Campaigning The Journal of the Joint Forces Staff College

Featured Essays

Baltimore Rally: Joint Interagency Planning, Training, and Leader Engagement Achieves Unity of Effort in Response to Baltimore Unrest

The American Insurgency: Lessons from a Failed British COIN Strategy



The New Surrogate Actor: The Utilization of Cyber Surrogate Forces and Proxy Forces in Unconventional Warfare

Breaking Down the Fundamental Challenges in Effective Operational Assessment



"That All May Labor As One"

Campaigning

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In this issue of Campaigning:

Editor's Corneriii Dr. Daniel H. McCauley
<i>Features</i> Baltimore Rally: Joint Interagency Planning, Training, and Leader Engagement Achieves Unity of Effort in Response to Baltimore Unrest1 COL Paul J. Cisar
Breaking Down the Fundamental Challenges in Effective Operational Assessment
The New Surrogate Actor: The Utilization of Cyber Surrogate Forces and Proxy Forces in Unconventional Warfare
The American Insurgency: Lessons from a Failed British Counterinsurgency Strategy
<i>Commentary</i> Operation Unified Response – The 2010 Haiti Earthquake
Managing the Expectations of the Third Offset
Developing an Operational Approach for the Transition from War to Peace through Stabilization, Reconstruction, and Development: Understanding Strategic Direction
<i>The Foresight Factor</i> On the Horizons: Leveraging Foresight for National Security Reform
Author Submission Guidelines90

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Editor's Corner

Welcome to the Fall 2016 edition of Campaigning. In a recent speech at the Air Force Association Air and Space Cyber Conference, the Chairman of the Joint Chiefs of Staff, General Joseph F. Dunford, Jr., expressed the need for the U.S. Joint force to maintain a balanced inventory of capabilities to defeat an array of potential adversaries across the range of military operations. In addition, he highlighted the need to think and act globally to address the challenges inherent within the transregional, multi-domain, and multifunctional strategic environment. This edition's essays present a range of analysis and thought that not only span multiple regions, domains, and functions, but incorporate historical and future aspects, too.

The Features section begins with an essay by COL Paul Cesar titled "Baltimore Rally: Joint Interagency Planning, Training, and Leader engagement Achieves Unity of Effort in Response to Baltimore Unrest," that focuses on the Maryland National Guard, the Maryland Emergency Management Agency, and the City of Baltimore's response to civil unrest in April 2015. Leveraging relationships established within the State's interagency components through exercises and training events prior to the unrest, state and city leaders were able to minimize the potential physical and social impacts.

The second featured essay, "Breaking Down the Fundamental Challenges in Effective Operational Assessments," by LCDR Lee, Dr. Medina, and COL Bolton, takes an indepth look at the challenges associated with assessment methods. In their essay the authors identify the two principal barriers that impede operational assessments and provide five recommendations to consider when conducting operational assessments.

Maj Cowan, LCDR Rathke, MAJ Brokhoff, and Lt Col Leaman provide our third featured essay, "The New Surrogate Actor: The Utilization of Cyber Surrogate Forces and Proxy Forces in Unconventional Warfare." In this essay, the authors argue that proxy cyber forces, much like traditional guerilla forces, operate as surrogates and as small-scale irregular military forces on behalf of others. The surrogates fuse modern cyber capabilities with traditional unconventional warfare concepts and practices to achieve politicalmilitary advantages against stronger conventional forces. As such, the U.S. SOF community must develop similar capabilities to address this shortfall in current SOF capability and doctrine.

Out final featured essay is, "The American Insurgency: Lessons Learned from a Failed British Counterinsurgency Strategy," takes a historical look at the American Revolutionary War through the lens of a counterinsurgency campaign. In this essay, Dr. Pratt speculates that if the British military leadership had understood the true nature of the American rebellion, they may have opted for a more traditional counterinsurgency strategy as opposed to the traditional conventional war strategy that was largely pursued.

This edition's Commentary features three essays. The first essay, "Operation Unified Response – The 2010 Haiti Earthquake," by Dr. DiOrio, provides an overview of the relief effort and some of the challenges associated with this specific disasters. Dr. DiOrio offers reflections of senior military and civilian leaders and what can be done nationally and internationally to facilitate future relief efforts.

The next essay, "Managing the Expectations of the Third Offset," by CDR Ricciardella, LtCol Berke, Lt Col Hresko, and LTC Zinn, provides a brief overview of previous offset strategies and the DoD's desire for developing a third offset strategy. The authors posit that the success or failure of the third offset will hinge upon how well the Services and research laboratories work together to transform concepts and ideas into a flexible strategy. Our final Commentary is by Associate Professor Snukis. In his essay, "Developing an Operational Approach for the Transition from War to Peace through Stabilization, he advances the argument that Joint Force commanders must begin any planning endeavor by comprehensively understanding strategic guidance and direction. Failing to do so, especially considering the longer term requirements in stabilization and reconstruction, will continue to result in less than desirable outcomes.

Finally, in this edition's Foresight Factor essay, I present a strategic foresight tool, The Three Horizons, that can be used by leaders, strategists, and planners, to help identify and understand competing futures and values that create policy and strategy spaces. Leveraging the current discussion on national security reform, the Three Horizons provides a conceptual framework for discussion on future defense reform.

We hope you enjoy this edition of *Campaigning*. You can let me know what you think by emailing me at mccauleyd@ndu.edu.

Daniel H. McCauley Editor Baltimore Rally: Joint Interagency Planning, Training, and Leader Engagement Achieves Unity of Effort in Response to Baltimore Unrest

COL Paul J. Cisar

In April 2015, Baltimore, Maryland, experienced the most violent civil unrestsince the death of Dr. Martin Luther King, Jr. in 1968.¹ In response to the April 2015 unrest and Emergency Declaration that followed, the Maryland National Guard employed over 3,000 Soldiers and Airmen in Operation Baltimore Rally to support civilian authorities. Effective execution of Operation Baltimore Rally resulted largely from relationships developed during prior interagency civil disturbance planning and training by components of the Maryland National Guard, the Maryland Emergency Management Agency, and Baltimore City Police that facilitated trust, operational understanding, and decision-making, ultimately supporting unity of effort during Operation Baltimore Rally.

Planning and Preparation²

"As a result of the inadequate plans and exercises, when Hurricane Katrina struck, a lack of understanding existed within the military and among federal, state, and local responders as to the types of assistance and capabilities that the military might provide, the timing of this assistance, and the respective contributions of the National Guard and federal military forces."

General Accounting Office (GAO) Report 2006³

In August 2013, the Director of Joint Staff for the Maryland National Guard (MDNG), Brigadier General (BG) Linda Singh,

approved a new MDNG domestic operations planning strategy, shifting from a single All Hazards Plan to individual Contingency Plans geared toward specific response scenarios supported by an overarching Campaign Plan [MDNG Military Support to Civilian Authorities Campaign Plan¹.⁴ The single All Hazards Plan was over 600 pages, but lacked specificity or detail for specific scenarios, which also made it difficult to transition to executable orders for specific response operations (hurricanes, snowstorms, civil disturbances). What was needed were individual Contingency Plans (CONPLANs) geared toward specific potential hazards the state might face. This would provide the necessary planning level detail and make them easily adaptable to specific events and executable for short/no notice events. In 2014, a new MDNG Joint Training Plan (JTP) became effective integrating individual CONPLAN development with joint training executed throughout each training year.⁵ This JTP had a five year planning horizon. The new integrated planning and training strategy supported revision or development of new specific hazard-based CONPLANs while simultaneously building response capability. Lessons learned from exercises during the year supported significantly improved final CONPLANs. In 2014, the new Director of the MDNG Joint Staff, BG Jeffery Kramer, directed Civil Disturbance training and OPLAN development as the focus for 2014 based on his assessment that Civil Disturbance planning and training needed attention.



Figure 1. MDNG Joint Planning and Exercise Strategy⁶

As the year progressed, the MDNG Joint Staff actively pursed interagency support and participation during exercise development and planning activities. The Operations Director for the Maryland Emergency Management Agency (MEMA), Ms. Kate Hession, was a key advocate for State agency participation. She facilitated an 8 June 2014 Civil Disturbance Table Top Exercise (TTX) attended by leaders from MEMA, the Baltimore City Police Department (BPD), both components of the MDNG, and key unit leaders. The TTX received favorable feedback and afterward the BPD indicated they would also revise their "Civil Disobedience Plan."⁷

Throughout the year, the Joint Staff actively shared Civil Disturbance planning products including the draft CONPLAN, briefings, TTX after-action review, and other information with MEMA, the Maryland State Police (MSP), and BPD. In September 2014, the MDNG executed a full-scale Civil Disturbance exercise that included all MDNG initial response forces and supporting units. BPD observers present at the exercise provided advice and feedback to the units. Key leader and staff exchanges increased throughout the year and developed into close coordinating relationships among the agencies in a number of areas including civil disturbance response, natural disaster response preparedness, and support for special events such as high profile sporting events. BG Kramer had regular communications with senior members of the BPD including Lt. Col. Melissa Hyatt, the Area 1 commander overseeing the Central District and Inner Harbor area of Baltimore. Baltimore's Star Spangled Spectacular celebration on September 8-16 2014 provided additional opportunities for many of the State agencies including MEMA, MDNG, and the BPD to work together closely. MDNG liaison officers worked in the BPD emergency operations center throughout the Star Spangled Spectacular. The 10-day celebration drew more than 2.5 million visitors including visits to Fort McHenry by President Obama and Vice President Biden. Numerous other events including a US Navy Blue Angels demonstration and port calls by US and British naval vessels and tall ships from many nations required coordination with the US Coast Guard and US Navy.

In January 2015, the Director of Planning in the Mayor's Office of Emergency Management requested BG Kramer's input/concurrence on the City's Civil Disobedience Plan. The plan identified eight potential tasks for the MDNG, developed through staff coordination between the BPD and MDNG Staffs.⁸ This higher level of key leader and staff coordination would be critical in the months to come.

Understanding the Operating Environment

"Disorder did not erupt as a result of a single "triggering" or "precipitating" incident. Instead, it was generated out of an increasingly disturbed social atmosphere, in which typically a series of tension-heightening incidents over a period of weeks or months became linked in the minds of many in the [African American] community with a reservoir of underlying grievances. At some point in the mounting tension...came the breaking point and the tension spilled over into violence."

National Advisory Commission on Civil Disorders 1968⁹

On 12 April 2015, BPD arrested Freddie Gray after a brief foot chase. During transport to the detention facility, Gray suffered a medical emergency and died at the hospital seven days later.¹⁰ Seven months earlier, a Ferguson Missouri Police Officer shot and killed 18year-old Michael Brown; more than 100 witnesses offered varying accounts of the shooting.¹¹ In December 2014, a Staten Island Grand Jury decided not to indict a New York City Police Officer whose arrest and physical restraint of Eric Garner led to his death; the decision came a week after a similar decision in the Michael Brown case.¹² These highly publicized events resulted in calls for police reform and protests across the country particularly among the African American community. Slogans such as "I Can't Breathe" and "Black Lives Matter" appeared on tee shirts and signs at public demonstrations and protests. In Ferguson, unrest broke out in the immediate wake of Brown's death and following the Grand

Jury's decision not to indict the police officer involved. Following the Brown grand jury decision, many political leaders across the country raised a concern. President Obama stated, "The fact is, in too many parts of this country, a deep distrust exists between law enforcement and communities of color."¹³ In Baltimore, social, religious, and political leaders were also speaking out. Two days before the Brown decision, Louis Farrakhan spoke to a crowd of more than 2,000 at Morgan State University in Baltimore, telling them, "They know an explosion is going to come," referring to predicted violence in Ferguson.¹⁴ In West Baltimore, Reverend Al Sharpton, social leader and cable television host, spoke at the Macedonia Baptist Church saying, "We worship this morning at a time of real crisis and concern."¹⁵ Religious leaders in Baltimore played a key social and political role, particularly among the African American community. Reverend Jamal H. Bryant of the Empowerment Temple AME Church was a key organizer of protests in Baltimore following the Brown grand jury decision. Outspoken on civil rights issues in Baltimore and nationally, Bryant had spent time in Florida during the Trayvon Martin incident and several weeks in Ferguson after Brown's death.¹⁶

Baltimore's demographics also factored into the environment. Like many other large Northeastern "Rust Belt" cities with large former industrial-based economies, Baltimore's population has undergone a major shift. Since 1970, Baltimore City's population declined almost 30%; during that same period, the African American population remained nearly steady, resulting in a 65% increase in their share of the city's population.¹⁷ According to US Census Bureau estimates, the 2014 population of Baltimore was 622,793, composed of 63% African American, 37% white or other ethnic descent; a ratio almost exactly the opposite of surrounding counties in Maryland.¹⁸



Figure 2. Baltimore City Poverty Rate Map¹⁹

The median household income from 2009-2013 for Baltimore City residents was \$41,385 with 23.8% of city residents falling below the poverty level; Maryland's overall median income over the same period was \$73,538, with 9.8% of the population falling below the poverty level.²⁰ Baltimore's economy also experienced a major transition over the last 50 years. The once thriving industrial, steel and major manufacturing base largely disappeared giving way to a more diversified finance, healthcare, tourist, and international trade-based economy focused around the port and inner harbor area.²¹ The

resulting demographic and economic shifts concentrated poverty around the city's center with affluent areas concentrated in the Northern suburbs and Inner Harbor areas.²² Baltimore is the only independent city in Maryland not located within a county. It has a charter form of Government with a Mayor who leads the executive branch and 15member city council who form the legislative branch with lawmaking powers; all serve four-year terms.²³ In November 2011 voters elected Democrat and former City Council President, Stephanie Rawlings-Blake, to her first term as Mayor with 87% of the vote.²⁴ Also in 2011, voters elected City Council President Bernard Young to his first term, replacing Rawlings-Blake. He and eight other City Council members as well as the Mayor are representative of the city's majority African American electorate. The BPD Commissioner leads the eighth largest municipal police department in the US with 3,200 sworn officers.²⁵ The BPD is responsible for policing an area encompassing 92 square miles, including 11.7 square miles of water (primarily the Patapsco River a major tributary of the Chesapeake Bay providing deep-water port access to the City).²⁶ The BPD organizes policing responsibilities in nine districts; five in the western portion of the City and four in the eastern.²⁷ Several major facilities within the City limits have law enforcement authorities and forces including the Port of Baltimore's Maryland Transportation Authority Police, the US Park Police for Fort McHenry National Park, and the US Coast Guard for navigable waters of Patapsco River and Inner harbor. Other important facilities include the 5th Regiment Armory, Headquarters for the MDNG, and the Cade Armory in West

Baltimore. Six additional MDNG Armories are located within 5 miles of the City limits.

Response Operations²⁸

We asked our incident commander focus group "what problems do you see on every incident?" Several incident commanders immediately replied: unclear, multiple, conflicting, uncooperative and isolated command structures... What accounts for command problems, for failure to collaborate?... First, they said, agencies lack the commitment to coordinate with each other. At best, they are unaware of what other agencies are doing and do not try to find out. At worst, they are unwilling to cooperate. This stems from a lack of trust between agencies and a lack of understanding across disciplines.

A Study of the Lessons of Disasters, Why We Repeat Them, and How We Can Learn Them.²⁹

After the outbreak of violence in Ferguson, leaders of the MDNG and BPD became increasingly concerned about potential unrest in Baltimore. The MDNG provided liaison officers to the BPD during several major Michael Brown related protests in Baltimore and increased alert posture for initial response units on several occasions. MDNG liaison officers provided staff support to BPD, situational awareness for the MDNG, and quick direct access to MDNG leaders and senior staff to answer BPD questions about potential MDNG response capabilities. On April 12, BPD representatives attended a MDNG briefing on support the Missouri National Guard provided in response to unrest in Ferguson.

Seven days later, on Sunday, April 19, Freddie Gray died of injuries sustained after his arrest by BPD officers. Protests erupted that day and tensions between BPD and demonstrators grew over the following week. By Tuesday, protestors began to mass regularly around the BPD Western District Headquarters near where police arrested Gray.³⁰ Leaders from the MDNG and BPD remained in close contact monitoring the situation. While demonstrations had been relatively peaceful, BPD raised concerns over planned weekend protests that would be significantly larger. By Friday, the MDNG revised the standing Civil Disturbance Operations Plan tailoring it specifically to current events in Baltimore. The MDNG Joint Staff also issued a Warning Order to all subordinate elements addressing the current situation.

Saturday evening, April 25, protests turned violent. There were thirty-four arrests and six police officers injured after demonstrators broke windows and vandalized police cars following a day of peaceful protests and strong rhetoric from protest leaders, including Mr. Malik Shabazz, president of Black Lawyers for Justice.³¹ On Monday, Gray's funeral was the focal point of protests and continued strong rhetoric. Jamal Bryant told his congregation, "Somebody is going to have to pay" for Gray's death.³²

The situation deteriorated rapidly. On Monday afternoon at 3PM, a group of mostly high school students gathered at Mondawmin Mall after a social media message called for a "purge".³³ Shortly after 3PM, violence and looting broke out and spread across multiple areas of the City. Police, largely in a defensive posture, were overwhelmed quickly. With media reports of looting, burning buildings, and chaos across the City, Governor Hogan declared a State of Emergency at 7PM. Shortly afterward, the MDNG issued Operations Order Baltimore Rally, initially calling up 500 Maryland Guardsmen. By 2AM Tuesday, initial MDNG elements arrived in the city to support the BPD with missions to secure critical infrastructure and facilities. With numerous additional requests coming from BPD for roving patrols, transportation support, and crowd control elements, the MDNG activated an additional 475 Guardsmen including the State's Joint Task Force, JTF-MD, comprised of the 58th Troop Command to assume command and control of all activated units. Over the next ten hours, the number of activated Guardsmen doubled to 2,000, including the Maryland Air National Guard to execute their joint reception, staging, onward movement and integration mission.

priorities based on BPD requirements. On Wednesday, April 29, BG Kramer assumed command of a new Joint Task Force, JTF-Chesapeake, created to assume command and control of two subordinate Task Force elements assigned to the City. This helped relieve span of control issues as larger numbers of MDNG forces flowed into the response effort. BG Kramer also assumed a critical role as the primary National Guard liaison to the BPD Commissioner, Anthony Batts. This role was crucial in providing both lead-time for mission requests as well as shaping Guard mission tasks to ensure they were suitable and feasible.



Figure 3. MDNG, Joint Staff, J1 Activation Strength³⁴

While the MSP served as the lead state agency for the response, close coordination continued with the BPD, which provided mission One of the decisions BG Kramer and Commissioner Batts made early on was to establish a central staging base for both police and MDNG troops in Lot C of the Baltimore Ravens Stadium in downtown Baltimore. This facilitated both rapid coordination and link up between Police and MDNG troops. More than 1500 MDNG personnel and 1000 police officers from jurisdictions all over Maryland and other supporting states used Lot C as a primary base for staging operations. BG Scott Kelly from the Maryland Air National Guard commanded the MDNG portion of the staging base, ensuring MDNG units had the sustainment and support requirements were met, as well as helping unit involving MDNG troops and protestors. By in large, troops were welcomed by many and garnered a large measure of respect contributing significantly to their effectiveness and support of the police. Uparmored MDNG vehicles provided critical transportation for both police and troops who often conducted joint patrols and used them to move forces to and from locations around the City.

commanders coordinate last minute mission requirements or changes with MSP leaders on site.

The Adjutant General of the MDNG, MG Singh, spent most of her time in the City maintaining



regular direct contact with Governor Hogan and advising the Mayor. She also spent a great deal of time on the streets visiting troops and did a great deal of public affairs messaging, reminding the public how Guardsman included members of the community and were on the street to protect the City. The combination of a rapid deployment by MDNG forces, MSP, and other police as well as the curfew put in place Monday was effective. By Thursday, 30 April, violence subsided.

There were very few violent incidents

Figure 4. JTF Chesapeake Operations Overlay 1 May^{35}

As the weekend of 2-3 May approached with additional protests planned, political and civic leaders were determined to keep the calm. The number of authorized Guardsmen mobilized rose to 3,000. The MDNG headed into the weekend with two notable operational changes, a more robust task organization and streamlined mission assignment process with refined coordination measures and lead-time worked out with the BPD and MSP. The Maryland Air National Guard activated 500 additional Airmen and trained many of them in civil disturbance techniques and tactics to support missions over the weekend. Two hundred and fifty Airmen attached to JTF Chesapeake supported missions in the City over the weekend, while the remainder continued to execute the support missions. The weekend remained calm and by Monday, with the curfew lifted and calm restored, police took control of the city and MDNG forces began demobilizing.

Analysis, Lessons Learned, and Conclusions

Lessons in Command and Control from the Los Angeles Riots in 1997 included: California NG leadership did not have a deployment timeline establishing when troops would be available on the streets; law enforcement agencies expecting military support did not know when to expect troops to arrive; and law enforcement agencies did not know where they wanted the troops to be deployed nor exactly what the soldiers should do once they appeared.³⁶ It had been a very long time since law enforcement leaders had seriously considered the possibility that the military might be required to help them in quelling a civil disturbance. When the crisis came, military support arrangements would be mostly ad hoc.

Civil disturbances are complex events, but are often predictable by maintaining situational awareness and understanding of social dynamics at play. A key to success in achieving unity of effort during Operation Baltimore Rally was the recognition by senior leaders of both the MDNG and supported agencies that conditions were building toward potential unrest and required proactive preparatory efforts. This led to the focus on civil disturbance planning, training, and increased interagency coordination in the year preceding the April 2015 unrest in Baltimore. Prior lessons learned from unrest in Los Angles, Ferguson, and other incidents led MDNG leaders to recognize that establishing leader and staff relationships among supported and supporting agencies was key to enabling effective interagency planning and ultimately effective response.

Achieving unity of effort is a challenge. While many organizations have significant capability, the central challenge is how to integrate and synchronize those capabilities by first getting organizations to work together.³⁷ MDNG joint planning and training events in 2014 that included most of the agencies ultimately responding to the unrest in Baltimore established a forum for agencies to discuss and work through potential unrest response scenarios. More importantly, it established key relationships that would facilitate ongoing coordination, understanding of capabilities, limitations, and interoperability concepts. For example, the BCP incorporated components of the MDNG Civil Disturbance plan into their plan, which clearly outlined expected timelines for various MDNG forces to mobilize and be available. Their primary mission statement " To protect the life and property, and maintain civil order for the citizens of Baltimore" and end state "to protect the right of all citizens to peacefully assemble and conduct free speech activities as guaranteed under the 1st Amendment to the US Constitution" closely followed verbiage in similar sections of the MDNG Civil Disturbance plan.³⁸

The relationships established through leader and staff engagement and coordination paid dividends during the response. MG Singh and BG Kramer both had immediate access and credibility with senior civilian leaders, including the Governor, City Mayor, and Police Commissioner, which translated down through the ranks. Information requests, clarifications and suggestions regarding mission requirements, assignments, and execution flowed laterally across staff elements and between Commanders and Police leaders in the field. It is quite likely without these pre-established working relationships, the coordination processes very easily could have bogged down in bureaucratic levels of review and filtering. The importance of established informal communication and coordination measures, especially in the early stages of response, was a lesson learned and implemented from the 1992 Los Angeles riots.³⁹

Press conference coverage featured key leaders from all the responding agencies together, and included MG Singh reinforcing key messaging requesting peaceful demonstration and compliance with the curfew and police direction. This unified messaging, reinforcement of civilian authority and military support roles, and close working relationships presented a united front to the public and was likely a factor in reducing violence and restoring calm. In contrast to the relationships and derived benefits among civilian and military staffs and leaders, many pointed to apparent discord among city officials and between City Mayor and Governor as a contributing factor in delaying initial response decisions and action.40

As expected, there were challenges in sustaining unity of effort during the response. A common challenge cited in many large

incidents is the command structure and weak implementation or understanding of the incident command system (ICS).⁴¹ The MDNG faced command structure challenges for the first 72 hours. The urgency for forces on the street and the rapid mobilization of more 1800 service members in 24 hours resulted in battalion and higher headquarters elements mobilized simultaneously or even after subordinate units. Those headquarters elements struggled to gain situational awareness, understanding, and command and control of subordinate units, some of which were already executing missions in support of police. Rapid mobilization and deployments also resulted in span of control issues as headquarters elements initially received assignment of significantly larger numbers of forces and units than normal. This impacted units executing missions early in the operation; some went longer than 48 hours before getting relieved for a formal rest cycle. It also affected timely and effective orders flow, processing, synchronization, and execution as various command elements came online.

Standing up and integrating a formal incident command structure was also a challenge for both police and MDNG. Under the ICS, the MSP served as the state's lead agency under the state's Emergency Support Function 13 (Law Enforcement), although the City Mayor and Police Commissioner primarily were generating both police and MDNG mission requirements. It took several days for multiagency mission coordination mechanisms to develop a clear unified command structure, and for coordinated and integrated mission request and assignment processes to evolve. The BPD "Civil Disobedience Plan" laid out basic information needed for initial interagency response operations but did not include a formal ICS incident action plan (IAP) with assignments for detailed roles and responsibilities including for a single Incident Commander, nor did it account for a multiday incident.⁴²

The establishment of the joint interagency staging base at Lot C of the Ravens Stadium with co-located operations leaders from the MSP, BPD, and MDNG early in the response was key in de-conflicting or clarifying mission assignments before these agencies deployed for operations across the City as integrated teams. MDNG Liaison officers at the City EOC and senior military leader engagement with both the MSP, the City, and Governor's staff also significantly reduced the impacts of the evolving command and coordination processes on the MDNG Civil Disturbance training and related unit preparations clearly benefited MDNG units supporting the response. Well prior to activation for Operation Baltimore Rally initial response force units had specialized training and equipment such as Non-Lethal Warfare kits, individual protective gear, and ammunition pre-staged and ready.

Requirements for additional equipment and ammunition to support follow on forces was on order or identified for rapid sourcing and distribution. Logistical challenges existed, but were anticipated and ultimately overcome with little or no impact to mission support. One of the primary logistical challenges was accountability for the large amount of equipment and ammunition pushed to rapidly mobilized and deploying units, and accounting for it at the conclusion of the operation. According to reports and reviews, the BPD had significant shortcomings in equipment and training that affected their response.⁴³

The April 2015 unrest in Baltimore was traumatic for the citizens of Baltimore. Recovery from the physical damage and social impacts likely will take years, but it could have been worse. While over 100 police officers were injured and there was significant property damage to more than 400 businesses, there was no documented direct loss of life due to the unrest.⁴⁴ Despite the challenges, prior joint and interagency planning, training and most importantly the relationships built in accomplishing those preparedness activities facilitated the trust, common operational understanding, and decision-making that ultimately supported unity of effort during Operation Baltimore Rally.

Author Biography.

COL Cisar is currently serving as the Chief of Staff for the Maryland National Guard, Joint Force Headquarters.

¹ The terms civil unrest, civil disobedience, civil disorder, civil disturbance, and riots are often used synonymously in broad terms by many references to describe the protest activities of a group of people which can span the spectrum of conflict from lawful peaceful protest to mass violence and property destruction. Generally, civilian authorities including law enforcement and military planners use one of the first four terms in the planning/preparedness context. This reflects both political and social sensitivities to defining any specific potential event or group as a riot or rioters. The term riot or rioter connotes unlawful behavior and violence; use of the terms prior to an incident raises concerns of incitement, constitutional rights infringement, and generally negative authoritarian view of the exercise of first amendment constitutional rights to assembly. This terminology sensitivity is reflective of recent public scrutiny of Missouri National Guard planning documents that used doctrinal military planning formats that included the word "Enemy" in referring to Ferguson protestors.

² Material in this section is based on the Author's experience as the Maryland National Guard, Joint Force Headquarters, Joint Staff, Joint Plans and Training Officer (J5/7) during the period from December 2011 through August 2015.

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⁴ Paul Cisar, Maryland National Guard All Hazards Operations Plan (AHOP) Structural Revision, Staff Position Paper (Baltimore Maryland, MDNG JFHQ, July 2013)

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⁶ Ibid, 6.

⁷ The Baltimore City Mayor's Office of Emergency Management and City Police Department refer to their plan to deal with incidents involving civil disobedience, crowd management, and mass arrests as the Baltimore City Civil Disobedience Plan

⁸ Chi-Poe S. Hsia, email RE: Civil Disturbance Planning to BG Jeffrey P Kramer, Director, Maryland National Guard Joint Staff, 25 January 2015.

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¹⁷ Randy Yeip, "Baltimore's Demographic Divide", The Wall Street Journal", May 1, 2015, accessed July 18, 2015, http://graphics.wsj.com/baltimore-demographics/

¹⁸ "State & County Quick Facts" US Census Bureau, accessed July 18, 2015,

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¹⁹ Yeip, "Baltimore's Demographic Divide"

²⁰ Ibid

²¹ Maryland Department of Business and Economic Development, Brief Economic Facts, Baltimore City, Maryland

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Breaking Down the Fundamental Challenges in Effective Operational Assessment

LCDR Anthony Lee, Dr Richard Medina, and COL Fred Bolton

Assessments Processes in Military Operation

Assessments are a critical component of determining how the United States military forces are, or are not, meeting their objectives throughout the range of military operations. Joint Doctrine describes assessment as the "determination of the progress toward accomplishing a task, creating a condition, or achieving an objective."1 Assessment activities help Commanders make decisions by providing a means for tracking progress toward specific objectives.² Without appropriate assessment techniques in place to inform the Commander and the staff of their operations' impacts, there can be no real understanding of whether or not what they are doing is actually meeting the intended objectives, or for that matter, if it is doing any good at all.

More recent U.S. counterinsurgency and counterterrorism operations have generated ample questions and concern about performing assessments across the range of military operations. A review of the "Decade of War" from the Joint Staff, Joint and Coalition Operational Analysis (JCOA) Center report demonstrates how assessment is a key consideration across at least two of its eleven themes, *Understanding the Operational Environment, and Host Nation Partnering*.³ JCOA's research acknowledges the need to (1) educate leaders on the importance of conducting assessments, and (2) develop meaningful assessment frameworks. Consequently operational assessments across the range of military operations are flawed in their implementation by two fundamental barriers: a lack of knowledgeable and experienced analysts and the guidance the analyst might use to design and execute an assessment.

The challenges with operational assessments and the two principal barriers faced in conducting this critical task must be understood. These barriers ultimately lead to the large number of subsequent problems typically seen in Command assessments.⁴ There are, however, ways to improve the assessment process as part of force development and operational design.

General Problems with Assessment Methods

The absence or poor quality of assessment feedback mechanisms can give rise to the inability to identify and mitigate against a number of negative trends such as duplicated development efforts, wasteful spending, a lack of decision-making accountability, and counter-productive policy or program implementation.⁵ It is acknowledged, however, that designing and conducting assessments are often difficult in complex asymmetrical situations such as in Afghanistan, Iraq, or across the continent of Africa, where several different operations can be undertaken at any given time.⁶ The challenge of conducting effective assessments may be further exacerbated by activities from other international

organizations and agencies conducting similar development or stability operations that may not be wholly accounted for or understood.

These agency complexities can have a multitude of cascading effects that make performing an assessment convoluted. Actions conducted in theater can simultaneously impact the host nation along political, economic, and social lines, at multiple levels of its hierarchy, and can vary spatially and temporally across the region. In his essay, "Why Operations Assessments Fail: It's Not Just the Metrics," Jonathan Schroden elaborates that "in unconventional conflicts the theories of war are more complex, objectives and ways to achieve them are less straightforward."⁷ This description of the operational environment is one of the more common and well-known problems of performing assessments intheater.⁸

Additional difficulties lie in geopolitical environments where particular command concerns span an array of countries. Such difficulties are exhibited where a number of failed or failing states exist, a population is to some extent hostile to Americans, or a state's government is likely the root cause of such a failed state now or in the recent past. Further adding to these situations, the United States might be engaged in combat in a particular region that is continuously unstable.

Assessment is a difficult undertaking with only one of these added elements, and the problem may be compounded by multiple elements. Former Combined Joint Task Force, Horn of Africa Commander, Rear Admiral Brian Losey indicates that "the very nature of a population-centric approach to foster stability through Civil-Military Operations (CMO) and humanitarian assistance activities makes determining whether a specific activity achieved a tactical or strategic objective – a very tall order."⁹

Consequently, there is a notable deficiency in suitable assessment feedback mechanisms by which the staff might make appropriate recommendations to the Commander. More to the point, the assessments themselves contain a number of weaknesses that are continually reinforced and propagated as each staff turns over and continues with unsuitable methodologies. These findings mirror those of others in the military assessment community.^{10, 11} It is therefore necessary to identify the most common and fundamental barriers to an effective assessment process to begin to overhaul the current process.

The Fundamental Barriers to Operational Assessments

There are two conditions that primarily lead to inadequate assessments through the range of military operations. These are gaps in the required education, training, and experience that the analyst will need to perform the assessment, and—closely tied to education and experience—the guidelines analysts have at their disposal to formulate and execute the assessment plan.

Educational Obstacles to Military Assessment Processes

Assignment of experienced and trained personnel to an assessment team is an essential element of success for the overall assessment process. Unfortunately, it is often the case within the military that unqualified personnel are assigned to assessments positions. Observations through several deployments and at various levels of command have suggested that there are few within the military ranks that have a robust comprehension of assessing operations. In this case, the military assignment process, as well as military education and training, simply fall short of preparing Service members to execute these responsibilities.¹²

This shortfall does not mean that those without specific skills and designations do not have the ability to perform analytical work, only that they lack the specific education or experiences to perform such duties from the start. In many cases an undergraduate degree is an implied criterion when assigning personnel to assessments branches, however, it is not explicit. Moreover, there are no criteria set forth as to the specific types of degrees or coursework needed. The assumption is made when a staff believes that assigning a person into a billet that they could somehow understand the scientific principles behind research at the outset. It could be argued that these persons should have this understanding with basic undergraduate education and, granted, most college programs require some semblance of basic statistics or research design. The question is then how many retain this knowledge through experience

and further education? How many have advanced degrees; how many have had advanced statistics and research coursework; how many are skilled in ethnography, geospatial analysis, demographics, models and simulations, social sciences, program and policy analysis or other similar methods? On the other hand it could also be reasoned that Operations Research Systems Analysts (ORSAs) would have the necessary skills to perform operational assessments, however, as Schroden's observations indicate, this may not necessarily be the case.¹³

Understandably, there is a need for filling billets; however, untrained and inexperienced "analysts" performing a command's assessments can have dire consequences for actions taken based on analysis results. Those who have not been trained, educated, or lack experience in the techniques of research will have great difficulty in identifying valid methodologies and equally important, in identifying those that are not appropriate. Moreover, in his essay, "Operations Assessment in Afghanistan is Broken. What is to be Done?," Stephen Downes-Martin articulates "it is difficult for those not explicitly educated and trained in science, analysis, and critical thinking to identify whether an approach is logically or scientifically valid."14

This will be painfully apparent when evaluating aspects of model uncertainties and validations. Other examples of research failure might be improper data collection techniques, development of unknown and undefined variables, unawareness of key operational and strategic system complexities, unqualified results, improper reporting methods, and most importantly, reliability of the conclusions. Further, specific failings of the researcher include an inability to identify problems, shortcomings, assumptions, and cautions within their own research, and the importance of reporting these conditions. These conditions only serve to amplify the adage that *they don't know what they don't know*.

Procedural Obstacles to Military Assessment Processes

In the recent past, one of the fallacies behind the typical design of an assessments shop is the notion that the analyst relies and most often structures the research design around incomplete design criteria. In essence, doctrine itself has led to challenges of how analysts might perform assessment by having been too limiting in the guidance that it provides. This is a view that has been identified within the joint community with a recent Joint Doctrine Note (JDN), explaining the need to address the gap by noting that...

"Current assessment doctrine does not provide sufficient guidance and procedures on how to evaluate progress toward achieving objectives, creating desired conditions and accomplishing tasks during joint operations."¹⁵

Research design methodology calls for consideration of multiple methods for data collection and assessment. Unfortunately, because of limited guidance on methods in doctrine, untrained analysts will utilize the best and often easiest techniques available. Many *analysts* assigned to assessment positions have no alternative but to reference what has been done in the past without an understanding of what they are referencing, nor do they understand the ability to expand their methods to consider other techniques.

In previous efforts to guide analysts, in their 2012 Prism essay, "Recognizing Systems in Afghanistan. Lessons Learned and New Approaches to Operational Assessments," Upshur, Roginski, and Kilcullen argue a common finding that "these metrics can be irrelevant and subjective whereby it represents an attempt to create an appearance of rigor through the use of quantitative language to express (in many cases) subjective judgment."¹⁶ Review of the JDN however reveals a thorough presentation of the why, what, and when of operational assessments and to a good degree, the how. It addresses some key considerations and challenges introduced here such as skills, organization and placement of the assessment team, and design considerations. Moreover it addresses even basic statistical considerations that an analyst should be keenly aware of in the first place. Of particular interest is the presentation of the framework to conduct operational assessments which is akin to a research proposal or a Data Collection and Analysis Plan (DCAP). This is something desperately needed in providing specificity into understanding the processes involved.

For all it does, the Joint Doctrine Note falls short, however, in explicitly explaining nuances of the guidance it provides. Noting that the JDN considers the capabilities listed as non-directive in nature, and that it is not an "introductory research methods" course, the assumption is made that these capabilities are inherent in nature. It is in this regard that the entirety of the assessments process breaks down. Although these considerations are well intended (and severely needed) to provide initial guidance into the planning and execution of an assessment, the analyst simply has not been trained in how to perform analytical functions. Most college curricula, for instance, require some aspect of research design and basic statistics, but many people do not pursue research as a profession. Thus, the basic understanding of the field is not practiced on a regular basis, particularly when you consider an operational warfare practitioner. It would be akin to an individual taking a course in astrophysics in undergraduate work and then asking them to fill in for a cosmologist for twelve months. This is not to say that being a research analyst is the same as unlocking the secrets of the universe, but the example illuminates the assumptions that are made when one is thrown into such a position because they had a class or two, five to ten years ago.

In presenting its assessments "best practices," the JDN explains some primary requisite skills, but the point is that these skillsets are largely devoid from those practicing assessments duties.¹⁷ These skillsets include the following:

Quantitative and Qualitative analytical skills –The primary concern is that those in assessments positions largely do not have the necessary skills. Does the analyst intuitively understand the statistical methods that can and cannot be used and why? Do they understand how to test hypotheses if needed?

Experience with common data analysis software and programs – It is not enough to explain that an analysis might be comprised of useful spider- or stop-light charts, bar graphs, or a geographic output, but how does one generate these and why? How does one analyze data in Excel for instance, how does one utilize statistical software packages like Geographic Information Systems (GIS) or Statistical Package for the Social Science (SPSS)? No guidance is provided on stepwise processes—even to the degree of providing a resource to review.

Some experience with or an understanding of military operations – The nature of the assessment is inherently military in nature. It is critical that the analyst have an understanding of what operations are taking place and how they will impact the environment.

Strong understanding of, and experience with, survey and polling techniques and analysis – In many cases it has been observed that the simplest solution is to "just write a survey" to get the data. However this area of methodology can be more difficult than quantitative methodologies. Survey theory, design, and analysis techniques are complicated and there is a particular art and science to survey and interview design, implementation, and subsequent analytical techniques. Furthermore, field observations are one other aspect that could be considered but only with properly trained personnel. Strong understanding of, and experience with, cultural understanding of the area of operations – To achieve this, the analyst should have the education of a sociologist, anthropologist, geographer, or sufficient training in these areas. A "strong" understanding of the cultural domain is not necessary in the context of analysis; however, stronger skills should be required for the analytical processes. While the knowledge of cultural aspects are nice to have, one must consider the numerous social, ethnic, and cultural nuances across even one area of operation let alone multiple.

Experience with common survey analysis software and programs – Noted above, will the analyst know which software is available and which statistical analysis techniques are appropriate in analyzing the data?

Ability to facilitate structured discussions of contentious issues and basic mediation skills There will, more often than not, be issues of contention when dealing with operations and assessments. An analyst should be able to provide ample justification for the information or positions presented to the staff and the Commander. Facilitation and mediation of contentious issues implies the analyst will be a buffer of sorts in addressing the issues within the staff and the assessments process. Analysts should maintain objectivity and provide clear and concise findings, recommendations, and conclusions to the staff. However, it is not their place to mediate a best solution for contentious issues.

Approaches to Consider for the Conduct of Operational Assessments

Based on the difficulties identified here, there are a number of recommendations that are provided for the improvement of the military assessment process. Though by no means exhaustive, they are meant to address the aforementioned barriers in ways that may range from being considered easily implemented, to the more administratively challenging, and perhaps even provocative. Of note are those recommendations associated with assignment, education, and qualifications of the analyst with various degrees of research methods, designing, and implementing training programs, fusing command-level assessment directorates, transforming U.S. military processes and terminology, and increasing reliance on academic and subject matter expertise.

Recommendation 1: Ensure Suitable Selection of Personnel

As an organization, DoD should develop a standard skill identification code and associated standards for personnel who will perform operational assessment functions within a Joint Force Headquarters. The Army Functional Area 49 (ORSA) and Air Force Specialty Code 61AX (Operations Research Analyst) designations provide a sound basis for personnel selection but only if individuals are available to fill those positions. Because personnel availability in these low density specialties is limited, an additional proficiency identifier should be created for those personnel with the expertise to perform assessment duties outside of their primary military specialty. Commands should then be in a better

position to identify those individuals with required skills, education, and experience to place into these analyst positions within the staff during the "recruitment" phase. In addition, interviewing personnel for these positions would be optimal, as there are few with the required skills. While application of assessment techniques can certainly be a learned skillset, if the intent is to revamp or restart an assessment cell, or if there simply is not enough time to provide training, it is recommended that the individual(s) have the competencies prior to deployment.

Recommendation 2: Implement Training Programs

To address the skills of research and analysis across the military, a professional training program should be developed, aside from the existing traditional Operations Research Systems Analysis (ORSA) training models.¹⁸ This program will provide basic understanding of how to design research that will be useful within "state building," counter-insurgency, or counter-terrorism lines of operations along various academic disciplines such as social and anthropological fieldwork, public administration and policy, and geographic analyses. In addition, a formal training program should provide basic and advanced statistical methods and consider both quantitative and qualitative analysis approaches as they are equally valuable.¹⁹ As part of a pre-deployment training process, an overview course in assessment techniques could be completed in as little as three to four weeks, provided a student has had a foundation in basic research methods.²⁰ As an outgrowth of joint

doctrine, a formal Operational Assessment Course should be developed under the purview of the Joint Staff at either the Joint Forces Staff College or Joint Targeting School.

Training should be founded upon the two primary responsibilities an analyst should undertake. One is the application of rigorous research methods and the other is the ability to understand the operational environment. For a research analyst to perform assessments, it is essential that they understand both aspects. An analyst should be able to understand or apply the principles for designing and conducting various modes of research. The analyst needs to comprehend the research design process as well as simple descriptive and inferential statistics and, to some extent, the more advanced and complex statistical testing methodologies (as needed). More important though, is understanding where application of such methods may or may not be appropriate.

Secondly, the greater skillsets the analyst has in understanding the operational environment, the more an assessment will be comprehensive in nature. The analyst should also be able to understand and apply concepts related to Systems of Systems Analyses (SoSA), spatial relationships, Operational Network Assessments (ONA), Social Network Analysis (SNA), and analysis of Political, Military, Economic, Social, Infrastructure, and Information (PMESII) conditions or similar theories and methods.

Lastly, the analyst should be multi-faceted in terms of technology use. They should

have an understanding at some level of advanced statistical software such as SPSS, SAS, or MiniTab; data mining software, such as Palantir; modeling and simulations; decision-making models; or geospatial analytical software packages, such as ArcGIS.

Recommendation 3: Create a Centralized Assessment Department for Enhanced Integration

To become more integrated with assessments across a command, the variety of command directorate perspectives should be considered.²¹ The process should be unquestionably coordinated and integrated but, moreover, be completely inclusive and transparent, however, with one sole source of analyses to determine effects and objectives attainment. The purpose of having a centralized assessments department is to "fuse" all data and information together for analysis and reporting; and the department should be autonomous, answering to the Commander alone. This autonomy will preclude the analyst staff from becoming too personally involved with each individual department's success(es). It will remove them from the daily operations of getting other tasks completed and allow them to focus on pure research and analyses.

Recommendation 4: Transform Terminology and Practices

Considering the shortcomings of U.S. military assessment methods, "developing Measures of Effectiveness (MOE) and Measures of Performance (MOP) does not adequately address the challenge of developing an assessment plan that will help guide decisions and identify opportunities and risks during execution."²² Restructuring the U.S. military's assessments framework to emulate other prominent or relevant agencies may promote inter-agency collaboration by reducing miscommunication between practices and terminology. ²³

Research designs should be planned to mimic common governmental evaluation methods. Whole of government operations are used to "create a platform for political, economic, and human security"²⁴ and include assignment of personnel to host national, military, and/or civil agencies to develop professional behaviors, build capacities, and assist in policy making. These activities are similar to what a public administration might perform, and it would be advantageous to treat them as such. Moreover, a more resounding consideration is the fact that many military officers who have taken research or statistical methods in undergraduate and/or graduate programs have learned these common research designs and terms. Ergo, using common terms and frameworks could allow quicker comprehension of the research needs and design structure.

Recommendation 5: Integrate Academic, Government, and Contractor Subject Matter Experts (SME)

Analysts should have access to academic institutions, think tanks, and/or military subject matter experts. In addition, they should have access to academic journals for theoretical and applied science references and should be equipped with various methodology reference materials on site. Having access to academics, whether remotely or on the Commander's staff, is extremely advantageous; they can provide the link between socio-cultural concerns and how the military and other federal agencies operate in the field. More importantly, experts can reinforce any shortcoming in the assessment staff expertise, and substantiate methods and findings.

There should be opportunities to work more closely with them as a military organization rather than have them work in isolation and apart from the rest of the staff. In this way, ideas can be shared, lending a better understanding of perspectives for academics, SMEs, and military personnel alike.

Conclusions

The importance of the assessment process cannot be underestimated. Regardless of the level of conflict intensity or phase of operation, understanding the conditions based on "ground truth" is an essential task. Without an effective assessment framework there can be no understanding, or at the very least, a more robust educated guess as to what progress is being made toward meeting the objectives.

The time is now to address these concerns and bring them to the forefront; and as the JCOA "Decade of War" report exclaims, there is a definite need to "employ a comprehensive framework for conducting assessments of relevant U.S. and host-nation variables to understand conditions, requirements, and progress necessary to meet national security objectives and promote needs of the host nation."²⁵ There are many practitioners and theorists who have proposed or implemented different approaches to operational or campaign assessments and all have made substantial progress in applying various analysis techniques. The principal concern, however, is that while the United States is becoming less involved in stability operations, development aid, and or capacity building within Iraq and Afghanistan, many may not feel this is a useful endeavor at present.

A counterpoint to this sentiment is the scale of development and stability operations taking place across the continent of Africa and other countries in the Middle East with no end in sight. To be sure, the U.S. military has made substantial improvement toward advancing the understanding of the difficulties of assessments. As addressed above, there are well-defined difficulties associated with performing assessments for the operational environment. Addressing these difficulties may alleviate other followon assessments challenges. The key themes in successful operational assessments are a lack of training, education, and skills of the assigned analyst; the limitations of overarching U.S. policy in terms of interoperability; and constraints within DOD doctrinal processes.

The goal is to address the fundamental problems associated with performing assessments in an operational environment in the first place. Only then can a more meaningful and interrelated, whole-ofgovernment assessment of U.S. operations take place. Until then, we are simply recycling the same ideas with the belief that these processes will work in the future even though they have not necessarily worked in the past. It may be then—in the next major conflict—that we will revisit our

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June 10, 2015. <u>http://smallwarsjournal.com/jrnl/art/foundations-for-assessment-the-hierarchy-of-evaluation-and-the-importance-of-articulating-a</u>

Review, 64(4), 103-125.

assessments and interoperability problems, realizing only too late that we have no clear picture, thus, repeating the cycle.

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http://www.dtic.mil/doctrine/notes/jdn1_15.pdf

http://www.dtic.mil/doctrine/notes/jdn1_15.pdf

¹⁸ There are several other specialties that are often used as a basis for "best practice" in selecting assessment personnel. Trained intelligence analysts often have acquired skills that can be applied to the assessment process. In addition, personnel associated with the targeting process, especially those who have completed training through the tactically focused Joint Targeting School three-week Staff Officer Course or one-week Battle Damage Assessment course have a foundation from which to build assessment skills.

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³ The Decade of War study is JCOA's response to the Chairman of the Joint Chiefs of Staff's call for learning the lessons of the past decade of US military operations.

⁴ A Command in this sense is a general term for a joint command such as a Combatant Command or Joint Task Force; and does not consider Service-specific operations assessments.

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¹² Connable, Ben., National Defense Research Institute, Rand Corporation, and Ebrary, Inc. Embracing the Fog of War : Assessment and Metrics in Counterinsurgency. Rand Corporation

Monograph Series. Santa Monica, CA: RAND, 2012, 23. ¹³ Schroden, Jonathan. "Why Operations Assessments Fail: It's Not Just the Metrics." *Naval War College Review* 64, no. 4 (2011): 97. ¹⁴ Downes-Martin, Stephen. (2011). Operations Assessment in Afghanistan is Broken. What is to be Done? *Naval War College*

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The New Surrogate Actor: The Utilization of Cyber Surrogate Forces and Proxy Forces in Unconventional Warfare

Maj Robert M. Cowan, LCDR Scott D. Rathke, MAJ Andrew S. Brokhoff, and Lt Col Sean A. Leaman

"This is another type of warfare--new in its intensity, ancient in its origin-- war by guerrillas, subversives, insurgents, assassins-- war by ambush instead of combat, by infiltration instead of aggression--seeking victory by eroding and exhausting the enemy instead of engaging him."¹

John F. Kennedy

Modern warfare has changed the nature of Unconventional Warfare (UW). Proxy cyber forces, like traditional guerilla/proxy forces, operate as surrogates and as members of small-scale irregular military forces. They operate in concert with an overarching political-military strategy against conventional forces and governments. The capabilities of surrogates, acting on behalf of others, seek to create discord and incite internal disruption from within the target state. UW is fundamentally an indirect application of power that leverages foreign population groups or entities in the support of mutual interests. By fusing proxy cyber actors and surrogates into UW concepts and practices, modern technologies enable UW mission objectives.

Enhancing U.S. SOF cyber-enabled special warfare capabilities and training is a strategic-level offensive capability gap that needs to be closed.² Closing this gap will level capabilities between existing cyber actors. Special Operations Forces need to pursue a form of special warfare that integrates cyber effects into tactical-level unconventional warfare. Integrating a cyber-enabled military specialization at the tactical-level would ultimately enable SOF the ability to confront cyber warfare. Having SOF trained in basic cyber techniques and capabilities is a cornerstone of that effort. Cyber-enabled UW bridges the gap between the virtual and physical worlds by harnessing modern information networks and fusing them with "oldfashioned, face-to-face SOF partner engagement."³

UW refers to the support provided to enable an insurgency designed to resist, coerce, disrupt, or overthrow a government or occupying power by operating through or with an underground, auxiliary, and guerrilla forces in a denied area.⁴ UW lines of effort include: disruption, intelligence, logistics, and psychological operations. Cyber surrogate forces are uniquely suited to provide effects across all UW lines of effort. As proven by the Islamic State of Iraq and the Levant (ISIL), Russia, and many others, those that control the narrative have a distinct advantage in cyberspace. By utilizing the range of options in cyberspace, cyber surrogates can amplify, create, and distribute vast amounts of information. The ability to exploit social media platforms for psychological impact plays out by the minute in online forums, Twitter, Facebook, and countless others.

First, disruption activities provide a key part for success during UW operations. This may include the destruction or degradation of enemy infrastructure, sabotage operations, communications, or limiting enemy sustainment capabilities. Currently, SOF use of cyber for disruption activities is limited even though it would give a commander unique options to support disruption efforts. By employing cyber surrogate forces, UW operations would limit the possibility of attribution, increase the element of surprise, and enhance intelligence gathering. Cyber surrogate forces can either be employed via traditional, kinetic, or sabotage activities against key adversary command and control networks and nodes or through non-kinetic denial of service activities that limit the ability to command forces or communicate.

In addition, while our unconventional adversaries continue to leverage cyberspace for intelligence operations, the U.S. SOF community is behind in exploiting this informational domain. Intelligence operations present one of the advantages of cyber surrogate forces. As an example, social media platforms provide areas for intelligence collection through exploiting publicly available information as well as supporting disruption activities.

In order to leverage the unique accesses, placement, and capabilities of SOF, standing engagements and interaction with partner forces provide an avenue for implementing cyber UW surrogates. By incorporating unclassified cyber tactics, techniques, and procedures (TTP), partner nation forces will be better postured to take advantage of adversarial cyberspace vulnerabilities. During key leader engagements (KLE) with U.S. foreign counterparts, it is imperative the upper echelon staffs properly message the importance of how SOF can play a vital role in cyber warfare and direct assistance on cyber-enabled UW. Expanding cyber subject matter experts (SME) and training interaction with partner forces enables interconnectedness based on a common understanding of the domain and provides not only avenues for further engagement, but also access to forces familiar with language intricacies, social norms, and the local area.

Additionally, advancing SOF cyberorganizations would offer significant benefits to modern UW efforts. A Special **Operations Command-Cyberspace (SOC-**CYBER) led by a Colonel or Navy Captain, provides the nation strategic capabilities and expertise no other DoD service can provide.⁵ The thought process behind SOC-CYBER is that it would align SOF forces to be fully incorporated with USCYBERCOM to assist in managing complex human-driven cyberoperations pursuing the most treacherous gray zone threats.⁶ SOC-CYBER would supplement perceptions during the expansion of national strategies, by inserting unconventional insights and asymmetric options throughout the development process. SOF enhances U.S. Cyber Mission Forces by mixing the best of technical and practitioner experience to jointly push-back against cyber-warfare's menagerie of threats.⁷ SOF are suited to provide an enhanced viewpoint on offensive cyberactions that optimize ambiguous relations between adversaries, computers, and data, while minimizing risks to force and mission. SOF's unconventional approach for avoiding decisive engagements while conducting offensive operations applies to

all types of human-based warfare, including cyber-war.⁸

By leveraging irregular actors, operating "by, with, and through" to our mutual advantage, UW makes possible the conduct of operations beyond the normal range and application of the instruments of national power. Emerging military problems of A2/AD, adversarial use of the internet, social media exploitation, and the reliance on cyberspace as a means for propaganda distribution and adversarial messaging require novel approaches to how the U.S. finds, builds, and utilizes proxy forces, especially those used to generate cyberspace effects. It is important to note not all operations that utilize irregular actors are limited to effects against "state actor" entities. The utilization of irregular actors like cyber surrogate forces can and should be leveraged against counter terrorism (CT), counter proliferation (CP), foreign internal defense (FID), and traditional counter insurgency (COIN) objectives. Additionally, the employment of cyber surrogate forces can be utilized as part of operations waged by general-purpose forces in a supporting role and reliance on information warfare objectives where supporting cyber-effects are part of both kinetic and non-kinetic effects on the battlefield. Additionally, the U.S. and our Allies will continue to face hybrid threats. The U.S. Army's Field Manual 3.0 suggests that hybrid threats will characterize the future operational environment.

Combinations of regular/irregular terrorists and criminal groups will be decentralized

and syndicated against the U.S.⁹ These hybrid threats will create a more competitive security environment. These threats currently take the form of violent ideological extremist organizations, rogue states, and a variety of other irregular challenges such as revisionist states like Russia, North Korea, and Iran.

State Actors

Revisionist states seek to challenge their current place in the global community and often rely on the subversive use of proxy forces to achieve their political and national objectives. These states will continue to rely on hybrid/asymmetric warfare TTPs to counter U.S. strengths and advantages.

Unconventional and asymmetric warfareleaning adversaries continue to expand their utilization of cyberspace for operational effects, command and control (C2), communications, intelligence gathering, disruption efforts, and other illicit activities. As explained by Duggan in *Strategic* Development of Special Warfare in Cyberspace, Russia successfully demonstrated its new understanding of how to integrate asymmetric technologies into unconventional warfare. By dispatching small teams of Spetsnaz Special Forces and enlisting virtual "privateers" and bounty hunters to conduct cyber-attacks against Ukrainian government information and logistics infrastructure, Russia was able to add opacity to the "fog of war" and create strategic effects by utilizing tactical forces.¹⁰

By utilizing SOF-enabled cyber forces, Russia choreographed cyber disinformation and cyber-attacks to create the conditions for conventional forces to achieve strategic objectives "under the guise of peacekeeping and crisis."11 Additionally, Russia waged a massive disinformation campaign aimed at legitimizing Russia's annexation of Crimea and support for separatists in eastern Ukraine. Russia has also employed socalled "troll armies" to invade online territories armed with pro-Moscow rhetoric to generate a narrative supporting their strategic goals and messaging.¹² In order to promote this narrative, Russia adapted a two-pronged strategy, releasing its troll armies as it tightened internet controls in the homeland. "Gray zone conflicts are not formal wars...they involve some aggression or use of force, but in many ways their defining characteristic is ambiguity."¹³ For example, in the "gray zone" conflict, Russia annexed Crimea and continues to foment civil conflict and separatism in eastern Ukraine through the extensive use of surrogates and cyber effects against key infrastructure.

Alternatively, new cyber/online censoring capabilities and operations in the A2/AD space have increased. As the use of cyberspace increased, so too has the drive for governments and groups to control it. China's Golden Shield Project, otherwise known as the Great Firewall of China, controls who sees what and when through censorship and surveillance. Selective disruption and blocking of websites as seen in the Arab Spring in 2010 by Egypt, Libya, Syria, and Tunisia provide a stop-gap

mechanism to slow information flow and messaging. Further, internet "kill switched" countries, such as North Korea, stand ready to disconnect from the rest of the world and further isolate themselves. Cyber surrogate forces could be utilized to provide access options to the outside world by utilizing proxy server access. Onion routing, such as I2P or Tor, and virtual private network (VPN) capabilities provide opportunities, not limitations, for subversive activities.¹⁴ Additionally, forces operating in "cyber constrained" A2/AD environments can be utilized for access, intelligence collection, preparation of the environment, disruption efforts, and surveillance/reconnaissance activities enhancing situational awareness of the battlespace.

Non-State Actors

Today, Violent Extremist Organizations (VEOs) and their aspirants are extremely effective at utilizing social media platforms to communicate, coordinate activities, recruit, and proselytize. ISIL utilizes every aspect of social media to communicate to external and internal audiences. By maintaining a consistent appearance and presence on social media, both governing effectiveness and ruthlessness of ISIL's propaganda campaign can appear far more successful and intimidating than reality. Additionally, cyberspace offers VEOs like ISIL a vast "global-commons" for recruitment and message dissemination. As John Horgan explains, "foreign fighters are driven to join ISIS by the need to belong to something special ... find something meaningful for their life."¹⁵ Their ability to

motivate foreign fighters to join the cause is truly global. In December 2015, The Soufan Group cited 12,000 new recruits flowed into Iraq and Syria in 2014 but grew to over 30,000 in 2015.¹⁶ ISIL's ability to recruit exceeded all other terrorist groups, including Al-Qaeda. Through effective use of social media tens of thousands of aspirants were emboldened to join ISIL's Jihad. According to Bean, "The largest terrorist threat on Twitter is ISIS ... whose social media efforts have been used to spread [their] message across the globe and recruit thousands to its cause. ISIS is estimated to have over 46,000 accounts on Twitter."¹⁷ Social Media tools like Facebook, Twitter, YouTube, WhatsApp, Snapchat, and countless other provide both the vehicle and conduit for communications, command and control, propaganda, and "branding." The means of their communication may serve as the most effective method for disrupting the terrorist's ability to recruit and generate narrative. Because of terrorist groups' reliance on "softer" technologies like smart phones and Wi-Fi connectivity, commercial off-the-shelf hacking tools can be utilized and vulnerabilities exploited with little training or expertise.

Countless organizations, groups, and individuals offer services for hire in the open, on the dark web, and other forums that also challenge the operating environment. Hackers sell anything from access to Facebook accounts to Botnet rental programs.¹⁸ The dark web offers cheap, easy tools and individuals for hire to create the effects needed. Beyond service for hire capabilities, emboldened groups of "patriotic hackers" and hacktivists are becoming a larger part of the cyber landscape for both adversaries as well as another friendly avenue to counter narratives and achieve objectives.

At the forefront of patriotic hacker/hacktivist group is Anonymous. Anonymous branded themselves as "an Internet gathering" with "a very loose and decentralized command structure that operates on ideas rather than directives."¹⁹ Anonymous functions as a surrogate entity, conducting intelligence gathering with nuances of psychological operations. They became known for a series of wellpublicized webpage defacements and disruptive, distributed denial-of-service attacks against government and corporate websites and servers. Following 2016 terrorist attacks in Paris, Anonymous expanded its counter ISIL "Operation ISIL" campaign with #OpParis. Anonymous conducted a "day of rage" and "International ISIL Day of Trolling" on 11 December 2015, advocating the use of hashtags #Daeshbags and #TrollingDay. They offered trolling advice and instructions for all internet users calling for openly mocking, taunting, and trolling via Twitter, Facebook, Instagram, YouTube, and others. They encouraged average internet users to also engage by pointing out anyone can participate in the "day of rage" and that it does not require special skills.

Additionally, numerous hacker communities including Anonymous, GhostSec, and Ctrlsec actively sought out and distributed thousands of Twitter account user names, email addresses, and social media persona details of ISIL members. This is unprecedented amongst the digital world as it is the first time these groups have come together for something this large. Energizing these groups as part of UW activities and the utilization of hacktivists by various entities and state-sponsored actors will become a larger part of controlling the narrative, psychological operations, and ultimately enhance cyberspace operational effectiveness.

The main challenges and obstacles to employing cyber surrogate forces in support of these concepts for the U.S. revolve around legal issues, possible retaliatory effects, and applying the correct framework. In the United Nations charter and the principles of International Law -Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States, "Every State has the duty to refrain from organizing or encouraging the organization of irregular forces or armed bands, including mercenaries, for incursion into the territory of another State."²⁰ Additionally, there are legal issues when considering the use of surrogate forces in cyberspace. The "status" of combatant/noncombatant and the legality of using forces as surrogates and the location of those forces provide some protections under the laws of war. Also, a cyber-space operation by individuals could constitute an attack on a state.²¹

In the case of enlisting privateers, private individuals who engage in hostilities forfeit many of the protections afforded civilians under the law of war. While there are not standing laws governing the use of surrogates in cyberspace, there are correlations with existing limitations and definitions as to what constitutes an "armed attack" and the status of those forces and subsequent protections offered to those conducting the attack. The issue of nonstate actors was addressed in the International Court of Justice under the Nicaragua Judgment, where the funding of guerillas alone did not constitute an armed attack; however, arming and training those forces constituted an armed attack and justified the opponents' use of force.²²

The framework for cyberspace operations and unconventional warfare may need to be adjusted based on legal limitations, a future unknown model, and attribution/nonattribution requirements. For limited denial of service attacks or social media exploitation, the use of cyber surrogate forces could be beneficial to directly supporting an irregular warfare operation. A different option could be dedicated cyber forces inside of USSOCOM that are trained to provide the types of effects SOF requires. This could follow the model of another recent technological advance, Remotely Piloted Aircraft (RPA). While most RPAs are operated by conventional forces, USSOCOM has dedicated assets available to support SOF-specific requirements. Finally, surrogate SOF could still be linked back to their U.S.-provided training based on 'fingerprinting' the techniques and tools used during an operation. Attribution of cyber operations provided by surrogate forces would need to be discussed and

policy created to effectively manage any undesired effects. Because of the limitations placed on the use of surrogate forces and public perception on the ethics of use of UW in general, the employment of cyber surrogates supporting UW may be unpalatable to leaders as a viable avenue for conducting warfare.

Despite the continued advancement and pervasiveness of technologies worldwide, more work is needed in relation to the utilization of cyber proxy forces and their employment in support of national objectives, especially in UW and SOF operations. UW may be the only viable option through which access, placement, and situational awareness are developed and fostered. The development of cyber surrogate forces and an operational framework based on long standing SOF practices along with sustained effort to develop, train, and equip "friendly" forces will enhance options for commanders and provide another mechanism to disrupt, deter, coerce, and defeat our adversaries. Surrogate forces have been utilized in the UW realm for the past 60 years, and cyberspace offers a logical progression to enhance commander's options during conflict. Increasing the effectiveness of UW operations through cyber surrogate forces, in order to enhance disruption, intelligence, logistics, and psychological operations, is key to achieving strategic objectives in the 21st century.

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- ⁵ Duggan "Why Special Operations Forces in US Cyber-Warfare?" The Cyber Defense Review <u>http://www.cyberdefensereview.org/2016/01/08/w</u> hy-special-operations-forces-in-us-cyber-warfare/
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The American Insurgency: Lessons from a Failed British Counterinsurgency Strategy

Dr. Charles V. Pratt

The American Revolutionary War was essentially a colonial insurgency against England, instigated by failed diplomacy, coercive laws, and taxation without representation. History has depicted the colonists' war for independence as a victory for enraged subjects of the British Crown. On the other hand, it could just as accurately be described as a failed counterinsurgency strategy on the part of England's welltrained, well-armed military. A historiographical argument reveals how an untrained, under-equipped colonial insurgency was able to overcome all odds to defeat a superior British force. Perhaps if England's military leadership had understood the true nature of the rebellion and insurgency, they may have elected a counterinsurgency strategy rather than a conventional war strategy, possibly leading to an entirely different outcome to the American Revolutionary War.

Even regarding established conventional war strategy, the British were experiencing difficulties. Strategic communication, both at home and abroad, was problematic, as were their command and control capability and operational coordination. Furthermore, England severely overestimated loyalist support within the colonies and predominantly in the south. Acutely focused on pursuing Washington's Army, British forces exercised brutal tactics that rapidly diminished any remaining support among colonists. Ultimately Britain's inability to comprehend the larger, predominate insurgency was incapacitating. Their reluctance to abandon conventional war strategies led to an unfathomable surrender at Yorktown in October 1781.

Counterinsurgency

Paramount to a successful strategy of British rule over the colonial population and colonial insurgents, an understanding of counterinsurgency (COIN) is vital. COIN is essentially civilian and military efforts designed to simultaneously defeat and contain an insurgency while addressing its root causes. Thus COIN is fundamentally an armed political competition between a host nation's (HN) government (England in this case) on one hand, with insurgents (colonists) and their supporters on the other. Although a typical COIN strategy involves military operations to eliminate and degrade insurgent elements, peaceful operations such as foreign assistance and humanitarian aid, help to ensure stability operations are a part of a comprehensive approach to counter an insurgency.¹

Overall COIN strategic approaches should be adaptable depending on the operational environment and focused on addressing the needs of the overall population rather than just the insurgents. This effort allows reinforcement of the HN legitimacy to rule, and allows the address of insurgent grievances in order to reduce insurgent influence throughout the region. This often can be achieved through political reform to help improve the quality of governance. The host nation's ability to comprehensively understand underlying grievances are key to
addressing the root causes of the insurgency, many of which may be legitimate. The existence of a large insurgency may demonstrate that a substantial part of the population views the HN government as illegitimate. A realistic political strategy that focuses on addressing the root causes, motives, and grievances of the insurgency are key to reestablishing HN legitimacy. COIN operations should ensure that HN end states are aligned with the physical, economic, political, and human dimensions of the insurgency.² Peering into the past is always a dangerous proposition and certainly can induce the "what if" scenario. However, there were marketable lessons to be learned throughout the American insurgency period from 1774-1783.

British strategic communications at home and abroad

The British communications network in the colonies was lackluster in comparison to the information operations capability of the colonists. Thomas Paine's *Common Sense* (1776), for which the Continental Congress had copyright, sold over 150,000 copies and was effectively distributed throughout the colonies.³ In his book, Paine articulated reasons for rebellion against tyranny. He argued that although government was a "necessary evil," the common man had the right to equal representation. His writing struck a chord with colonists on the fence regarding loyalty to the Crown.⁴

Perhaps not as well-known as Paine's work was a series of newspaper essays known as *The Crisis* (1775) which fostered an awareness of threats to colonists' rights and proposed the need to resist enemies with an opposed armed force.⁵ *The Crisis* achieved epic strategic communications goals for the insurgents by spotlighting England's bribed elected officials and corrupt Anglican bishops, and ultimately suggesting the King was the greatest criminal in England.⁶ The British Government was unable to curtail such coercive language from reaching all of the colonies and further undermining waning Tory support.

Compounding the strategic communication difficulties abroad were Britain's internal communication woes. In their counsel to the King of England, Lord Germain, head of the Department of War, and Lord North, of the House of Commons, perpetuated the perception that the rebellion could be put down with force and that colonists some 3,000 miles away could be effectively subjugated to British law. The distance barrier also led to a large transactional distance between military leadership in England and the commanding generals in New York. Continental Army military leadership, the Continental Congress, and the insurgent movement throughout the colonies could easily send coded messages over land and sea in a matter of days or weeks. Orders from England's War Ministry, on the other hand, could take up to four months to travel across the Atlantic to British commanders in the colonies. Simply, British military leaders were out of touch with colonial society at large and were not providing efficient, timely communication back to decision makers in England.

In the wake of the Boston Massacre, Samuel Johnson, a member of the British

Parliament, wrote Taxation no Tyranny An answer to the resolution and Address of the American Congress. In this work, Johnson fervently asserted that colonists' acceptance of British protection stipulated obedience to the Crown and thus subjugated them to British rule and government.⁷ However, not everyone within the British government agreed with Johnson. John Wilkes, Lord Mayor, insisted the fighting in America had been started by the British in Boston, Lexington and Concord. He blamed British troops for inhumanly murdering colonists as early as 1774, including women and children; reports of such brutality continued until after the Battle of Breeds Hill in June 1775. Published eyewitness reports from British soldiers returning from the battles corroborated Wilkes' claims. England's lack of internal control over their own information operations allowed sentiments among the country's populous to run the gamut, fueling the view, in certain circles, that the rebellion was nothing more than a group of rabble-rousers who needed a good thrashing.⁸

It was this sorted lack of strategic information operations that continued to prejudice British military leadership and cause the populous to doubt the truth about reports of British brutality in the colonies. Further, the confusion dissuaded internal evaluation of the trade policy and the taxation issues actually fueling the insurrection. British lawmakers and military leadership could have possibly countered the insurgency had they realized from the outset the uprisings were the result of overly harsh subjugation and begun to allow more representation to colonists concerning taxation. In addition to turning a blind eye to the causes of the insurrection, the British internal communication, operational coordination, and command and control failures were detrimental to their military strategy.

British Command and Control Failures

While planning for the Northern Campaign in February 1777, Lord Germain approved an operational plan submitted by General John Burgoyne. Burgoyne convinced Germain that, by moving British troops down from Quebec through Lake Champlain and the Hudson Valley to Albany, they could isolate the center of the colonial rebellion. This operational strategy would cut off Washington's Army from the southern colonies and bolster Loyalist support. However, for this strategy to work effectively, there needed to be substantial coordination with General Howe's troops in Philadelphia, who were in position to attack that city by sea. According to Burgoyne's plan, Howe would travel up the Hudson River with his army of nearly 21,000 to support Burgoyne's forces in New York.⁹ Although Howe was aware of Burgoyne's plan, a personal rift between the two factored into an unwillingness to cooperate and decentralized decision making capabilities made it difficult for Lord Germain to ensure coordinated efforts. So, Burgoyne's plan, although approved by the King, was never mandated by the Department of War and was largely ignored by Howe, who had submitted his own plan for taking Philadelphia.¹⁰

Although Howe and Germain corresponded eight times, Germain neglected to mandate

his coordination with Burgoyne and General Clinton.

Clinton, whose troops were being dispatched to Canada, saw the dangers of an uncoordinated attack on two fronts. Although he realized the detrimental lack of coordination, his personal disdain for Howe prevented him from attempting to persuade either of the other commanders to adjust their plans.¹¹ Washington watched as Howe, choosing not to reinforce Burgoyne and Clinton to the north, sailed for Philadelphia on a hunch that by taking Philadelphia he could end the rebellion. Howe's decision not to support Burgoyne, instead moving to take Philadelphia by way of the Chesapeake, effectively took his army out of the fight. Washington, seeing that Howe was not supporting Burgoyne, was able to rout Burgoyne's army at Saratoga. Burgoyne was forced to surrender 5,721 men, including seven generals, 27 cannons, and 5,000 weapons to General Gates on October 17, 1777. This was a devastating blow to the British forces.¹²

The victory by the rebel forces at Saratoga and the loss of the British campaign through the Hudson Valley were viewed as the great turning point in the war, bolstering rebel confidence and drawing in French assistance.¹³ This failed campaign would set the tone for continued command and control dysfunction and perpetuate personal agendas. Disjointed combined operations would eventually spell out several losses for the British over the next four years, costing the British hundreds of lives and valuable resources and ultimately turning the tide of war. The rebellion, now center stage on the international front, created further legitimacy for the Revolution.

Loss of loyalists support in the Southern Campaign

In order to achieve a successful insurgency, a rebellion needs local support for the cause. Sometimes the best counterinsurgency strategy is less about winning battles and more about not encouraging enemies. From the colonial point of view, the revolution hinged on Tory support for the British troops. The failure to maintain this support was perhaps the major reason for England's defeat in the Southern Campaign from 1778-1781.

Three strategic faults culminated in the failure of this three-year campaign. First, the overall campaign strategy was based largely on the assumption there were more loyalists in the South than in the North, requiring a smaller British army presence to fight the rebels, quell the rebellion and restore British rule of law. Secondly, the disjointed leadership vision between Clinton, Germain and Cornwallis, who ultimately was running the Southern Campaign, created ineffective support, unraveled logistics and undermined momentum. Thirdly, the British failed to realize they were, in fact, dealing with a large-scale insurgency. Had they adhered to counterinsurgency tactics, they may have been able to win the hearts and minds of rebel dissidents, rather than create more insurgents.

Instead, the British relied on an "Americanized" pacification strategy in an effort to achieve economy of force. The strategy allowed the British army to train loyalists to maintain and defend liberated territory, freeing British forces to move on to other regions.¹⁴ This strategy hinged on continued loyalist support, beyond future British presence. Germain conceived the idea of pacification and convinced the King this strategy was the only way to gain victory in the colonies. Further, he surmised there would be large numbers of angry southern colonists, displaced by the war, who would fight the Continental Army and any local dissidents. Thus, the war would become an internal civil war between colonists.¹⁵ This strategy of invoking locals to fight against their own populous in hopes of creating a civil war does not, however, align with a counterinsurgency strategy. Neither Cornwallis nor Clinton believed pacification would work, so they never gave it due diligence, often waffling between this mandated strategy and their own preservation of forces.

Southern loyalists willing to take up arms against the insurgent forces were far fewer than England had estimated. The realization of this drastic miscalculation should have indicated to British military leadership they had a large-scale insurgency on their hands, rather than an opposing military force. Even non-combatants were not in support of British rule. Cornwallis himself declared it was wishful thinking to expect the militia to restore any order and ultimately force rebels to submit to British rule. He further claimed loyalists recruited in the South were inefficient, unreliable and often worse than the rebel militia itself.¹⁶ Additionally, it was not uncommon for British officers to promise spoils of war in order to elicit

contracts with local militia. However, as battles were lost and contracts broken, the militia simply ended their commitment, despite attempts to coerce them to join regular British forces.¹⁷ Simply, they had no true loyalties to the British cause and were merely motivated by a degree of monetary promise. This weakness in loyalty and lack of commitment to quell the insurgent message severely stymied British strategy.

Cornwallis and Clinton's inability to adequately motivate the Tory militia and win over southern colonists' loyalty, along with England's persistent overestimation of loyalist support resulted in embarrassing losses in Saratoga in 1778. Further complicating matters, the cost of the war had far exceeded England's budget. Drastic reductions in support forced Cornwallis to maintain large expanses of territory with only 4,000 regular troops.¹⁸ The contentious population fostered an increasing number of loyalist defectors. British mistreatment of the local populous further tipped the scales in favor of the rebel forces.

By not recognizing the war as in insurgency, Clinton was overly focused on conventional warfare, chasing Washington's Continental Army in the North. Clinton and Cornwallis both thought that luring out and defeating Washington's army should be the primary goal, well worth an entire year of pacification. They failed to comprehend their aggressive amphibious raids on the southern coasts were striking terror into colonists rather than winning over loyalist support. Such disconnected strategic messaging also confused British soldiers as to whether or not they were to be inducing a sense of security or demoralizing the populous.¹⁹ There was perhaps no one more brutal in his tactics than Lieutenant Colonel Banastre Tarleton of Cornwallis' army. Seen as a hero in England. Tarleton gained fame in South Carolina in a battle known as the Massacre at Waxhaw's Creek. Rebel forces who surrendered under a flag of truce, expecting a measure of quarter, were made to kneel over prone. Tarleton, bayoneted anyone demonstrating signs of life, ostensibly killing them and any wounded.²⁰ His brutality earned him the title "Bloody Tarleton". Later, in the battle of Cowpens, Tarleton's butchery ignited the killing of many loyalist militia at Kings Mountain. When defeated, the loyalists threw down their weapons and demanded quarter. The rebels, however, responded with "Tarleton Quarters!" This response was followed by merciless attacks on unarmed men.²¹ From that moment on. Cornwallis would not be able to recruit nearly as many loyalists as before, and he was certainly unable to keep the remaining loyalist faithful. By brutalizing the American populous, the British strategy of pacification was nullified; more and more insurgents emerged with each misstep.

The British continually underestimated the persistence of the insurgent colonists and Washington's Continental Army. As late as the battles at Lexington and Concord the British perceived their troubles in America were inspired only by a few conspirators and not by a robust insurgency engulfing the southern colonies. Further, they perceived that most colonists loved the King, and their loyalties were still with England.²² This disillusionment propagated by Lord North and Germain was the lynchpin in their failed

strategy. Both Clinton and Cornwallis were of the notion that reconciliation should be given a chance by ending the war with compromise.

Had the Americanism strategy not been implemented, the English may have ended the war in 1778, and not protracted the expansive war another seven years. Even Lord Howe, while commanding the Navy in American waters, agreed the southern area was too large to control and the American campaign should be abandoned.²³ Overall the disjointed nature and incoherence of the British leadership, strategic goals, and end states heavily contributed to British failure in the Southern Campaign and ultimately led to losing the final battle in Yorktown in 1781.²⁴

Counterinsurgency Lessons Learned

A COIN campaign must understand the operational environment. Primarily it must understand key groups within the society, relationships, tensions, ideologies, and narratives that resonate amongst these groups. Further, it is vital to understand their value system, interests, motivations, an, lastly, the means by which they communicate.²⁵ The British did not truly understand the operational environment of the colonies for many years prior the Declaration of Independence in 1776. British government officials imbedded through the colonies refused to acknowledge growing insurgent sentiments, understand the communication of insurgent narratives, and respond to a colonial desire for more representation in British government decision making.

Insurgents should be isolated from their cause and support. It is easier to separate the insurgency from its ideological sources rather than attempt to kill every insurgent. A successful COIN strategy would cut off the sources which provide the recuperative power to recruit more insurgents. Some sources of the insurgency could be cutoff off simply by addressing the social, economic, and political grievances that fuel the insurgency.²⁶ The British fixation on defeating Washington's army overshadowed the catalyst of why it was created in the first place. Addressing the major colonial grievances such as taxation without representation and ability to manufacture goods would have gone far to quell the growing anger and frustration of the colonial population.

An effective COIN strategy should prepare the HN for a long-term commitment. COIN operations demand a considerable investment of time and resources. The population may prefer the HN to the insurgents. However, the population will not actively support the HN government unless they are convinced that the insurgency can be overcome by the capability, means, and will to win. The population must have confidence in the staying power of the counterinsurgents and the HN.²⁷ The British initially were in for the long haul while committing enormous resources to quell colonial unrest. However, when resources waned in 1780 and Cornwallis suggested capitulation due to lack of resources in the south, the British instead decided to implement a new "pacification" strategy. The British tried in earnest to offer southern loyalists security and stability through use of monetary contracts.

However, once the contracts were broken the loyalists soon turned against the British as their perceived continued viability waned. England's long term commitment was cut short by lack of loyalist support, economic hardship, rising war debt, and lack of popular support back home.

Finally, the appropriate level of force must be used. The use of force will generate reactions. Although overwhelming force must be used to destroy an opponent to reassure the populace's safety and security, counterinsurgents and the HN should calculate carefully the type and amount of force used to avoid collateral damage. An operation or individual actions that needlessly kill five insurgents is counterproductive if its actions leads to the recruitment of fifty more insurgents.²⁸

The British and Colonial forces waged an equilibrium conflict with similar weapons and tactics. Although the British had superior numbers, modernized equipment, and ships, their outdated European tactics brought many British to slaughter. British forces were not overwhelmingly brutal to colonial insurgents and there is no record of overwhelming collateral damage to the populous during battles. However, the bombing of the southern coast cities in 1781 and the brutal tactics of Banastre Tarleton were more counterproductive than any other combat methodology used by the British. Simply, the British created more insurgents as the conflicted wore on.

Conclusions

The question of why British military leadership both in America and England never perceived a larger insurgency among colonists from 1775-1783 and yet were disillusioned by the notion of conventional warfare as a means to counter the insurgency still is not clear. However, major contributions to a failed counterinsurgency strategy were poor or nonexistent British strategic communications and the failure to quell colonial strategic communications. Additionally, the failure of British command, control. and coordination within its own military operations and hampered by a poorly conceived strategic end state, failed to overcome the large transactional distance between England's War Ministry and its commanders in America. It further created vast inefficiencies of manpower and rapidly diminished the resources required to quell the growing insurgency amongst the colonies. Furthermore, brutal British tactics diminished remaining loyalist support in the south contributing to a growing insurgent sentiment among colonists who were otherwise neutral. Finally, it was England's inability to identify and address population grievances early on, accurately identify the insurgency's roots, and pivot from a conventional war strategy to a counterinsurgency strategy which led to their ultimate loss of the Revolutionary War.

The sheer determination of the colonial insurgency, the remarkable leadership of Washington and his officers, and support of the French in 1781 which led to ultimate victory cannot be overstated. However, had the British chose to understand the true nature of the growing insurgency in the beginning, they may have opted for a counterinsurgency strategy offering more colonial representation, limited taxation, and allowed colonial manufacturing to blossom. Certainly their inability to recognize and capitulate to these colonial grievances blinded them to the notion that an overarching insurgency was possible and existing.

Author's Biography.

Dr. Charles V. Pratt is on the military faculty at the Joint Forces Staff College.

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⁵ T.H Breen, *American Insurgent American Patriot; The Revolution of the People*. (New York: Hill and Wang, 2010), 262.

⁶ Ibid,. 271.

⁷ Hibbert, *Redcoats and Rebels*. 22.

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⁹ Robert Middlekauff, *The Glorious Cause: The American Revolution*, 1763-1789. (New York: Oxford University Press,

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¹¹ Ibid., 376.

¹² W. J. Wood, Battles of the Revolutionary War 1775-1781

University of Chicago Press, 1956), 82.

¹⁴ John Shy, *A People Numerous and Armed* (Michigan, University of Michigan Press, 1990), 199.

¹⁵ Ibid., 200.

¹⁶ Hibbert, *Redcoats and Rebels*, 274.

¹⁷ Gordon S Wood, *The Radicalism of the American Revolution* (New York: Vintage Books, 1991), 164.

¹⁸ Hibbert, *Redcoats and Rebels*, 275.

¹⁹ Shy, A People Numerous and Armed, 201.

²⁰ Benton Patterson, Washington and Cornwallis: The Battle for

America 1775-1783 (Maryland: Taylor Trade Publishing, 2004), 223

²¹ Ibid., 254.

²² Middlekauff, *The Glorious Cause*, 440.

²³ Shy, A People Numerous and Armed, 195.

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²⁶ Army Field Manual 3-24, 1-23.

²⁷ Ibid., 1-24

²⁸ Army Field Manual 3-24, 1-25.

Operation Unified Response – The 2010 Haiti Earthquake

Dr. David R. DiOrio



Figure 1.

With airport control tower destroyed, Air Force Special Tactics Teams directing air traffic on day one. $^{\rm l}$

On January 12, 2010, a massive 7.0 magnitude earthquake centered 25 km. southwest of Port-au-Prince, Haiti killed over 230,000 people, injured another 300,000, and created over one million homeless.² An estimated 45,000 Americans were stranded. The country's infrastructure was decimated and a majority of air and sea transport facilities were destroyed. Hospitals collapsed and key access roads were blocked with debris, which greatly hampered rescue efforts. Six field hospitals at schools and stadiums were established within a few days, but the medical situation was bleak. The Haitian government (GoH), with a majority of civil leadership dead, was effectively paralyzed.³ On the first day of the quake, the President of Haiti declared a

national emergency, confirmed by the U.S. Ambassador to Haiti, and both requested immediate assistance from the United States and the international community.⁴

The security situation in Haiti remained amazing calm, but shortages of relief supplies and delays in distribution led to angry appeals from international aid workers and survivors. Looting and violence was sporadic and the local police presence was virtually non-existent.⁵ Four thousand inmates from the Prison Civile de Port-au-Prince were unleashed on the public. Haiti is the poorest country in the Western Hemisphere, and now the already fragile economy was in shambles. The power grid, marginal even before the quake, was devastated and there were no available petroleum reserves for generators. Public landline and cellular telephone capability was gone and all the radio stations went off the air. The clothing industry, which accounts for two-thirds of Haiti's exports, came to a standstill.

In the following days and nights, most Haitians slept in the streets, in cars, or in makeshift shanty towns because they feared that standing structures would not withstand after-shocks. Construction standards are low in Haiti—there are no building codes. The country suffered from fuel and water shortages even before the disaster, so there was no reserve capacity. In the heat and humidity, corpses buried in rubble began to decompose and smell. Port-au-Prince's morgues were quickly overwhelmed with tens of thousands of bodies.⁶ The dead were hastily stacked in the street before burial in mass graves dug in fields north of the capital. Towns in the eastern Dominican Republic began preparing for tens of thousands of refugees, and hospitals close to the border were filled to capacity. The border was reinforced by soldiers, and the Dominican Republic asserted that all Haitians who crossed the border for medical assistance would be allowed to stay only temporarily.

Forward leaning military... a plan will come later

The United States Coast Guard, at the time of the quake, had two cutters near Port-au-Prince and four more joined within a few days to provide initial damage assessments. The most immediate concern was opening the air and seaports. The Haitians handed over control of the airport to the U.S. to hasten flight operations, hampered by damage to the control tower. By Day 2, a team of Air Force special tactics teams reopened the Port-au-Prince airport, but understandably; air traffic control was initially confused. Some planes carrying medical supplies were not allowed to land in favor of evacuation or security related aircraft. Incoming planes from around the world arrived without notice-most circled for at least an hour-and they all seemed to be out of gas upon arrival. A formal agreement to prioritize humanitarian assistance flights had to be brokered by the United Nations (UN). Airfield management capability and subsequent flow improved significantly when the Air Force Contingency Response Group arrived at

Port-au-Prince and Canadian air traffic controllers opened Jacmel airport.

"Just tell them to keep sending me stuff, I'll tell them when to stop." 7

LTG Keen, CDR JTF-Haiti

U.S. military resources began arriving within hours. Two MC-130Hs immediately began the distribution of essential food and water. The USAF sent in 6,000 airmen including a Kansas Air Guard Engineering Squadron to break the log-jam at the airport. The U.S. Navy mustered 33 ships, including the carrier USS Carl Vinson that arrived on Day 4 fresh from sea trials, loaded with food and water (with distilling capability) and 19 helicopters, supported by the cruiser USS Bunker Hill. The hospital ship USNS Comfort soon arrived with two USNS salvage ships and USCG buoy tenders that tried to re-open the ports. Approximately 4,000 United States Marines of the 22nd and 24th MEUs (diverted from the Middle East deployment cycle) arrived with V-22 Osprey and helicopter squadrons on USS Bataan (LHD-5) and USS Nassau (LHA-4) supported by their amphibious ready group support ships. Three thousand United States Army soldiers of the 82nd Airborne Division (Global Response Force) from Fort Bragg were sent in to establish a base to distribute food and water.⁸ By Day 3, U.S. helicopters were distributing tons of food and within the first week after the disaster, and the U.S. military had a total of 17,000 military personnel in and around Haiti. They were joined by over 43 militaries from around the world; some

integrated or coordinated with the U.S. and some did not.⁹

Global Response ... abundance of enthusiasm surrounding political turmoil

"Since...the first hours and days are absolutely critical to saving lives and avoiding even greater tragedy, I have directed my teams to be as forwardleaning as possible in getting the help on the ground and coordinating with our international partners as well."¹⁰

President Barak Obama

The French, Italian, Dutch, Spanish and Canadian Navies sent ships that arrived within the first week (including the Italian Carrier Cavour). An Argentine military field hospital, that was part of the UN Mission in Haiti, MINUSTAH, was the only hospital left operating. Within a week, rescue and medical teams arrived from the United States, Canada, Russia, France, Chile, Peru, Jamaica, Brazil, Colombia, Cuba, Iceland, Sri Lanka, China, and Korea. From the Middle East, the government of Qatar sent a strategic transport aircraft (C-17) and the Qatari armed forces set up a hospital. The Israeli Defense Forces also established a field hospital which included specialized facilities to treat children and the elderly. Initially the relief teams were autonomous with independent logistics support. Since the functioning logistics train ended at the edge of the Port-au-Prince airport-the field hospitals and emergency response vehicles ended up clustered there as well.¹¹

The combined military response to Haiti was impressive, but political turmoil erupted that overshadowed events on the ground. Although Haitian President Preval and his

remaining cabinet met with the international representatives daily, there was confusion as to who was in charge and no single group had organized the relief effort days into the crisis.¹² The UN expressed approval of a United States humanitarian mission and stated that the American troops would not stay long, although the plan was not yet developed. The neighboring Dominican Republic and the U.S. were the fastest and largest contingents to respond. The French immediately expressed dissatisfaction with the larger size of the American relief operation compared to those of European nations and they resented the commanding role of U.S. forces. Several Latin American leaders accused the US of militarily occupying Haiti-including Venezuelan President Chavez, former Cuban President Castro, Bolivian President Morales and Nicaraguan President Ortega. It did not help that Congressman Ron Paul (R-Texas) opposed operations citing concerns of an "open-ended U.S. military occupation of Haiti."¹³ The U.S. Department of State (DoS) rejected these allegations stating that U.S. forces were requested by the Haitian government. The dispute culminated with a UN brokered agreement that gave the United States military responsibility for the ports, airports, and roads for distribution of humanitarian assistance-and the UN mission (supported by select militaries and Haitian authorities) responsibility for law and order.14

Over 60 nations and hundreds of nongovernmental organizations (NGOs) and private organizations responded by sending special teams and supplies, despite the

unknown disposition of the relief resources upon arrival. The NGOs proved invaluable. International aid workers, without food or shelter themselves, acted as translators for outside rescuers to communicate with Haitians whose only language was Creole. Red Cross organizations from around the world, most notably the International Committee of the Red Cross, dispatched doctors, nurses, and tons of medical supplies, but they were stranded at the airfield. Medical supplies in the field lasted only 24 hours and Médecins Sans Frontières (Doctors without Borders) reported that many amputations were done without anesthesia or morphine-constructing splints out of cardboard and reusing latex gloves. Ophelia Dahl, director of Partners in Health, reported "there are hundreds of thousands of injured people... as many as 20,000 will die each day that would have been saved by surgery."¹⁵ The wounded were taken to field hospitals in ambulances, police pickup trucks, wheelbarrows, and improvised stretchers. Even the Royal Caribbean Cruise lines shuttled supplies in and many wounded out.

United States Interagency Coordination

"Given the many different resources that are needed, we are taking steps to ensure that our government acts in a unified way. My national security team has led an interagency effort overnight." ¹⁶

President Barak Obama

The National Security Council (NSC) acted quickly to coordinate a U.S. government (USG) response to be headed by Rajiv Shah, administrator of the United States Agency for International Development (USAID). USAID was designated the lead federal agency and they led an Interagency Haiti Task Force. There was general agreement that USAID should be in charge of coordinating international humanitarian relief efforts by leveraging their subordinate Office of Disaster Assistance (OFDA). USAID-OFDA became the final authority, manned with technical disaster response expertise and a pre-existing management structure that allowed it to leverage the assets of NGOs and other organizations to create a more integrated response. OFDA established an NGO coordination cell on Day 4, but USAID responsiveness and effectiveness was hampered by limited personnel, insufficient resources, bureaucratic hurdles and diverse political agendas amongst the agencies.¹⁷

On the ground, the role of USAID as the lead federal agent was not clear. The response planning model, the International Response Framework (IRF), was insufficient to manage multiple USG chains of authority and did not readily incorporate UN or Host Nation capabilities. This framework was not as mature as the U.S. National Response Framework (NRF) that was frequently exercised and validated within the United States. Protocols between agencies did not exist, mandates of action were undefined, and budgetary responsibilities were unclear. The USAID Disaster Assistance Response Team— **Response Management Team** (DART/RMT), military, and the U.S. Embassy in Haiti were operating on parallel paths with varying degrees of

collaboration.¹⁸ High-level policymakers, often armed with faulty information and with little or no expertise in disaster response, created difficulties for field staff resulting in increased tensions between agencies. Refined protocols were clearly needed.¹⁹ The establishment of liaison officers proved to be a sufficient—albeit not optimized—interim measure to facilitate mutual understanding and enhance the overall USG effort.

Mobilization of response personnel was a major weakness. Leaders were unable to quickly tap into experts, and the lack of preresponse training significantly degraded the response. Expertise resident in the U.S. State Department's Office for Reconstruction and Stabilization (S/CRS), for instance, were not employed due to an internal rift between USAID and S/CRS stemming from competing mission sets, budgetary considerations, and personalities.²⁰ USAID-OFDA was not able to muster or hire additional staff to handle the magnitude of the crisis, and pre-existing relationships were insufficient to augment staff from other agencies. However, the many USG agencies that did respond did so with passion and professionalism, making a significant, positive impact despite limited resources.

The Federal Emergency Management Agency (FEMA) and the U. S. Dept. of Health and Human Services (HHS) were charged with providing shelter and emergency medical care to augment local resources and to assist in evacuating American Citizens (AMCITS)—and they responded relatively quickly. Shelter and healthcare are vital to maintain social cohesion and reduce lethal congestion at the points of aid distribution, but there was no coherent strategy.²¹ The establishment of shelter was delayed due to devastation and bottlenecks at the ports and airfields, and this provided an opportunity for the civil authorities to work with the military to open vital lines of communication. The Federal Aviation Administration (FAA) coordinated with military airport engineers and controllers to do just that with great success. Seaport capabilities proved more problematic due to the extensive port infrastructure damage.

The U. S. Dept. of Homeland Security (DHS) was directed to coordinate overall non-medical support (mostly food security and nutrition) across all Federal agencies. They did this by supporting the UN World Food program and its partners through a number of channels and the result was the stabilization of food prices, although the nutritional standard for surviving children remained below emergency thresholds months into the crisis. From the outset, the international community's delivery of emergency aid depended entirely on logistical support from the U.S. military. According to USAID, the military should be commended for its extraordinary efforts in actively liaising with its civil partners, but the perception was that the military is less proficient in delivering humanitarian aid than it is in conducting search and rescue.²²

The U.S. military involvement in Haiti was met with apprehension by some NGOs, especially early-on during the emergency relief phase when search and rescue needs were prioritized over delivering life sustaining supplies. From the USAID perspective, the mandate and role of the military should be clearly delineated and exit strategy defined before mobilization. Secretary Clinton, recognizing the void of clear guidance and resulting confusion, collaborated with the Haitian President who emphasized that the priorities were to reconstitute the government, clear roads, and dispose of the dead. It would take some time to get the U.S. "whole of government" effort in gear, but the Pentagon, understanding that time was of the essence, pushed forces and resources while USAID commenced detailed planning.²³

USSOUTHCOM and the challenges in forming the Joint Task Force

"The COCOM Staff has a BIG role in being the strategic shaper for the JTF so that the JTF can function at the operational and the tactical level...the challenge was that we had - by necessity to be the operational and strategic headquarters for this crisis while the JTF stood up. Once the JTF HQ was functional...they took control of the operational/tactical level actions and we then transitioned to the strategic level shaping actions. So, the COCOM HQ has to 'look up and inform down' along strategic level actions by J-Code function and other policy considerations."²⁴

BGen Garza, USSOUTHCOM Chief of Staff

USSOUTHCOM commenced crisis action planning on the evening of 12 January over 12 hours before they would get official tasking from the Joint Staff. The most immediate tasks at hand were establishing security and making damage estimates. Two significant challenges emerged; the lack of situational awareness and clear on-theground assessments to enable decisions and subsequent force flow, and the nagging planning shortfalls that resulted from SOUTHCOM's unique and unorthodox staff organization that was optimized for theater security cooperation rather than crisis response. The command was functionally aligned with the interagency and without traditional J-codes to promote theater cooperation activities. This made the task of forming a JTF very challenging.²⁵

*"The functional organizational model we were under did not survive the crucible of the crisis."*²⁶

BGen Garza, USSOUTHCOM Chief of Staff

On Day 5, CDRUSSOUTHCOM,

understanding the planning dysfunction, directed the staff to reorganize into the traditional J-code structure. This created confusion, but ultimately culminated with a better organization to deal with the crisis. The new—albeit traditional—J code structure allowed faster integration of augmenters and facilitated communication between staffs organized in the same manner. The external staff augmentation was overwhelming. The command not only had to work through the problems associated with the crisis itself, but they also had to realign in stride and assimilate what would eventually be 274 new members from the Joint Staff, other CCMDs, and the Services.

"When the Haiti earthquake hit, we immediately went into crisis action mode and quickly realized that we did not have the personnel depth to maintain 24/7 daily operations. Accordingly, the Boss (General Fraser) went to the JS (Joint Staff) and COCOMs and requested personnel augments.

Within 24 hours we received several staff augments - initially NORTHCOM provided 3 FO/GOs (flag/general officers) and 34 Action Officers²⁷

BGen Garza, USSOUTHCOM Chief of Staff

The Chairman of the Joint Chiefs of Staff issued an execute order on Day 2, authorizing humanitarian assistance and disaster relief (HADR) operations. USSOUTHCOM stood up Joint Task Force Haiti (JTF-H), commanded by their Deputy Commander, LTG Ken Keen, who was visiting the U.S. Ambassador to Haiti, Kenneth Merten, on a routine theater security cooperation visit —having dinner with him at the time of the quake. LTG Keen's Haiti desk officer, Lt Col Bourland, was killed in his hotel which left him with a small staff and armed with a Blackberry and one tenuous land line. USSOUTHCOM decided to build the JTF around Keen, very familiar with the area of responsibility (AOR) and who had fostered personal relationships in Haiti. Most notable was his long-time friendship with MG Peixoto, a Brazilian officer in command of UN MINUSTAH (security mission), who was spared, although many—including the Mission Chief—were killed in the collapse of their HQ. Their relationship, which extended back many years to an exchange program in which CPT Keen was assigned to the Brazilian Airborne Brigade where Peixoto was a Pathfinder. His relationship was critical to working through a host of highly politicized issues, not the least of which was delineating security responsibilities between the U.S. forces and MINUSTAH.²⁸

Establishing security ... a prerequisite for effective humanitarian relief

MINUSTAH was given the mission to establish security. By Day 3, when food and water were not keeping pace with demand, violence erupted—mostly related to gang activity. Uruguayan UN peacekeepers had to fire rubber bullets to try to control crowds. Brazilian troops distributing food had to employ tear gas and pepper spray. Several men scaled walls at the Haitian Dept. of Commerce, raided aid trucks, and started throwing supplies into the crowd. Across the countryside, stones were often thrown at aid workers. Nepalese UN Peacekeepers had to wield batons to try to control unruly crowds. Many convoys delivering food were attacked by bandits and required UN escort. The UN requested and received assistance from the European Union (EU) which sent 300-350 police officers from France, Spain, and the Netherlands. U.S. forces, in charge of airport and seaport operations, established security at those logistics nodes. LTG Keen announced that despite the looting and violence, there was less violent crime in Port-au-Prince after the earthquake than before. As security improved, JTF-H could focus on organizing and executing the humanitarian assistance mission, but the task would not be easy.

Identifying and organizing the JTF-Haiti component parts

JTF-H was officially established by vocal order (VOCO) on 14 January, but the process of identifying and assembling the components of the Joint Task Force would

take the next six weeks. With no assigned forces and an outdated HADR functional plan (FUNCPLAN 6130-06) the USSOUTHCOM and JTF staffs had to build the team from scratch. Almost immediately, the major building blocks of the JTF such as TF-41, including the USS Carl Vinson, the 22nd and 24th Expeditionary Strike Groups, as well as the 2/82 Airborne Brigade Combat Team were alerted and committed to the response.²⁹ However, many of the supporting forces and the command and control necessary to build the JTF were not part of the Global Response Force (GRF) and had to be identified on the fly. The lack of a designated JTF HQ or joint logistics element within the GRF required ad-hoc deployment planning by the staff with little force deployment planning experience and capacity. Many necessary enabling capabilities (to include engineering, civil affairs, psychological operations, public affairs, and medical) were not in a contingency ready status.

The component elements of the JTF were in various states of readiness and were scattered across the United States. Some were in the Active Component, others in the Reserve, each with different mobilization timelines. Some were at or near "force projection platforms" such as Ft. Bragg and Pope AFB, while others were scattered and had to move long distances to reach an aerial port of embarkation (APOE) or a sea port of embarkation (SPOE). These considerations added to the challenges at the early stages of planning and complicated the decision making at the CCMD level with regard to JTF composition and force sequencing.³⁰

Selecting the Core of the JTF HQ

Early in the planning, a major decision was to identify the "core" command and control element around which to form the JTF. The main options considered were: a subordinate Service component command—US Army South (ARSOUTH), 2nd Fleet, II MEF, 12th Air Force, the USSOUTHCOM Standing Joint Force Headquarters (SJFHQ), or an external organization that was "JTF capable."³¹ From the start, LTG Keen felt that the nature of the crisis warranted that some, if not all, of his headquarters to be situated on land. He desired to be tightly connected to the embassy, the government, the UN, other relief organizations, and perhaps most importantly—the people. He believed that a highly visible land-based presence was important to instill confidence among the Haitians.

A land-based requirement effectively narrowed the field to the two ground Services. II MEF was unavailable due to operational commitments in CENTCOM, so ARSOUTH appeared to be the logical choice as they had been "certified" as a JTF capable HQ. However, ARSOUTH was focused on a significant security concern associated with the potential mass exodus of Haitians toward Cuba or the U.S. Accordingly, the Joint Staff tasked ARSOUTH to prepare for mass migrant operations. USSOUTHCOM designated **ARSOUTH** as the JTF-Migrant Operations (JTF-MIGOPS) with the specified task to deploy its HO to the U.S. Naval Station Guantanamo Bay, Cuba. With

ARSOUTH committed, SOUTHCOM had to find an alternate JTF headquarters.³²

An alternate option was to employ the Standing Joint Force Headquarters (SJFHQ) and build around it. Lead elements of the USSOUTHCOM SJFHO arrived in Port au Prince within 24 hours. While providing important preliminary staff capability, the SJFHQ could not form the nucleus of the JTF staff without significant personnel augmentation. All but 22 of its original 56 designated personnel had been redirected and integrated into another directorates within the staff to make up for manning shortfalls. Although the initial team that arrived in Haiti brought with them a comprehensive understanding of the country, they were too few to provide a viable planning staff for continuous day and night operations. Additional staff assistance would come from an unexpected source. LTG Keen received a phone call from LTG Frank Helmick. Commander of the XVIII Airborne Corps at Ft. Bragg, NC. Helmick was a personal friend who offered his Assault Command Post (ACP) to support the JTF-H core headquarters.³³ The ACP was already packed and ready to deploy for a training exercise in Korea and were already tagged for deployment-the decision to accommodate their offer was easy.

JTF-Haiti kicks into gear

Mission: The JTF-H mission was to conduct Foreign Disaster Relief operations in support of USAID to support the GoH and MINUSTAH by providing localized security, facilitating the distribution and restoration of basic human services, providing medical support, and conducting critical engineering operations in order to alleviate human suffering and provide the foundation for the long term recovery of Haiti.³⁴

Within 72 hours, the XVIII ABC Assault Command Post (ACP), led by MG Allyn, was on the ground in Haiti, providing a proficient staff around which JTF-H would mature. Though very experienced as a result of a recent Iraqi Freedom tour, the XVIII Corps staff was not a joint team and required the addition of a host of "plugs" to balance the service and interagency representation. The JFCOM Joint Enabling Capabilities Command (JECC), with a joint and interagency complement, arrived and provided valuable operational capabilities that rounded out the XVIII ACP operational and logistics planning capability. Soon, other staff augmentation from the Joint Force Maritime Component Command (Task Force 41), the 12th USAF's Air Component Coordination Element (ACCE), as well as numerous other joint and interagency staff members turned the Army "green" team into a joint "purple" team. The JECC's Joint Communications Support Element (JCSE) provided an early entry communications package to support the adhoc staff, and all communications domains became available.³⁵

Coordination, Collaboration, and Communication

"The military's planning capability is not the most expensive part, but it is probably the most valuable. The international coordination structure would not have stood up if they weren't there – we tapped into the JTF planning capacity."³⁶

United Nations Strategic Plans Officer

The nascent JTF staff established a footprint on the embassy grounds that provided space and communications within a close proximity to the epicenter. The embassy also afforded an opportunity to nurture host nation and interagency relationships. While this arrangement was very beneficial for coordination and collaboration, the inflow of so many personnel greatly strained the embassy life support and legacy communications infrastructure.³⁷ To alleviate the burden, personnel were lodged in tents on the embassy grounds and the JTF headquarters was established in a vacant lot near the UN HQ, thereby maintaining a close proximity to vital collaborating partners as the operation matured.³⁸ The JECC's communications team employed deployable systems and workarounds to alleviate the connectivity problems.

The JTF commander realized the importance of organizing coordination cells to facilitate a collaborative environment and align efforts with the UN, MINUSTAH, and NGO/PVOs. He established a Humanitarian Assistance Coordination Cell (HACC) as a mechanism to integrate with the UN Cluster system. To promote an atmosphere of political neutrality, LTG Keen designated BG Matern, a Canadian exchange officer assigned to the XVIII ABC HQ, the responsibility to lead the HACC efforts. Primarily staffed by the 98th Civil Affairs (CA) Battalion, the HACC integrated military support to USAID and the Haitian Government by establishing medical clinics and food distribution points.³⁹ Dedicated military personnel were also assigned to directly support USAID and MINUSTAH.

Determining Requirements

"Many of the early assessments were simply guesses. SOUTHCOM guessed at what ... capabilities and capacities would be needed and sent them forward without ever being requested by the lead agency (USAID)"⁴⁰

BGen Garza, USSOUTHCOM Chief of Staff

The major military force deployment plans were crafted within the first few days when the situation was still very vague. As a result, the fledgling staffs had to make some bold assumptions. Though USSOUTHCOM developed a generic functional plan (FUNCPLAN 6150-06) for HADR operations in theater, the plan was written with a traditional J-code construct in mindbut the CCMD staff was not configured that way. Moreover, there was no standing Concept of Operations (CONOP) or Operations Plan (OPLAN) with an associated Time Phased Force Deployment Data (TPFDD), built for HADR that the staff could leverage to begin force flow planning. Adding to these complications, logistics and deployment expertise had been disaggregated under the current staff organization.⁴¹

Force Flow and Logistics

"The opening of the airport by the US was critical since initial over-the-shore supplies were more hampered. They went from around 35 flights per day to just over 200 flights per day, which was incredible. From the humanitarian assistance perspective, logistics is the best thing that the military does for such a disaster and we did it well."⁴²

W.L. "Ike" Clark, USSOUTHCOM Humanitarian Assistance Division Chief

At first, USSOUTHCOM implemented a "push" concept of force deployment. Because speed was of the essence, the CCMD opted to overcome ambiguity and uncertainty with the deployment of willing and available forces as directed by the Services. Force flow was prompted on verbal orders, given the absence of an established TPFDD. This resulted in an unsynchronized sequencing of units and equipment for several weeks. Supporting commands did not adequately communicate with each other and the risk of inadequate support for responders was very high. The precipitous infusion of manpower and provisions, while inefficient and ad-hoc, was nonetheless effective in bestowing the onscene commander the means to stabilize the situation and save lives.⁴³

"We had 16 pages of VOCOs regarding force flow. Official RFFs were not required and the bureaucracy was eliminated by this approach. This was the enabler for speed-of-response."⁴⁴ RADM Parker, USSOUTHCOM J-3

Yet the speed of response had a downside. The nonexistence of an audit trail, due to reliance on verbal orders, deprived

commands of coordinated force flow planning and tracking. Because effective Joint Reception, Staging, Onwardmovement, and Integration (JRSOI) was not doctrinally implemented as expected; a Joint Logistics Operations Center (JLOC) was not established for weeks. Operational planners did not have adequate visibility of "what they had, where it was, and what was coming."⁴⁵ Rather than approaching the mission from an operational perspective, the staff was overwhelmed with tactical distribution of "whatever showed up at the airfield from well meaning contributors".⁴⁶ To adjust, JTF-H created the Force Flow Working Group (FFWG) consisting of J3 and J4 personnel who met frequently to remove barriers, de-conflict issues, and advise the commander. The FFWG was one of several ad hoc organizations to deal with the early confusion. Later, as additional boots-on-the-ground arrived and the JTF matured, actual requirements became evident and a "pull" approach was implemented, improving effectiveness and efficiency.

Information Gathering and Situational Awareness

"I can honestly say that ... we have not had any problems sharing information. One of the key reasons for this is that from the outset of this crisis, we at the SOUTHCOM Headquarters decided to classify our Operations Order as UNCLASSIFIED. This classification gave us ease of transmission across the military, civilian sectors and with our partner nations."⁴⁷

BGen Garza, USSOUTHCOM Chief of Staff

Information sharing was vital to mission success. Communications barriers and limited data was available for management decisions and there were overwhelming requests for information within the beltway and the media.⁴⁸ News reports became a driver for a deluge of inquiry during the first weeks. Responding to the great demand for detailed tactical information from senior leaders placed a heavy burden on the staff on the ground that often disrupted the planning process. The staffs spent several hours each day to "chase down" facts and prepare for VTCs with Washington leadership; often asked questions with no means to answer. USSOUTHCOM was also responsible for situational awareness on the activities of other U.S. and international contributors in support of the relief effort. Foreign embassies bombarded the State Department with inquiries. In turn, USSOUTHCOM had to constantly support the Country Team by providing critical elements of information. Fortunately, the integration of interagency representation, coupled with augmentation from USNORTHCOM, provided an enhanced ability to gain sufficient situational awareness of the whole of government effort.49

A Joint Information Center (JIC) was established and successfully faciliated information flow, but projecting a unified message between all the agencies was difficult. USSOUTHCOM applied an "open" communications approach by developing an unclassified network to facilitate information flow. Though degraded, the commercial communications infrastructure became part of the de-facto crisis response coordination architecture and a viable alternate means to military communications. For several weeks, much of the operation in Haiti was run off of cell phones and mobile email devices.

Commercial technology helped greatly. The International Charter on Space and Major Disasters was activated, allowing satellite imagery of devastated regions to be shared with rescue organizations. Social networking sites such as Twitter and Facebook spread information quickly. The OpenStreetMap community improved access to real-time mapping using satellite imagery provided by Google Maps© (through GeoEye Inc.) for use by all relief teams. Open source websites, such as Ushahidi, synchronized messages from many sites to assist trapped Haitians and inform families. Google Earth updated its coverage of Port-au-Prince, showing details of the the earthquake-ravaged city. On the Internet, the JTF staff leveraged the All Partners Access Network (APAN) and a User Defined Operational Picture (UDOP), allowing them to link with USAID and other government sites.⁵⁰ The merging of digital sources created a near real-time information sharing environment that enabled collaboration.

To address information gaps, traditional intelligence, surveillance and reconnaissance (ISR) systems, was merged with nontraditional means such as those found on open internet sites. ISR platforms produced hydrographic and geographic surveys and imagery to provide a preliminary assessment of damaged infrastructure and the disposition of internally displaced persons (IDPs). USSOUTHCOM re-tasked its sole P-3 aircraft to conduct full motion video (FMV) of Port au Prince. National Technical Means, including commercial satellites, RQ-1 PREDATORs, RC-26 Air National Guard aircraft, and the RQ-4 GLOBAL HAWK, provided geospatial intelligence to enhance situational awareness.⁵¹ Additionally, new sensor capabilities, ALIRT (airborne laser imaging research test bed) and LIDAR (light detection and ranging), also provided assessments of infrastructure damage. JFCOM's Joint Warfare Analysis Center (JWAC) provided detailed infrastructure analysis of roads, food distribution, water sources, IDP movement, and electrical grids.52

"The SOUTHCOM J2 provided estimates on the viability of Haitian hospitals by using satellite imagery showing movement around the buildings; but this gave no real intelligence on functionality, capability, or staffing that can only be obtained from in-person assessment."⁵³

CAPT Miguel Cubano, USSOUTHCOM Surgeon General

Most of the information gathering had to be done the old fashioned way—with boots on the ground. USSOUTHCOM deployed intelligence teams to comprehensively assess the human terrain. Information was merged from social networking sites, local clergy, non-governmental organizations and the Haitians themselves, to focus the humanitarian effort. Ground troops conducted ground reconnaissance and provided assessments to the headquarters and local leaders. The U.S. Special Operations Command (USSOCSOUTH) deployed special operations teams to provide on-the-ground assessments outside of Port au Prince. Later, the innovative use of Google Earth combined air and ground reconnaissance with the commercial mapping to form a Common Operating Picture (COP).⁵⁴

Strategic Communications

LTG Keen and his staff recognized the importance of an effective strategic communications plan to get out in front of the voracious media. To accomplish this, they organized the Joint Interagency Information Cell (JIIC) —a centralized coordination team comprised of USG agencies assisted by the U.S. Embassy's Public Diplomacy Officer. The message was to portray the U.S. as a capable, efficient, and effective responder. Focusing on the Haitians, international community, and American people; the core themes emphasized "Haitians helping Haitians" and a partnership effort.⁵⁵ Of equal importance was dismissing the undesirable messages that the U.S. was saving an inept Haitian Government, that it was an occupying force, or that the U.S. was committed to rebuilding the country. The White House sent a "trusted agent" to synchronize messages, and the Chairman of the Joint Chief of Staff, ADM Mullen, sent his personal public affairs officer to assist the JTF Commander.⁵⁶

"For the first few days of the crisis, the guy that was most valuable to me was the Chairman's PAO—he was with me all the time."⁵⁷ LTG Keen, JTF Commander

The JECC support team included the Joint Public Affairs Support Element (JPASE). JPASE provided media and production specialists to fill the information void that was initially filled by the media. In the early days, there were more media representatives on the ground than military. Using real time video and satellite feeds, the media were ahead of the military in describing the situation on the ground. This provided a beneficial window for leaders, but with drawbacks—it tempted those in Washington to apply a "10,000 mile screwdriver."⁵⁸

Mission Performance and Transition

By April 2010, in spite of severely damaged docks, the port doubled its capacity through JTF assistance and projects, allowing the offload of over 8,500 containers totaling over 10.2 million short tons. Navy and Army divers repaired the damaged south pier in record time and by mid-March the port was turned back over to the Haitian port authority. Joint Logistics Over-the-Shore operations brought much needed supplies from ships anchored offshore to the beaches via landing craft, amphibious vehicles, and hovercraft. JTF helicopters from the Army, Navy and Marine Corps flew every day, bringing in supplies and transferring patients. By the end of May, over 4.9 million meals, 17 million pounds of bulk food, and 2.6 million bottles of water were delivered to the people most in need. Over one million Haitians received emergency

shelter, while more than 80 blocks of debriscovered streets were cleared and over 40,000 buildings were assessed by JTF engineers.⁵⁹

The Operation Unified Response military effort effectively concluded with the redeployment of the 24th MEU on March 24th—ten weeks into the crisis. International partners took over responsibility for food and water distribution. The JTF continued to orchestrate relief support through engineering projects. Through mid-May, the JTF mission focused extensively on mitigating the dangers of heavy rains, floods, and mudslides at the nine main displacement camps in Port au Prince. This included supporting GoH, UN, USAID, and NGO partners in relocating displaced persons to transitional resettlement sites. JTF-Haiti engineering operations resulted in the protection of over 37,000 persons at high risk. Through these transitional efforts, JTF-Haiti postured for a seamless transfer of responsibility to the newly created Humanitarian Assistance Coordination Cell (HACC) that coordinated follow-on Haiti relief operations and Theater Security Cooperation activities via the New Horizons initiative. The New Horizons initiative sponsored medical readiness training exercises, construction projects, and medical relief missions in rural areas. The overall operation officially concluded on June 1st, 2010.60

Reflections on Haiti

During an after action plenary session in August 2010, the key leaders with agency representation reflected on the Haiti response. Representives included the USAID Administrator, Dr. Shah; USSOUTHCOM Commander, General Fraser; JTF Commander, LTG Keen; DoS representative, Undersecretary Kennedy; U.S. Ambassador to Haiti, AMB Merten; and the initial USAID response coordinator, Ambassador Lucke. Dr. Shah noted that a critical enabler for the response was strong presidential support backed by Congress and the American people, which led to attempting innovative methods and taking risks to save lives. Clear policy—shared by the USG, Host Nation, and International Partners-served to establish priorities and foster effective solutions. Dr. Shah identified a shared decision-making capability shortfall that requires an investment. This investment, he argued, will enhance the impact of each direct aid dollar that is spent. Then, authorities on the ground—aligned to the resources—may be better applied to the response.⁶¹

General Fraser emphasized the need for unity of response by utilizing a common operating picture supported by comprehensive and capable logistics. The military's ability to move people, equipment and supplies and to repair and operate the airport and ports was essential, but it is expensive and the Department of Defense does not always understand the requirements and humanitarian imperative that USAID, NGOs, and other stakeholders understand. However, there is a need to use the strength of military logistics to maximize the overall government response.⁶²

Undersecretary Kennedy reminded the audience that all humanitarian contingencies are not the same, and planning must be flexible. By international law, it is the host government that has the authority to direct activities; however in situations like Haiti, wherein the host government is severely impacted and has limited capacity-our first effort must be to persuade that government to allow the U.S. to take charge of key functions.⁶³ Diplomatic actions are necessary to rally international support. The most important role for the USG, through the Embassy, is to protect U.S. citizens and better tools are needed to perform this task.⁶⁴ There is a need to coordinate support in Washington in order to enable the effort (especially in terms of logistics) and to alleviate the burden on the field staff.

LTG Keen reinforced the need to respond quickly, build partnerships, fully support the lead Federal Agency, and work closely with the U.N. Humanitarian community. He recommended that the USG develop a capable Response Assessment Team and form a reserve International Civilian and Military capacity to respond to disasters and this team must be exercised. Better doctrine and processes are needed for the Humanitarian Assistance Coordination Centers (HACC) —and they need "unclassified" information sharing tools to better integrate and support the NGOs and public/private sectors.⁶⁵

Ambassador Merten reflected on how the U.S. Embassy staff had to play a dual role of victim and responder. Many lost their homes and over 16,000 Americans had to be evacuated—the largest evacuation of U.S. citizens since World War II. He underlined the significance of collaborating with all partners before deploying, and the resulting assistance must be self-sustaining, as to not overwhelm the staff and resources at the Embassy.⁶⁶

Ambassador Lucke expressed the importance of designating a civilian agency supported by an existing—as opposed to ad hoc-international planning and communications system. He expressed concern that much of the decision-making power was concentrated in Washington, and highlighted the importance of empowering

³ United States Agency for International Development. Independent Review of the U.S. Government Response to the Haiti Earthquake, by Debarati Guha-Sapir, Thomas Kirsch, Shayna Dooling, and Adam Sirois (Washington D.C.: USAID, 2011), 11. ⁴ United States Department of Defense, United States Southern

Command, USSOUTHCOM OPORD 01-10: Haiti Earthquake Foreign Disaster Relief. (Tampa, FL: United States Southern Command), 2.

⁷ Joint Center for Operational Analysis, 9.

9 Ibid.

field missions to handle the disaster response.⁶⁷ The Ambassador indicated that a balance must be established between the demand for information in Washington and the ability of USAID to deliver, so that relief efforts on the ground are not sacrificed. All presenters applauded the overall response efforts in Haiti, but there is clearly much more that can be done to prepare for the next crisis.

Author Biography.

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²⁹ USSOUTHCOM OPORD 01-10: Haiti Earthquake Foreign Disaster Relief, 1.

32 Ibid.

- 36 Ibid, 15.
- 37 Ibid, 14.
- ³⁸ Ibid.
- ³⁹ Ibid.
- ⁴⁰ Ibid, 7.
- ⁴¹ Ibid.
- ⁴² Ibid, 11.
- 43 Ibid, 13. 44 Ibid.
- 45 Ibid, 14.
- ⁴⁶ Ibid.

- ⁴⁸Independent Review of the U.S. Government Response to the Haiti Earthquake, 12.
- ⁴⁹ Joint Center for Operational Analysis, 4.
- ⁵⁰ Ibid, 7.

52 Ibid.

55 Ibid, 15.

¹US Government Photograph: www.southcom.mil Accessed June 27.2016.

² United States Agency for International Development, Office of U.S. Foreign Disaster Assistance, Haiti - Earthquake, vol. Fact Sheet #58 (Washington, D.C.: USAID, 2010), 1.

⁵ Independent Review of the U.S. Government Response to the Haiti Earthquake, 12.

⁶ United States Agency for International Development, Fact Sheet #58.2

⁸ USSOUTHCOM OPORD 01-10: Haiti Earthquake Foreign Disaster Relief, 2.

¹⁰ Barak Obama, "Remarks by the President on Rescue Efforts in Haiti," Briefing Room, January 13, 2010, 1, accessed August 20, 2010, https://www.whitehouse.gov/the-press-office/remarkspresident-rescue-efforts-haiti. ¹¹ Joint Center for Operational Analysis, 10.

¹² Independent Review of the U.S. Government Response to the Haiti Earthauake. 9.

¹³ Ron Paul, "Ron Paul's Statement in Opposition to H Res 1021, Condolences to Haiti" ONTD Political, January 25, 2010, 1,

accessed August 7, 2010, http://ontd-

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¹⁵ "2010 - Haiti Earthquake," 3, accessed August 20, 2010,

http://www.iodr.cd/documents/haiti2010.pdf.

¹⁶ Barak Obama, 2.

¹⁷ Independent Review of the U.S. Government Response to the

Haiti Earthquake, 41.

¹⁸ Joint Center for Operational Analysis, 15.

¹⁹ Ibid, 12.

²⁰ Ibid. 14.

²¹ Ibid, 12.

²² Ibid, 12.

²³ USSOUTHCOM OPORD 01-10: Haiti Earthquake Foreign Disaster Relief, 1.

²⁴ Joint Center for Operational Analysis, 16.

²⁵ Ibid.

²⁶ Ibid, 8.

²⁷ Ibid, 3.

²⁸ Ibid. 9.

³⁰ Joint Center for Operational Analysis, 9.

³¹ Ibid, 10.

³³ Ibid.

³⁴ USSOUTHCOM OPORD 01-10: Haiti Earthquake Foreign Disaster Relief, 1.

³⁵ Joint Center for Operational Analysis, 12.

⁴⁷ Ibid, 7.

⁵¹ Ibid, 5.

⁵³ Ibid, 6.

⁵⁴ Ibid.

⁵⁶ Ibid.

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⁵⁸ Ibid, 5.
⁵⁹ United States Agency for International Development, *Haiti-Earthquake, vol. Fact Sheet* #58, 2.
⁶⁰ "2010 - Haiti Earthquake," 4, accessed August 20, 2010, http://www.iodr.cd/documents/haiti2010.pdf.
⁶¹ Independent Review of the U. S. Government Response to the Haiti Earthquake, 110-115.

⁶² Ibid.
⁶³ Ibid.
⁶⁴ Ibid.
⁶⁵ Ibid.
⁶⁶ Ibid.
⁶⁷ Ibid.

Managing the Expectations of the Third Offset

CDR Ted Ricciardella, LtCol David Berke, Lt Col Eric Hresko, and LTC David Zinn

In a speech delivered at the Southeastern New England Defense Industry Alliance in September 2014, Secretary of Defense Chuck Hagel outlined his vision for a strategy designed to cope with the military realities of the 21st century.¹ Secretary Hagel noted that while the United States has been mired in conflict in the Middle East, nations like Russia and China have not been sitting idly by. Instead, they have been seeking to reduce our technological superiority by developing systems and operating concepts of their own that seek to negate our ability to power project and operate relatively unmolested at a time and place of our choosing. Coupled with a flat, if not shrinking, defense budget, building a larger military is an untenable solution to the problem. Instead, Secretary Hagel proposed looking back to our past experiences combating the Soviet Union during the Cold War. From this, the so-called Third Offset Strategy was born.

The ideas contained within the third offset are in many ways aspirational. Those concepts, and how they will translate into research and development are clear. What is unclear is how that technology will develop into grand strategy. Secretary Hagel has proposed a way forward, but the final shape the strategy will take has yet to be determined. What is clear is twofold. First, like the previous offset strategies, the third offset will take time to mature. Developing and procuring new technology is a long and not

always linear process. Second, to be truly effective, the third offset must become more than a technology procurement strategy. It must evolve into a joint military strategy that goes hand in hand with the national strategy it underwrites. Before the Third Offset was officially announced, each of the services had already begun planning for the future with respect to new technologies and operating concepts. The services have thus far focused on developing their future operating concepts but have done little work to integrate with the other services. For the Third Offset to be a truly effective strategy, the technologies and operating concepts must be integrated into a joint strategy.

A Brief History of American Offset Strategies

The concept of an offset strategy is not a new one. Since the end of World War II, the United States has developed two strategies that have been identified as offset strategies.² Put simply, an offset strategy is where one attempts to "offset" the advantages an adversary possesses in an asymmetric and presumably more affordable manner.³ In the case of the United States, our offset strategies attempted to counter the Soviet Union and Warsaw Pact's numerical superiority over the U.S. and its allies.

The first instance of a U.S. offset strategy came on the heels of World War II, while the U.S. was still involved in the Korean War. President Eisenhower came to realize the U.S. was being rapidly out produced with respect to conventional forces. In 1953, the Soviet Union could field some 175 divisions to the U.S.'s 29 divisions.⁴ In contrast, the U.S. held an almost 7:1 edge over the Soviet Union with nuclear weapons. Moreover, building, fielding, and maintaining nuclear weapons was less expensive and required far less manpower than a large standing Army. Even if the U.S. wanted to maintain parity with conventional forces, Eisenhower and his advisors feared such a course of action was economically untenable in the long run.⁵ Out of this realization, the so-called "New Look" was born⁶. Instead of relying on U.S. conventional forces to meet Soviet aggression head on, this new strategy sought to deter aggression with the threat of the use of nuclear weapons.⁷

Some 20 years later, the U.S. found itself on the tail end of the Vietnam conflict with a rapidly declining defense budget. In the intervening years, the U.S. recognized the difficulties of deterring Soviet conventional aggression with the threat of nuclear war. Because of this, Secretary of Defense Harold Brown, along with Undersecretary of Defense for Research and Engineering William Perry sought a new investment strategy they termed an "offset strategy."⁸ This offset strategy sought to counter Soviet numerical superiority with U.S. technological superiority.⁹ Many of the systems we have come to associate with recent conflicts such as the E-8 JSTARS, ATACMS, and Link-16, can trace their roots to this second offset strategy.¹⁰ The core tenets of the second offset strategy were based on developing advanced intelligence, surveillance, and reconnaissance (ISR) and space capabilities, along with new precision weapons intended for deep strike.¹¹ The idea was that deep ISR,

coupled with precision strike could have the same effect on the Soviet's ability to command and control as tactical nuclear weap-ons.¹²

Foundations of the Third Offset

While the Third Offset focuses on completely different technologies, it shares the same overall goal as the previous two offset strategies. Its aim is to substitute large numbers of weapons and a large standing military with superior technology. Additionally, while the previous two offset strategies were developed when the U.S was lagging behind the Soviet Union in military strength, the third offset strategy has been initiated when the U.S. is in a position of strength. Rather than an attempt to catch up with an adversary, this new strategy is designed to keep the U.S. firmly ahead in the face of rising foreign military powers.

Much like the past two offset strategies, the third offset strategy is one firmly rooted in technology. After Secretary Hagel's unveiling of the third offset strategy, the Department of Defense (DoD) began several new initiatives focused on understanding the character of the future operating environment and determining what sorts of technological investments the DoD should undertake. From the creation of the Strategic Capabilities Office (SCO), which was tasked with looking at immediate needs, to a series of strategic portfolio reviews focusing on mid-term problems, to the Long Range Research and Development Planning Program, focusing out past 20 years, the DoD has

taken a comprehensive look at the anticipated future threat, and where our technological strengths lie. The results of those three near, medium, and long-term focus efforts determined the major technological thrust of the third offset should revolve around human-machine collaboration combat teaming. ¹³ Secretary Work further subdivided human-machine collaboration combat teaming into five sub-categories:

Learning Machines – using big data analytics to help better predict future events.¹⁴ **Human-machine collaboration** – using machines to assist humans with decision making.¹⁵

Assisted Human Operations – technology, such as wearable electronics and exoskeletons which directly aid a human performing a task.¹⁶

Human-Machine Teaming – also known as manned- unmanned teaming. This would involve a human or manned platform directly aided by unmanned platforms. **Automated Weapons** – weapons that can select and engage targets without human intervention.¹⁷

Each of the services has subsequently tailored their research and development portfolios to align their efforts along the lines of the third offset strategy.

US Army

The U.S. Army is undertaking a significant intellectual effort focused on designing and fielding an innovative and adaptive future Army that will remain the bedrock of the Joint Force. The ongoing renaissance of warfighting ideas is reminiscent of General William Depuy's post-Vietnam development of AirLand Battle doctrine that stimulated the Second Offset within the Army. The effort includes the recent release of a vision statement and new operating concept, the realignment of institutional responsibilities, and re-focused institutional wargaming and experimentation. While the Army's work preceded the announcement of a Third Offset Strategy, the Army's plan for innovation aligns with Secretary Carter's guidance.¹⁸

U.S. Army Training and Doctrine Command (TRADOC) published the Army Operating Concept (AOC), "Win in a Complex World, 2020-2040," in the fall of 2014¹⁹. This foundational document describes how the future Army will prevent conflict, shape security environments, and win wars, and guides future force development by identifying first order capabilities that the Army needs to sustain supremacy in the land domain.

The science and technology appendix of the AOC identifies technological focus areas that nest with the five pillars of the Third Offset. One focus area of technological development is artificial intelligence that will enable the deployment of autonomous and semi-autonomous systems with the ability to learn. These *learning machines* will provide increased autonomy, and subsequently, enable the future force by increasing its tactical operating area, force protection, and capability. Future development of autonomous Unmanned Ground Systems (UGS) will provide additional capability through *human*-

machine collaboration, such as achieving enhanced situational understanding through persistent reconnaissance. Another technological focus area is human-machine combat teaming through the development of UGS that integrate into manned formations, including UGS with autonomous weapons. The Army also seeks to develop assisted human operations technologies to enable automated and autonomous air and ground resupply and affordable, interoperable, autonomous and semi-autonomous systems that improve the effectiveness of Soldiers and small units.

TRADOC, currently commanded by General David G. Perkins, has overall responsibility for developing the capabilities of the future Army as part of the Third Offset. The Army Capabilities Integration Center (AR-CIC), part of TRADOC, is the lead agency for future capabilities. ARCIC oversees the development, evaluation, and integration of concepts, requirements, and solutions for the Army and is currently led by Lieutenant General H.R. McMaster, widely considered an intellectual visionary with a penchant for institutional innovation. McMaster will primarily leverage two sub-directorates for the development of Third Offset capabilities: the Concept Development and Learning Directorate (CDLD) and the Force 2025 and Beyond Directorate (F2025BD). CDLD develops the Army's vision of future conflict and future joint land operations that drive the development of Army concepts and capabilities. F2025BD integrates and synchronizes the development of future Army concepts and capabilities, and helps foster innovation efforts across the force.

In the spring of 2016, Lieutenant General McMaster announced the impending release of the Army's Robotics and Autonomous Systems (RAS) Strategy.²⁰ Significant efforts of the RAS will be Ground Vehicle Autonomy and autonomous Leader-Follower technology. The Squad Multipurpose Equipment Transport (SMET) is an example of an autonomous ground vehicle that is being tested today. The vehicle is designed to accompany a squad of nine Soldiers during operations and performs a variety of roles, including equipment-bearing, breaching, and employment of autonomous weapons. The SMET is expected to fill roles that enhance situational awareness, augment protection, or provide a capability to Soldiers that is currently unavailable.

While developing Third Offset capabilities, the Army will primarily leverage two initiatives to test and assess ideas and concepts: Unified Quest (UQ) and the Army Warfighting Assessment (AWA).²¹ UQ is the Army's future study plan designed to explore enduring strategic and operational challenges to identify issues and explore solutions critical to current and future development. The AWA is an annual capstone exercise at Fort Bliss, TX, which allows the Army to experiment, assess, and test new concepts and capabilities, in a field training environment, with Soldiers and equipment.²²

The Army is institutionally aligned to pursue Third Offset capabilities as part of the joint force but will continue to face challenges with budgetary pressure and operational demands. These challenges may force the Army to make tough decisions between readiness and future investments in development. The Army Vision and Operating Concept provide the roadmap for future development. TRADOC and ARCIC will continue to guide and manage Army innovation and development. Historically, the Army has been cautious not to over-rely on emerging technologies. The nation's premier ground force recognizes that war will always be a fundamentally human endeavor, where the American Soldier remains the most discriminately lethal force on the battlefield.²³ The Army will continue to invest significantly in the human dimension, but must also integrate emerging technologies to maintain overmatch against future adversaries.

US Navy

The Sea Service's 2015 maritime strategy, "A Cooperative Strategy for 21st Century Seapower" takes on an offensive warfighting tone and states that where the United States has interests, it needs access. The country may have to fight for that access against increasingly sophisticated adversaries – including in domains where we have long taken dominance for granted.²⁴ This maritime strategy is aligned with the "third offset strategy." The Navy views the third offset strategy as a combination of both new capabilities and new concepts of operation. Designed to give the United States an edge in high-end conventional warfare, the focus of the third offset is not just on technology, but a combination of technology and our greatest asset, our people. The offset strategy concentrates on the operational level of

war and uses human-machine collaboration and combat teaming at its core. The Navy's focus in this respect has been on anti-access and area-denial, guided munitions, undersea warfare, cyber and electronic warfare, human-machine teaming and the development of new operating concepts. New technologies, like the Anti-Submarine Warfare (ASW) Continuous Trail Unmanned Vessel (ACTUV) program and the autonomous cargo resupply platform, are crucial to this effort. Equally important is the effort to repurpose existing weapons to create advantages. The Navy is currently attempting to turn SM-6 surface-to-air missiles into anti-ship missiles, has recently upgraded Virginia-class attack submarines to more than triple their missile payload and created a Tomahawk missile with a ship-attack capability.²⁵

In a rapidly changing defense environment, the long-term viability of programs will depend on the ability to affordably add technologies and capabilities during a systems lifespan. One example of where the Navy is applying these new methods is electronic warfare. The EA-18G Growler has a vast array of sensors and weapons that provide the warfighter with a lethal and survivable weapon system to counter current and emerging threats.²⁶ Currently, when an aircraft encounters a new kind of signal on the battlefield, it records the data and brings it back to its base or ship to be analyzed. In conjunction with the Defense Advanced Research Projects Agency (DARPA), the Navy is introducing new deep-learning systems into the EA-18G, aiming to use this artificial intelligence to detect, catalog and counter

the threat in real time. This "cognitive electronic warfare" approach allows a nearly instantaneous response and reaction, and a threat can be taken care of during the mission. As DARPA director, Arati Prabhakar, explains, "We want to get to where we respond and react faster than human timescales. The way we do that is by scouring the spectrum in real time and, secondly, applying some of the most amazing frontiers of artificial intelligence and machine learning. Then we use those to build systems that can learn what the adversary is doing in the electromagnetic spectrum, start making predictions about what they're going to do next, and then adapt the onboard jammer to be where the adversary's going before they get there."27

The idea of the Third Offset is not to have machines replace humans, but to have machines and humans work together where each brings what it does best. This teams up human insight with the tactical acuity of computers. A prime example is the Aegis weapon system. This weapon system uses computers and radar autonomously to track and guide weapons to destroy enemy targets, while at the same time keeping humans in the loop, if desired.²⁸

The ASW Continuous Trail Unmanned Vessel (ACTUV) is the Navy's autonomous warship designed to hunt foreign stealth submarines. It is a crewless, 140-ton robotic ship that the Navy hopes to have in the Fleet by 2018. Extremely inexpensive compared to a manned system, ACTUV is designed to overtly track and trail target submarines. Operating under minimal supervisory command and control, the vessel has advanced autonomous navigation and is to be in constant contact with other ships and aircraft through a satellite link.²⁹ The potential effect this program has is tremendous and has the capability to change the landscape of surface warfare.

The Broad Area Maritime Surveillance (BAMS) program includes the MQ-4C Triton. The Triton is an unmanned aerial vehicle (UAV) that services ISR missions and can cover vast areas. Developed in conjunction with the manned P-8 Poseidon maritime patrol aircraft, the Triton UAV is specifically designed to work with its manned partner to funnel information to the man in the loop for decision making. This teaming concept provides a near continuous source of information to maintain the Common Operational and Tactical Picture (COTP) of the maritime battlespace.³⁰

In an attempt to provide 24/7-capable orbits from an aircraft carrier, the Navy's unmanned carrier-launched airborne surveillance and strike system (UCLASS) program's goal is "to effectively and affordably conduct sea-based 21st-century suppression of enemy air defenses, strike and surveillance missions within the emerging global command and control architecture."³¹ In order to make this the most agile and affordable force, a squadron of UAVs on an aircraft carrier should have interchangeable modules that the strike-group commander could rapidly employ depending on the mission.³²

The Navy stands on the cusp of achieving a huge operational advantage through the use

of unmanned and autonomous systems - air, surface and subsurface.³³ The goal must be to develop a future force architecture that will migrate a mix of autonomous and manned systems across all domains and, more importantly, provide the underpinnings for reprogramming funds to make it happen.³⁴ The current stovepipe approach to design, acquire, use these innovative technologies will prevent the Navy from realizing their full potential, however. A unified (joint) strategy is needed. The Navy must learn how to align these new unmanned and autonomous systems, not just within the Navy using Navy assets, but inclusive of national, joint, coalition, and interagency platforms as well.

US Marine Corps

The Marine Corps Combat Development Command (MCCDC) is chartered to integrate concepts to properly equip the force of the future.³⁵ As the Third Offset develops, MCCDC will play a pivotal role in developing a strategy for identifying systems that reinforce the technological advantage the Department of Defense (DoD) is searching for. Specifically, the Marine CorpsWarfighting Lab will be the Marine Corps' lead agency for Third Offset, responsible for coordinating across industry and within the DoD.

"A Cooperative Strategy for 21st Century Sea Power" describes the increasing technological advancements made by our adversaries, but also the need to counter them and preserve access to all domains.³⁶ Additionally, RAND testimony before the House Armed Services Committee in 2014 identified specific facets of the Third Offset that pertain to the future of Maritime and Air Power projection.³⁷ Clearly the Marine Corps has a role and a responsibility to seek the needed change to remain America's force in readiness.

An experimental yet critical venture began in 2010 when the Marine Corps and DARPA developed the Legged Squad Support System (LS3).³⁸ Commonly known as the robotic mule, it represented the type of relationship that the Marine Corps would need to explore in the future. The mule was designed to carry heavy loads of equipment and allow infantry personnel freedom of movement and increased speed during assaults. While the mule has since been retired, the Warfighting Lab created a paradigm, years before the DoD revealed the newest offset strategy. Though the Corps has not traditionally looked to leverage technological advantage, it will serve the service well to build upon the lessons learned from the experiment.

Perhaps the most relevant developed element of the Third Offset for the future of Marine Corps warfighting is the ability to overcome the Anti-Access/Area-Denial networks developed by its adversaries.³⁹ The F-35 Lightning II will soon be the only tactical aircraft in the inventory to support the Marine Air Ground Task Force (MAGTF). As the replacement for The F/A-18 Hornet, AV-8B Harrier, and EA-6B Prowler, it will perform all the missions of Marine tactical aviation in contested environments. The ability to offset the anticipated area denial

weapons of the 21st century will allow the Marines to execute their Expeditionary Force 21 warfighting concept. Doctrinal responsiveness and versatility demand a system capable of functioning where current systems are prohibited from operating.⁴⁰ The advancement of network enabled weapons is required to support other pillars of the strategy. While weapon systems may not be autonomous in the near future, the ability to update them from multiple platforms within a network will facilitate the agility and responsive needed to outperform threat networks currently being created. Naval Air Systems Command had begun the developmental testing that can one day be integrated into normal F-35 employment of long range and lethal fires.⁴¹ The integration of unmanned aerial systems (UAS) into airspace control has been occurring for over a decade. The Marine Corps must look to leverage the Multifunction Advanced Data Link (MADL) native to the F-35 to incorporate future UAS platforms, making them more flexible and viable in contested airspace. Stand alone or segregated operations of manned and unmanned vehicles are not conducive to dynamic 21st-century combat operations. The integration of the platforms into tactical and operational schemes of maneuver promotes offensive strengths while reducing risk to mission and personnel.

US Air Force

Much like the other services, the USAF not only has programs in development now which support the concepts contained within the third offset strategy, but is also building

a research and development portfolio for future systems that will enable the DoD to operationalize the third offset strategy. In September 2015, the United States Air Force released the Air Force Future Operating Concept (AFFOC), a document which illustrates and explains how the Air Force will evolve to perform its mission in the future joint operational and strategic environment in the year 2035.⁴² Broadly speaking, it outlines how the USAF will evolve from a service that defeats it adversaries by conducting simultaneous, parallel operations to paralyze enemy's decision-making capabilities, into a service that stymies an enemy's ability to respond by presenting more problems than the enemy can react to.43

While the basic functions and missions of the USAF will not drastically change over the next 20 years, the breadth and scope of those missions will continue to evolve. Whereas today's Air Force focuses on air and space superiority, with the integration of cyberspace into every facet of future operations, tomorrow's Air Force will rely on Adaptive Domain Control (ADC), simultaneously operating within air, space, and cyberspace against enemy targets in all domains.⁴⁴ To do this, the USAF of the future will integrate air, space, and cyberspace command and control (C2) under one command and control function termed multi-domain command and control (MDC2). No longer will C2 of air, space, and cyberspace be relegated to separate organizations. Instead, C2 will be integrated seamlessly "under one roof" to make overall C2 more agile and responsive across all domains.45

The key to this evolution is what the USAF has termed "operational agility." On the one hand, operational agility refers to the USAF's ability to develop multiple approaches to solving operational problems. It also refers to the ability to switch rapidly between operational approaches based on changes in the tactical and operational environment, or as the AFFOC puts it, "the ability to act appropriately within a changing context."46 However, this operational agility comes at a price, and that price is the continued reliance on new technology. Fortunately, the technologies proposed under the third offset go hand in hand with the new operating concepts contained within the AF-FOC.

On the non-kinetic side, learning machines will be central to MDC2 and ADC, both for helping to predict future events, and to better understand and react to events as they unfold. The AFFOC envisions learning machines that can fuse date from social media. real-time internet activity, and multi-source intelligence and analyze trends to identify patterns and anticipate behaviors.⁴⁷ These systems will then employ human-machine collaboration techniques to provide human operators air analysis of the situation, predictions of possible future outcomes, and potential courses of action to consider. Additionally, the AFFOC envisions the use of human-machine collaboration in areas where humans are unable to process data quickly enough.⁴⁸ For example, in cyberspace operations, humans will likely be unable to make decisions in real time, and instead will predelegate many operations to computer systems. On the flip-side, humans will be able

to react better to and understand unforeseen circumstances. Human-machine collaboration will help divide tasks between humans and computers, allowing humans and computers to do what they do best in an integrated manner.

On the kinetic side, the Air Force is already embracing human-machine teaming and automated weapons. While the USAF is comfortable with operating manned and unmanned aircraft in close proximity, directly teaming manned and unmanned platforms are unexplored territory. The USAF has begun basic research into the subject and the Air Force Research Laboratory (AFRL) recently unveiled a new initiative focused on understanding many of the fundamental issues associated with teaming, such as trust and other psychological issues.⁴⁹ The AF-FOC envisions mixed formations of manned and unmanned aircraft. However, instead of requiring the aircrew of the manned platforms to fly the unmanned platforms remotely, these future unmanned platforms would be capable of fully autonomous operations when provided with mission-type orders from the formation lead.⁵⁰ Additionally, the USAF is pushing the boundaries with respect to the use of fully automated weapons. In concert with the U.S. Navy, the Air Force is developing Long Range Anti-Ship Missile (LRASM), which incorporates varying degrees of autonomy for routing and targeting.⁵¹

Third Offset Way Ahead

Despite the fact the services are actively working to develop technologies and operat-

ing concepts compatible with the third offset strategy, there is still much work to be done. In order for the third offset to be truly effective, it needs to be more than a procurement strategy for the individual services. It needs to evolve into a coherent, department-wide strategy that underpins a larger and comprehensive national strategy. In the case of the first two offset strategies, the military strategy was coupled with a broader national strategy. The New Look dovetailed with a more comprehensive strategy meant to deter Soviet aggression by threatening the use of nuclear weapons not just at the point of conflict, but more broadly against Soviet forces across the globe. In essence, it sought to raise the stakes of smaller conventional conflict so high as to give the Soviets pause before they acted aggressively.⁵² Similarly, the second offset strategy sought to integrate across the service components in a joint manner, leveraging the strengths of each service. Beginning with airborne ISR assets able to detect and locate Soviet forces deep behind the front lines, to digital datalinks able to pass information to platforms and weapons irrespective of service, to longrange fires and maneuver forces able to strike deep and exploit enemy weaknesses, the second offset evolved from a collection of technological marvels into a joint and integrated military strategy.

In much the same way, for the third offset strategy to be truly effective, it must be coupled with a coherent military and national strategy. To be sure, both the first and second offset strategies began with a recognition of U.S. vulnerability, namely in the face of overwhelming Soviet numerical strength. Over time, however, they matured into fully developed strategies with operating concepts tailored to fit the operational and strategic problems if their day.

The roots of the third offset strategy, however, arise from a different problem. As Deputy Secretary of Defense Work stated, the U.S. is currently in a position of military preeminence. However, during the time we have been mired in conflict in Afghanistan and Iraq, other nations have learned from our experiences and are building military capabilities that directly counter ours.⁵³ Specifically, he noted that the third offset is focused on maintaining DoD's power projection capabilities into the future when he said, "Our perceived inability to achieve a power projection over-match, or an over-match in operations, clearly undermine, we think, our ability to deter potential adversaries. And we simply cannot allow that to happen."⁵⁴ In many ways, maintaining a technological advantage can be more difficult than it is for an adversary to narrow the gap, more so in a free and open society, in which our military strength is dependent on free enterprise.⁵⁵ At this stage in the development of the third offset, the key will be to approach the problem from multiple directions, and not limit ourselves to one or two approaches.⁵⁶ Because the nature of our next great challenge is unclear, we need not limit ourselves artificially at this stage in the game.

Finally, developing a coherent strategy takes time, more so when the strategy is intimately linked with research, development, and procurement. The first offset took only a few

years to enact because the means were already at hand. The United States had the upper hand with respect to nuclear weapons, and the New Look was less about developing new technology than it was about utilizing existing technology in a new way. The second offset, however, took considerably more time. Envisioned in the early 1970s, many of the weapons and platforms which came out of the second offset were not operational until the mid to late-80s. In 1976, then DARPA director Dr. George Heilmeier wrote a short article for Air University Review entitled "Guarding Against Technological Surprise." In it, he daydreamed about future technologies he envisioned could revolutionize the way the U.S. conducted warfare if, and only if, the U.S. were the first to adopt those technologies.⁵⁷ Some of the technologies he envisioned, such as spaced based chemical lasers, never came to pass, at least not in the form he imagined. Others, such as chip-based infrared sensors and adaptive optics, were developed over the intervening decades and are now ubiquitous both on and off the battlefield. The point is that developing such technologies to maturity takes time, and not every promising technology will mature and bear fruit. Strategy development is a dynamic process in much the same way as technology development, and the final iteration of the third offset will likely be very different than we envision it today.

Conclusion

The third offset strategy is much more than an assemblage of new weapons and support systems. The third offset is an idea which

seeks to combine new technologies and innovative operating concepts into a strategy which capitalizes our strengths against an uncertain adversary in a time of fiscal austerity. While the services have already stepped up to the plate and are actively aligning their R&D and procurement priorities with the proposed third offset strategy, the path to an executable strategy is a long one. While the New Look only took a few years to become a reality, the second offset took decades to realize. Not only did the technology take years to mature, but the operational concepts which made those technologies so effective could not mature until the technologies were themselves fully developed. Dr. Heilmeier encouraged a culture within the DoD that put commanders and technologists in close contact, facilitating dialogue between those developing new technologies, and those entrusted with their use in war.⁵⁸ Ultimately, the success or failure of the third offset will hinge on how well the services and research laboratories are able to work together over the next decade and develop new concepts and ideas into a flexible and workable strategy able to cope with the uncertainty of the future.

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Developing an Operational Approach for the Transition from War to Peace through Stabilization, Reconstruction, and Development: Understanding Strategic Direction

Thomas J. Snukis

The Islamic State (ISIS) dominates today's headlines with their violent approach and apocalyptic goals. Terrorist attacks in San Bernardino, Brussels, Paris, Orlando and a host of other assassinations and kidnappings mark this group as one that must be addressed. As national security decision makers across the globe attempt to make sense of ISIS's actions and craft appropriate responses, Sun Tzu provides sage counsel when he stated "War is a matter of vital importance to the state; the province of life or death; the road to survival or ruin. It is mandatory it be thoroughly studied."¹ While Sun Tzu's insight is no revelation to most, multiple assessments of recent U.S. governmental operations in the Middle East region highlight that Operation Iraqi Freedom (OIF) and its aftermath absolutely warranted more thought and study than the U.S. national security apparatus allocated and applied.² Sun Tzu's advice, ignored or overlooked at multiple levels during the design, planning, preparation, and execution of OIF, must be applied whenever the use of American force is contemplated, and especially to the current ISIS dilemma. During OIF and Operation Enduring Freedom (OEF), most military experts recognized that the United States excelled in its ability to conduct combat operations against Al Qaeda, the Taliban, Sadaam Hussein, and the Iraqi Army, but then

struggled with the resultant transition from war to a sustainable peace. As General (Retired) Anthony Zinni USMC, former commander of U.S. Central Command, stated regarding the use of force "The most important question is ...and then what?"³ In his view what happens once the shooting stops and the dust clears is extremely important – essential! Specifically today, what happens once the ISIS threat is removed? How will the area be stabilized, reconstructed, and then developed to ensure the root causes and drivers of the ISIS movement are mitigated? What will fill the vacuum?

As current strategic thought on U.S. Middle Eastern relations and engagement develops and refines, especially the approach towards the Islamic State, these questions must be answered leveraging the hard earned lessons of OIF, OEF, and other operations from the past to properly inform the present and anticipate the future. This is the first in a series of essays for the Campaigning journal that will focus on the transition from war to peace through stabilization, reconstruction, and development. This essay concentrates on identifying the essential U.S. governmental strategic guidance, concepts, and doctrine surrounding stabilization, reconstruction, and development. The series will look at the guidance, relevant literature, and lessons from history, including the lessons from OIF and OEF, through an operational lens in an attempt to provide the U.S. national security policymaker, diplomat, Joint warfighter, and other governmental agencies with a framework

that can be used as a starting point in future endeavors.

United States Government Strategic Directives, Stability Concepts, and Doctrine

Julian Corbett, an early 20th Century naval theoretician, in his book Some Principles of Maritime Strategy, promoted the benefit of understanding the concepts and theories underlying a specific issue. He directly extolled the value of concepts, "clear conceptions of the ideas and factors involved in a war problem, and a definite exposition of the relations between them, were in his eyes the remedy for loose and purposeless discussion...In this way we prepare the apparatus of practical discussion..." Corbett further advised, "Without such an apparatus no two men can even think on the same line; much less can they ever hope to detach the real point of difference than divides them and isolate it for quiet solution."⁴ Without the essential requirement for developing a conceptual understanding among practitioners so that they can begin from a common starting point, we often find that too much time is spent debating the framework and not enough time analyzing the specific issue under consideration.

Joint Publication (JP) 5-0, Joint Operation Planning, provides a conceptual method with which the Joint commander can develop an operational approach. This method or framework, called operational design, facilitates the development of a description of the broad actions the force must take to achieve the desired military end state. Within this design methodology, three distinct frames assist in the development of that approach: 1) understand the strategic direction; 2) understand the operational environment; and 3) define the problem.⁵

This essay will focus on the first frame of operational design, which is to develop an understanding of the strategic direction. An 'upfront' appreciation of the strategic direction, concepts, and doctrine develops a shared understanding amongst the key U.S. governmental stakeholders, classifying several foundational issues that directly impact stabilization and reconstruction in order to "isolate it for quiet solution." Within this section we will identify and provide a synopsis of the following: the U.S. Strategic Direction, Operational Concepts, and evolving Doctrine governing postconflict Stabilization and Reconstruction.

Strategic Direction National Security Policy Directive (NSPD-44) Management of Interagency Efforts Concerning Reconstruction and Stabilization, 2005

NSPD-44, signed by President George W. Bush, laid out the directive "to promote the security of the United States through improved coordination, planning, and implementation for reconstruction and stabilization assistance for foreign states and regions at risk of, in, or in transition from conflict or civil strife."⁶ This directive highlights the essential need for coordination among U.S. governmental agencies and departments, especially between the U.S. State and Defense departments. It assigns responsibilities but does not address the specifics of how to conduct these types of operations. Overall, the directive is useful to the U.S. national security apparatus as it establishes responsibilities and highlights the critical nature of solid intergovernmental coordination. It does, however, generate confusion by implying that reconstruction has precedence over stability by how it places reconstruction before stabilization in its description. This becomes a trend, it seems, as most U.S. governmental direction relies on the World War II model, wherein the U.S. governmental resources were extensive, and which leveraged better starting conditions in both Germany and Japan. Each had unconditionally surrendered; the populations were warweary and not supportive of continued resistance; and the populations were fairly homogeneous, educated, literate, and had experience with effective governmental institutions. The starting conditions in both post-conflict Afghanistan and Iraq were much more nuanced with tribal, religious, and sectarian divisions and scarcer U.S. resources. The tougher starting conditions in Iraq and Afghanistan, combined with limited investment of personnel and time, require a more sequenced and prioritized approach than in the post-WWII world.⁷

Department of Defense Instruction (DoDI) 3000.05 *Stability Operations*, September 16, 2009

The goal of this directive, produced eight years after the start of Operation Enduring

Freedom, was to ensure that the U.S. Armed services emphasized and executed stability operations to the same high standard that they established and met when conducting combat operations. Six years after President Bush declared "mission accomplished" in Iraq and Secretary of Defense Rumsfeld stated that the U.S. was in a period of "stabilization and reconstruction," the evidence was underwhelming that the U.S. military and the U.S. government as whole had adequately embraced the essential work of post-conflict stability.⁸ DoDI 3000.05 was published to compel the Department of Defense to establish and maintain the "capability and capacity to conduct stability operations activities to fulfill DoD component responsibilities under national and international law." ⁹ This directive properly accounts for the essential activities necessary to create stability post-conflict. Moreover, the directive established that the "capabilities shall be compatible...[with] other U.S. Government agencies...and when directed the department can:

- 1) Establish civil security and civil control.
- 2) Restore or provide essential services.
- 3) Repair critical infrastructure.
- 4) Provide humanitarian assistance."¹⁰

Concepts

United States Joint Forces Command Stability Operations Joint Operating Concept (JOC) 2004

After the U.S. Army published the initial *FM 3-07, Stability Operations*, in 2003, United States Joint Forces Command (USJFCOM) followed it up by publishing

the Stability Operations Joint Operating Concept (JOC) for the Department of Defense in September of 2004. Synthesized lessons from both Operation Enduring Freedom and Operation Iraqi Freedom started to emerge from the experiences of the U.S. Armed Forces. USJFCOM based their thinking on four fictional cases to generate their concept. The JOC enhanced the body of knowledge on stability in two key areas. First, it proposed ten guiding principles for the joint force commander's thoughts on the conduct of stability operations pre, during, and post- conflict with an eye towards achieving a more coherent and stable post-conflict environment. These principles are:

1. Organize military and civilian agencies to achieve unity of purpose and coherency of action.

2. Incorporate information operations into every action, tactical and operational.

3. Impose security by adopting an assertive posture.

4. Defeat those violently opposed to stability.

5. Neutralize, co-opt, or induce others who threaten stability.

6. Act with precision quickly: Balance restraint and overmatching power.

7. Act from a position of legitimacy.

8. Pursue interim conditions for "next state" in the transition process.

- 9. Operate within the law.
- 10. Develop reliable local intelligence. ¹¹

Second, the Stability Operations JOC addressed internal adversaries within the post-conflict environment and outlined the concept of spoilers. They identified three categories of potential spoilers that the Joint force must account for during post-conflict operations. To be successful, the Joint force must clearly understand each spoiler category and how to account for each as they attempt to create a stabilized postconflict environment. The three categories of spoilers and recommended Joint Force actions regarding each are:

• **Total Spoilers** are those individuals who have no stake in reestablishing civil society...they are irreconcilably opposed to the U.S. and multinational position. They must be killed, captured, and defeated.

• Limited Spoilers may oppose assimilation into society out of fear of their former superiors or out of a concern for a loss of prestige or income. They must be included in the emerging post-conflict political process or coopted for the benefit of the new order. If they are ignored they may become total spoilers.

• Greedy Spoilers act to satisfy selfish, usually economic, interests. If their actions are criminal in nature they must be arrested and dealt with in accordance with local laws. This may be problematic if the rule of law has been removed or is non-existent because of preceding circumstances. If they are ordinary citizens just looking to gain an advantage in the emerging post-conflict order they can be co-opted.

Failure to account for each category of spoilers or to mis-categorize spoilers will

generate challenges to the development of a safe and secure post-conflict environment.¹²

United States Joint Forces Command Military Support to Stabilization, Security, Transition, and Reconstruction Operations Joint Operating Concept (JOC) 2006

A second JOC, the *Military Support to Stabilization, Security, Transition, and Reconstruction Operations* Joint Operating Concept, provides a wealth of information for both the policymaker and the operators. They identify six major mission elements (MME's) or lines of operation that the U.S. government must perform. Those MME's are:

- Establish and maintain a safe, secure environment
- Deliver humanitarian assistance
- Reconstruct critical infrastructure and restore essential services
- Support economic development
- Establish representative, effective governance and the rule of law
- Conduct strategic communication

As we will see with the subsequent documents, the MME's accurately lay out the basic activities required to create stability. Unfortunately this document as the others also reinforces the notion that all activities must be done in parallel or concurrently. "These...MMEs...are executed in a concurrent manner and are integrated and tailored to the specific situation."¹³

Doctrine

United States Army Field Manual (FM) 3-07 *Stability Operations* 2003, 2008, and 2014

The first stability document that emerged was the United States Army Field Manual (FM) 3-07 *Stability Operations* published in October 2003. Updated in 2008 and again in 2014, FM 3-07 contributes "to the Army...by providing tactical guidance on the conduct of operations focused on stability.... The principal audience for FM 3-07 is leaders and planners at the battalion level and above." FM 3-07 establishes five primary stability tasks for the Army. Those tasks are:

- Establish civil security.
- Establish civil control.
- Restore essential services.
- Support to governance.
- Support to economic and infrastructure development.¹⁴

Additionally, FM 3-07 recognizes the need for a near, mid, and longer-term approach to stability through identification of the three phases of the stability framework—initial response, transformation, and fostering sustainability. Unfortunately, the manual neglects to address the temporal aspect of stability with any real rigor or precision.¹⁵

Overall, the manual does a credible job of identifying many of the intricacies and variables involved in stability operations but fails to organize the whole in a coherent and easily understandable manner. The manual tries to do too much, which ultimately diffuses the essence of stability operations and gives the impression that the practitioners must do it all, and discounting the reality of available resources.

United States Joint Chiefs of Staff Joint Publication (JP) 3-07 *Stability Operations* 2011

Despite the joint nature of the forces involved in Operations Enduring and Iraqi Freedom, it took ten years for the Joint Staff to publish joint doctrine covering stability operations. Once published, Joint Publication (JP) 3-07 captures many of the best practices, insights, observations, and concepts from a variety of sources, but it has not analyzed stability operations in a holistic manner nor has it synthesized the available lessons learned. While many other Joint doctrinal publications address stability operations, JP 3-07 has primacy and must focus the efforts of the Joint Force Commander and his staff on the nuances and intricacies of this extremely difficult mission set. For example, General Rupert Smith in his book, Utility of Force, highlights the difficulty in operating within the population. He terms it "war amongst the people." He states that "war amongst the people is different...Civilians are the targets, objectives to be won, as much as an opposing force."¹⁶ Although JP 3-07 stresses that "the JFC [Joint Force Commander] must understand the context in which stability operations are executed," the publication does not adequately discuss the contextual nuances and intricacies of the post-conflict environment in any meaningful detail. This extends to the temporal dimension of stability operations as well as

the coverage of the Joint functions. JP 3-07 establishes three broad categories for stability missions, tasks, and activities accounting for the temporal dimension. Those activities are initial response activities, transformational activities, and activities that foster sustainability. Additionally, JP 3-07 addresses the fragile states framework and defines each category that a certain state may reside in. This difference must be accounted for in a postconflict environment. If the starting conditions of the state are not properly understood, the level of work required during the initial response phase will be underestimated. Joint Pub 3-07 also defines five Stability Operations Functions. Adapted from the U.S. Institute of Peace publication, Guiding Principles for Stabilization and *Reconstruction*, the five functions are: Security, Humanitarian Assistance, Economic Stabilization and Infrastructure, Rule of Law, and Governance and Participation.¹⁷

Conclusion

When developing an operational approach, the Joint commander must begin by analyzing the strategic guidance documents that underpin the desired end state as well as the doctrine that provides the framework for action. This essay analyzed and assessed the relevant strategic direction to U.S. Joint Forces and other U.S. Governmental Agencies regarding the importance of and the conduct of stabilization, reconstruction, and development activities following a destabilizing event such as a war, armed intervention, or a natural disaster. In future Campaigning articles, we will address the operational environment from several different perspectives, and then conclude by attempting to define the problem facing today's Joint force regarding stabilization, reconstruction, and development.

³ Zinni, Anthony C. 4 April 2003. Operational art [videorecording (DVD)]: non-traditional missions. ATHENA DATABASE

⁴ Corbett, Julian Stafford. 1911. Some Principles of Maritime Strategy. London, New York: Longmans, Green and Co. 5-6.
⁵ United States Joint Chiefs of Staff. Joint Operation Planning.

Joint Publication 5-0. Washington, DC: U.S. Joint Chiefs of Staff, 2011. III-7.

Directive/ NSPD-44. Washington, DC: The White House, 2005. 3. ⁷ Ibid., 4-6.

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Operations Washington, District of Columbia: United States Department of

¹⁰ Ibid. 2.

¹³ United States Joint Forces Command. *Military Support to Stabilization, Security,*

Transition, and Reconstruction Operations Joint Operating Concept.

Suffolk, VA: Government Printing Office, 2006, iii.

¹⁴ U.S. Department of the Army. *Stability Operations*. Army Field Manual 3-07.

Washington, DC: U.S. Department of the Army, June 2, 2014, iii. ¹⁵ Ibid.

¹⁶ Smith, Rupert. 2008. *The Utility of Force: The Art of War In The Modern World*. New York: Vintage.

¹⁷ United States Joint Chiefs of Staff. *Stability Operations*. Joint Publication 3-07.

Washington, DC: U.S. Joint Chiefs of Staff, 2011. III-1 to III-59.

¹ Sunzi, and Samuel B. Griffith. 1963. *The Art of War*. New York: Oxford University Press.

² Numerous publications have highlighted the weaknesses of U.S. strategic/operational design, planning, preparation, execution, and assessment. Among several considered for this paper are: Ricks, Thomas E. 2007. *Fiasco: The American Military Adventure in Iraq.* New York: Penguin Books. , Gordon, Michael R., and Bernard E. Trainor. 2006. *Cobra II: The Inside Story Of the Invasion and Occupation of Iraq.* New York: Pantheon Books. , Woodward, Bob. 2006. *State of Denial.* Princeton, NJ: Simon & Schuster. , Wright, Donald P., and Timothy R. Reese. 2008. *The United States Army in Operation Iraqi Freedom, May 2003-January 2005: On Point II: Transition To the New Campaign.* Fort Leavenworth, KS: Combat Studies Institute Press. , United States. 2009. *Hard Lessons: The Iraq Reconstruction Experience.* Washington, DC: Special Inspector General, Iraq Reconstruction.

⁶ Office of the President of the United States. *National Security Presidential*

⁸ Rumsfeld, Donald. *News Conference with Hamid Karzai*. Kabul, 1 May 2003.

⁹ Department of Defense. Department of Defense Instruction 3000.05 *Stability*

Defense, 2009.

¹¹ United States Joint Forces Command. *Stability Operations* Joint Operating

Concept. Suffolk, VA: Government Printing Office, 2004. ¹² Ibid.

On the Horizons: Leveraging Foresight for National Security Reform

Dr. Daniel H. McCauley

I was on Capitol Hill last summer when I heard the first rumblings of a new Goldwater-Nichols Defense reorganization initiative proposed by Senator John McCain. A few days after I returned to the Joint Forces Staff College I received a call from an action officer on the Joint Staff asking for some thoughts on a Goldwater-Nichols (GN) II initiative. After a short discussion, we determined there were any number of initiatives that could be undertaken but it essentially depended upon the vision that senior leaders had in mind. Since that time, I've had the opportunity to reflect on the proposed initiative a bit more.

What I have come to realize is that the Department of Defense (DoD) does not need a Goldwater-Nichols DoD Reorganization Act II. Rather, what the DoD needs is a McCain Defense Reorganization Act I. I recently had the opportunity to listen to very senior military officials discuss the subject as well as to see some of the Joint Staffs' recommendations. What I have found is that any reference to Goldwater-Nichols subconsciously, or consciously, preserves most of the underlying paradigmatic assumptions of the 1986 framework. These assumptions remain unexamined and continue to serve as the primary organizing principles for any proposed reorganization.

Any approach that starts with the past and works forward to determine what type of reform is needed will likely result in a

system framework that serves yesterday's Joint force very well, today's force adequately, and next year's force poorly. This bureaucracy-preserving approach reverberates with the narrow, short-sighted thinking and compromise that undermines any meaningful or needed change by retaining historical equities and protecting the status quo. At best, this approach involves some "tinkering" on the margins, but clearly serves to preserve the certainties of the past. Unfortunately, the past is behind us and a future full of uncertainties is staring us in the face. To effectively meet these uncertainties, bold innovations are necessary to transform a national security system mired in the organizations, processes, and systems of the 1980s into one that addresses the realities of the 21st century.

Given future uncertainties and knowing that the systems of the past are inadequate, the question becomes how does the DoD reorganize? Before specific organizations, processes, and products are discussed, which is where most of the current reform discussion centers, a more general discussion of the desired system, specifically the attributes, values, and competencies of the Joint force, must be defined and described. The U.S. national security interests and desired goals should form the initial framework for any reform. In addition, possible, probable, and preferable strategic environmental conditions must be analyzed and assessed to provide additional context for any new framework. Only after this broad visualization is established can specific courses of action be considered.

The purpose of this essay is not to present a specific DoD reorganization proposal, which is well beyond the scope of this essay, but rather to present a method with which to begin a thoughtful reform process. The 'Three Horizons' is a futures technique that facilitates the assessment of the inadequacies of a current system, identifies those needed attributes of a desired system, and serves as a means to understand the dynamics of the transition between the two systems.¹ In this essay, I'll broadly review the current DoD national security system, provide an overview of the Three Horizons, and use the tool to facilitate the discussion of a future national security system.

Background

When the 1986 Defense Reform Act was passed, it was a bi-polar world in which the United States and NATO stood toe-to-toe with the Soviet Union and the Warsaw Pact competing for world hegemony. The competing ideologies were capitalism and communism, nuclear weapons were the mainstays of deterrence arsenals, space and precision-guided weapons were still in their infancy, and Apple had recently introduced the first Macintosh computer. In the U.S., Ronald Reagan was leading the rebirth of America, while in the U.S.S.R., Mikhail Gorbachev was introducing *perestroika* and glasnost. Among other notable global events, Iran and Iraq were still heavily involved in a regional war, the U.S. had conducted regime change in Grenada, and the Soviets were mired in their occupation of Afghanistan. In addition, the world's population was 4.9 billion, the Dow Jones Industrial average was 1895.95, and the

median U.S. household income was \$24,897.²

Over the next 30 years, the national security system designed to fight the Soviets failed to keep pace with a world that has not only continued to change, but has changed at increasing rates.³ When one considers the changes in global population and demographics, gender and sexual roles, urbanization, the environment, health, transportation, communication, information, the identity and role of the state, among other trends, the world is a vastly different place and far more complex than it was three decades ago.⁴ Given the complexity of this global security environment, the capacity of the current defense enterprise is taxed beyond its limits-the system is overloaded and cannot properly perform crucial functions.⁵ This is the impetus behind Senator McCain's recent Senate hearings on National Defense Reform and a direct outcome of the handicaps and the specific shortcomings of the current national security system over the past 15 years.⁶

The Three Horizons

The 'Three Horizons' is a strategic thinking tool used to connect the present with the desired future while identifying the anticipated tensions, trends, and disruptions that might occur as one transitions from one system to another. Research shows that all systems evolve along an S-curve and lose their fitness over time. When using the Three Horizons tool, the first task is to identify the existing system and the challenges to its sustainability. This is also known as making the case for change (Horizon 1). As the external environment changes over time, the system in question loses 'fit' aspects. Commensurate with an analysis of the current system, a complementary task is to think through the desired end state (or the conditions that attainment of stated objectives are anticipated to create) or the ideal system and the emerging options (Figure 1). The ideal or desired system is only one of many potential futures, so other futures that can displace the current system must also be identified. By analyzing the historical and current trends, the identification of elements in the present can provide an azimuth check for the likelihood of the desired system (Horizon 3), while maintaining awareness of all options that could lead to transformational change.





It is at this point that the real intellectual struggle takes place. The space between Horizon 1 and Horizon 3 is known as the transition space, which is an intermediate space where values collide and diverge (Figure 2). This space is inherently unstable and the ambiguity associated with it creates the tensions that exist between reality and the ideal. It is within this intermediate space that Horizon 2 emerges as innovations and change start to define an unrealized system that is already more effective than the current system (Figure 3).





For the strategic leader, the dilemma becomes whether to prolong the status quo or invest in an intermediate system that has the potential to bring the vision of Horizon 3 closer to reality (Figure 4). The former approach requires managing the strategic risk associated with modifying a decaying system and sustaining it over time. With the latter approach, strategic risk is managed by leveraging relevant current system components, integrating current and nearterm innovations in Horizon 2, and planting the seeds for Horizon 3.⁷



Figure 4.

It is my contention that we often struggle with innovation because we consistently fail to project our plans into the future in coherent ways, and that our adversaries, current and potential, are restless, the global security environment evolving and dynamic, and that change is a constant. The Three Horizons framework offers an approach to reorganization that integrates the uncertainty of different time dimensions and the unknowns of innovation into our way of thinking. It embraces the need to address the multiple challenges that today's security environment presents (first horizon), cultivates the seeds of the desired system (third horizon), while allocating the appropriate focus and resources as we transition from one horizon to another (second horizon).

The Three Horizons Applied to DoD Reorganization

A system's "fit" within the strategic environment determines the lifespan of the system.⁸ At the end of the World War II, the National Security Act of 1947 was a major restructuring of the United States government's military and intelligence agencies. This restructuring was necessary to provide the U.S. with a more efficient and manageable foreign policy apparatus during the Cold War. The Act was subsequently modified in 1949, 1953, and 1958 to address shortfalls in the Act and changes within the environment. In the early 1980s, significant defense reform was again needed as exemplified in failures or less than desirable outcomes in Vietnam, Grenada, the Desert

One raid, the *Mayaguez* rescue, and the USS *Pueblo* seizure.⁹

According to Jim Locher in his book *Victory* on the Potomac, the 1986 Defense reform had nine goals that were firmly grounded in the context of the Cold War and the result of arcane defense structures and processes that had not been significantly changed for over one hundred and fifty years. Those goals were to: 1) strengthen civilian authority; 2) improve military advice; 3) place clear responsibility on combatant commanders for accomplishment of all assigned missions; 4) ensure CCMD authority is commensurate with responsibility; 5) increase attention to strategy formulation and contingency planning; 6) provide for more efficient use of resources; 7) improve joint officer management; 8) enhance the effectiveness of military operations; and 9) improve DoD management.¹⁰ These nine goals helped to reshape the Defense Department into an unequalled 20th Century security organization. In short, the changes to the national security system that began in 1947 and culminated in 1986 resulted in a U.S. security system that fit the global security environment almost perfectly, and dominated that environment for a decade.

Unfortunately, the DoD system, structures, and processes, designed and developed to confront the challenges of the 1990s, remained generally static over the following 30 years while the strategic security environment evolved resulting in a systemenvironment mismatch. The primary driver for this system-environment mismatch occurred in 1991 when the global security system hit a strategic inflection point—the

collapse of the Soviet Union. This event dramatically changed not only the way the U.S. thought and acted globally, but other actors as well. Ethnic, religious, and other social 'fractures' that were kept in check by the potential of global nuclear war began to come to the fore in the 1990s and reached a boiling point in the early 2000s. For example, in the second George W. Bush administration, radical ideology, political alienation, terrorism and new governments in Iraq and Afghanistan coupled with the 'color' revolutions in Georgia, Ukraine, and Kyrgyzstan continued the erosion of the 1986 national security system.¹¹ During the Barack Obama administrations, ideological wars, religious and ethnic strife, nuclear proliferation, public health dangers, the reemergence of Russia, Chinese military modernization and economic expansion, a growing global economy and climate change among other factors continued to 'chip away' further at the strategic fit of the current national security system.¹²

Over the past fifteen years, the DoD's system-environment mismatch accelerated to the point at which it finds itself today with organizations, processes, and products unfit for unrestricted warfare with state or non-state actors.¹³ This mismatch is shown in Figure 5 and depicts Horizon 1. The vertical axis is the degree to which the U.S. security system "fits" the strategic environment (from 0 to 100) and the horizontal axis depicts time. The brown horizontal lines represent trends over time that are affecting the strategic environment, such as globalization, the proliferations of technology, or the spread of extreme ideology. The yellow bomb burst represents the strategic inflection point of the fall of the Soviet Union in 1991. The black s-curve represents the fit of the U.S. security system—in the early 1990s, its fit was close to 100. Since that time, however, as the strategic environment has changed, the U.S. security system's fit with the environment has declined.



Figure 5.

Whereas most strategists and planners are aware of the zone of change (blue-shaded area), which are those elements driving system unfitness, one of the important and neglected characteristics of systems is that there is also a zone of constants (greenshaded area).¹⁴ Within the zone of constants are those elements of a system that are present in any security system although their form or function (or both) may change slightly. Land and sea forces are examples of constants that have been resident in almost all security forces throughout history.



In Figure 6, the green s-curve represents the U.S. security system required to operate successfully in the near- and mid-terms and represents Horizon 3. This horizon is described by national strategic documents, such as the Joint Operating Environment: JOE 2035. This document identifies the future conditions within which the Joint force is expected to operate and includes such factors as: new poles of economic power, rebalanced energy security, the weakening of traditional U.S. alliances, the refinement of state hybrid stratagems, the intensification of warfare by proxy, contested international rules, the erosion of standing institutions of international order, increased food and water demands among a whole host of other equally challenging conditions.¹⁵ With these conditions in mind. the JOE identified four levels of strategic goals¹⁶ that the national security system or DoD must meet to address these wideranging challenges:

- Adapt to changing conditions by ensuring that the U.S. "can adequately cope with emerging changes in the security environment."

- Manage antagonism and impose costs by discouraging "changes to the security environment that are unfavorable to the United States."
- Punish aggression and rollback gains by blocking and undoing "changes to the security environment that are dangerous or disruptive to the United States."
- Impose change and enforce outcomes by introducing "desired changes to the security environment that are favorable to the United States."

This range of strategic goals must be used to inform any defense reform initiative, to include organizations, processes, and products, to achieve the desired national security system. One of the most interesting aspects of this diagram is that the convergence of the curves of the two horizons effectively define a triangle of choice. This space is the transition space (Figure 7) as the legacy system declines and intersects with the desired system at some point in the future. At the present time, the desired system is not fit for purpose (not yet developed)—it is still merely an unrealized desired system that is likely to change as the future changes.



The transition space, or the area highlighted in yellow, therefore, becomes critical: it is the space of conflict between the current system and the desired system of the future. In the current call for Defense reform, Senator McCain's desire for Defense reorganization has its genesis in this systemenvironment mismatch. In the security environment, this transition space is the region where policy and strategy are used to either reshape the environment to make it fit the old system paradigm or change the system to fit within the new strategic environmental paradigm (Figure 8).



At their core, policy and strategy are typically about choices in values. As all systems decay in the face of change, analysis of the current system makes explicit the assumptions and values that underpin the current system. Hence the need to understand the objectives of the 1986 reform. As any move to a new system, as described by the conditions outlined in the recent JOE, is usually transformational in nature, a change in values, or at least the way the values are applied, underpin the desired system. Policy and strategy, therefore, determine how best to manage the conflicting values and their trajectories within the transition space.

If an assessment of the current system and the strategic environment determine that a system-environment mismatch exists, and that the desired system is unattainable in the near future because of any number of internal and external constraints, a shift to an interim or intermediate system is required.¹⁷ This interim system is Horizon 2 and is indicated by the red line in Figure 9. Horizon 2 is used to manage the challenges within the transition space while working toward Horizon 3. From a national security perspective, this transition space can also be seen to encompass strategic risk. It is the responsibility of policy-makers and strategists to mitigate as much of the strategic risk between the current system and the desired system as possible. As strategic risk is decreased, however, any interim transitions may increase operational risk because of the unknowns associated with any change.



Over time, even though operational risk is relatively constant as the current system (Horizon 1), through interim systems (Horizon 2), continually adapts to the changing environment and makes headway toward the desired goal (Horizon 3), strategic risk decreases (Figures 10 and 11). The reality of such a dynamic environment is that these three different horizons will be constantly in motion: Horizon 1 will always be changing; Horizon 2 will never quite be attained as adjustments are constantly made to environmental actors and factors; and Horizon 3 will always be somewhere off in the future.





Again, in the current discussion of Defense reform there appears to be a difference of opinion between those who support Senator McCain's position that a transformational change is required (and the likely need for an interim horizon) and those who believe minor adjustments to the old system are adequate. For those who are old enough to remember the change effort that was required with instituting GNA in 1986, any significant change to the current Defense system will require an even greater effort given today's complexities. This effort is made ever more difficult by dynamic conservatism, which is the tendency for a system to fight to remain the same. System entropy will also make the effort extremely challenging as is readily evident in circles outside of the DoD. In a recent question and answer session with House Armed Services Committee staffers, it was stated that there is no need nor desire to revisit the roles and missions of the Services again. Rather, tinkering on the margins with such things as defense acquisition reform was all that was needed.¹⁸ As this example and the literature on the Three Horizons method points out, the amount of energy and resources required

to adapt to any new requirements typically results in a retrenchment of current bureaucratic policies and practices.¹⁹

Integrating Foresight into the Discussion

The capacity of an organization to adapt itself to the changing environment is paramount for survival; for the DoD, there is an

even greater imperative to adapt as its environmental fit underpins the nation's security. Given the operational tempo of the past 14 years, coupled with the current operational efforts around the world, it's easy to understand why there is a lack of appetite for any significant change. However, with the continued degradation of the current national security system and the fact that delaying only makes any subsequent change more difficult, a transformational redesign of current structures and processes is an imperative.

A critical activity missing in the development of current defense policies and strategies is foresight. A simple definition of foresight is the ability to think about what might happen in the future. Foresight is a strategist's tool, designed to make better and more-informed decisions in the near-, midand long-term. It requires the ability to recognize patterns to explain how things work or determine what causes what.²⁰ The Quadrennial Defense Review (QDR) is the primary document that serves as a Defense programmatic roadmap for the next 20 years.²¹ The 2014 QDR, however, stops short of integrating a range of potential futures and their associated implications into its planning construct for the Joint force. Equally important, it fails to perform the same intellectual exercise for competitors, adversaries, and potential adversaries. Instead, the 2014 QDR, which is not unlike past QDRs or other strategic planning documents, only provides a general description of individual global security trends and some of their implications for the Joint Force today. More importantly, as security and strategy are relative to other actors within the environment, it fails to consider not only the cross impact of the trends on each other, but their implications for other actors within the global security environment. Without this additional context, any discussion is inherently myopic and wholly incomplete.

Lacking the integration of foresight into security discussions, civilian and military strategists and planners alike are solving the problems of the past with little or no understanding of the broader implications for global actors five years from now let alone 10 or 20 years. Instead, we are merely viewing the world from a singular U.S. perspective while simply extrapolating what some of these trends may mean over the next few years. One of the shortcomings with this approach is that we are missing the 'so what?' We are too bounded by our previous experiences or the current context to imagine²² who or what our next enemy may be.

Granted, the current DoD approach provides cognitive relief from the uncomfortable ambiguity associated with long term trends

and the uncertainty that comes along with them. In essence, we feel more comfortable hopping from crisis to crisis chasing the trend of the day without any long-term view that would help prioritize current efforts-as unsustainable as this may be. Futures tools, such as the Three Horizons, and the associated foresight that comes with it, is critical in the ability to develop near-term priorities and reasonable programmatics through the development of longer-term understanding. Without these tools influencing the way we think, we will be unable to detect new requirements nor have the foresight to shape the environment in ways that enhance the DoD's ability to provide effective national security.23

As current strategy, planning, and educational documents highlight, the Joint force, and its leadership in particular, must become comfortable with ambiguity and uncertainty. As the future is unknowable with any high degree of certainty, we do know there are trends that will converge and diverge in ways affected by non-linearity and chance. Although we don't know specifically how or when their effects will be felt, identifying the catalysts or drivers of game-changing events, or some of the specific second- or third-order effects, while spending time 'rummaging' through the potential implications and effects can provide one with a sense of how the future is being shaped.²⁴ Joint staff officers must become comfortable with the terms probability and possibility to stratify the likelihood of potential events. These two terms help to anticipate change and develop

awareness of the impact of potential future drivers of change. Probability refers to likelihood and chance. Likeliness enables the ranking of alternative futures as more or less. Possibility is rooted in reality—a possible future is potentially realizable.²⁵

Integrating these concepts with the Three Horizons, one should find a conceptual framework driving DoD reorganization that illustrates the major trends affecting the current global security environment. Over time, each of these trends have a number of possible futures as it matures individually and as each trend is affected by other trends and actors. The probability of one of those futures becoming realized can also be ascertained with some level of certainty, especially when considering shorter time horizons. In the case of national security, the U.S. has a desired or preferable future which would enhance the safety and security of the American people. That preferable future, however, is just one of many possible and probable futures (see Figure 12).



Figure 12.

In this example, the preferred future borders on the probable and possible based upon current trends and their potential implications, which would indicate that environmental shaping must be accomplished to push the preferred future more squarely into the realm of the highly probable.

The space between the current conditions and trends and the desired future thus becomes the policy and strategy space. It is within this space that other actors, and the effects that these trends have on them, must be considered for their positive or negative effect on U.S. national security interests and the continued viability of the current system.

Policies and their associated strategies are then developed to manage the security environment over time such that the preferred U.S. future becomes more probable. Given the fit, or in the case of our earlier discussion of the current DoD organization, between the desired future and

> the current conditions, an intermediate future must be worked toward that is reasonable and that minimizes the risk associated with the policy and strategy space (see Figure 13). It is also within this policy and strategy space that the greatest strategic risk occurs, especially if decision makers defer the actions necessary to 'refit' the current

system to the system that is needed.²⁶

One other consideration for planners is that the desired or preferred future or system may not be the one that is the best fit for the given conditions and actors. This discrepancy is often at the center of disagreement between stakeholders as those who have equities and interests in maintaining the current system fight to retain them regardless of future system demands. For those who embrace the status quo, uncertainty and ambiguity are minimized by simply extrapolating the current state of affairs into the future.



Figure 13.

For a better and more complete analysis, futures scenarios must take into account the effects of long-term trends on current and potential competitors and adversaries. Only then can a realistic assessment of U.S. security system needs be ascertained. Once an understanding of the current and future security environment is understood and how U.S. national security interests are affected, then the necessary functions and forms are developed. Just as the current and future environmental conditions affect our interests, any resulting security function or form must be considered within the current and future conditions. In turn, the DoD security functions and forms have an effect on the environment.

Conclusion

The issues and security challenges leading up to the 1986 Defense reorganization are not the same we face today nor will they be the same in the future. The DoD enterprise must adapt and change to keep the U.S. the global leader it needs to be—30 years without reform has been far too long to remain static in the Information Age. The

> framing of any potential security reorganizations or solutions must be grounded in the current global security context as well as likely future security contexts. Unfortunately, any reference to a Goldwater-Nichols Act II will likely subconsciously lead to framing the security environment using the same stale assumptions and paradigms that were prevalent during that

time period. Instead, a complete redesign is needed, one that starts from a blank sheet of paper and severs our emotional attachments to legacy systems or old ways of doing business.

Any proposed defense enterprise system intended to shape the strategic environment must be isomorphic with that system. The two systems, environment and security, do not have to be perfectly matched; however, to act effectively as the 'regulator' of the global security system, the complexity of the DoD system must exhibit a minimum similarity with the global system. If the DoD system is too simplistic or rigid, such as the current structure, then its actions are likely to make the global security system more out of control.²⁷ In short, a new defense security system should not be predetermined, but rather developed out of a keen understanding of the functions as they are executed in the current environment and expected to operate in the future security environment(s). Anything short of this will only result in some "tinkering on the margins" that won't solve the broader issues in play and will likely cause second- and third-order effects that will have undesirable consequences.

Much as the DoD Reorganization Act of 1986 has been a work in progress, any new defense reorganization will take years before it reaches full maturation as envisioned. In fact, our mindset must change to understand that any proposed system will likely never be attained because of a constantly changing strategic environment. Rather, proposed systems must be agile systems that are

² Retrieved from infoplease on June 10, 2016 at

income (2014) was \$53, 657.00--retrieved from http://www.deptofnumbers.com/income/us/. constantly adapted to ever-changing conditions and actors. System agility must be the cornerstone of any proposed system. Meanwhile, as we begin to realize the significant changes that must be made, we must also battle dynamic conservatism and organizational entropy. Any change will be painful, but the longer we take to make the necessary changes the wider the strategic risk gap becomes. The time to change is now, on our terms, rather than when a crisis hits and pulls the current system crashing down around us. Integrating foresight tools, such as the Three Horizons, into our thinking will help insure we have more agile and effective security systems and organizations.

Author Biography.

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²¹ There is no statutory requirement for a stand-alone defense strategy; more often than not, it is included within the Quadrennial Defense. *CRS Report for Congress*, "Quadrennial Defense Review (QDR): Background, Processes, and Issues," Jeffrey D. Brake, National Defense Fellow, June 21, 2001.

²² Branfman, O. and Pollack, J. (2013). *The Chaos Imperative. How Chance and Disruption Increase Innovation, Effectiveness and Success.* NY: Crown Business, 6.

¹ Curry, A. (2015). "Searching for Systems: Understanding Three Horizons," *APF Compass*, January, 11.

http://www.infoplease.com/. Dow Jones average is from December 31st 1986.

³ For comparison, the Dow Jones Industrial average was 17,899 (June 10, 2016)--retrieved from

http://www.bing.com/search?q=dow+jones+average+for+today&sr c=IE-SearchBox&FORM=IESR02; the world population is estimated at 7.4 billion people--retrieved from www.worldometers.info/world-population; and the U.S. median

⁴ National Intelligence Council (NIC). (2012). *Global Trends* 2030: Alternative Worlds. Washington, DC.

 ⁵ Hodgson, Anthony. (2012). A Transdisciplinary World Model, *Systems Research and Behavioral Science*, Vol. 29, Issue 5.

Systems Research and Behavioral Science, Vol. 29, Issue 5. ⁶ Lamb, Christopher J. and Franco, Megan. (2015). "National-Level Coordination and Implementation: How System Attributes Trumped Leadership," Chapter 3 in *Lessons Encountered: Learning From the Long War*, Richard D. Hooker, Jr. and Joseph J. Collins, eds. Washington, DC: National Defense University

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 ⁸ Curry, A. and Hodgson, A. (2008). "Seeing in Multiple Horizons: Connecting Futures to Strategy," *Journal of Futures Studies*.
 ⁹ Locher, J. (2002). *Victory on the Potomac*, College Station, TX: Texas A&M University Press.

¹⁰ Locher, 2002.

¹¹ Bush G. W. (2006). *The National Security Strategy of the United States*, Washington, D.C.

¹² Obama, B. (2010). *National Security Strategy*, Washington, D.C. and Obama, B. (2015). *National Security Strategy*, Washington, D.C.

¹³ Connable, B., Campbell, J. and Madden, D. (2016). *Stretching and Exploiting Thresholds for High-Order War*, Santa Monica, CA: Rand Corporation

¹⁴ Curry, 2015.

¹⁵ Joint Operating Environment: JOE 2035. (2016). Joint Staff J-7, Washington, D.C.

¹⁶ JOE, 2016, 40.

¹⁷ Curry & Hodgson, 2008

¹⁸ Ibid.

¹⁹ Hodgson, 2012.

²⁰ Hines, A., and Bishop, P. (2006). *Thinking About the Future*, Washington, DC: Social Technologies, LLC.

 ²³ Carbonell, J., Sanchez-Esguevillas, A., and Carro, B. (2015).
 "Assessing Emerging Issues: The External and internal Approach," *Futures*, Vol. 73.
 ²⁴ McCloskey, D. (1991). "History, Differential Equations, and the Problem of Narration," *History & Theory*, Vol. 30.

²⁵ Mehrabanfar, E. (2014). "Wild Cards Applications in Futures Studies," *International Journal of Modern Management and Foresight*, Vol. 1, Iss. 8.
²⁶ Curry & Hodgson, 2008
²⁷ Hodgson, 2012.

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