role can be used by rotary-wing cavalry elements on a smaller scale. Though this assumes a certain level of risk dependent on the enemy situation, but when used in conjunction with persistent rotary-wing close air support, this organization would provide a flexible, "boundable" capability that would greatly enhance speed and mobility of ground components pursuing enemy forces attempting to delay. As suggested by *Tactics*, 7-4.

units in deep penetrations.²⁴ Furthermore, vertical envelopment within an area of operations where air superiority is contested is simply not viable.

Just as the rigid defense in depth of the western front of World War I evolved to that which used elasticity to mitigate the overwhelming effect of preassault artillery barrages, coastal defense systems of the future will likely demonstrate elasticity to prevent against the heavy naval gun fire and aerial shaping expected in the preassault phase. As the defenses of the Pacific in World War II evolved from a contested defense at the beach to those arrayed in depth, it should be expected that area denial threats will be layered to mitigate attrition at the coast. To those defending a coastline, common sense dictates that ADA should remain hidden until the assault phase commences. With the vertical envelopment threat thereby neutralized the enemy could focus on arraying defenses deep of the suspected FBHL, ceding the beach to the attacker while maneuvering the operational reserve to an area that could defeat subsequent breakthroughs. In this instance, the threat of surprise is neutralized, and the attacker can be pushed back into the sea by counterattack. Such is the character of the modern defense in depth. An ACE-centric MAGTF will not fundamentally change that, especially against a near-peer foe. As a result, the phases of an amphibious operation of the future will still require the fundamental requirements of penetration of the defense in depth, exploitation of that penetration, followed by the achievement of the ultimate objective.

CONCLUSION

"There will always be men eager to voice misgivings, but only he who dares to reach into the unknown will be successful."²⁵

Though this analysis has been deeply rooted in history, the intention is to look forward regarding the likelihood of the modern MAGTF to face a defense in depth, and the required revisions in organization and employment necessary to achieve operational results. Therefore, this analysis suggests that the breakthrough of a modern defense in depth will be a requirement of future war, and that exploitation and pursuit beyond that breakthrough is how one transitions tactical action into operational success. In its current employment of armor in doctrine and practice, the MAGTF fails to capitalize on the shock effect of the armor force to truly achieve an asymmetric, indirect effect. Instead, organizing self-sustaining armor and cavalry into the conceptual OEPF best exploits the advantages of concentrated armor at the operational level and provides the tempo advantage of true maneuver warfare doctrine, thereby maximizing its operational impact. Establishing this framework in training would provide the experience and support relationships necessary to test the concept in practice. Furthermore it is necessary to break the paradigm of disaggregating armor to avoid the pitfalls associated with applying what works in counterinsurgency operations to conventional combat. In the latter, only armor employed in mass has been proven to be the most effective method. The OEPF provides a conceptual framework to maximize this fact.

²⁴ Operation Market Garden was a failed Allied attempt to bypass the Siegfried Line with airborne troops of four divisions of the First Allied Airborne Army, and to keep the retreating German Army under pressure in pursuit. Though the initial landings were successful, failure was largely attributed to the speed of the German advance against slow moving, light infantry of the Allied airborne divisions. This operation is mentioned here to highlight that, though airborne troops have been used effectively as a supporting effort to major operations, airborne troops are ill-suited for exploitation and pursuit primarily due to mobility and striking power. Therefore, the viability of vertical envelopment as the decisive operation in contemporary deep penetrating exploitation and pursuit is questionable. For more on Operation Market Garden, see John C. McManus, *September Hope: The American Side of a Bridge Too Far* (New York: Penguin, 2012).

²⁵ Guderian, Armored Forces.

Radical Islam Goes Global Why the Internet Forces the U.S. Government to Confront an Ideology

by Jamie D. McDonald, U.S. Central Intelligence Agency¹

n November 2009, U.S. Army Major Nidal Hasan yelled "Allah Akbar" and opened fire on his fellow soldiers at Fort Hood, Texas. He killed 13 and wounded 32.² Later investigation revealed that he had had extensive email correspondence with an American and Yemeni citizen, the radical Sunni imam Anwar al-Awlaki.³ Nor was Hassan alone. According to the *New York Times*, in approxmiately a dozen terrorist cases in the United States, United Kingdom, and Canada, the perpetrators had ties to al-Awlaki, often solely through his Internet preaching.⁴

To date, this has been a one-off. Al-Awlaki was unique in that he spoke excellent English and was charismatic as well as religiously credentialed. And now he is dead, killed by a drone strike in Yemen.⁵ So why worry?

This paper argues that, far from being a one-time affair, the success of Anwar al-Awlaki's radicalization-by-Internet model is likely to be replicated and, in fact, to become the dominant effective means by which radical Islam achieves victories against the United States. Not only radicalization, but also instruction on terrorism tactics, including improvised explosive devices (IEDs) and targeting can be disseminated via the Internet—a method that provides for a completely decentralized structure of radical Islamists that cannot be targeted effectively by traditional methods.

THE NATURE OF THE PROBLEM

Ultimately, the United States' best weapon in the fight against radicalization and training by Internet is crafting (or adopting) and advancing a counterideology that will overcome radical Islam. With no terrorist training camps or radical mosques to target kinetically or with other traditional methods, the United States must turn to nontraditional techniques. America will

¹ Jamie D. McDonald is a graduate of the Marine Corps University's Command and Staff College. This paper won the Central Intelligence Agency, Office of Military Affairs, Intelligence Writing Award for Academic Year 2013–14. ² Josh Rubin and Matt Smith, " 'I Am the Shooter,' Nidal Hasan Tells Fort Hood Court-martial," CNN News, 6 August 2013, http://www.cnn.com/2013/08/06/justice/hasan-court-martial/.

³ Brian Ross and Rhonda Schwartz, "Major Hasan's E-Mail: 'I Can't Wait to Join You' in Afterlife," ABCNews, 19 November 2009, http://abcnews.go.com/Blotter/major-hasans-mail-wait-join-afterlife/story?id=9130339.

⁴ Scott Shane, "Born in U.S., a Radical Cleric Inspires Terror," *New York Times*, 18 November 2009, http://www.nytimes.com/2009/11/19/us/19awlaki.html.

⁵ Jennifer Griffin, "Two U.S.-Born Terrorists Killed in CIA-Led Drone Strike," Fox News, 30 September 2011, http://www.foxnews.com/politics/2011/09/30/us-born-terror-boss-anwar-al-awlaki-killed/.

not, however, meet with success if the U.S. government simply tries to squash jihadist Internet training sites, videos, forums, etc., as they appear. Unless the United States can radically improve its methods for shutting these down—and finds some way to deal with First Amendment protections for American citizens—this "whack-a-mole" approach will not be able to keep pace with the creation of new sites and videos. According to Haifa University professor Gabriel Weimann, these sites have increased from fewer than 100 before the 11 September attacks to more than 4,800 by 2009.⁶ Further illustrating the problems with attempting to fight radical Islam by blocking undesirable media, note that it took YouTube a full year after the Fort Hood attacks to remove some (not all) of al-Awlaki's videos. And even then, the company did so only under Congressional pressure.⁷

Countering the Ideology

So if the United States cannot successfully target the means of Internet radicalization, it must target the radicalization itself—that is, the ideology of radical Islam. A study by the Washington Institute for Near East Policy states that

Engagement and counterterrorism are key elements of [the U.S. government's] comprehensive strategy [against radical Islamic groups], but the wide space between them must be addressed. Missing are the policies and programs that should suffuse the space between these two poles on the counterradicalization spectrum, including efforts to contest the extremist narrative of radicalizers, empower and network mainstream voices countering extremism, promote diversity of ideas and means of expression, and challenge extremist voices and ideas in the public domain.⁸

The U.S. government must contest the narratives that radicals like Anwar al-Awlaki present to their followers to stem the tide of people using the Internet to convert to radical Islam. Al-Awlaki was unusual so far, but with millions of Muslims across the English-speaking world, the odds are that another charismatic English speaker with religious credentials will embrace radical Islam and begin to spread the ideology among American citizens. The United States must be prepared with an alternate ideology that appeals to those who might otherwise be receptive to radical Islam.

A Definition of Radical Islam

Radical Islam ideology claims that it is legitimate for Muslim individuals to undertake violent jihad using any means available against non-Muslims either to redress perceived wrongs in Muslim lands, to encourage conversion to Islam, to expel non-Muslims from Muslim lands, and/ or to create an authentic Muslim state. It differs from traditional Islam in that traditional understanding of jihad requires either a central caliph or *imam* (Islamic leader) of Islam to declare a communal jihad for offensive purposes (and no such central authority exists today) or a state of emergency in which jihad must be undertaken by all individuals in the area due to an invasion of Muslim lands by non-Muslim forces.⁹ Thus, the primarily Muslim Afghans fighting the So-

⁶ Eben Kaplan, "Terrorists and the Internet," Council on Foreign Relations, 8 January 2009, http://www.cfr.org /terrorism-and-technology/terrorists-Internet/p10005.

⁷ "YouTube Pulls Clips It Says Incite Violence," CNN News, 4 November 2010, http://edition.cnn.com/2010/US /11/04/awlaki.youtube/.

⁸ J. Scott Carpenter et al., *Fighting the Ideological Battle: The Missing Link in U.S. Strategy to Counter Violent Extremism* (Washington, DC: Washington Institute for Near East Policy, 2010), 1, http://www.washingtoninstitute.org/uploads /Documents/pubs/StrategicReport04.pdf.

⁹ James Turner Johnson, "Jihad and Just War," First Things, June 2002, http://www.firstthings.com/article/2002/06 /jihad-and-just-war.

viets when they invaded in 1979 could be interpreted by traditional Islam as a legitimate jihad, while—in contrast to radical Islam's interpretation—fighting the United States because they have an agreement with the government of Bahrain to base the U.S. Navy's Fifth Fleet there would not be legitimate jihad.

This is not to cast counterideology as a panacea, however. As the Washington Institute study indicates, radical Islam provides a justification for violence and should not be ignored, but the ideology is not the sole reason its adherents commit violent acts.¹⁰

THE TRADITIONAL PATH TO JIHAD

It is useful to have an understanding of the traditional path of Islamic radicalization and subsequent violence before proceeding on to consider its parallels using the Internet. As this paper is most concerned with preventing violence against Western society, the below sections deal primarily with the dynamics present among subjects living in Western societies at the time of their radicalization. It is presumed that those radicalizing in the Middle East and South Asia can be fought using counterterrorism methods already practiced by the U.S. security establishment.

Radicalization

Traditionally, Islamic radicalization in Western society has taken place in person. In the United States as well as abroad, this has taken place within mosques or Islamic centers with radical speakers or in venues with ample opportunities for proselytization, such as prisons. The subject begins to listen to a radical imam or other spiritual leader, finds the support of a group of people who believe similarly, adopts radical Islamic thought into his or her own world view, and then continues his or her own indoctrination while preparing to commit some violent act.

The case of Richard C. Reid, the attempted shoe bomber, is instructive. After converting to Islam while in prison, Reid began attending London's Brixton Mosque and then moved to the Finsbury Park Mosque, a known hotbed of Islamic radicalism, where *Time* magazine notes that convicted terrorists Zacarias Moussaoui, Djamel Beghal, and Kamel Daoudi worshipped as well. He took an Islamic name, Abdul Rahim, and began espousing extremist ideology. He followed up with travel to Afghanistan, Pakistan, Egypt, and Turkey and, at one or all of those stops, received training in terrorist tactics and jihad.¹¹

Reid's journey reflects what the New York City Police Department's (NYPD) well respected Intelligence Division discovered about Islamic radicalization. Individuals often feel frustration with their own lives or with the politics of their own government, as Reid likely had while in prison. They then, either alone or in a community of similar individuals, encounter radical Islamic ideology. This can be within a mosque, as it was with Reid, but also within a hookah bar, café, Islamic student association, or retail or other businesses either catering to or employing Muslims who proclaim radical beliefs.¹²

The subject then enters into what the NYPD refers to as *indoctrination*, where he progresses deeper into his radical Islamic ideology and, importantly, receives encouragement toward jihad from a "spiritual sanctioner," who could be an imam or just someone whom the subject perceives to be a religious authority, such as an older prisoner or veteran jihadi.¹³ For Reid, this appears to have been the Finsbury Mosque's noted imam, Abu Hamza al-Masri, the one-eyed imam now

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¹⁰ Carpenter et al., *Fighting the Ideological Battle*, 2.

¹¹ Michael Elliott, "The Shoe Bomber's World," *Time*, 16 February 2002, http://content.time.com/time/world/article/0,8599,203478,00.html.

¹² Mitchell Silber and Arvin Bhatt, *Radicalization in the West: The Homegrown Threat* (New York: NYPD Intelligence Division, 2007), 6–7, 21–35.

¹³ Ibid., 36.

incarcerated in the United States and awaiting trial on terrorism charges.¹⁴ The subject then withdraws from the mosque as his thinking becomes more extreme than a mainstream mosque can support, at least in the West, and he turns to political thought. Reid's trips abroad in Europe and to a madrasah in Pakistan likely fulfilled this need in his case.

Jihað

The final stage is jihad, where the individual decides to undertake violent action and begins his training and preparation.¹⁵ Richard Reid attended at least one terrorist training camp in Afghanistan. This stage is that in which most of the actual training and planning for violence takes place. Again, traditionally this has usually taken place at training facilities in Pakistan, Afghanistan, Saddam-era Iraq, or Qaddafi-era Libya. These were run by al-Qaeda or a similar extremist group, and the trainees were either known to the organization directly or had references from some trusted third party. The subjects taught would vary from small arms and tactics to improvising explosive devices, according to the subject's plans and the instructors' evaluation of the subject's intelligence.

THE INTERNET-ENABLED PATH TO JIHAD

All of these traditional paths can be replaced by the Internet. No longer do subjects need to voyage abroad or even travel to places like Northern Virginia's Dar al-Arqam Mosque to radicalize. Nor do they need attend training camps like those in Afghanistan to learn terrorist tactics. Instead, they can do so right from their smart phone, computer, or tablet. In fact, soon after al-Qaeda was rooted from its original site in the Afghan mountains in November 2001, it began intentionally migrating its movement into cyberspace.¹⁶

Radicalization

Although radicalization occurs much more easily and frequently as a result of direct, personal contact, some radical Islamists have used the Internet to contact like-minded individuals and bolster their commitment. Likewise, some have largely self-radicalized through the Internet alone.

Initial exposure to radical Islam is not difficult with the Internet. Works by al-Qaeda figures like Osama bin Laden and Ayman al-Zawahiri as well as radical Islamic clerics like Anwar al-Awlaki and Sayyid Qutb are easily found online in text, video, and audio formats. Today, there are many radical Islamist websites available that extol al-Qaeda or similar ideologies. According to Dr. Norman Cigar, Saudi tribal websites have included such sections, and the open, no-password-needed forums at radical Islamist websites like snamalislam.com promote undisguised jihadist ideology under a banner depicting al-Qaeda leader Ayman al-Zawahiri.¹⁷ Even al-Qaeda's original web forum, which sprang up in the wake of the 11 September attacks, remains publicly available online in archive form.¹⁸ And now the messages are spreading to Facebook and Twitter.¹⁹

While most of these websites are geared largely toward Arabic speakers, several have foreign

¹⁴ Elliott, "The Shoe Bomber's World."

¹⁵ Silber and Bhatt, *Radicalization in the West*, 43–44.

¹⁶ Steve Coll and Susan B. Glasser, "Terrorists Turn to the Web as Base of Operations," *Washington Post*, 7 August 2005, http://www.washingtonpost.com/wp-dyn/content/article/2005/08/05/AR2005080501138.html.

¹⁷ Norman Cigar, "Tribes, Society and the State in Saudi Arabia: Change and Continuity and the Implications for Security and Stability," *Magbreb Review* 36, No. 3/4 (2011): 230; and مالــــــس قكــبــش (Islam Network Hump) web forum, accessed 15 February 2014, www.snamalislam.com/vb/index.php.

¹⁸ "Al Neda website archive," accessed 15 February 2014, https://cryptome.org/al-neda.htm.

¹⁹ Aaron Y. Zelin, "Jihad's Social Media Trend," Washington Institute for Near East Policy, 5 February 2013, http://www.washingtoninstitute.org/policy-analysis/pdf/jihads-social-media-trend.

language sections. Anwar al-Awlaki along with al-Qaeda on the Arabian Peninsula (AQAP) went so far as to start an English-language, online jihadist magazine called *Inspire*. This English language publication is, according to Bruce Riedel, a former CIA officer now with the Brookings Institute, "clearly intended for the aspiring jihadist in the U.S. or U.K. who may be the next Fort Hood murderer or Times Square bomber."²⁰ In its pages, the aspiring jihadi will find articles claiming to reveal the true nature of the West and calling for the killing of figures like Dutch politician Geert Wilders and former Muslim Ayaan Hirsi Ali.

In the case of Nidal Hasan, e-mail correspondence with Anwar al-Awlaki took the place of personal contact. Hasan had met al-Awlaki when the latter was working in Northern Virginia. So while his case was not solely Internet-based, he used e-mail to continue that relationship in a manner much harder for law enforcement officials to trace than if he had met personally with al-Awlaki.²¹

Meanwhile, attempted jihadist Bryant Neal Vinas seems to have been radicalized solely through the Internet. According to an unnamed law enforcement source of the *New York Times*, Vinas met a few people at his local mosque, but the radicalization seems to have come primarily via Internet sites. His radicalization was sufficiently thorough that, after Vinas travelled to al-Qaeda training camps in Pakistan and Afghanistan, he attempted to kill American soldiers via a rocket attack on a U.S. base.²² Again, while his training was done traditionally in camps, his radicalization was Internet-based.

As mentioned previously, radical Islamists have recognized the potential of Internet communications and have begun to exploit it. As particular personalities or websites become more effective, they are likely to become the targets (kinetic, cyberwarfare, or otherwise) of the U.S. government's traditional antiterrorist methods. But these methods alone will not be sufficient to stop the online spread of jihadist ideology, as sites can be put up much faster than they can be taken down by friendly forces, and information can circulate in manners that are almost impossible to stop, such as encrypted email, thumb drives, etc. To understand the problems facing the U.S. government, consider how, with the aid of the Internet, Umar Farouk Abdulmutallab, the "underwear bomber," was identified, contacted, recruited, trained, and made operational within six weeks.²³

Training

To date, according to the Council on Foreign Relations, the use of the Internet as a planning and operational tool has been minimal.²⁴ Although those who have not travelled to physical training camps have pulled off attacks that killed Americans (e.g., Nidal Hasan and Carlos Leon Bledsoe, who killed a U.S. Army private in a drive-by shooting in Arkansas), most of these have been less effective than the successful attacks carried out by those who have learned how to improvise explosive devices at al-Qaeda or other camps.²⁵ This trend is likely to falter, however, as Internet training improves and the U.S. government and its allies continue to clamp down on overseas training camps. Distance learning is improving in mainstream society as educational institutions

²⁰ " 'How to Make Bomb in Kitchen of Mom' Featured in Al Qaeda's 1st English Magazine," FoxNews, 1 July 2010, http://www.foxnews.com/world/2010/07/01/make-bomb-kitchen-mom-featured-al-qaedas-st-english-magazine/.
²¹ Rubin and Smith, " 'I Am the Shooter'."

²² William K. Rashbaum and Souad Mekhennet, "L.I. Man Helped Qaida, then Informed," *New York Times*, 22 July 2009, http://www.nytimes.com/2009/07/23/nyregion/23terror.html.

²³ Gordon Lubold, "Internet Aids Terrorist Recruiting, Radicalization, Pentagon Says," *Christian Science Monitor*, 10 March 2010, http://www.csmonitor.com/USA/Military/2010/0310/Internet-aids-terrorist-recruiting-radicalization -Pentagon-says.

²⁴ Kaplan, "Terrorists and the Internet."

²⁵ James Dao, "Man Claims Terror Ties in Little Rock Shooting," New York Times, 21 January 2010, http://www.nytimes.com/2010/01/22/us/22littlerock.html?hp&_r=0.

learn what works well and what does not, and it is only a matter of time until adherents of radical Islam learn best practices to convey their information on terrorist tactics effectively.

Already radical Islamists have a wealth of information on how to carry out their own personal jihad. *Inspire* magazine carried in one of its issues an article entitled, "How to Make a Bomb in the Kitchen of Your Mom." It included English-language instructions on how to make a crude pipe or pressure-cooker bomb with sugar and phosphorous and an alarm clock for a timer.²⁶ Dzhokhar and Tamerlan Tsarnaev claimed that they followed those instructions in the Boston Marathon bombing that killed three and injured hundreds.²⁷ Likewise, some radical Islamist websites contain a "military forum" that provides instructions on how to make chemical weapons, roadside and vehicle-borne IEDs, and suicide vests.²⁸ It is not the purpose of this paper to evaluate the effectiveness of those instructions, but rather it is to warn that these avenues for training exist and that improvements in their ability to convey information pose a growing, substantial risk to U.S. national security.

In addition, radical Islamists who are American citizens do not need explosives training to kill a great number of Americans. They can instead buy small arms, illegally carry them to a gunfree zone with no police presence and plenty of people (or no police presence and few exits), and begin shooting. The Tsarnaevs could have killed far more people with high-caliber, semiautomatic rifles in the crowd at the Boston Marathon than they did with two pressure-cooker IEDs.

U.S. GOVERNMENT EFFORTS SO FAR

Obviously, if the number of extremist websites has grown exponentially, U.S. government efforts to halt the spread of radical Islamic ideology have not been successful. The U.S. government has several efforts underway to counter radical Islam, other than the obvious military actions. Unfortunately, very few of them provide any ideology to replace radical Islam, and those efforts that do attempt to provide an alternate are problematic.

Strategic Implementation Plan

In 2011, the Barack H. Obama administration issued a *Strategic Implementation Plan for Empowering Local Partners to Prevent Violent Extremism in the United States* (hereafter, SIP).²⁹ The objectives of the strategic plan are "(1) enhancing Federal engagement with and support to local communities that may be targeted by violent extremists; (2) building government and law enforcement expertise for preventing violent extremism; and (3) countering violent extremist propaganda while promoting American ideals."³⁰ These goals sound reasonable. Strong communities can, to some extent, police themselves, and more expertise on extremism is never a bad thing, but the third objective is more relevant for the purposes of this paper.

When it was issued, activities under the SIP had largely consisted of attempts to encourage and empower communities and civic activists to counter violent extremism online rather than authorizing U.S. government entities to do so directly. This was likely to avoid First Amendment and other legal issues. Future activities listed in the SIP also center on building community and government expertise, but one proposal describes the Department of Homeland Security as "providing grants to counter violent extremist narratives and ideologies." Unfortunately, rather

²⁶ " 'How to Make Bomb in Kitchen of Mom' Featured in Al Qaeda's 1st English Magazine."

²⁷ Richard A. Serrano, Melanie Mason, and Ken Dilanian, "Boston Bombing Suspect Describes Plot," Los Angeles Times, 23 April 2013, http://articles.latimes.com/2013/apr/23/nation/la-na-boston-bombings-20130424.

²⁸ Islam Network Hump.

²⁹ The *Strategic Implementation Plan* is more useful to examine than the *National Security Strategy* (NSS) to counter criticism that the NSS is too high-level a document to contain the specifics on counterideology. *Strategic Implementation Plan for Empowering Local Partners to Prevent Violent Extremism in the United States* (Washington, DC: White House, 2011), http://www.whitehouse.gov/sites/default/files/sip-final.pdf

³⁰ Strategic Implementation Plan, 2.

than an ideology with a realistic chance of appealing to those who might otherwise be attracted to radical Islam, the ideology that the strategic plan seeks to use is described as "freedom, fairness, equality, dignity, hope, and opportunity."³¹ To those who are already disaffected with the West—i.e., those most likely to be swayed by radical Islamic ideology—these values are not likely to resonate.

In addition, as the Congressional Research Service (CRS) has pointed out, there is no overall lead agency for this, or any of the other objectives.³² Portions are designated for different agencies, but the overall message that is supposed to compete with the ideology of radical Islam is nowhere set beyond the six words mentioned above.

Notably, none of the efforts mentioned in the White House's strategic plan mention attempts to disrupt online training in terrorist tactics.

Monitoring

According to CRS, such U.S. government agencies as the Federal Bureau of Investigation (FBI), Department of Defense, and Department of Homeland Security focus on monitoring websites for threat, law enforcement, and intelligence information and on removing websites deemed to be too dangerous to be allowed to operate. CRS cites the example of increased activity on radical Islamist websites in relation to a Florida man's intent to burn copies of the Quran to memorialize 11 September 2010. The FBI noted the increase and reportedly issued an intelligence bulletin noting threats against the pastor and the event as well as U.S. interests in general.³³ Monitoring these sites is simple enough, albeit with jurisdictional issues for some agencies, but its utility is only to warn of the possibility of an attack. It rarely provides the details of who is involved or how the attack will unfold. Even if the attack is foiled, the individual jihadist remains radicalized and prepared to try again—likely with higher operational security.

Removing Websites

Taking action against radical Islamist websites is likewise troublesome. According to the Council on Foreign Relations, other than the debate over whether to monitor each particular website or to remove it, U.S. agencies face difficulties due to First Amendment protections for webmasters and servers in the United States.³⁴ And analysts across the political spectrum—from the left-leaning Electronic Frontier Foundation to the libertarian Cato Institute—have pointed out that, once information has made it onto the Internet, taking down the website does little good. The information can be forwarded by email or new websites can be put up faster than the U.S. government can remove them with current methods.³⁵

The Department of State's Proactive Effort

The U.S. Department of State has taken a different tack by creating the Digital Outreach Team (DOT). Native speakers of Arabic, Persian (Farsi), and Urdu take part in mainstream news sites and online forums, identify themselves as U.S. officials, and counter radical Islamist statements.³⁶ Their stated and overt goal is "to counter terrorist propaganda and misinformation

³¹ Ibid., 18.

³² Jerome P. Bjelopera, *Countering Violent Extremism in the United States* (Washington, DC: Congressional Research Service, 2012), 4, https://www.fas.org/sgp/crs/homesec/R42553.pdf.

³³ Catherine A. Theohary and John Rollins, *Terrorist Use of the Internet: Information Operations in Cyberspace* (Washington, DC: Congressional Research Service, 2011), 6–7, https://www.fas.org/sgp/crs/terror/R41674.pdf.

³⁴ Kaplan, "Terrorists and the Internet."

³⁵ Mary Noble, "Why Doesn't the U.S. Government Destroy Terrorist Websites?," *Politix* (blog), 15 May 2013, http://politix.topix.com/story/6017-why-doesnt-the-us-government-destroy-terrorist-websites.

³⁶ Gina Abercrombie-Winstanley, "Terrorist Use of the Internet" (speech, 2d Tri-Border Conference, Manilla, Philippines, 28 June 2010), http://www.state.gov/j/ct/rls/rm/2010/143876.htm.

about the United States across a wide variety of interactive digital environments that had previously been ceded to extremists."³⁷ While the idea is a good starting point, importantly, the team neither attempts to advocate a counterideology nor does it point out how un-Islamic the radical jihad message is. The team only attempts to explain U.S. actions. Measuring the effectiveness of these attempts is problematic at best, but in 2012 they totaled only 7,000 online engagements, and those were confined to mainstream sites. None of them took place on the radical Islamist forums.³⁸ Contrast this with the 4,800 known radical Islamist websites—each with hundreds or even thousands of discussion threads—cited above, and you see how ineffective even 7,000 engagements can be. A *Middle East Journal* case study of the DOT's efforts with respect to President Barack Obama's 2009 speech to the Muslim world in Cairo found that only 4 percent of those who responded to DOT's messages were positive. The remainder of the messages were negative, with the most common response being to call the DOT's native speakers some variation of a slave or traitor.³⁹ The DOT is to be commended for engaging on Arabic, Persian, and Urdu forums, but the effort is as yet too small and improperly focused to make a difference.

U.S. Cyber Command

The Department of Defense, of course, has unified many of its related activities under U.S. Cyber Command (USCYBERCOM). Its mission statement is primarily defensive—that is, to protect U.S. information systems—except for the final point: "conduct full-spectrum military cyberspace operations in order to enable actions in all domains, ensure US/Allied freedom of action in cyberspace and deny the same to our adversaries."⁴⁰ That last is offensive in spirit, at least, but it represents the whack-a-mole approach to radical Islamist websites, which is doomed to failure.

Department of Homeland Security

The Department of Homeland Security (DHS) is not even addressing radical Islamist ideology in its counterterrorism program. Instead, the department notes that violence can come from many ideologies and, likely as a result of the White House's strategic plan, it seeks to "support local communities and law enforcement." This may be an attempt to soothe the concerns of American Muslims, who would object if their particular religion were singled out, but the fact remains that DHS's strategy does not include attempting to dissuade or preempt the spread of radical Islamist or any other ideology.⁴¹

FOREIGN EFFORTS

Other governments have tried similar efforts, reaching out to strengthen communities, educating law enforcement, defending government actions against extremist critiques, etc. Several, however, including European nations, have also included the important concept of counterideology. The discussion below is not an exhaustive list, but provides context for those charged with U.S. national security.

³⁷ "Center for Strategic Counterterrorism Communications," U.S. Department of State, http://www.state.gov/r/cscc/index.htm.

³⁸ Caitlin Dewey, "The State Department's Arabic Outreach Team Spoofed an al-Qaeda Video," Washington Post, 9 July 2013, http://www.washingtonpost.com/blogs/worldviews/wp/2013/07/09/the-state-departments-arabic-outreach -team-spoofed-an-al-qaeda-video/.

³⁹ Lina Khatib, William Dutton, and Michael Thelwall, "Public Diplomacy 2.0: A Case Study of the U.S. Digital Outreach Team," *Middle East Journal* 66, No. 3 (Summer 2012): 459, 462.

 ⁴⁰ "U.S. Cyber Command," Department of the Army, http://www.arcyber.army.mil/Organization/USCyberCommand.
 ⁴¹ "Countering Violent Extremism," U.S. Department of Homeland Security, http://www.dhs.gov/dhss-approach -countering-violent-extremism.

Saudi Arabia

Saudi Arabia is frequently cited by experts as a successful example of fighting radical Islam. The Saudi government uses a multipronged approach to defeat radical Islam that it calls "men, money, and mindset." The first prong entails law enforcement operations against those who commit acts of terrorism. The second prong is the disruption of funding avenues. The "mindset" prong is fighting the ideology known as radical Islam.⁴² The Ministry of the Interior, in particular, is charged with administering several programs that propagate traditional interpretations of religious doctrine and even go so far as to promote particular recognized religious academics and authorities that refute radical Islam's teachings on jihad. The Ministry of Culture and Information also sends religious experts to schools and mosques to denounce radical Islam. The government has erected billboards contrasting mainstream Islam with the death and destruction caused by radical Islam. The Ministry of Islamic Affairs likewise organizes and sponsors lecture series, classes, and discussions in mosques; and the Ministry of Education fills a similar role for the nation's schools with programs and written materials aimed at parents and students alongside a training program for teachers believed to have extremist leanings. According to a report by the Carnegie Endowment for International Peace, Saudi officials claim that about seven different antiradical Islam activities occur each day at schools across the country.⁴³

United Kingdom

The United Kingdom's counterterrorism strategy (CONTEST) has four pillars: pursue, prevent, protect, and prepare. The "prevent" portion deals with countering the ideology of "terrorism" or "violent extremists" generally, but the CONTEST document makes it clear that the ideology it refers to is that of al-Qaeda and related groups. Like the United States, the United Kingdom (UK) remains committed to freedom of speech, "[b]ut preventing radicalisation must mean challenging extremist ideas that are conducive to terrorism and also part of a terrorist narrative."⁴⁴ To do so, the UK has recognized the strategic importance of Islamic studies and backed work by academics and community leaders to contextualize Islam in the UK. In addition, its Foreign and Commonwealth Office and Department for Communities and Local Government have sponsored lectures, debates, and events supporting a mainstream version of Islam.⁴⁵

Yemen

Yemen too is engaged in a multipronged campaign against radical Islam. The counterideology element consists of the Yemeni government exerting control over mosques and directing mainstream Islamic scholars to disseminate messages of tolerance and compassion via mass media. Additionally, the Yemeni Ministry of Religious Endowments administers counterideology and mainstream Islam curricula in the country's religious institutions.⁴⁶

⁴² Combatting Terrorism: U.S. Agencies Report Progress Countering Terrorism and Its Financing in Saudi Arabia, but Continued Focus on Counter Terrorism Financing Efforts Needed (Washington, DC: Government Accountability Office, 2009), 13, http://www.gao.gov/assets/300/295873.pdf.

⁴³ Christopher Boucek, *Saudi Arabia's "Soft" Counterterrorism Strategy: Prevention, Rebabilitation, and After Care*, No. 97 (Washington, DC: Carnegie Endowment for International Peace, 2008), 8–10, http://carnegieendowment.org/files /cp97_boucek_saudi_final.pdf.

⁴⁴ *CONTEST: The United Kingdom's Strategy for Countering Terrorism* (London: Secretary of State for the Home Department, Her Majesty's Government, 2011), 12, https://www.gov.uk/government/uploads/system/uploads/attachment _data/file/97995/strategy-contest.pdf.

⁴⁵ *Prevent Strategy* (London: Her Majesty's Government, 2011), 49, https://www.gov.uk/government/uploads/system /uploads/attachment_data/file/97976/prevent-strategy-review.pdf.

⁴⁶ Col Taisee Saleh, "Yemen National Strategy to Combat Global Terrorism" (master's dissertation, U.S. Air War College, 2006), 6, http://www.dtic.mil/get-tr-doc/pdf?AD=ADA448617.

Russia

Then-President Dmitry Medvedev met with leaders from its predominately Muslim areas including Chechnya in 2009. He proposed a Muslim television station to promote mainstream Islam alongside restrictions on access to overseas Islamic education.⁴⁷ While the results of this effort remain to be seen, Russia is possibly the one country that Islamic communities view in as poor a light as the United States, so its efforts are worth watching.⁴⁸

Jordan

Jordan's program to counter the ideology of radical Islam centers on a deradicalization program in Jordanian prisons, according to the Soufan Group, a strategic intelligence company. This program is religion based and operates in concert with literacy classes and employment aid as necessary.⁴⁹

CONCLUSIONS

The Internet continues to penetrate into communities around the world; to increase accessibility with the ubiquity of WiFi hotspots, smart phones, tablets, and wearable computers; to improve machine translation abilities like Google Translate; and to improve bandwidth to make streaming video and complex images more efficient. All of these trends have important impacts on the abilities of the ideology of radical Islam to reach more people, more frequently. This will facilitate not only the exposure of people to radical Islam, but it will also draw together individuals for that critical indoctrination phase of radicalization in which the company of like-minded people is critical. It will also provide more "religious sanctioner" authority figures to give adherents of radical Islam the encouragement, affirmation, and permission to continue in the ways of violent jihad.

Counterterrorism professionals recognize the importance of fighting the ideology of radical Islam. Because the U.S. government cannot now, and will likely not be able in the future to, prevent this ideology from spreading using cyberwarfare or traditional means, the U.S. national security establishment must advance a competing ideology. While the U.S. government faces legal constraints in directly advocating a particular religion or its interpretation, the United Kingdom has shown the way forward by supporting the work of mainstream Islamic figures who are able to discredit radical Islam from inside the faith.

RECOMMENDATIONS

The U.S. *National Security Strategy* and the implementing strategic plans must explicitly acknowledge that U.S. security is threatened by a specific ideology above all others. While the Oklahoma City bombing, the Unabomber, and other ideologically motivated attacks indicate that radical Islam is not the only threat to U.S. security, no other source comes close to the amount of American casualties that have been caused by adherents of radical Islam. The United States must stop attempting to be circumspect about who our enemies are and name them directly.

The U.S. government must clearly delineate its attempts to discredit radical Islam from an attack on mainstream Islam. American society is generally reluctant to criticize any religion, especially a minority religion, and Muslims in America and abroad are understandably worried

⁴⁷ Denis Dyomkin, "Medvedev Turns to Muslim Clerics to Counter Islamic Radicals," *FaithWorld* (blog), Reuters, 31 August 2009, http://blogs.reuters.com/faithworld/2009/08/31/medvedev-turns-to-muslim-clerics-to-counter-islamist -radicals/.

⁴⁸ RIA Novosti, "Russia's Image Mostly Negative, Poll Says," *Moscow Times*, 5 September 2013, http://www.themoscow times.com/news/article/russias-image-mostly-negative-poll-says/485540.html.

⁴⁹ "Jordan's Counterterrorism Program," Soufan Group, 27 August 2013, http://soufangroup.com/tsg-intelbriefs -jordans-counterterrorism-program/.

about attacks and discrimination against their religion that might arise out of backlashes to radical Islamic attacks. By carefully crafting a message that clearly only seeks to discredit radical Islam, mainstream Muslims can be reassured and the hesitation of American society writ large can be assuaged. This might be accomplished through messages contrasting mainstream Islam with radical Islam, or it might be better served by finding a label for radical Islamists that denies any tie with mainstream Islam.

The message must constitute an offense against radical Islam. Explaining U.S. actions like the Department of State's Digital Outreach Team is a worthwhile endeavor, but ultimately it is a defensive action. The U.S. government must lean forward and illustrate why radical Islam is wrong, and it must push that message aggressively.

The counterideology message must consider the audience. This is not something that must play well to the American voting public, but to the people who might otherwise be lured by radical Islam. That means keeping in mind that anyone looking for meaning in life on the Internet must find something fulfilling. Bromides like "the freedom to be yourself" or pushing democracy as the best way for a people to make themselves heard are not going to work if what the individual is trying to discover is who he really is. Similarly, messages that appeal to the average Chinese Uighur are not the same that will appeal to the average Gulf Arab or the average Senegalese.

Choose charismatic spokespeople. If Osama bin Laden had been a complete bore, his message would not have been adopted. Likewise, we must use people the target population considers charismatic and trustworthy. This might mean using popular figures like soccer stars or musicians, but it also means choosing people for U.S. government-produced counterideology videos who are likable.

To that end, the U.S. government should reach out to mainstream Islamic authorities. The U.S. government does not have the religious legitimacy to discredit radical Islam itself. Instead, scholars, religious figures, Islamic community leaders, and other individuals who have the respect of those who might otherwise be persuaded by radical Islam should be promoted, cited widely, and supported. Especially important in this fight will be domestic Muslim clerics and scholars.

The U.S. government must also be transparent. A large portion of the world deals heavily in conspiracy theories. If the U.S. government attempts to hide its hand, then when it is discovered it could unravel all of the good work that had been done. It is better to make the message clear from the beginning; for example, "We are the United States Government. We have an interest in showing how violent jihad is not truly Islamic, but we are not authorities on Islam. Here are some people who are authorities on Islam who say that violent jihad is wrong . . ."

This must entail a whole of government approach. If the Department of State is discrediting radical Islam on the Internet using one message while Department of Defense entities are holding press conferences with a different message, then the effectiveness of any counterideology campaign will be reduced. Likewise there must be coordination between agencies that are domestically focused and those that operate primarily overseas.

These efforts must be persistent over time and omnipresent at any moment in time. Every Google search for "Islamic ideology" should return an argument against radical Islam in the top results. Every YouTube search for "jihad" should return videos of mainstream Muslim authorities condemning the use of violence. This may best be accomplished by expanding the mission and size of the Department of State's Digital Outreach Team. The Voice of America broadcasting network should also be utilized to disseminate this counterideology message.

The U.S. Government must not be hypocritical or perceived as hypocritical. If the message is that radical Islam is wrong because it advocates an individual's use of violence in response to injustices in Muslim lands, then the U.S. government must not engage in wars to exact revenge, to shift national boundaries, etc. The U.S. government also must consistently condemn human rights violations by allied governments, especially those with majority Muslim populations.

The U.S. government should also disburse foreign aid in line with this counterideology plan. U.S. Agency for International Development (USAID) could fund the building of mosques with mainstream clerics. Development funding could be tied to a foreign government's willingness to promote counterideologies against radical Islam.

The U.S. government must partner with other governments with more expertise in counterideology. As noted above, several friendly governments have experience in this area, and we can benefit from the lessons they have learned. In addition, coordinating messages with other countries will help guarantee that members of a particular community hear a consistent message that counters radical Islam; for example, coordinating with the United Kingdom, Ireland, Canada, South Africa, etc., would help assure that English-speaking Muslims would be exposed to the selected counterideology.

The U.S. government must continue to expand its foreign language capabilities. The Department of State's Digital Outreach Team is an excellent beginning and an acknowledgement of the importance of reaching people in their native tongues. While an English-language effort will be useful for a very important target community—American Muslims—this is a world-wide effort and must occur in Persian, Kurdish, Russian, Turkish, French, several dialects of Arabic, and many more languages to be effective.

Shaping and Adapting Unlocking the Power of Colonel John Boyd's OODA Loop

by Major Paul Tremblay Jr., USMC¹

To flourish and grow in a many-sided uncertain and ever changing world that surrounds us, suggests that we have to make intuitive within ourselves those many practices we need to meet the exigencies of that world. The contents that comprise this "Discourse" unfold observations and ideas that contribute towards achieving or thwarting such an aim or purpose.

~Colonel John R. Boyd, USAF²

INTRODUCTION

I January 2015, the 36th Commandant of the Marine Corps, General Joseph F. Dunford Jr., published his 2015 Commandant's Planning Guidance.³ On the cover, the words innovate, adapt, and win highlight the pictures and doctrinal ideas placed above them—images that have shaped the Corps since its inception. Within the first few lines of text, the guidance references General Alfred M. Gray Jr., the 29th Commandant, who said, "Like war itself, our approach to warfighting must evolve. If we cease to refine, expand, and improve our profession, we risk being outdated, stagnant, and defeated." General Dunford goes on to explain how he plans to set the conditions required to fight and win against future enemies. He specifically states that "As a Corps, we also remain committed to constantly improving the quality of our manning, training, and equipping efforts and our resultant warfighting capability."⁴

This focus and surge of related ideas is not a new phenomenon. In 1997, The 31st Commandant, General Charles C. Krulak, championed a similar message, calling for the creation of "Marines and their leaders who have superb tactical judgment and are capable of rapid decision-making under physical and emotional duress."⁵ Krulak followed up this guidance with an article in the *Marine Corps Gazette* in May 1999 titled "Cultivating Intuitive Decisionmaking." In it, he highlighted character, repetitive skills training, self-study, and command climate as the

¹ Maj Tremblay is a distinguished graduate of Marine Corps University's Command and Staff College and currently attends the Marine Corps School of Advanced Warfighting. This paper won the Col Franklin Brooke Nihart Writing Award for Academic Year 2014–15.

² John R. Boyd, "The Essence of Winning and Losing" (unpublished brief, 1996), http://dnipogo.org/john-r-boyd/.

³ Gen Joseph F. Dunford Jr., *Commandant's Planning Guidance, 2015* (Washington, DC: Headquarters Marine Corps, 2015), http://www.marines.mil/Portals/59/COMMANDANT'S%20PLANNING%20GUIDANCE%202015%20(2).pdf.

⁴ Ibid., 2.

⁵ Gen Charles C. Krulak, "Commandant's Planning Guidance," Marine Corps Gazette 79, no. 8 (August 1995): A-17.

foundational ingredients necessary to develop these qualities. Krulak also emphasized the importance of Colonel John Boyd's ideas and theories.

The impact of John Boyd's theories on the Marine Corps cannot be overstated. They have shaped and influenced doctrine, operations, and numerous Commandants. These ideas have also shaped countless Marines and sister Services in recent decades. Unfortunately, a common misunderstanding and oversimplification of Boyd's ideas has crept in over time, leading to an increasing emphasis on absolute speed and efficiency over relative speed and effectiveness. This emphasis creates a mismatch between institutional training goals, on the one hand, and individual mastery on the other. If this mismatch is not realigned, efforts to improve decision making in general, let alone adaptability and innovation initiatives may miss the mark despite millions of dollars and labor hours invested. Shaping and adapting will continue to occur, however it may be in spite of, rather than because of, the Marine Corps' institutional efforts.

This paper aims to clarify and reinforce Colonel John Boyd's Observe, Orient, Decide, and Act (OODA) framework that General Krulak referred to in "Cultivating Intuitive Decisionmaking" and what General Dunford infers in the 2015 Commandant's Planning Guidance in an effort to expand on and improve the collective understanding of this crucial idea.⁶ This framework, known to some as the Boyd Cycle, is widely recognized as the OODA "loop." The necessity for this clarification is two-fold. First, the OODA loop is a widely accepted decision-making framework in the U.S. Department of Defense and beyond.⁷ However, its depiction as a fourstage cyclical model in many, if not all doctrinal publications and professional venues, is not only incomplete but also highly misleading.⁸ The components themselves are accurate; however, the lack of context combined with the graphical depiction of an orderly, linear sequence misrepresents his theory and has led to institutional biases and shortfalls.⁹

Second, by exploring the complexity and dynamics of Boyd's final depiction of the loop, one will appreciate the detail, focus, and depth required to understand, shape, and adapt at the individual level. This understanding can then be scaled to the unit, organization, and institution levels, fostering an even greater understanding and appreciation of the remaining doctrinal publications. Finally, this improved understanding will help shape future Marine Corps training, education, and command climates.

MISUNDERSTANDING BOYD

One of the most unfortunate aspects of Boyd's OODA loop is that despite the tremendous amount of time, research, and energy he and his closest confidants put into its development, it is often misconstrued, misunderstood, and oversimplified by the majority of those who discuss it. This phenomenon is not modern nor is it specific to the Marine Corps. Many people, including some who actually knew and worked with Boyd, did not fully grasp the totality of what he meant, a problem that has only become worse after his death.¹⁰ One of the main reasons for this lack of understanding is that Boyd never codified most of his thoughts in clear prose; he preferred the dynamic give and take of a multifaceted verbal briefing.¹¹ He left several hard copy versions of his briefing slides, but not a transcription of the interaction. His only attempt at writing was an essay entitled *Destruction and Creation*.¹²

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⁶ Gen Charles C. Krulak, "Cultivating Intuitive Decisionmaking," Marine Corps Gazette 83, no. 5 (May 1999).

⁷ Frans Osinga, "Science, Strategy, and War: The strategic theory of John Boyd"

⁽doctoral dissertation, Netherlands, 2005), 141.

⁸ Ibid., 5.

⁹ Gary Klein, Sources of Power: How People Make Decisions (Cambridge, MA: MIT Press, 1999), 130.

¹⁰ Franklin C. Spinney, interview by Paul Tremblay, 18 February 2015, hereafter Spinney interview, 18 February.

¹¹ Franklin C. Spinney, interview by Paul Tremblay, 20 February 2015, hereafter Spinney interview, 20 February. ¹² Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War* (New York: Little, Brown and Company, 2002), appendix.

Furthermore, those who saw Boyd's presentations came away with only a snapshot of his personal development. His ideas and perspectives were constantly evolving, including during the act of presentation. Consequently, the final iterations of his many briefs contain a far more developed understanding of the concepts presented than those he presented initially.¹³ After Boyd died in 1997, anyone interested in learning about these briefs either sought out those who were closest to Boyd, such as Colonel Chet Richards, USAF (Ret), and Franklin C. Spinney, or traveled to Marine Corps Base Quantico, where Boyd's personal collection is held. If those options were not feasible, one was simply limited to second-hand interpretations, the latter of which appears to be the most prominent.¹⁴

The totality of Boyd's work resides in a series of presentation overlays. These briefs range in topics from "Patterns of Conflict" to "The Conceptual Spiral." This collection, known as "A Discourse on Winning and Losing," traces the evolution of Boyd's thoughts and perspectives on surviving and thriving in a competitive environment.¹⁵

Another aspect of the common misunderstanding and oversimplification of Boyd's ideas is that very few of those charged with teaching them have the time or the access to work their way through the presentations in their entirety before they have to do so. Consequently, the majority of what is passed down from generation to generation of Marines in the hierarchy of formal school instruction in the Marine Corps is a superficial echoing of General Krulak's emphasis on speed and tempo from "Cultivating Intuitive Decisionmaking" and the following simplified illustration of the cycle from doctrinal publication *Warfighting* (figure 1).¹⁶

This misleading model of the OODA loop has been and continues to be discussed not only in military circles, but also in business circles, such as Forbes and the Harvard Business Review.¹⁷ In both popularized interpretations, the image and its interpretation suggest that success in a competitive environment depends on the ability to outpace and outcycle the opponent, inferring that the individual has to cycle through all phases of the OODA loop faster than the opponent does. To illustrate this perspective, in 1997, Dr. Phillip Meilinger wrote, "According to Boyd, the key to victory was to act more quickly, both mentally and physically, than your opponent.

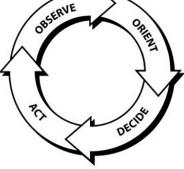
He expressed this concept in a cyclical process he called the OODA Loop. As soon as one side acted, it observed the consequences, and the loop began anew."18

The final aspect of why most individuals misunderstand or oversimplify Boyd's work is that "A Discourse on Winning and Losing" is overwhelming. Boyd's discourse is itself a constant back and forth interplay between analyzing and synthesizing information from major battles, scientific theory, strategic thought, and personal impressions that can lead one astray quickly. Furthermore, without access to any speaker's notes or video recordings of the final versions of these presentations, significant portions of its richness and points of emphasis are lost to the reader.¹⁹ All of these con-

OBSERVE

Figure 1. The OODA loop

as illustrated in doctrine



¹³ Spinney interview, 18 February.

¹⁴ Coram, Boyd, 4.

¹⁵ Osinga, "Science, Strategy, and War," 271.

¹⁶ Warfighting, MCDP-1 (Washington, DC: Headquarters Marine Corps, 1997).

¹⁷ Grant T. Hammond, The Mind of War: John Boyd and American Security (Washington, DC: Smithsonian Institute Press, 2001), 11.

¹⁸ Col Phillip S. Meilinger, "Air Targeting Strategies: An Overview," in Richard P. Hallion, ed., Air Power Confronts an Unstable World (London: Brassey's, 1997), 60-61.

¹⁹ Coram, *Boy*, 7.

straints and ambiguities severely limit comprehension and have led to the current misinterpretation predicament. However, like the aphorisms of Sun Tzu, the ambiguities in the discourse open up an opportunity for an ever-enriching dialogue with the reader—if one chooses to make the effort.

UNDERSTANDING THE CONTEXT

In 2001, Dr. Grant T. Hammond published *The Mind of War: John Boyd and American Security*. In 2002, Robert Coram published *Boyd: The Fighter Pilot Who Changed the Art of War.* Both pieces detail the life, experiences, and ideas of Boyd in a way that provides a much-needed context for understanding the man behind the theories, as well as an introduction to the theories themselves. Shortly thereafter in 2005, Frans Osinga, a General Dynamics F16 fighter pilot from the Netherlands, presented his doctoral dissertation, "Science, Strategy and War: The Strategic Theory of John Boyd," taking an in-depth look at "A Discourse on Winning and Losing" and providing a thorough analysis and commentary on the timeless, complex, and incredibly well researched thoughts and ideas. Dr. Osinga is now a professor of military operational art and sciences at the Netherlands Defense Academy and turned his dissertation into a book in 2007 under the same title. For anyone interested in understanding the epistemology of Boyd's personal development, these three books are an excellent place to start.

While it is beyond the scope of this paper to trace the many years and thousands of hours that went into Boyd's theory, it is important to mention that Boyd developed the OODA loop based on a lifetime of experience, analysis, synthesis, study, and professional interaction. It was a tremendously taxing and creative process, with roots in not only experiences as a fighter pilot and aircraft designer, but also later as a student of history, science, and philosophy. His study covered multiple strategists from Sun Tzu to Vo Nguyen Giap and hundreds of military commanders, scientists, engineers, manufacturing moguls, and systems thinkers in between. That is why those closest to him believe that his final drawing of the cycle represented far more than just a theory on decision making. It was a framework for understanding the nature of human interactions with the environment to enable the survival and growth of individuals and groups including uncovering tactics, operations, strategy, learning, and moral values.²⁰

THE ACTUAL OODA "LOOP"

Figure 2 illustrates how Boyd depicted the OODA loop in early 1993. He viewed the entire "loop" as an ongoing, multifaceted, cross-referencing process. To assist in conceptual understanding, the following analysis will begin with a description of observe and continue from left to right.

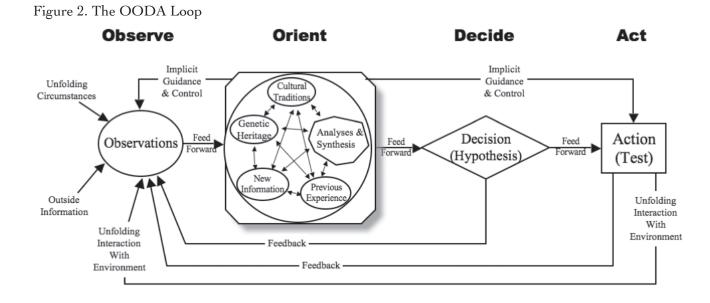
OBSERVE

Boyd defined *observe* as the act of sensing yourself and the world around you. Sensing is the use of some sort of internal organ or technology (e.g., of touch, taste, smell, sight, and hearing or a radar, infrared, communications intercept, etc.) through which one receives stimuli from the external environment.²¹ The diagram shows that observations relative to the OODA loop have multiple facets or inputs. He characterized these inputs as unfolding circumstances, outside information, and one's unfolding interaction with the environment, as well as two distinct types of internal feedback loops. Unfolding circumstances represent those sensory inputs that one can directly sense but are seemingly random or independent of one's own actions. An example would be if a Marine was on patrol in Afghanistan and a farmer in the distance was tending to his field. The Marine is in a position to directly sense the circumstance, however, that Marine's

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²⁰ Spinney interview, 20 February.

²¹ "Sense," Merriam-Webster, http://www.merriam-webster.com/dictionary/sense.



action did not directly cause it nor is it directly involved with it. Such circumstances may or may not be relevant or threatening initially, depending on how one's interaction evolves.

Outside information are sensory inputs that describe either unfolding circumstances or an unfolding interaction from someone else's perspective. An example would be if, while that same Marine is on patrol, he heard some say over the radio that "there are local nationals up ahead." That observation could be a random or entirely unrelated event from the Marine's specific activity (i.e., there could be a wedding party forming oblivious to the Marine on patrol) or that observation could be identifying events directly unfolding in response to the approaching Marine.

Unfolding interaction with the environment is the actual effect of one's personal actions on the environment, which one can directly sense. If the Marine raised his weapon in the direction of one of those local nationals and that person saw the Marine do this, the responding behavior would be a direct result of the unfolding interaction with the environment. It may be as simple as freezing or as elaborate raising his hands while women and children wail in anguish. A similar example is if a Marine fired his weapon. The unfolding reactions could be singular, such as only the sound of the gun is perceived, or it could also be plural, such as people taking cover in all directions, the sound emanating from the rifle, the recoil felt on the shoulder, etc. This type of sensory input represents the direct sensing of the action. The internal feedback loop from action is different from the unfolding interaction input to observation.

Feedback Loops

A feedback loop describes causally connected elements.²² Although it was initially introduced under the banner of *Cybernetics* in 1948, this idea, along with systems thinking, has grown to explain balancing and self-regulation at the neurological level in terms of how the human body prepares for what it *expects* to observe and how it actually interacts with the environment. Dr. B. F. Skinner based his model of "stimulus-response" on it, which forms the heart of the behavioralist school of psychology.²³ As Dr. Vladimir Kosonogov wrote in the *Neurophysiology* journal, "at first, goals, and intentions of the executor's action are coded *outside* the mirror neuron system. If the action is important for the observer and can be useful in his own motor repertoire, his mirror

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²² Osinga, "Science, Strategy, and War,"104.

²³ Ibid., 106.

neuron system implicitly reproduces the action, retrieving the kinematics and sensory consequences the observer experienced in the past while executing the same action. Thus, the implicit reproduction facilitates the observer to execute this action either immediately or in the future."²⁴

Cognitive psychologists have articulated the difference between direct outside observations and indirect causal loops as the difference between "top down" processing and "bottom up" processing of perception. While "top down" processing refers to a person's expectations of what is likely to occur based on previous experiences and inherent mobilization of selective mechanisms that influence focus and attention, the "bottom up" processing is the actual observations sensed. In this case, the feedback loops from decision and action are the body's preparation to receive *expected* feedback from top down perception. The bottom up perception would come from the *actual* interaction with the external environment. Both of these descriptions allude to the incredible level of complexity involved in the human body's interactions within itself and with its external environment. This process is multifaceted and simultaneous; it is not linear or sequential.

Why Observations Matter

While sensory input—what one can see, hear, smell, taste, and feel—ultimately travels to the brain, it is important to remember that the brain is but a small part of the overall nervous system. As Dr. Margaret Polski recently articulated in *Wired for Survival*, "the nervous system is a bio-electro-chemical signaling and information system that links all sensory, mental and physical activity at cellular, molecular, and neural levels." She goes on to state that this incredibly complex system influences behavior through four main mechanisms: "voluntary actions of the muscles (somatic systems), involuntary actions of the smooth muscles, heart and glands (autonomic systems), the endocrine system and the immune system."²⁵

The nervous system is comprised of the central nervous system (the brain and spinal cord) and the peripheral nervous system (a supporting collection of spinal and cranial nerves). The inputs and outputs of the central nervous system are influenced by incoming sensory information conveyed by the peripheral nervous system. This is to say that our thoughts, choices, and actions are inextricably linked to the outside world.²⁶ This physiological description is another way to view the difference between outside inputs to observation (those that are picked up by the peripheral nervous system) and those implicit inputs such as feedback loops (those mobilized by central nervous system in preparation and anticipation) of expectant observations.

The multiple inputs to observation depicted on the above diagram are a critical representation of the complexity involved in neurobiological sensing and signaling.²⁷ The dense network of neurons in the body that enables attention and sensory perception, learning, emotion, problem solving, memory and motor control are not simply reactive or even conscious in most instances. They are constantly working, whether we realize it or not. This point is especially critical when considering that unfolding circumstances, outside information, unfolding interaction with the environment and various feedback loops are constantly being sensed by the nervous system; whether we want them to be or not.

²⁴ V. Kosonogov, "Why the Mirror Neurons Cannot Support Action Understanding," *Neurophysiology* 44, no. 6 (2012): 499–502.

²⁵ Margaret M. Polski, Wired for Survival: The Rational (and Irrational) Choices We Make, from the Gas Pump to Terrorism (Upper Saddle River, NJ: FT Press, 2009), 36.

²⁶ Margaret M. Polski, Essay on Wired for Survival: Human Nature, Lawgivers, and Other Wifeman (Fairfax, VA: George Mason University Press, 2008), 9.

²⁷ Ibid.

ORIENT

Without the context of orientation, Boyd believed that all observations would be meaningless. He was particularly detailed about the components of orientation as a complex set of filters and shaping mechanisms of genetic heritage, cultural predispositions, personal experience, and knowledge.²⁸ Orientation both shapes observations and is the lens through which one makes sense of observations. Genetic heritage represents the physical makeup of one's body, particularly the brain; it includes those structural characteristics that evolved through an interaction with the environment and were passed down through millions of years of trial and error, selection, and reinforcement. It both wires together the common nature of one's body and mind, and shapes the uniqueness of each person's capabilities and limitations. Cultural predispositions refer to the set of learned behaviors during the formative years of life resulting from one's place and position in the world. Personal experience represents a catalog of all of the learned behavior since the formative years peculiar to each individual. Knowledge represents information, understanding, or skills acquired throughout a collective awareness of associations, and knowledge can also be synonymous with memory.²⁹

In his dissertation, Dr. Osinga summarizes Boyd's initial thoughts on the importance and distinction of orientation:

To survive and grow within a complex, ever changing world of conflict, it is necessary to have insight and vision, focus and direction. To that end, Boyd posits, we must effectively and efficiently orient ourselves; that is, we must quickly and accurately develop mental images, or schema, to help comprehend and cope with the vast array of threatening and non-threatening events we face.³⁰

According to Dr. Dietrich Dörner, the emeritus professor for general and theoretical psychology at the Institute of Theoretical Psychology at the Otto-Friedrich University, this idea has tremendous importance. He found through years of research that people interpret the world around them and make sense of the constant barrage of stimuli via mental models. He has also found that individuals create and modify such models based on the collective interaction of their experiences, cultural norms, and beliefs. He emphasized that all models are merely a personal interpretation and thus a biased simplification of what actually exists. They are not a perfect picture of reality. This insight reinforces Boyd's ideas and explains the differences among the elements of orientation and their collective interaction. It also explains why individual orientation is a highly specialized phenomenon.³¹

In their joint research paper, "Conditions for Intuitive Expertise: A Failure to Disagree," cognitive psychologists Dr. Daniel Kahneman and Dr. Gary Klein also reinforce the concept of orientation as the interaction of lenses, models, or schemata. Their initial focus was to contrast the differences between their two approaches to intuition that are often viewed as conflicting. In the process, they discovered that they were in fact contrasting to different elements of orientation; both of which are present at all times during decision making and each of which have built in limitations. Dr. Klein's approach—Naturalistic Decision Making (NDM)—focuses on the ability to compare relevant cues with the available repertoire of images in the mind based on experiential learning. Dr. Kahneman's approach—Heuristics and Biases—was originally skeptical of experience as his research found that in certain situations individuals will rely solely on

²⁸ Osinga, "Science, Strategy, and War," 271.

²⁹ "Heritage," "Predispositions," "Experience," and "Knowledge," Merriam-Webster.

³⁰ Osinga, "Science, Strategy, and War," 271.

³¹ Dietrich Dörner, *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations*, trans. Rita and Robert Kimber (New York: Metropolitan Books, 1996), 42.

memory if they do not have access to appropriate cues; and that memory is inconsistent at best.³²

Dr. Kahneman later differentiated between personal experience and personal memory. *The Riddle of Experience vs. Memory* is a Technology, Education, and Design (TED) presentation that has been viewed more than two million times at the time of this writing. During this lecture, Kahneman illustrated the distinct differences between the mental model of experience and the mental model of memory in numerous ways. The first was through the comparison of an individual's experience with the same individual's memory of a symphony. The individual stated that he had been listening to a symphony, and it was glorious music. However, at the very end of the recording, there was a dreadful screeching sound. The individual then added, with significant emotion, that this one event ruined the whole experience. Kahneman contends that the screeching sound did not ruin the experience. The individual had listened to and enjoyed 20 minutes of glorious music. The screeching sound had ruined the memory of the experience. Kahneman concluded that this is an example of direct conflict between the experiencing self and the remembering self, and thus an example of the uniqueness of the two mental models.³³

This research illustrates that orientation, as depicted in figure 2, is a graphical representation of abstract reality; mental images one constructs are not only shaped by personal experience, genetic heritage, cultural traditions and memory, they are also compared and contrasted to new information to validate or invalidate existing schemata. If the entire OODA loop represents a multifaceted learning and feedback framework, orientation in and of itself represents the heart of this multifaceted learning and feedback framework.³⁴ According to Boyd, the way orientation changes and evolves to ensure the matchup of the entire loop to its environment is through the process of analysis and synthesis: the destruction of existing mental images and the creation of new ones.

Analysis and Synthesis

Analysis is a careful study of a *whole* by studying its *parts* to understand what they do and how they relate to each other. Alternatively, one can think of analysis as an effort to explain the nature and meaning of something through resolving complex expressions into simpler or more basic ones.³⁵ Boyd likened this process to deduction, differentiation, and destruction in his essay *Destruction and Creation*. He described a systematic process of moving from general to specific. Analysis is related to understanding. *Synthesis*, on the other hand is defined as the composition or combination of parts or elements so as to form a whole. It also leads to an explanation of the nature or meaning of something through creating complex expressions from simpler or more basic ones.³⁶ Boyd referred to this process as creation in the same essay, moving from specific to general, the same way that information leads to knowledge, and then to wisdom. Synthesis is related to creativity.

Boyd summarized the importance of this process in the abstract of his paper *Destruction and Creation*. He stated that the destruction of existing and the creation of new mental patterns permit one to both shape and be shaped by a changing environment. He also stated why one cannot avoid this activity if one intends to survive on one's own terms.

³² Daniel Kahneman and Gary Klein, "Conditions for Intuitive Expertise: A Failure to Disagree," *American Psychologist* 64, no. 6 (2009).

³³ "Daniel Kahneman: The Riddle of Experience vs. Memory," Technology, Education, and Design (TED) video, 20:06,
5 February 2010, http://www.ted.com/talks/daniel_kahneman_the_riddle_of_experience_vs_memory?language=en.

³⁴ Osinga, "Science, Strategy, and War," 271.

³⁵ "Analysis," Merriam-Webster, http://www.merriam-webster.com/dictionary/analysis.

³⁶ "Synthesis," Merriam-Webster, http://www.merriam-webster.com/dictionary/synthesis.

DECIDE

Boyd's idea of decision is a review of alternative courses of action and the selection of the preferred course as a hypothesis to be tested. Dr. Klein's research, mentioned previously in the orientation section, supports Boyd's theory. Klein has found that people draw on a large set of abilities to make decisions; abilities termed by some researchers as *sources of power*:

The conventional sources of power include deductive logical thinking, analysis of probabilities, and statistical methods—clearly defined procedures used primarily in laboratory settings. Yet the abilities that are needed in natural settings; those settings that include time pressure, high stakes, inadequate information, dynamic conditions, and team coordination, are usually not conventional at all. Natural decision-making is defined by *poorly defined procedures*, where one has to invent or modify procedures.³⁷

Klein studied firefighters, police officers, nurses, emergency room physicians, and military officers, and was fascinated with how they made split-second decisions that saved lives. He found that:

The powers of intuition, mental simulation, metaphor and storytelling are what experienced decision makers leverage in natural settings that have a series of decision points . . . The power of intuition enables us to size up a situation quickly. It depends on the use of experience to recognize key patterns that indicate the dynamics of the situation. The power of mental simulation lets us imagine how a course of action might be carried out. The power of metaphor lets us draw on our experience by suggesting parallels between the current situation and something else we have come across. The power of storytelling helps us consolidate those details in order to make them available in the future, either to ourselves or to others . . . Expertise in recognition prime decision-making depends on perceptual skills.³⁸

Recognition primed decision-making model posits that experienced decision makers focus on how their assessment of the situation compares to previous experiences. From there, the first workable option that comes to mind is quickly evaluated by imagining how it will be carried out, not by a formal analysis or comparison. The first option they consider is usually workable; they do not have to generate a large set of options. As this process evolves, experienced decision makers can discern weaknesses in stride and make timely corrections on the spot, thereby making their option stronger and more effective. Recognition prime decision makers emphasize being poised to act rather than waiting until all the evaluations are completed.³⁹

These observations are directly in line with Boyd's theory that the analysis and synthesis of new information compared to existing mental models produces a hypothesis that must be tested and further refined through continuous feedback. These observations are also directly in line with his ideas of implicit guidance and control depicted by the lines directly connecting orientation to action and observations in figure 2.

ACT

Boyd described the final part in the loop as action: the testing of the decision selected by implementation. It is the culmination of the interactive process of observation, orientation, and

³⁷ Kahneman and Klein, "Conditions for Intuitive Expertise," 3.

³⁸ Ibid., 287.

³⁹ Ibid., 8.

decision. Using a scientific analogy, it is the experiment designed to test the hypothesis, the results of which produce more observations that are then fed back and compared to expected observations. Actions either prove or disprove the validity of the decision.

Implicit Guidance and Control

At this point in the discourse, the only aspects remaining in the detailed Boyd diagram (see figure 2) are the implicit guidance and control loops going from orientation to observation and from orientation to action. Paradoxically, understanding implicit guidance and control is the most important part of understanding the OODA loop as an aid for evolving tactics, operations, and strategy: the idea of intuitive decision making as outlined by General Krulak. Out of these implicit connections flows both advantage and disadvantage. If action flows nearly instantaneously from orientation, the quickness of the overall loop is accelerated. This relative acceleration will shorten, or seemingly *compress* the time an adversary has to reorient in response to what is happening in his environment. Boyd contended that in a competitive situation, be it combat, sports or debate, the opponent with the relatively quicker loop will, at times, have a more relevant picture of the unfolding situation because he or she is *shaping* it rather than being forced to *adapt* to it. This mismatch in orientation can provide a fleeting opportunity for the quicker side to continue to act to exploit the effects of the first move before the slower side understands what is happening. If the quicker side can maintain this mismatch, the slower side will become increasingly disconnected from the environment and their actions will become increasingly unrelated to the actual situation. They will be driven solely by *perception*. As this process continues, the relatively slower side continues to generate increasingly irrelevant observations, leading to more disconnected decisions, and so forth. The relatively slower side's loop will fold back in on itself as confusion and disorder increase, generating an internally focused close loop.

If this mismatch is combined with menacing pressure of a life-or-death situation, the relatively slower side's loop quickly degenerates into chaos, panic, and ultimate collapse.⁴⁰ This mismatch is what Boyd referred to as "operating inside their OODA loop." Miyamoto Musashi, the expert Japanese swordsman and rōnin, referred to this mismatch as the necessity to "act and react without thinking" in his seventeenth-century treatise *A Book of Five Rings*.⁴¹ Dr. Klein's research confirms that intuition, depending on the use of experience to recognize key patterns that indicate the dynamics of a situation, is the source of power that participants in all time sensitive situations leverage the most.⁴² The phenomenon Boyd was describing did not derive from absolute speed but relative speed, and that is a vital distinction.

As noted above, implicit connections can also lead to a disadvantage. If an individual does not have a well-developed orientation, and therefore cannot perceive the relevant cues, patterns and leverage points of a particular situation, that individual may feel pressured by the situation to enact *preconceived* notions and actions, regardless if they are relevant or not. The danger manifests when individuals are repeatedly conditioned to respond to stimuli based on a script regardless of relevant cues or pattern recognition in a bias for action culture. Boyd named this condition *incestuous amplification*, and when it occurs, the decision-maker's OODA loop becomes increasingly distorted and disconnected from its environment. Psychologists refer to this phenomena as cognitive dissonance exacerbated by confirmation bias.

Incestuous amplification occurs when one's preconceptions misshape the observations that one is sensing. These misshapen observations then blur the true connection between the individ-

⁴⁰ Chet Richards, "Boyd's OODA Loop: It's Not What You Think," Jay Adams & Partners, Inc., 21 March 2012, http://www.jvminc.com/boydsrealooda_loop.pdf.

⁴¹ Miyamoto Musashi, A Book of Five Rings, trans. Thomas Cleary (Boston: Shambhala Publications, 1993), 25.

⁴² Kahneman and Klein, "Conditions for Intuitive Expertise," 1.

ual and the environment because the brain begins to synthesize cues and preconceived responses. Viewed abstractly, incestuous amplification hijacks the orientation of an individual's OODA loop by overriding actual observations to a point where the subsequent orientation induces the individual to perceive and act on what he or she wants to see rather than what actually is. First order effects of this disconnect may be initially too small to measure thanks in part to luck, chance, or ambiguity. However, if the cycle continues unabated, subsequent actions continue to induce dysfunctional behavior back into the entire OODA loop, which then folds back on itself to magnify the mismatch. The cycle not only repeats itself but mutates by amplifying itself; the effect, as Spinney, in his recent article on the subject, stated that "it is a little like placing a microphone next a speaker when recording, only much more dangerous."⁴³

This kind of positive feedback loop essentially forms a *closed system*. Left uncorrected, the individual exhibiting an incestuously amplifying OODA loop becomes increasingly disconnected from his or her environment, yet continues to increase internal *entropy*. As Spinney continues:

Put another way, all living systems can be viewed as open thermodynamic systems that must process a flux of matter, energy, and information to maintain their coherence. To do this, they must communicate effectively with their environments. Incestuous amplification has the effect of closing off the system from its environment, and any activity in a closed system always generates entropy, thereby making it impossible to maintain that system's coherence. Therefore, without a correction or change that opens the decider's OODA loop to an effective communication with the real world, the only uncertainty in the outcome is how long an OODA loop driven mad by incestuous amplification can last before it degenerates into chaos, confusion, and disorder.⁴⁴

IMPLICATIONS

As outlined above and contrary to the commonly simplified version, the OODA loop does not represent a linear process developing chronologically. It is a multidimensional, complex, and dynamic framework that operates in both time and space. This deceptively simple idea, when graphically depicted in the way that Boyd intended it to be depicted; in this instance, figure 2 summarizes the complexity of interactions and interrelationships involved in critical thinking, decision making, and learning processes. It describes how orientation shapes our interpretation of observations. It highlights the correlation between previous experience, cultural heritage, and traditions and recognizing key patterns that indicate the dynamics of the situation, suggesting parallels between the current situation and something previously encountered. It speaks to how mental simulation lets us imagine how a course of action might be carried out, and how that might shape future observations and actions. It also describes how details are synthesized in order to make them available in the future, either to ourselves or to others.⁴⁵

The actual OODA loop also describes how actions based on these processes, together with other external inputs, affect the environment, which in turn generates new information, new orientations, and new experiences. It simply and eloquently describes emergence, learning, and growth. It graphically depicts how actions within the loop can be simultaneous as well as sequential, showing how decisions and actions do not relieve one from the need to continue to observe and reorient continuously. It also shows how one can skip the decision stage implicitly or even go backward for the sake of increasing clarity and focus.

⁴³ Franklin Spinney, "Can Obama Put Down the Brie and Opt for Real Change?," *Counterpunch*, 10 September 2008, http://www.counterpunch.org/2008/09/10/can-obama-put-down-the-brie-and-opt-for-real-change/

⁴⁴ Ibid.

⁴⁵ Kahneman and Klein, "Conditions for Intuitive Expertise," 3.

The narrow interpretation of the OODA loop (see figure 1) also suppresses another essential feature of Boyd's theory: developing, maintaining, and reshaping one's orientation, the box around which the loop revolves. Absolute speed is not very useful if one cannot adequately react on incoming information or one's interpretation of events is flawed. Orientation shapes the way one interacts with the environment. It is the amalgamation of lenses through which one sees the world. It determines how and what one observes, decides, and acts. It determines the character of the present cycle, while shaping the character of future orientations. It feeds forward and backward. Orientation is the most important part of the OODA loop. Brave decisions and heroic actions are pointless if the observation was inaccurate because of an inadequate or dysfunctional orientation.

This is an incredibly important distinction from the absolute speed and tempo narrative that has shaped mental models and the common decision-making dialog. While one aspect and application of it is certainly reaction time, specifically how quickly one can make *sense* of the observations presented, if one's adversary never *observes* what one is doing, then one may be expending a tremendous amount of energy for no strategic or tactical purpose. Furthermore, if one's actions are exactly what one's adversary thinks or wants one to do, then if absolute speed is one's only driving force, then one is simply falling into the trap at high speed.

Essentially, the OODA loop is dependent on individual orientation. He who has the ability to keep their orientation closely matched to reality while attempting to disrupt or detach their opponent's with multiple actions has the advantage.⁴⁶

CONCLUSION

Recent combat experiences in Iraq and Afghanistan highlighted the power of small-unit decision making on the battlefield. In response, multiple articles, symposiums, and programs of record have saturated the discussion with disparate and often counterproductive ideas on how to inculcate and enhance that decision making through creativity and adaptability. Rather than create another center of excellence or add another skill to an already saturated system, the U.S. Marine Corps could go far in simply articulating how it views decision making, what the elements of it are, and how to improve them over time. From there, they can evaluate training and education and identify where the redundancies are and where individual responsibility lies. In the process, the Marine Corps may be surprised by what it finds.

Colonel John Boyd's detailed OODA loop diagram facilitates this discussion, highlighting that decision making is a combination of both implicit and systemic modalities; each of which requires both individual insight and intuition. Decision making is more than a simple four-stage model anchored by absolute speed and efficiency. When compared to the latest research on systems thinking, evolution, and cognition, the detailed model of the OODA loop highlights the vitality of individual orientation above all other components. It is through this critical series of lenses that individual Marines must observe, decide, and act in complex environments. They must be prepared to shape and be shaped by that process to innovate and adapt accordingly. Whether that action is emergent, novel, or is in accordance with best practices or lessons learned is irrelevant. What is essential is whether or not that action was relevant to the particular situation and why.

This renewed understanding brings clarity to how the Marine Corps can shape and influence future generations of combat leaders, particularly what General Krulak intuitively knew based on his personal relationship with Boyd and what has been lost over time. The question is not how to develop intuitive or analytical decision making, the question is how to maximize the relevancy of both skills through the development of individual orientation. An authoritarian

⁴⁶ Richards, "Boyd's OODA Loop."

culture that is conditioned by a systems approach to training and education is optimized for compliance and efficiency. While this methodology has many benefits, it does not foster innovation and creativity, nor does it develop individual orientation. It actually stifles it. Dr. Gary Klein recently stated that "Organizations inadvertently suppress the insights of their workers, and they do so in ways that are ingrained and invisible. They value predictability, they recoil from surprises, and they crave perfection: the absence of errors. Unfortunately, actions that are taken to reduce errors and uncertainty can get in the way of insights. Therefore, organizations are faced with a balancing act."⁴⁷

"The answer lies not in restricting human endeavors," wrote Dr. Edward T. Hall, "but in evolving new alternatives, new possibilities, new dimensions, new options, and new avenues for creative uses of human beings based on the recognition of the multiple and unusual talents so manifest in the diversity of the human race."⁴⁸ A way to do that, at least in the short term, is to view education as the antithesis of training from an institutional perspective. If training must be a closed, mechanistic model of efficiency due to resource and fiscal constraints, education must then become an open, organic exchange of ideas to provide balance and to enable intuition and insight to spring from collective experience. This exchange can be facilitated in a variety of cost effective and easily accessible ways.

Dr. Bruce Gudmundsson, the Case Method Chair at Marine Corps University, recently posted a paper on the "Modular Marine Corps University" concept. In it, he describes a flexible, individually focused, and adaptable system that "would foster continuous education, both military and general, throughout the Marine Corps; document the skills, accomplishments, capabilities, and attainments of Marines in a way that makes sense to the outside world; and improve access to education, both military and general, for all Marines, particularly those with duties that prevent them from taking advantage of existing educational opportunities."⁴⁹ This modular system is as simple as providing access to video recordings of Marine Corps University lectures for students to view at their leisure, or can be as elaborate as providing a venue for students to work with university professors on individual study projects accredited by the university. Approaching this topic conceptually opens the aperture for ideas in keeping with Dr. Hall's observations. Ideally, this process over time will become less focused on the historical training versus education debate and more in tune with providing efficient access to information and reinforcing positive learning experiences, sustaining the transition above and beyond entry level schools.

Imagine a day where a squad leader at Marine Corps Base Camp Lejeune, North Carolina, can watch both an Infantry Officer Course lecture on human factors in combat and Dr. Sebastian Gorka discuss the Islamic State from his room in the barracks in preparation for an upcoming training event. Those insights could also come from or be reinforced via an online discussion through a Marine Corps University sponsored venue or with members of his unit who have been exposed to the same information. When this professional exposure leads to a true professional discourse, especially when it is generated from the bottom up, the same squad leader may be forced, just by the nature of a rapidly evolving situation to, at a minimum, repeat the same process to remain relevant. Ideally, the squad leader inevitably comes to the realization that to truly teach, coach, and mentor rather than simply expose and discuss, one must invest just as much intellectually as one does physically if not more. This evolution and self-actualization is the very behavior the Marine Corps is trying so hard to systematically instill.

Unfortunately, as Dr. Hall noted again in Beyond Culture, "part of the problem lies in the

⁴⁷ Gary Klein, Seeing What Other's Don't: The Remarkable Ways We Gain Insights (New York: Public Affairs, 2013), 151.

⁴⁸ Edward T. Hall, *Beyond Culture* (New York: Anchor Book, 1981), 3.

⁴⁹ Bruce Gudmundsson, "The Modular Marine Corps University" (unpublished manuscript, 7 February 2015).

tension between creativeness and diversity and the rather specific limiting needs of institutions. Most cultures and the institutions they engender are the result of having to evolve highly specialized solutions to rather specific problems."⁵⁰ He continued that "many people's sense of worth is directly related to the number of situations in which they are in control" and therefore, the number of specialized solutions can be assimilated with control. The problem lies in when a specialized solution does not control the situation. This feeling of powerlessness and limitation of control naturally leads to increased aggression. Dr. Hall concluded that the only way to escape from this vicious cycle is to "involve ourselves actively and consciously in the very parts of life that we take most for granted." This movement cannot be imposed, but has to "spring from within" the individual.⁵¹

Dr. Karl Popper also reinforced this idea in The Open Society and Its Enemies:

The secret of intellectual excellence is the spirit of criticism; it is intellectual independence. And this leads to difficulties which must prove insurmountable for any kind of authoritarianism. The authoritarian will in general select those who obey, who believe, who respond to his influence. But in doing so, he is bound to select mediocrities. For he excludes those who revolt, who doubt, who dare to resist his influence. Never can an authority admit that the intellectually courageous, i.e. those who dare to defy his authority, may be the most valuable type. Of course, the authorities will always remain convinced of their ability to detect initiative. But what they mean by this is only a quick grasp of their intentions, and they will remain forever incapable of seeing the difference.⁵²

Dr. Peter Senge argues in *The Fifth Discipline* that "Personal mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively."⁵³ Focusing one's energies on improving observation, recognizing patterns, understanding the difference between implicit and explicit decision making, and embracing feedback is, as Dr. Senge suggests, "the essential cornerstone of the learning organization. An organization's commitment to and capacity for learning can be no greater than that of its members."⁵⁴

This insight is important when one scales the OODA loop to the unit level and reinforces what General Krulak referred to in "Cultivating Intuitive Decisionmaking"—the importance of command climate. The cultivation of intuitive decision making requires a significant culture shift from highly mechanized, control-based environments. Leaders must be viewed based on their ability to *facilitate* development not compliance. Units have to become a collective of unique individuals — each at a different level of personal and professional development — not a homogenous whole only able to respond to stimulus in scripted ways.

To develop individual cognition to a level of proficiency required for battlefield innovation and adaptation, the right pedagogy and mentorship are crucial during the formative years and beyond. Major Don Vandergriff, USA (Ret), has published a series of books outlining his argument for why now, more than ever, a change in the training and educational paradigms of the past are required. His books, *Path to Victory, Raising the Bar* and *Adopting Mission Command: Developing Leaders to Operate in a Superior Command Culture,* are filled with detailed descriptions of

⁵⁰ Hall, Beyond Culture, 5.

⁵¹ Ibid., 7.

⁵² Karl Popper, The Open Society and Its Enemies (Princeton, NJ: Princeton University Press, 2013), 127.

⁵³ Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday, 1990), 5–11.

⁵⁴ Ibid., 7.

how to evolve current programs of instruction to maximize individual orientation growth and collective outcomes.

Vandergriff's methods are being used by numerous organizations and militaries around the world with great success. Some of the Marine Corps' premiere training institutions have already implemented this transition on their own initiative, and are seeing immediate results. These transformational efforts garnered tremendous support during General Gray's tenure as Commandant. Reading through Vandergriff's well researched and thorough texts reinforces what previous generations of Marines—General Charles Krulak, Lieutenant General Paul Van Riper, Colonel Michael Wyly, and Major John Schmitt—were arguing for and implementing more than two decades ago. The genesis of these ideas can be found in Carl von Clausewitz's treatise *On War*.

It seems that in the last three decades, as the Corps has tried to improve institutional efficiency, Marines have been taught to think linearly rather than comprehensively.⁵⁵ This linear thinking is reinforced with training that conditions immediate and scripted responses to stimuli regardless of the initial conditions. This way of thinking is based on an illusion that the world is created from individual pieces, all abiding by universal laws. As physicist Dr. David Bohm concludes, "this sets up a futile task—similar to trying to reassemble the fragments of a broken mirror in an attempt to see a true reflection."⁵⁶

To accomplish what General Dunford calls for in his guidance — the ability to innovate and adapt in "increasingly uncertain, complex, and decentralized operating environments" — leaders at all levels must embrace how individuals actually interact with their environments. Studying the full version of the OODA loop rather than simplifying it to a linear process is the first step in appreciating the complexity of this interaction. This renewed understanding and appreciation will enable Marines, young and old, to expand their individual capacity for desired action, nurture new and expansive patterns of learning and thought, and harness the true power of the idea. The ability to innovate and adapt *effectively* in increasing uncertain, complex, and decentralized environment requires *excellence* in thought and in deed. Excellence in thought requires both intuition and insight. Excellence in deed is acting on that intuition or insight, not simply acting for the sake of acting.

⁵⁵ Hall, Beyond Culture, 11.

⁵⁶ Senge, *The Fifth Discipline*, 1.

Take It, Don't Break It A Megacity Concept of Operations

by Colleen M. Borley, U.S. Department of State¹

ny parent entering the china section of Macy's with a three-year old understands the concept of "you break it, you buy it." All but the stout-of-heart parent would steer the tot clear of the china section altogether. Today, the world expects the United States to fix what it broke in the aftermath of a conflict. The megacity has become a "steer clear" zone in U.S. Army doctrine.² Like the complexities of keeping a toddler out of trouble in Macy's, the Army grasps the complexities of tackling war in the megacity. Former Secretary of State and Army General Colin L. Powell acknowledged the expectation in deliberations over the war in Iraq in 2002 with President George W. Bush, according to the Washington Post's Bob Woodward. He called it the "Pottery Barn Rule."³ The expectation that the United States will fix what it broke and make preparations for the end of a conflict essential throughout the prosecution of the conflict. Fortunately, war is unlikely to be generated within a megacity because of the megacity's economic dynamism. However, if external forces thrust war upon the megacity, victory will require the preservation of the megacity's dynamism and intricate networks. A look at the megacity's mojo shows its economic power. A case study on sieges indicates that the best way to preserve the economy and the megacity's networks is to win without fighting. The case study flows into a concept for victory in a megacity without substantially breaking the megacity. Victory without butchery means employing deception, gaining support from inside, and preventing the enemy from using tunnels.

The megacity is not one of the "nine terrains" Sun Tzu envisioned. But if he were alive today, Sun Tzu would have to revise his terrains to include the megacity. The world's population is growing increasingly urbanized and more megacities are emerging. Megacities present a multidimensional battlespace inhabited increasingly by netizens (network + citizens) linked through complex digital relationships. Megacities frequently stretch high into the sky, dense with towers, while containing depths of an almost equal size below ground in a warren of tunnels. Slums and peri-urban areas are also a characteristic of megacities.⁴ How do you fight and win in this complex territory? Given the amount of wealth generated in megacities and their importance to the global economy, the challenge to success in a megacity is to take it without substantially breaking it. Key terrain becomes network nodes for food, water, communications, and electricity. Seizing key terrain generally means laying siege to the city.

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 $^{^{2}}$ The term *megacity* is defined as an urban area with a total population of more than 10 million people.

³ Bob Woodward, *Plan of Attack* (New York: Simon & Schuster, 2004), 150.

 $^{^{4} \}mathit{Peri-urban}$ is defined as the space where urban and rural areas overlap.

The growth of urban poverty associated with a megacity seems to drive doom and gloom analysis about the future of warfare. Economic data suggests a different view and there is room for optimism. Megacities cluster cheap labor, deliver public goods and services efficiently, generate significant portions of national wealth, and provide opportunity for advancement. A look at the data will show the economic power of the megacity and will explain why people migrate to them. The megacity's economic power and resiliency will likely insulate the megacity from warfare in the future.

Pessimism seems to dominate literature on urbanization and megacities. A leading figure in the pessimistic camp seems to be Australian writer David Kilcullen. In his book, *Out of the Mountains*, Kilcullen argues that population growth, urbanization, littoralization, and connectedness are factors that will play a role in the causes of wars of the future.⁵ Kilcullen deduces that population growth and concentration in urban centers, such as megacities, will cause wars because war is a fundamental human endeavor. Where humans are, Kilcullen predicts, war will follow.⁶ Kilcullen reaches a logical conclusion, but data does not seem to support the conclusion, and Kilcullen's conclusion falls short on understanding urbanization and the growth of megacities.

Jonathan Kalan, Janice Perlman, and Edward Glaeser have studied megacities and identified causes for optimism. Kalan, a photojournalist who writes for the BBC and *Foreign Policy*, takes on the traditional notions of the megacity's ills. Where some see slums, Kalan argues there is dynamic economic activity and upward mobility. Where some see environmental catastrophe, Kalan suggests that the average megacity dweller uses less energy and emits less than his rural counterpart.⁷ Janice Perlman is a sociologist who spent 40 years studying the *favelas* (shanty town) of Rio de Janeiro. Her research documented the upward mobility of the megacity's slums and demonstrated why people continue to migrate toward megacities.⁸ Harvard economist Edward Glaeser proposes that slums are the sign of a healthy city, because they are the first step on the urban ladder to prosperity. He notes that cities do not make people poor, but poor people flock to cities because of the economic opportunity they provide.⁹ Looking at Detroit, the inverse seems true. When a city can no longer provide prosperity, people abandon it.

Three key assumptions underlie the analysis of the likelihood of warfare in a megacity. The first is that a fundamental cause of war is economics. The second is that the most important difference between a city and a megacity is their scale. The third is that the phrase "war in a megacity" refers to urban combat, such as the conditions the U.S. military experienced in Fallujah, Iraq. A single violent act or terrorist attack does not constitute war, but could be the precursors to war. Graham Brown and Arnim Langer, scholars of hybrid inequalities, note that, "Empirical evidence suggests that the progress of a country's economy and the likelihood of violent conflict tend to be inversely related . . . violent group mobilization frequently occurs in situations characterized by a sharp economic decline or lower-than-expected economic progress."¹⁰ Indermit Gill, director for Development Policy at the Development Economics and Chief Economist Unit of the World Bank, emphasized scale in differentiating megacities from cities.¹¹ If megacities are prosperity generators on a massive scale, then it would seem that war would be unlikely.

¹¹ Kalan, "Think Again," 70.

⁵ David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (Oxford: Oxford University Press, 2013), 28

⁶ Ibid.

⁷ Jonathan Kalan, "Think Again: Megacities," Foreign Policy 206 (2014): 69.

⁸ Janice Perlman, Favela: Four Decades of Living on the Edge in Rio de Janeiro (Oxford: Oxford University Press, 2010), 201-4.

⁹ Edward Glaeser, Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier (New York: Penguin, 2011).

¹⁰ Graham K. Brown and Arnim Langer, "Horizontal Inequalities and Conflict: A Critical Review and Research Agenda," *Conflict, Security & Development* 10, no. 1 (2010): 27.

Megacities attract millions each month, and aggregate their cheap labor into economic success. Nearly 1.4 million individuals per week migrate to cities globally.¹² If people are rational actors making choices about their future, then clearly they see taking a chance on the cities as beneficial, even if it means trading the countryside for the slum. Mega-naysayers such as Kilcullen predict a "human tidal wave" as a coming catastrophe, but since 1950, the cities of the globe have absorbed the equivalent of New York City's population every other month.¹³ Despite this huge influx, the city continues to deliver on its economic promise to many. Not only do people migrate to cities and eventually improve their economic situation, they generate enough wealth to send it back to their relatives. According to the World Bank, "In 2013, remittances were more than three times larger than official development assistance (ODA) and, excluding China, significantly exceeded foreign direct investment flows to developing countries."¹⁴ The human migration toward the megacities and the remittances demonstrate the economic success of the megacities. Additionally the migration and remittance flows link megacities and rural regions closely together so that it is possible economic shock in one could be felt in another. The megacity's economic success and increasing global ties are two factors that will insulate the megacity from the prospect of warfare.

Upward mobility for the urban poor and migrants of a megacity is another key factor in the diminished likelihood of war in a megacity. Janice Perlman, who experienced Rio's favelas first hand, makes an important distinction about the urban migrants. She observed that these newcomers were the "most far sighted capable and courageous members of their communities. They were the ones with the motivation and willingness to work in the least desirable jobs for the longest hours . . . to provide their children with the opportunities they never had."¹⁵ The United Nations Population Fund notes that cities concentrate poverty, but they also provide opportunities to escape poverty.¹⁶ Perlman followed residents of the favelas for many years and found that 67 percent of her original subjects, as well as 65 percent of their progeny, had left the slums. Those who stayed in the favelas reported that they had better access to public services and improved household comforts.¹⁷ As long as the megacity continues to churn economically and maintain the prospect of upward mobility for many of its residents, it seems unlikely that war will germinate amid the trickle-down prosperity.

Research suggests that megacities perform more efficiently and with less environmental impact in the delivery of goods and services than rural areas. A 2012 McKinsey Global Institute (MGI) study found that it was 30–50 percent cheaper to provide housing, water, and education in populated urban areas than in rural areas. MGI also found that 90 percent of urban households had electricity as opposed to 63 percent of rural households.¹⁸ Edward Glaeser argues that the average city dweller uses less energy than his or her country or suburban counterpart.¹⁹ In Glaeser's view, "The combination of public transportation, smaller homes, higher population density and neighborhoods designed for walking makes cities the most environmentally friendly

¹² K. C. Seto et al., "Human Settlements Infrastructure and Spatial Planning," in *Climate Change 2014: Mitigation of Climate Change, Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK; Cambridge University Press, 2012).

¹³ Perlman, Favela.

¹⁴ Dilip Ratha et al., *Migration and Remittances: Recent Developments and Outlook*, Migration and Development Brief 23 (Washington, DC: World Bank, 2014), http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934 -1288990760745/MigrationandDevelopmentBrief23.pdf.

¹⁵ Perlman, Favela, 216–21.

¹⁶ "Urbanization," United Nations Population Fund, accessed 13 November 2014, http://www.unfpa.org/pds/urban ization.htm.

¹⁷ Kalan, "Think Again," 71.

¹⁸ Richard Dobbs et al., Urban World: Cities and the Rise of the Consuming Class (McKinsey Global Institute, 2012).

¹⁹ Ethan Wagner, "Two Tales of a City," Journal of International Affairs 65, no. 2 (2012): 189–91.

places for living."²⁰ Similar to the argument about upward mobility, as long as the megacity continues to deliver the "public goods," war seems less likely to loom in future.

The flow of more than a million people per week and the subsequent upward mobility seems to confirm what the financial data shows. The megacity is a powerhouse of wealth generation. The MGI study found that the 600 cities making the largest contribution to global gross domestic product (GDP) would have created 65 percent of global economic growth by 2025. Of the 600 cities, 440 are in emerging economies. By 2025, those 440 cities will have generated close to half of global GDP growth.²¹

The Asian Development Bank (ADB) found that cities in Asia produce more than 80 percent of GDP in many Asian countries. According to ADB, almost 80 percent of metropolitan areas in the world have average incomes that exceed averages for their nations, particularly in Asia.²² The other ramification of megacity wealth generation is that the destruction or disruption to the megacity is not in anyone's interest. For countries depending on the megacities to drive their national economy, violence in the city disrupts the economy and the flow of goods and services is a mutually assured destruction situation.

War is not likely to take place in megacities because megacities are efficient dynamic aggregators of economic wealth, distributors of goods and services, and mechanisms for upward mobility. As long as megacities maintain their economic dynamism, war will remain an unlikely occurrence in a megacity. That does not mean that the megacity will be able to provide everything to all its inhabitants. Nor does it mean that violence, crime, and slums will not exist in megacities. It also does not mean that megacities are invincible. Possible causes for disrupting the success of megacities are state failure or interstate conflict. Yet, it seems that the megacity contains sufficient resilience and economic capacity to prevent such shocks from completely disrupting the megacity mojo.

In the event state failure or interstate conflict bring conflict to the megacity, it seems logical that the conflict could take shape as a siege. In the past, warring parties could bypass, occupy, besiege, or destroy enemy held cities. Of the four options for dealing with a city, one of the most complex military options is besieging a city. The density and territorial expanse of a megacity magnify the military challenge the megacity poses. Examining methods of ending sieges offers lessons, which could apply to the megacity. Several methods of ending a siege appear common: treachery, deception, tunnels, surrender, and negotiated settlement. Leave surrender and negotiated settlements to the diplomats and politicians. Treachery, deception, and tunnels seem the most applicable to the military practitioner, because opposing forces have used them all in sieges to compel an enemy to surrender or to resist an enemy's blockade.

A case study of 19 sieges on four continents over 2,000 years of history does not chronicle siege technology, but rather the people on both sides of the walls. The case study shows how people betrayed, deceived, and dug their way to the conclusion of their respective impasses using deception, treachery, and tunnels. Case selection included geographic considerations to ensure observe global siege conditions. Methodology for siege breaking also factored into the case selection as well as the availability of sufficient information documenting the use of deception, treachery, or tunnels. Surprisingly, the most common conclusion for a siege is that one of the parties simply capitulates once reaching the end of its ability to resist. The cases where resistance succeeded or deception brought swift victory are of greatest interest to this study. The significance today of sieges is that, as the number of megacities grows, twenty-first-century conflict is likely to take place in or around a megacity. The key to victory in a megacity may lie

²⁰ Ibid.

²¹ Dobbs et al., *Urban World*, 25.

²² "Urban Development," Asian Development Bank, http://www.adb.org/themes/urban-development/main.

beyond the Trojans and the trebuchet in understanding the siege as a complex military option for approaching conflict in a megacity.

Medieval walled cities and megacities bear some comparisons worth exploring. A megacity is an urban population center containing more than 10 million inhabitants, characterized by vast geographic area and dense concentration of people and infrastructure.²³ Megacities draw strength from generating enormous amounts of economic activity and the resiliency derived from the interconnectivity of the cities' in habitants.²⁴ At the same time, megacities remain vulnerable, because the inhabitants depend on water and produce grown outside of the city for sustenance. Not unlike the walled cities of the past, the density of the megacity makes visibility into the heart of the city difficult for an enemy. In addition, megacities must import the elements of sustainment, food, and water just as its medieval urban forbearers did. The need to sustain life through resources brought into the city makes both a walled city and a megacity vulnerable to sieges.

According to the Oxford Dictionary, a siege is a "military operation in which enemy forces surround a town or building, cutting off essential supplies, with the aim of compelling the surrender of those inside."²⁵ The term *siege* is different from the term *blockade* in that the purpose of a siege is to compel surrender through denying the enemy life-sustaining materials. In contrast, a blockade by definition does not have a stated purpose other than denying the import of sustainment. According to Merriam-Webster, a blockade "is to stop people or supplies from entering or leaving (a port or country) especially during a war."²⁶ The Army's *Operational Terms and Graphics* omits a definition of both words, but both remain viable military means to achieve objectives to-day. The task to "isolate" is listed in the *Operational Terms and Graphics* as "A tactical mission task that requires a unit to seal off-both physically and psychologically-an enemy from his sources of support, deny him freedom of movement, and prevent him from having contact with other enemy forces."²⁷ None of these definitions includes walls as a requirement. The key element in sieges is compelling the enemy to act and the enemy's resistance to that compulsion. For nearly 2,000 years, both the attackers and defenders in sieges have used treachery, deception, and tunnels to compel enemy action and achieve victory.

For the purposes of the case study, *treachery* is the provision of privileged information provided from inside source, which allows an opposing force to achieve foreknowledge in support of victory. The fruits of treachery can either provide insight into enemy centers of gravity, critical vulnerabilities or preconceptions. According to Abram Shulsky, former director of the Office of Special Plans at the Department of Defense, "deception refers to the effort to cause an adversary to believe something that is not true . . . with the goal of leading him to react in a way that serves one's own interests, rather than his." A study from the Office of Research and Development at the Central Intelligence Agency in 1980 divides deception into two types: A-deception involves increasing the enemy's ambiguity by diluting the truth's signal strength and increasing the possible number of alternate explanations; and M-deception is intended to draw in accordance with a plan.²⁸ Whether A-deception or M-deception, feedback that the enemy is interpreting signals as intended and improves the overall success of any deception operation.²⁹ Privileged information from the inside is one key feedback mechanism.

²³ Kalan, "Think Again," 69.

²⁴ David J. Kilcullen, "The City as a System: Future Conflict and Urban Resilience," *Fletcher Forum of World Affairs* 36, no. 2 (Summer 2012): 20.

²⁵ "Siege," Oxford Dictionaries, http://www.oxforddictionaries.com/us/definition/american_english/siege.

²⁶ "Blockade," Merriam-Webster's, http://www.merriam-webster.com/dictionary/blockade.

²⁷ Operational Terms and Graphics, FM 10-2 (Washington, DC: Department of the Army, 2004).

²⁸ Deception Maxims: Fact and Folklore (Washington, DC: Office of Research and Development, Central Intelligence Agency, 1980), 22.

²⁹ Abram Shulsky, "Elements of Strategic Denial and Deception," Trends in Organized Crime 6, no. 1 (Fall 2000): 17.

In some cases, betrayal from an insider represents an efficient path to victory. In AD 634, General Khālid ibn al-Walīd laid siege to Roman-controlled Damascus. A resident of Damascus seeking refuge for his bride, informed Khālid that the city planned to mark the birth of the Roman governor's son with a celebration. Additionally, the Roman informant told Khālid that the inhabitants of the city would be drunk and the walls lightly defended. Khālid selected a few men to scale the walls, open a gate, and allow Khālid's army to enter.³⁰ Privileged information provided Khālid with insight into the activities behind the walls, and allowed Khālid to take advantage of an operational opportunity. Operations in a megacity will similarly require insider information to overcome the density of the megacity and inform operational decisions.

Similar to Damascus, insider information proved decisive in the siege of Smolensk. Lithuanian forces besieged Russian-controlled Smolensk from 1609 to 1611. Lithuanian forces finally broke through when an informant, Andrei Dedishin, told the Lithuanian forces the location of city wall's vulnerability.³¹ Lithuanian forces dug under the wall and placed a powder charge underneath the wall to punch a hole and provide an avenue for attack. The city fell in a day following the wall's breach.³² Once again, an insider provided information critical to the enemy's understanding of vulnerabilities and played a decisive role in ending the siege.

In Metz, France, during the Franco-Prussian War, Wilhelm Stieber, Otto von Bismarck's head of the *Feldgendarmerie*, employed an extensive network of sources.³³ Stieber had a source in French Marshal Patrice de MacMahon's staff who reported the French plans to relieve their forces under siege at Metz.³⁴ Prussian General Helmuth von Moltke used the source's report to outmaneuver the French relief force and trap them in the fortress of Sedan, including Emperor Napoleon III (or Charles-Louis-Napoléon Bonaparte). Not only did the source's information compel the surrender of Metz and Sedan, it ended the war by crushing the French Army's ability to resist.

Deception changes risk-gain calculations, often allowing one side to persist until reinforcements arrive or convincing a side that continued resistance is futile. In 1899, British Colonel Robert Baden-Powell and a garrison of 1,500 men withstood a siege by 8,000 Boers for 217 days at Mafeking.³⁵ Colonel Baden Power and his men employed a variety of deceptive tactics to buy time until reinforcements could break the siege.³⁶ For example, Colonel Baden-Powell's men placed dummies on the fortifications to draw fire from Boer positions, offering British snipers a chance to attrite the Boer force. When Boers grew skeptical of the dummies, the British played accordion music as the dummies made their appearance on the fortifications.³⁷ Colonel Baden-Powell also cobbled together improvised dummy forts, guns, and armored trains to draw enemy fire.³⁸ The British would also "fatten-up" any emissaries sent to speak with the Boers during the siege to give the appearance that conditions in the fort remained tenable for a significant period.³⁹ Baden-Powell also arranged Sunday cricket matches to aid the impression that all was well within the walls and that the British could hold out indefinitely.⁴⁰ His ruses bought sufficient time for British reinforcements to raise the siege. In the case of Mafeking, deception

- Lithuanian Prints," Cross-Cultural Communication 10, no. 3 (2014): 2.
- ³³ Crowdy, The Enemy Within.

³⁰ Terry Crowdy, *The Enemy Within: A History of Espionage* (Oxford, UK: Osprey Publishing, 2006).

³¹ Daniel H. Shubin, Tsars and Imposters: Russia's Time of Troubles (New York: Algora Publishing, 2009), 200.

³² Anna Filipczak-Kocur, "The Regaining of Smolensk in 1611 and Its Defence in 1634 in the Eyes of Contemporary

³⁴ Ibid.

³⁵ Christopher Dawson, "The Celebrated Siege," Daily Telegraph (Sydney, Australia), 17 May 2000.

³⁶ John Fox, "Lord Robert Baden-Powell (1857–1941)," Prospects 43, no. 2 (2013): 255.

³⁷ Reginald Hargreaves, "For to Deceive," Marine Corps Gazette 43, no. 1 (1959).

³⁸ Dawson, "The Celebrated Siege."

³⁹ Hargreaves, "For to Deceive."

⁴⁰ Dawson, "The Celebrated Siege."

served as a force multiplier and allowed the British sufficient time to reinforce their position and lift the siege.

The British success at Mafeking illustrates not only how deception can change the riskgain calculation, but also how deception conditions the enemy through repeated actions and small changes. The British representative's appearance and attitude conditioned the Boers with whom he spoke to believe that the men within Mafeking's walls had sufficient stores. The cricket matches also supported the deception by making the besieged seem more able to resist.

In Detroit during the War of 1812, the British employed "Magruder's Principle" of deception offensively to even the odds of victory. Magruder's Principle states that "it is generally easier to induce an opponent to maintain a preexisting belief than to present notional evidence to change that belief."⁴¹ In Detroit, British Major General Isaac Brock played upon the fears and beliefs of American commander Brigadier General William Hull that the British force exceeded the American force significantly and his fear of Native Americans. In a letter to Major Thomas Evans, General Brock credited Major Thomas with the idea to clothe the British militia in discarded uniforms from the 41st Regiment of regulars. Brock told Thomas he thought the ruse doubled the size of his force in the Americans' eyes. Additionally, to increase the apparent size of the British force, Brock ordered that soldiers walked through the chow line in a loop such that they surreptitiously dumped the contents of their mess kit in a pot and returned to the end of the line.⁴² Brock intercepted a letter from General Hull indicating his fear of attack from Native Americans to the American Secretary of War William Eustis. Brock used the knowledge of Hull's fear to draft a message to Hull, playing on Brock's alliance with Tecumseh and the Shawnee. Brock noted that he would responsible for the good conduct of his men; however, he could not control the actions of the Shawnee forces under his command. The letter clearly influenced Hull's decision to surrender Fort Detroit with barely a shot fired on 18 August 1812.⁴³

Used offensively in the case of Fort Detroit, deception served as a force multiplier and played an important role in ending the siege swiftly. Brock disrupted Hull's ability to command and control, because he thoroughly skewed his perception of reality. Scott Gerwehr and Russell Glenn suggest that "Deception is used to adversely affect an opponent's decision-making processes, most often to influence or degrade enemy command and control (C2)."⁴⁴ Gerwehr and Glenn saw the effects of deception as applicable even down to the individual enemy soldier in a "low intensity urban insurgency."⁴⁵ The isolation of the American troops defending the walls of the fort, in part, allowed Brock's deception to work, because the defenders could not verify Brock's claims regarding the Native Americans and could not properly assess the size of the opposing force. The density of a megacity will also likely make deception a tool, which both sides could use.

Tunnels are ancient weapons that remain a in the repertoire of modern warfare. Tunnels provide life support or efficient means of employing limited resources to attack enemy forces.⁴⁶ Historically, armies and insurgents have used tunnels to gain advantage over numerically superior opponents. Tunnels tend to prolong sieges; opposing forces tend to use tunnels when they have sufficient time and expertise to construct them. Although tunnels can prolong conflict,

⁴¹ Deception Maxims, 6.

⁴² Ernest Alexander Cruikshank, *The Documentary History of the Campaign upon the Niagara Frontier: Part 3* (Niagara, Canada: Lundy's Lane Historical Society), http://www.nosracines.ca/e/page.aspx?id=885575

⁴³ Donald R. Hickey, The War of 1812: A Forgotten Conflict (Champaign: University of Illinois Press, 2012), 83.

⁴⁴ Scott Gerwehr and Russell W. Glenn, *The Art of Darkness: Deception and Urban Operations* (Santa Monica, CA: Rand, 2000), 20. http://www.rand.org/pubs/monograph_reports/MR1132.

⁴⁵ Ibid.

⁴⁶ Arthur Herman, "Notes From the Underground: The Long History of Tunnel Warfare," *Foreign Affairs*, 26 August 2014, http://www.foreignaffairs.com/articles/141931/arthur-herman/notes-from-the-underground.

tunnels can also end sieges when used as a weapon, such as in the Siege of Smolensk. There is a psychological advantage in the use of tunnels.⁴⁷ Like the leviathan lurking beneath the sea's surface, a tunnel can deliver an unseen threat to an enemy without warning. At the same time, tunnels are symbols of resistance, such as in Gaza. The tunnels provide a morale boost to the Palestinians as both a symbol and a means of Palestinian resistance.⁴⁸

In Turin, during the siege of 1706, tunnels extended the ability of the city's Austrian/Savoyard defenders to withstand the French Army until reinforcements arrived to lift the siege. Both Turin's Austrian/Savoyard defenders and their French opponents used tunnels to try to break the four-month siege. The French, under the command of General Louis Francois D'Aubusson, Duc de la Feuillade, even tried to build a trench around the city. By late August 1706, Austrian forces feared they would run out of powder and ammunition to sustain the fight and knew they had to develop a strategy to break the siege. The Austrian commander, Weirich Philip Lorenz, Count von Daun, focused Austrian efforts on mining and countermining operations as the most efficient means of opposing the French with his limited resources.⁴⁹ The Savoyard sappers constructed tunnels nearly reaching the French lines. In one case, French forces located a tunnel into the city and a Savoyard sapper had to blow up the tunnel to prevent their entry into the city and lost his life in the process.⁵⁰ Rather than dueling artillery, the main effort in the siege of Turin appears to have taken place underground. The tunnels did not deal the final blow to the French forces; however, the subterranean cat and mouse game engaged the French for months until the armies of Prince Eugene of Savoy and Victor Amadeus, Duke of Savoy, could relieve the siege.

The battles of Petersburg (1864) and the Somme (1916) took place nearly 50 years apart yet followed similar patterns. In both cases, the attacking force opposing a well-defended, fortified position used tunnels to shock their enemies in the hope of breaking a stalemate. In the case of the Battle of the Crater in Petersburg, Union troops secretly dug a tunnel under the Confederate lines, filled the tunnel with barrels of black powder, and detonated the powder.⁵¹ Unfortunately, due to errors in executing the plan that was to follow the explosion, the blast trapped advancing Union soldiers in a crater.⁵² Unable to scale the crater walls, Union soldiers became easy pickings for the stunned Confederates.⁵³ At the Somme, British soldiers detonated 450,000 kilograms of explosives underneath Hill 60 on Messines Ridge, creating an 800-meter crater.⁵⁴ The explosion killed or entombed 10,000 German soldiers and eventually the British took the ridge.⁵⁵

The Palestinian tunnels at Gaza demonstrate the asymmetric use of tunnels in warfare. In 2014, Israel Defense Forces (IDF) destroyed 31 military crossings into Israel.⁵⁶ These sophisticated tunnels 60-feet below the surface contained weapons caches and avenues to move Hamas fighters and equipment and to kidnap victims. Some tunnels were large enough to drive trucks through.⁵⁷ For more than a decade, the tunnels also provided vital support to the inhabitants of Gaza as the means for smugglers to move goods in for resale. Smugglers have moved everything

⁵⁵ Herman, "Notes From the Underground."

⁴⁷ Ibid.

⁴⁸ Khaled Abu Toameh, "Analysis: Perfume, Viagra, Lions and Fuel: Smuggling Is Gaza's Growth Industry," *Jerusalem Post* (Israel), 14 November 2008.

⁴⁹ Kenneth P. Czech, "Breaking the Siege of Turin," *Military History* 14, no. 6 (1998): 42.

⁵⁰ Ibid.

⁵¹ Alfred P. James, "The Battle of the Crater," *Journal of the American Military History Foundation* 2, no. 1 (Spring 1938): 2–25.

⁵² Herman, "Notes From the Underground."

⁵³ Bryce A. Suderow, "The Battle of the Crater: The Civil War's Worst Massacre," *Civil War History* 43, no. 3 (1997): 221.

⁵⁴ Mark Day, "Miners of Messines," Australian, 11 August 2007.

⁵⁶ Ibid.

⁵⁷ Ibid.

from food and small household items to cars and building materials through the tunnels.58 When Israel cut off fuel deliveries to Gaza in 2008, smugglers even established a pipeline for fuel and the price of fuel fell by nearly 50 percent. The longer the siege persists, the more sophisticated the tunnels become.⁵⁹

Treachery, deception, and tunnels are likely to remain important tools in modern sieges, particularly in a megacity. Today's sieges may take place without encircling walls, as in Gaza, but the key principle of compelling an enemy to surrender its position remains. In the sieges examined, opposing forces tried to use treachery, deception and tunnels to gain an advantage and break a stalemated situation. Sources of privileged information regarding the enemy situation and center of gravity serve to hasten victory without significant loss to friendly forces. Deception changes risk-gain calculations, and can act as a force multiplier in uneven contests. Tunnels can offer sustainment or a means of delivering a knockout punch from below to attack enemy forces. Tunnels bring a psychological advantage to the fight. They can carry with them the terror of the unknown or act as a symbol of resistance. In combatting the density of the megacity and its complex networks and understanding how treachery, deception, and tunnels have contributed to victory in siege warfare will be critical to success.

With the "Pottery Barn Rule" in effect, or its "Macy's corollary," it seems clear that a military operation aimed at gaining control of a megacity or its inhabitants must have a different approach to the problem. Gaining control of a megacity will likely involve depriving certain sectors, or even the entire city, of at least some sustainment to compel them to conform to the attacking force's plan. This siege without walls will require a new approach, which preserves the megacity and its power, and can harness that power to achieve victory. The new approach will require foreknowledge, deception, and misdirection to change the enemy's reality and bend the enemy to conform to the will of the attacking force without unduly damaging the features making the megacity so valuable.

Sun Tzu stresses the importance of "foreknowledge."60 Foreknowledge gained through intelligence collection is the central element in battlespace preparation. Foreknowledge requires using all sources of information effectively to understand the center of gravity of the enemy city. While all forms of intelligence are important, gaining insights from human sources within the city with access to key network nodes is the most important. Not only can these human sources inform as to how the network works, they can also highlight critical vulnerabilities or exploitable enemy preconceptions and in some cases assist in the exploitation of those vulnerabilities. For example, the right source at the public water company could provide information about how to control the flow of water to certain sectors remotely. Access to major telecommunications companies offers similar benefits. Treachery from within leads to foreknowledge for the attacking force and increases the opportunity for surprise.

Surprise is frequently an important biproduct of deception. Gerwehr and Glenn noted in their 2000 monograph that surprise attacks can significantly diminish the cost of attacking in an urban environment. Their research indicated that, "surprise changed the ratio of casualties in favor of an attacker from 1:1 to 5:1."61 U.S. Army General William E. DePuy also agreed that surprise changed the combat calculus, although he disagreed with Gerwehr on the magnitude. DePuy assessed that surprise doubled combat power for either side. Regardless of the precise magnitude, it seems clear that surprise increases combat power. Dr. Barton Whaley, a

⁵⁸ Tamer Qarmout and Daniel Béland, "The Politics of International Aid to the Gaza Strip," Journal of Palestine Studies 41, no. 4 (Summer 2012): 34.

⁵⁹ Abu Toameh, "Perfume, Viagra, Lions and Fuel."

⁶⁰ Sun Tzu said the key to enabling "the good general to strike and conquer, and achieve things beyond the reach of ordinary men, is foreknowledge." Sun Tzu, The Art of War.

⁶¹ Gerwehr and Glenn, The Art of Darkness.

noted scholar in deception from the Naval Post Graduate School, observed that of the 68 major battles fought between 1914 and 1967, combatants increasingly relied on deception to achieve surprise.⁶²

Foreknowledge can feed a successful deception or influence campaign, because deception campaigns rely on an accurate understanding of the motivations and desires of the deceived. Noted political scientist Robert Jervis wrote an essay on misperceptions in which he hypothesized that decision makers tend to force new information to fit their existing analysis of a given situation.⁶³ Foreknowledge is essential to understanding an opponent's preconceived notions to lead an opponent to misperceive the threat and make tactical errors. General Brock in the Siege of Detroit is a classic example of this technique. Brock used Hull's belief about the size of the British forces and his fear of a violent attack from Native Americans to achieve victory. Each megacity will differ in terms of what motivates the leadership and inhabitants. However, shaping the beliefs of the inhabitants of the megacity at all levels of society to achieve desired outcomes for the attacking force seems to be as essential to battlefield success as artillery rounds. Some examples of possible ways to lead the enemy to misperceptions could be using deception to increase the apparent size and capability of the attacking force. The deception shaping could include planted stories in local news and social media outlets about a new capability, which could radically change the conflict. In addition, include news stories about the benevolence of U.S. forces to civilian populations, especially those who cooperate with instructions and do not pose a threat to U.S. forces.

Another important use for deception is to misdirect the location of your attack. Misdirection is particularly effective when paired with an enemy's preconception.⁶⁴ The Allies were very successful using this tactic at Normandy. Adolph Hitler remained convinced that the Allies planned to invade at Pas-de-Calais. The Allies had foreknowledge based on ultra intercepts of Hilter's conviction and used it to craft the Allied deception plan associated with Overlord.⁶⁵ Data from a 1980 study completed for the CIA's Office of Research and Development indicated that deceptions, which played to enemy perceptions, succeeded more frequently than those that did not.⁶⁶ An attacking force could use control over the network nodes, particularly communications, to create the appearance of an impending attack far away from the intended target. The operational plan should include a psychological campaign to undermine the enemy's will to fight. The psychological campaign could incorporate the deception plan, but could simply use information gained from sources to attack the enemy's morale.

As seen in the siege of Gaza, tunnels have served as a lifeline for the inhabitants of Gaza. They became both symbols of resistance as well as a means to circumvent the blockade. Given how many megacities have miles of underground tunnels already constructed to accommodate public transportation, denying the enemy the use of these tunnels is critical lest the tunnels protract the siege. A ruse suggesting that a contagion dwells in the tunnels or that the attacking force has rigged the tunnels with explosives and traps would keep people voluntarily out of the tunnels. The ruse could serve as a force multiplier so that U.S. forces would need personnel to guard the tunnel access points. The ruse is not likely to be durable as a stand-alone effort. The ruse has a long military tradition because, according to Vietnam veteran Lieutenant Colonel Richard E. Mack, "the commander who can successfully outwit the enemy doesn't need fire superiority, nor necessarily the advantage of a larger force."⁶⁷ In the age of social media, it be-

⁶³ Robert Jervis, "Hypotheses on Misperception," World Politics 20, no. 3 (April 1968): 459.

⁶⁴ Deception Maxims, 7.

⁶⁵ Ibid., 6.

⁶⁶ Ibid., 9.

⁶⁷ Richard E. Mack, "A Case for the Ruse," Marine Corps Gazette 52, no. 4 (1968): 24–27.

comes easy for residents to spread truth about situations on the ground and therefore the ruse execution must be thorough and nested within a larger plan to gain control swiftly.

The ultimate goal should be, as Sun Tzu recommends, to win without fighting.⁶⁸ The megacities worldwide continue to grow and drive prosperity. However, megacities are not without their weaknesses. Similar to ancient walled cities, megacities seem particularly sensitive to the continuous flow of food, water, and supplies from outside the megacity. The case study on sieges showed how opposing forces used treachery, deception, and tunnels to gain an advantage in sieges. The case study demonstrated that foreknowledge gained through the treachery of an insider and a deception represented excellent means for ending sieges to the deceiver's advantage. Tunnels presented a mixed bag. When forces on either side of the walls used tunnels to breach the walls, the tunnels succeeded most often when combined with deception or treachery. Tunnels also served as symbols of resistance and often prolonged conflict. Therefore, in the interest of taking a megacity with numerous subterranean tunnels, it seems best to render the tunnels useless to the opposing side. Foreknowledge, deception, and treachery will attack the enemy's "awesomeness" and sap his will to resist. Capitulation with minimal destruction of the megacity is vital to prevent a massive humanitarian assistance problem and to preserve the megacity's economic power. Keeping the "Pottery Barn Rule" in mind, foreknowledge will highlight ways to apply force most efficiently to achieve victory. At the same time, foreknowledge could reveal vulnerability in the enemy's perceptions of the situation, which could allow the use of a ruse or a misdirecting deception. Foreknowledge is the key to unlocking the siege and bringing a victory without fighting.

⁶⁸ Sun Tzu, The Art of War.