

Campaigning

The Journal of the Joint Forces Staff College

*A Profession of Arms
and Thought*

Leadership Design



Mosby and Joint Functions

Broken Windows



**“That All
May Labor As
One”**



Fall 2014

Campaigning

Fall 2014

<https://jdeis.js.mil/jdeis/index.jsp?pindex=69>

Commandant

RDML John W. Smith, Jr

Dean of Academic Programs

Dr. Patricia B. Strait

Joint Advanced Warfighting School

Dr. Robert Antis

Joint and Combined Warfighting School

CAPT John Maxwell

Joint Continuing and Distance Education School

COL Dale D. Fair

Joint Command, Control and Information Operations School

COL Michael Miller

Editor

Dr. Daniel H. McCauley

Editorial Board:

Professor William S. Marlowe

Dr. Kenneth P. Pisel

Dr. Frederick R. Kienle

Professor Stephen W. Dennis

Cover images clockwise from the top:

USN: Chief Mass Communication

Specialist Jennifer A. Villalovos/Released

USMC: Sgt. Adwin Esters

USCG: Petty Officer Richard Brahm

USA: Sgt 1st Class Rodney Jackson

USAF Photo: Airman 1st Class Trevor T.

McBride

Welcome to the Fall 2014 edition of the Campaigning journal. After a six-year hiatus, Campaigning was re-launched last spring to provide a forum for dialogue and discourse on topics relevant to leadership and planning at the operational level of war. This issue should not let you down: with essays that vary from a combatant command for the Arctic to how Joint staffs can leverage generational differences, this edition of Campaigning has a broad range of topics that illuminate many operational-level opportunities and challenges.

As we look forward to the next decade, providing an education that empowers Joint professionals to develop creative approaches to the complex national security issues facing the U.S. Armed Forces is vital to meeting the objectives delineated by our leadership. Since there is no single best institution, instructional delivery method, or publication for doing that, the collective set of colleges within DoD provides the Joint force an excellent enterprise for creating diversity in thought. Each school has a specific niche and it is important to embrace the numerous methodologies available for building a large contingent of critically and creatively-thinking, steely-eyed warriors. Here at the Joint Forces Staff College we benefit from multi-faceted JPME 2 educational models: the 12-month program in the Joint Advanced Warfighting School (JAWS), the Joint Continuing and Distance Education School (JCDES) for our Reserve/Guard personnel, and the 10-week program hosted by the Joint and Combined Warfighting School (JCWS). While these schools seek to educate joint professionals in critical and creative thinking, as well as operational-level leadership and planning, each does so differently in order to reach a specific audience.

As the Joint force transitions from one that is engaged primarily in combat to one that is more heavily involved in training and partnership building, many officers will be unaccustomed to planning within the context of future global environmental conditions. There are many ways to successfully make this transition, and Joint education has a vital role to play in the development of the skills needed to address these conditions. Writing an article for one of the many professional journals published throughout the year is an effective method for building proficiency in analyzing and designing in an unfamiliar setting. Publishing enables ideas to quickly reach larger audiences and, more importantly, allows the author the opportunity to present a viewpoint that might not otherwise be seen or heard. The enclosed essays, which represent submissions from JCWS faculty and students in both JCWS and JCDES, should be thought-provoking-if you have any comments or questions, please feel free to email me at john.maxwell@ndu.edu.

It is an honor and privilege to lead the Joint and Combined Warfighting School. I am looking forward to cooperating with other DoD institutions, students, and faculty to provide a top-notch education to the women and men who are responsible for our Nation's defense.

John Maxwell
CAPTAIN, USN
Director, Joint and Combined Warfighting School (JCWS)
Joint Forces Staff College

In this issue of Campaigning:

An Institution for the Profession of Arms and Thought	4
Dr. Daniel H. McCauley, JCWS Faculty	
Leadership design: A Methodology to Analyze and Visualize an Approach to Global Leadership	9
Dr. Frederick R. Kienle, JCWS Faculty	
Joint Before Joint Was Cool: A Fresh Look at the Success of Mosby's Rangers in the Civil War	28
Lt Col Jeffrey Guimarin, Maj David Lawrence, and Lt Col Kevin Weeks, JCWS	
Pirates and Broken Windows	37
CAPT Steven Marinello, JCDES	
Leveraging Generational Differences in a Joint Staff	44
MAJ Catie Boylston, LCDR Jed Espiritu, LCDR Jason Iletto, and Maj Steve Wick, JCWS	
COLDCOM: New Ground for a Cold War	53
LTC Bart Hensler, Maj Benjamin Mather, and LCDR David Palilonis, JCWS	
What's Next for NORAD?	64
Maj Christopher Buckley, LCDR Sebastian Kielpinski, and Lt Col Thomas Walsh, JCWS	

Disclaimer: The views expressed in this journal are those of the authors and do not represent the views of the Joint Forces Staff College, National Defense University, or the Department of Defense.

An Institution for the Profession of Arms and Thought

By Dr. Daniel H. McCauley

People and organizations react differently to change—some fight it whereas others embrace it. I'm an embracer and, as such, eagerly read National Defense University's (NDU) senior leaderships' recent *Joint Force Quarterly* article titled "Breakout": A Plan for Better Equipping the Nation's Future Strategic Leaders.' The article stated that "the time for meaningful change has arrived." Three reasons were given: the Chairman said to update the curriculum; we are in "a period of severely reduced resources;" and "we can do better." Although each reason by itself would require responsible institutions to search for efficiencies, effectiveness, and relevancy, the proposed changes fail to provide an educational environment that prepares future leaders for collaborative, context-based problem solving. The direction posed in this article simply does not qualify as meaningful change as it focuses on the 'what' and the 'how' without sufficient emphasis given to the 'why.' Let me explain.

First and foremost, change is needed! But change is not needed because the Chairman said so—although this is a solid cue that one should not ignore for too long. Change is not needed because some have criticized our academic rigor—even though NDU recently passed its Middle States Accreditation. Change is not needed because our curricula are not innovative—even though we update it annually. Change is not needed because

we do not leverage the student's prior training and operational experiences—adult education is designed to leverage individual expertise and experiences. And change is not needed because our research centers can be linked better to support our students—that goes without saying.

In reality, change has been needed since the fall of the Berlin Wall, but the lack of a clear national threat, a relatively good economy, and a decade plus of wartime budgets enabled the traditional paradigm to remain in place despite clear indications otherwise. Quite simply, defense spending overwhelmed any deficiencies in education. Fortunately, current and future fiscal realities have forced NDU specifically, and the Joint education enterprise in general, to finally address long-needed change. Instead of 'tinkering in the margins' in an attempt to fit an old paradigm into a new fiscal reality, NDU must embrace this new fiscal reality as it develops a new educational paradigm. This new paradigm must prepare the Joint force for the extraordinary tasks ahead—not for the tasks of a decade or two ago.

So, how do we prepare joint leaders today for senior leadership positions a decade from now? It begins by understanding education and the role of joint professional military education (PME). The Officer Professional Military Education Policy (OPMEP) describes the core competencies of education as providing a "depth of view, diverse perspectives, critical analysis, abstract reasoning, comfort with ambiguity and uncertainty, and innovative thinking particularly with respect to complex, non-

linear problems.” Joint PME’s goal is to ensure the Joint force remains capable of defeating our Nation’s adversaries through the development of a depth and breadth of knowledge and habits of mind essential to the Profession of Arms. Therefore, the task of PME institutions is to contextualize the core educational competencies across the range of anticipated military operations.

Whatever is taught must be flexible enough so that as the requirements or environment change, leaders have the adaptability to flow with the changes. Flexibility eschews standard answers or schoolhouse templates, which are the cornerstone of training. Education, on the other hand, encompasses such things as theories, concepts, and context to provide the individual with the tools to develop contextually nuanced answers and design original templates.

If education prepares students to be agile in their thinking, NDU must frame the current and future strategic environment within its curricula to provide the context for Joint leader education. Over the next decade, the strategic environment will be shaped by megatrends such as individual empowerment, a diffusion of power, globalization, and changing demographic patterns. In addition, other lesser trends such as governance gaps, crisis-prone global economies, food and water pressures, and the diffusion of disruptive technologies will create environmental dynamics that generate surprises and uncertainties for the Joint force.

Unfortunately, the Profession of Arms as we know it is inadequate in light of these trends and the military tasks associated with providing global stability and security. Whereas our profession traditionally calls for unique expertise in the application of lethal military force, the profession has grown beyond the military instrument of power. Thus, Joint leaders must not only possess the skills and competencies associated with the Profession of Arms, but must also possess the skills and attributes associated with a Profession of Thought. If Joint leaders continue to be taught in the same manner and with the same techniques as in the past, expecting a different outcome is folly.



What does this mean for education at NDU? How do we institute ‘real’ change? It begins with a vision for Joint professional military education. Not a vision for the University—that’s an organizational vision and we have one already. What I’m talking about is a vision that explains ‘why’ we do the things we do. A vision that identifies our core

values and acts as a guiding principle for decision making and curriculum development. A vision that describes our core purpose as educators and the fundamental reason we exist. A vision that provides a vivid description of a future a decade or more out, that reaches out and grabs faculty and staff, and serves as a unifying focal point for University effort. An educational vision for NDU must integrate the core competencies of education with the demands of the future operating environment. It must also develop an organizational structure that supports and facilitates University interaction, and promotes outreach and integration. As such, I propose the following five actions by NDU.

First, adopt the following seven thinking competencies as core values for education at NDU. These seven competencies directly link to the CJCS' desired leader attributes, and comprise campaign thinking. These competencies act as essential and enduring tenets of NDU because they describe who we are and what we stand for—even in times of fiscal austerity.

- *Critical thinking* – provides a depth and breadth understanding and leverages hindsight, insight, and foresight (desired leader attributes 1, 2, 3, 4, 5, 6).
- *Creative thinking* - the ability to challenge assumptions, recognize patterns, and see in new ways (desired leader attributes 1, 2, 3, 4, 6).
- *Contextual thinking* - the use of skilled judgment or observation by looking at the environment encompassing a fact or situation to achieve understanding,

evaluate viewpoints, and solve problems (desired leader attributes 1, 4, 5, 6).

- *Conceptual thinking* - used to understand a situation or problem by identifying patterns or connections (desired leader attributes 1, 2, 3, 6).
- *Collaborative thinking* – used to create synergy, improves performance, and motivates people to learn, develop, share, and adapt to changes (desired leader attributes 1, 4, 5, 6).
- *Cultural thinking* – used to understand the interconnected world, the incongruence of national borders, and the synthesis of perspectives across a wide spectrum of cultures (desired leader attributes 1, 4, 5, 6).
- *Communicative thinking* – used to understand the various means and modes of communicating as well as the challenges associated with communicating complex issues between individuals, organizations, societies, cultures, and nations (desired leader attributes 1, 4, 6) .

Second, the reason we exist at NDU is that we are essential to developing the finest military in the world. Adopt as our core purpose: to “develop adaptive and agile leaders with the requisite values, strategic vision and critical thinking skills necessary to keep pace with the changing strategic environment.” Taken straight from General Dempsey’s ‘White Paper on Joint Education,’ this purpose acts as a guiding star for NDU—forever pursued, but never reached; unchanging but inspiring change.

Third, adopt as NDU’s educational vision:

Imagine a university that is devoted to the Profession of Arms.

Imagine a university that provides an educational foundation for Joint leaders to achieve national security interests and objectives in complex and unstructured environments.

Imagine a university that seeks to facilitate mastery of fundamentals in the art and science of war by encouraging intellectual curiosity, stimulating critical thinking, rewarding risk-taking, and understanding the value of multiculturalism.

Imagine a university that seeks to remove traditional constraints on student thinking by identifying and supporting various learning styles, behaviors, and desires. Imagine a university that seeks to build a culture of rigorous academic study that stimulates the ability and passion of students.

Imagine a university that prepares Joint leaders to operate globally now...and in the future.

Fourth, adopt an alliance organizational structure that acknowledges the diversity of the individual colleges and centers while adding value through shared resources and reduced risk in an uncertain fiscal environment. The airline industry in the 1990s is a great example of a successful alliance that leveraged network synergies by reducing costs and improving resource use.

What made the alliance successful for so long was the acknowledgement by alliance leadership of the strong individual airline cultures that made further consolidation difficult. Each NDU component, while having education in common with other members, has a well-defined mission that is markedly different from other members. As such, further consolidation of faculty, staff, and research and curriculum processes erodes effectiveness.

Fifth, leverage NDU's centers of expertise to provide contextual expertise and relevance to University-wide curricula. Invite other centers of expertise, such as DARPA, World Futures Society, Johns Hopkins Applied Physics Laboratory, and the Frederick S. Pardee Center for International Futures, into the NDU alliance to cover gaps in the development of current and future contexts.

Oh, I know that some of you are thinking 'Hold on. We haven't changed a thing!' Yes, on the surface that may appear to be true; however, superficial change, the kind that's easy to see and even easier to do, is the mark of a bureaucratic institution. Real change, change that gets to the core of the problem, begins with a vision. If the vision is crafted properly and leadership 'walks the walk,' then real change at the grass roots level will become a reality far faster than if it were directed top-down.

National Defense University is at the nexus of need and opportunity. It needs to change to prepare Joint leaders better to face the uncertain and complex challenges presented by technology, globalization, fiscal

constraints, and other environmental trends over the next decade. It also has the opportunity to rid itself of a structure developed in a bygone era and to replace it with one that is flexible, adaptable, and characterized by a 'leader of leaders' approach. This type of an approach, best managed as an alliance, serves its member organizations as a broad visionary, platform builder, guardian, overseer, and strategic communicator.

We have a choice: we can change because cost reductions are necessary; or we can change because we understand our values, we understand our purpose, and we envision a future that provides the Joint force the education it needs and deserves. NDU has the opportunity to lead the JPME community in supporting a Profession of Arms and Thought for the 21st Century.

Author Bio: Dr. Daniel H. McCauley is a National Defense University professor at the Joint Forces Staff College located in Norfolk, VA. Dr. McCauley is a retired United States Air Force pilot and has served in various course director capacities including strategy and theater campaign planning. His areas of interest are strategic leadership, strategic foresight, strategy, design, and creative thinking.

Leadership Design: A Methodology to Analyze and Visualize an Approach to Global Leadership

By Dr. Fred R. Kienle

The Chairman of the Joint Chiefs of Staff, General Martin Dempsey, is undeniably focused on imbuing tomorrow's leaders with critical thinking skills and attributes that include abilities to understand security environments and to anticipate and lead change.¹ He encourages every U.S. military leader to become a life-long learner and to embrace new methods of innovation, adaptability and critical thinking. One tool for leaders to design an adaptive approach toward leading and innovating in their organizations is a leadership design methodology. This design methodology, growing in use among military operational planners, can be directly applied to planning approaches to leading organizations in the military and across the national security environment.

What is leadership design and what is it not? Leadership design *is* a way to *think* about leading nearly any organization in today's challenging global environment. Leadership design is *not* a detailed and mechanical plan to be memorized and executed by the leader. Instead, leadership design provides a methodology and an ensuing opportunity to inspire creative thinking and learning. Leadership design spurs the leader to examine and depict a series of networks and interdisciplinary systems that relate and interact to create the activity that we call leadership.² By actually visualizing an approach to leadership through an organized

framework, nearly any leader can gain most of the necessary cognitive scaffolding for further understanding of the leader's environment, the essential elements for practicing leadership and the potential focus areas and activities that can later give way to a more detailed leadership plan. The steps of leadership design outlined in this paper encourage the evaluation, analysis, synthesis, reflection, reasoning, and critical thinking necessary to increase the probability of a leader's desired outcomes.³ Not to be trite, but leadership design is a journey and not a destination. As you read through the following methodology for confronting the often daunting task of leading an organization in today's complex world, consider how you would use this framework to *begin* developing your plan to lead. Place your own organization and situation within the frame of this leadership design methodology.

Defining Leadership

The first step in leadership design, as is usually the first step in leading most organizations, is understanding what leadership really is. Stogdill laments that there are as many definitions of leadership as there are people who have tried to define it.⁴ Undeniably interdisciplinary and encompassing a wide range of fields including management, sociology, psychology, philosophy, anthropology and other arts and sciences, leadership has several components that remain visible regardless of the exact definition we attach to it.⁵ Northouse provides a conceptual model that identifies several key components that are central to the human

phenomenon we call leadership; leadership is a complex process, leadership involves influence, leadership occurs in a group or organizational context and leadership involves goal attainment.⁶ This leads to a general definition of leadership as “a complex process whereby an individual (the leader) influences a group (an organization) to achieve a common goal (a vision).”⁷ With this understanding, a leader can discern several components of a leadership process or system that lends him or her toward a design process.

Luthans contends that “leadership remains pretty much a ‘black box’ or unexplainable concept” but this does nothing to understand and decompose the complex leadership process.⁸ Demystifying this ‘black box’ leadership method by leveraging a basic design process presents leaders with a useful conceptual framework and an organized approach by which to lead a group or an organization. By linking environmental understanding, the leader’s vision, organizational objectives, and broad methodologies to focus actions and activities, the leader can leverage leadership design to create and visualize a cognitive pathway for influencing the selected group toward specific goal attainment.⁹ This is not to suggest that it there is a simple formula, a rigorous science or any mysterious cookbook that leads inexorably to successful leadership.¹⁰ But for those who invest in the development of a leadership design, the learning that takes place during the leadership experience can be significantly less painful and chaotic than the discovery learning that may otherwise be expected

The Leadership Design Process

The leadership design process, like leadership itself (and as in so many other disciplines), encompasses both art and science. Using design thinking to visualize a leadership approach requires empathy for the problem, rationality (science) to analyze and adapt solutions, and creativity (art) in the generation and application of insights and approaches.¹¹ In many ways, the design approach is similar to systems thinking in its methods of understanding problems, visualizing potential solutions and developing an acceptable approach.¹² In essence leadership design is a non-deductive approach to build systemic understanding and to formulate unique patterns of learning and action in order to assist leaders in transforming existing organizations’ conditions into a more desirable state.¹³

Leadership design prompts a leader to understand the relevant strategic global environment, to develop a holistic cognitive map and to shape decision analysis regarding what actions the leader may, or will, take to lead an organization. Leadership design equips the leader with the foundations of a broad leadership approach that enables analysis, reflection and a way to potentially recognize emergent opportunities. While an iterative process, and not necessarily a sequential process or methodology, leadership design does lend itself to some linear presentation as it unfolds across a time continuum. In many senses, leadership design enables a leader to understand, visualize and describe leader actions that, when synchronized within the organizational and global environments, can

help solve organizational problems in movement toward attainment of the leader's strategic vision.¹⁴

The Visual Mind Map: A First Step

Leadership design is a process that can best be *visually* expressed to help the leader (and followers) approach a more complete understanding of the design itself, and how it will lead to a defined vision. Leaders should be able to physically portray their leadership design to effectively express their environment, goals, ideas and depict their cognitive map.¹⁵ While strategic plans composed of words and numbers remain necessary, and metaphors enable leaders to think and relate in fresh ways, mind-mapping and visual frameworks frequently yield distinctly unique insights.¹⁶ In the same way that Leonardo da Vinci relied on his sketchbooks to illustrate the relationships of *his* own ideas, leaders can derive invaluable insights from representing even a simple leadership design. Through continuous critical thinking and discourse that results in the creation of a design drawing, leaders can approach a more holistic understanding of the total leadership process while developing and then refining their own cognitive maps.¹⁷ The basic holistic leader design drawing starts as a simple sketch that enables the leader to both analyze and synthesize the relevant global environment, the important leader vision, goals, and actions. Morgan terms this imaging as "picture power."¹⁸ The first picture may seem disjointed as the leader captures the beginnings of understanding the specifics of the environment, the organization, the "problem" (factors that

must be addressed to achieve the desired vision) and the approach.¹⁹ This first "mind map" visual depiction begins the leadership design process in earnest.



Figure 1, Understanding the Leadership Environment, Beginning the Design

The visual "mind-mapping" uses divergent thinking and a "blank sheet of paper" to begin understanding the environment, the organization, the "problem, the vision and the range of solutions or avenues that can be used to get from the current environment to the desired future environment, or the leader's vision."²⁰ Through this first conceptual model, the leader begins to further frame a sense of understanding for the environment, the organization, the problem and the related "systems" that will comprise the leadership design that will assist and guide the leader in accomplishing a refined vision.²¹ While the first effort at visualization may appear to be a disjointed mind-map, it sets the stage for a more organized leadership design visualization.

Leadership Design Visualization: Sketch the Approach to a Vision

The leadership design sketch is the result of significant understanding, analysis and communicative efforts. Design's holistic understanding of unique leader situations and opportunities is "reached through critical and creative thinking, mediated by discourse, repetitive drawings and continuous reflection."²² It is an artful application of both critical and creative thinking. Observing the tension between the current situation on one side and the leaders vision on the other, in essence solving an existing problem, is at the very heart of the way leadership designers have to think.²³ The design sketch works to pictorially illustrate and capture the leader's mind-mapping exercise.

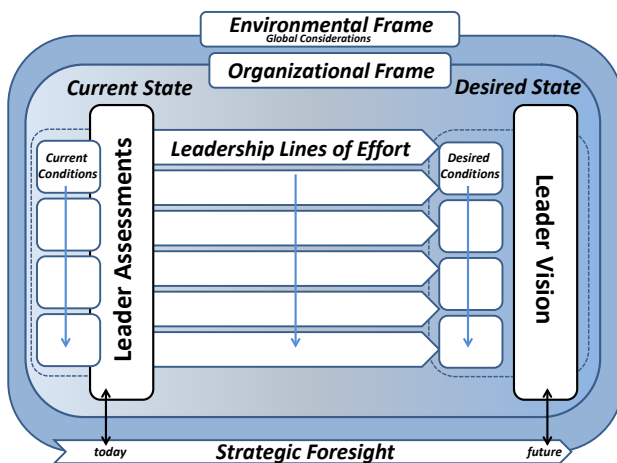


Figure 2, Visualizing a Leadership Design Approach; the Basic Sketch

If properly developed, the leadership design diagram (figure 2) serves to inform a wide variety of thinking and plans while offering a mechanism to integrate both thinking and planning. The leadership design 'assists in the goal setting process while aiding in

discerning objectives and mapping out a plan to achieve those goal and objectives.'²⁴ A well depicted and articulated design aids in shaping the best path of organizational growth while helping to develop and integrate the most appropriate strategy and supporting rational to achieve both objectives and vision.²⁵ The leadership design informs the organizational growth while also aiding in determining: 1) resources required to implement the chosen strategy, 2) team make-up, vision, and leadership necessary to implement the strategy, and 3) direction to be followed in pursuing objectives. Benefits of the leadership design process aid any organization's ability to determine who they are, what they do, their business model, who and where their customers are, how the organization should develop, what the prevailing environmental conditions are, and other key influencers that shape leader actions. Once the overall construct of the visual depiction is conceptually understood, the next step is to develop the key individual components and references for the leadership design process.

Developing the Leadership Design: Building the Environmental Frame

Framing the environment helps a leader understand the context in which the leadership design will be applied.²⁶ When framing the environment, the leader examines and studies the broad environment, whether global, regional or more localized, to comprehend and understand the conditions, circumstances and factors that affect the current conditions, the desired conditions and the potential to

achieve the desired vision. To develop the environmental frame, the leader *organizes, interprets, depicts* and generally endeavors to *make sense* of the complex global, regional or local realities that will provide the backdrop for all future design endeavors.²⁷ The leader considers factors including, but not limited to, economic globalization, governmental implications, global business dynamics, a wide range of international impacts (finance, markets, marketing, human resource management, public relations, politics, industries, competitive positioning, cultural stressors and others).²⁸ By establishing an understanding of global, regional, cross-agency and local realities in wide-ranging areas that might impact the leader's organization, the leader is able to better understand the *context* in which *all* actions will occur and how environmental factors will impact efforts to accomplish the leader's vision. Through understanding and consideration of global and regional trends (including technological breakthroughs, international megamergers, ethnic conflicts, religious tensions, radicalism, environmentalism and demographic dilemmas²⁹), the leader recognizes unavoidable, potential challenges and contributions to vision attainment. Depending on the nature of the environmental frame (which is likely to change over time), the leader may need to modify approaches and perhaps, even the vision. While in the background, the importance of a comprehensive environmental frame to understanding the problem cannot be overstated (see figure 3).

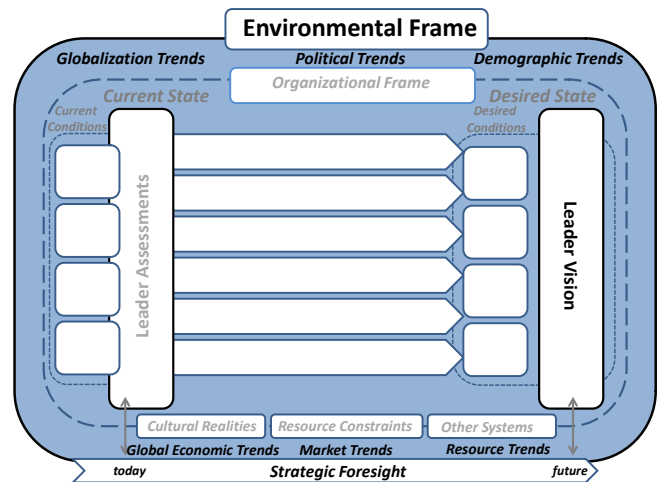


Figure 3, Building the Environmental Frame: The Context of the Design

The initial exploration of the overarching environment within which the organization exists, its various actors, their interrelationships and the evolution of significant trends establishes an initial narrative that should prompt useful questions, and perhaps generate answers, as the leader refines the leadership design.³⁰ The environmental frame provides the “outer frame” in which the organizational frame will be developed to help illuminate the relationship(s) between the organization and the global environment in which it resides.

The Organizational Frame:

The leader's organization or group, while inexplicably linked to the external influences addressed in the environmental frame, is a separate and distinct entity with its own uniqueness and its own descriptors. Whether a large multinational corporation or a small local nonprofit, each organization has its own identity and characteristics. Regardless of the type of organization, every organization consists of “social entities that

are goal-directed, designed as deliberate structures and coordinated activity systems, and are linked to the external environment.”³¹ The leader must frame the organization as a system of interacting elements that acquires inputs from the environment, transforms them and discharges outputs to the external environment.³² Within the organizational frame, the leader must master the culture, size, technology, strategy, goals and environment of the organization. These interdependent contextual and structural dimensions will provide a backdrop for all design activities, though more narrowly focused than the environmental considerations, which will provide a basis for analysis and measurement.

Sanders states that “in the new planning paradigm, strategic thinking, the most important step in any planning effort, begins by stepping back and observing the environment as it really is, a complex system of interacting variables.”³³ This same approach applies to leadership design; the leader must properly assess the current organizational environmental space to understand prior leader efforts, interrelationships, various actors, existing problems and alternative potential solutions.³⁴

Developing the organizational frame forces the leader to confront the realities and details of the leader’s organization, the true “work space” of the leadership design. The organizational frame is meant to prompt the leader of any type of organization to understand the organization’s structure and more importantly, to consider that the

organization is made up of *people* fulfilling the roles of management, the technical core and support staff.

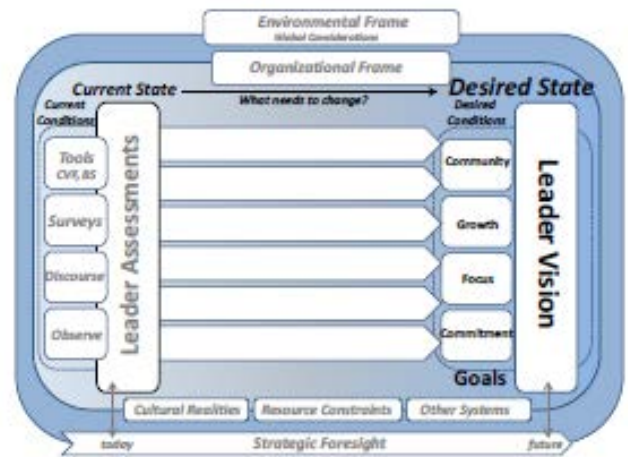


Figure 6: Leader Vision: Solving the Existing Problem through Design

While seeking to understand the realities of the organizational frame, the details of what the organization is and what it might become in a global sense, the leader should consider consulting organizational theorists such as Galbraith, Handy, Nadler, Tushman and others.³⁵ By studying, analyzing and mastering the organizational frame, the leader is better prepared to make modifications, improvements and changes to the many aspects of organizational design within the leadership design. More importantly, the leader will better understand his fit, role and responsibilities to the organization or group within its global environmental frame. This provides a coherent backdrop against which to analyze the organization through a somewhat orderly assessment process. At each step, the ideas, notes, insights and reflective thoughts should be captured in order to synthesize all that comes to light through the leadership design process.

Assessment: Building the Requisite Understanding to Proceed

An old aviators' maxim asserts that the first thing a navigator must know is not where he wants to go, but where he *is*. While understanding the players, systems, trends and relationships in the environmental and organizational frames is essential, formally assessing the organization as it currently exists in the global environment is essential to the leadership design process. The leader needs to further refine and confirm an understanding of the current state of the organization beyond the wide understanding gained from the organizational frame. Acknowledging all of the players, prior problems and past trends is essential to initiating a leadership design. According to Mintzberg, "you cannot see ahead unless you can see behind, because any good vision of the future has to be rooted in an understanding of the past."³⁶ Just as insight about the present and foresight about the future make up two major components of strategic thinking, so too is assessment of the present a prerequisite, and a key step toward a leadership design that supports attainment of goals and vision.³⁷

There are a myriad of methodologies available to ascertain where any organization stands and where its component situations reside. While the profitability, productivity, processes, growth, customer satisfaction and efficiency are readily available metrics, the leader will benefit from a variety of assessment instruments as well.³⁸ While there are numerous tools available, one fairly comprehensive assessment tool is the

balanced scorecard. It not only provides performance measurements, but aids leaders in determination of what should be done and measured. Because the balanced scorecard is established in an effort to align the organizations vision with key work elements focused on a desired outcome, it is well suited for use as an assessment instrument within the leadership design.³⁹ In this process, general focus is placed on targeting the right things to accomplish in the organization in order to achieve the specific objectives that support the leader's vision. The leadership design then helps illustrate the requisite connectivity between the assessment's focus and the objectives that contributes to the organization's sustainable competitive advantage detailed in the vision. Leaders need to assess their organizations continually, through a variety of methodologies.

Other assessment instruments, including the Competing Values Framework and the Organizational Culture Assessment Instrument also inform the leadership design process.⁴⁰ Both of these tools help assess current culture, help determine desired culture and aid in plotting a course for potential organizational culture change to support an organization's strategic direction toward the leader's vision. Others tools, surveys and discourse prompt, including the Multifactor Leadership Questionnaire and the Strategic Leadership Team Survey, aid the leader in the assessment phase of the leadership design process.⁴¹ Another tool, Porter's Five Forces Model of Competition, diagnoses the organization's position with regard to the global environment, helping *link a previous step* in the design process to

the leader's assessment.⁴² Each of these assessment tools, uniquely helpful in establishing insights into the current state of the all aspects of the organization, are depicted on the left, as the visual start point of the design process within the existing environments (see figure 5). Leaders at every level can benefit from finding the assessment tools that will work for their organizations.

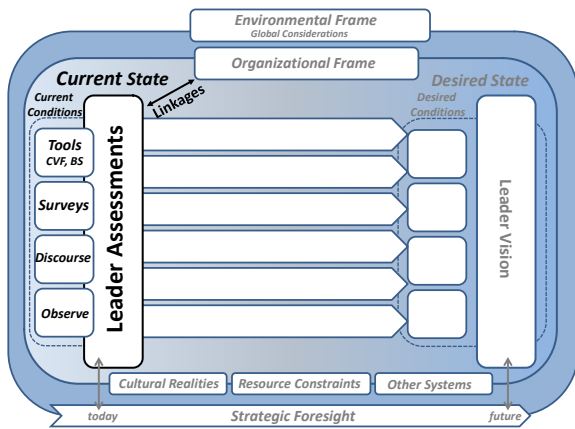


Figure 5: Assessment: Improving Understanding in the Design Model

Leadership design requires ongoing assessment, using tools previously described, as well as other assessment methods, to further define the current organization. Assessment informs the entire leadership design process and continues throughout the design process and related subsequent reframing as the leader executes a continuous monitoring, evaluation and reevaluation of progress toward attainment of objectives and leader vision. The leader must analyze and composite the assessment information to determine current conditions and the state of the organization. Like the navigator, the leader must first know precisely where he or she, others in the organization and the organization itself are. Only then can the leader proceed through

the leadership design process. Once the leader understands the current state, it is possible to further develop and understand the leader's desired state for the organization.

The Leader's Organizational Vision: a Critical Step

Once the navigator determines where he is, he determines where he needs to go; the same standard applies in leadership design. Most military leaders understand the need for objectives and end states; this is similar. Visually depicted on the right side of the leadership design diagram, the vision serves to bookend the leadership design process with an assessment of the current situation at the other end (the left side of the diagram) (see figure 6). In essence, the vision provides the desired positive outcome, target or end state of the entire leadership process.⁴³

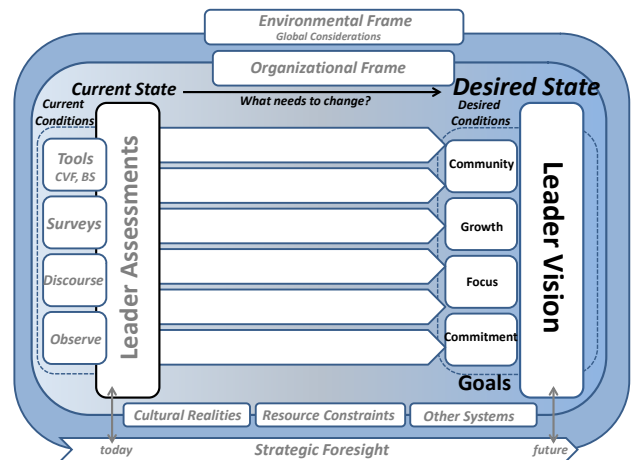


Figure 6: Leader Vision: Solving the Existing Problem through Design

The vision must be clearly articulated and captured as the focus of all leadership activity and then should also serve as the "primary point of origin" for all

organizational activities. The leader's vision is, by its very nature, an 'attractive, realistic and believable future.'⁴⁴ Connecting the current organization and environmental conditions to the vision is of preeminent importance in the leadership design effort just as it is in the practice of leadership.

Announcing and codifying the long term goal for the organization, the vision statement captured on the leadership design also presents both strategic guidance and motivational focus.⁴⁵ The vision statement encompasses and frames values, culture, change, organizational design and change management and must be simultaneously clear, linked to stakeholder interests and feasible or attainable.⁴⁶ In essence, vision is the most important part of the leadership design because it summarizes the organization's preferred place for the future. Everything the leader and the organization do is aimed toward the vision. This is much more than simply espousing a reinvented leader vision when assuming leadership, but is a concerted effort to analyze and define where the organization should go.

It is important that the clear, realistic and long term vision be based on a separate foresight process and should by no means be the leader's singularly inspired image.⁴⁷ One of the most important steps in leadership design, and clearly one of the first steps, development of the vision should answer the question "who and what does the organization want to be?"⁴⁸ On the leadership design diagram, the vision drives everything occurring between the assessment of the current state and the vision itself. All subsequent activity in the

leadership design process is focused on the ways to move the organization toward the leader's vision.

Determining the Leader's Objectives for the Organization

Most organizations in the business world seek to gain sustainable "competitive advantage" which is most frequently defined as a definitive measurement of success and an objective.⁴⁹ Competitive advantage is what makes an organization distinctive and enables it to perform at higher levels than other similar organizations; competitive advantage enables an organization to maximize resource application for desired and beneficial results. Competitive advantage generally equates to a measurable and quantifiable condition that is most often related to some of the same metrics employed in assessing the current condition of the organization. By defining the organization's competitive advantage, concrete and actionable concepts emerge; these should be captured by the leader and established as objectives to be met in order to ensure attainment of the leader's vision.⁵⁰ By defining these objectives as definitive indicators of competitive advantage, the leader should go beyond one-dimensional descriptors of organizational success and, in turn, define the descriptive (and quantifiable where possible) objectives of all leader-influenced organizational activities.

Through a precise and concise definition of competitive advantage, the leadership designer goes beyond the process of strategic planning that naturally serves to promote clear objectives with connectivity to specific tasks. Montuori notes that "in the

formulation of strategy, the very purpose is to create order, and forge an orderly, clear, and unambiguous path into the future.”⁵¹

The application of clear competitive advantage objectives does this within leadership design process. Leadership design incorporates the objectives used in strategic planning in a more holistic, but nonetheless systematic, leadership process.

Woodbury offers several strategic principles that help identify quantifiable areas as an organization delineates practical competitive advantage metrics.⁵² These include how the organization describes and measures itself in several key areas: organization for growth, improvement of quality, sense of community, and focus on the organization’s core mission issues.⁵³ Going beyond Drucker’s traditional management by objectives, identifying these measurable objectives, clearly derived from the vision and the organization’s definition of competitive advantage, helps clarify the activities and considerations that should serve as linkages in the leadership design. These four objectives contribute a definitive sense of organizational direction without being overly prescriptive.

As Jeffrey Pfeffer noted, successful organizations focus more on empowering people to embrace a common set of goals than on articulating the right and specific “business strategy.”⁵⁴ Goals focused on community, growth, commitment and focus serve as a foundation for useful and measurable shared objectives. These goals, articulated and quantified where possible, provide targets for all leader and organizational activities at every level – they

link the vision to the activities depicted by lines of effort. Articulated and demonstrated leadership lines of effort then focus on these shared objectives enroute to a common vision.

Leadership Lines of Effort: Concepts, Considerations and Activities that Link the Current Organization to the Future Vision

Leadership lines of effort fill the gap between the present and the future organization - between the existing circumstances and the vision. Lines of effort are used to visually and cognitively link multiple concepts, tasks, activities and objectives. Considered together, the lines of effort go beyond strategy planning alone as they prompt consideration and synchronization of a comprehensive set of considerations and activities. The leadership lines of effort are a particular array of activities and considerations, aligned and wholly interdependent, that move the organization from its current state toward achievement of objectives and attainment of the leader’s (and the organizations’) vision. The leader lines of effort also provide a framework for drawing appropriate organizational boundaries, prioritizing effort and shaping relationships between activities and actors.⁵⁵ They are selected by the leader with help from his or her ‘strategic leadership team’ as they develop the leadership design. While there are a multitude of potential leader lines of effort, there are several key lines worthy of leader consideration regardless of the type or size of the organization and the environmental circumstances (see figure 6). These six lines

of effort also synchronize nicely with the desired leader attributes endorsed by the Chairman of the Joint Chiefs of Staff.⁵⁶

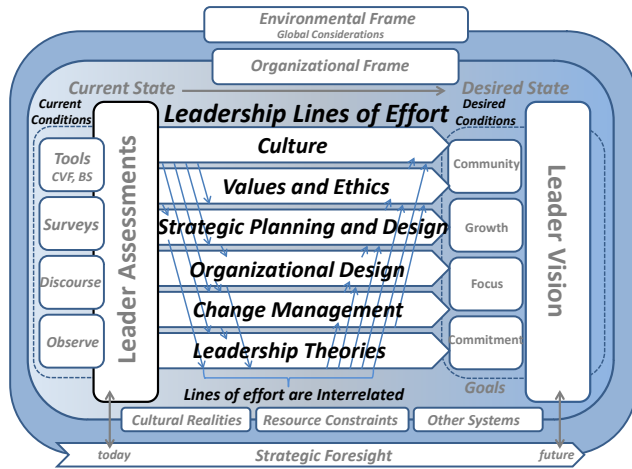


Figure 6: Leadership Lines of Effort: Actions to Link Present to Future

The Foundational Line of Effort: Theoretical Underpinnings

Of the six lines of effort depicted in figure 6, the leadership theory line is depicted on the bottom, to signify its role as a *foundational* line of effort upon which much else is built. In leadership, as with most any significant human endeavor, there are theoretical underpinnings that can furnish the mind with “insight into the great mass of relevant phenomena and of their relationships.”⁵⁷ All leaders learn about leading, but few remember leadership theories. Theories of leadership present a reasonably coherent conceptual structure of how critical variables interact by presenting ideas that can be put to the test and revised as new data accumulates.⁵⁸ Leadership theory contributes a researched foundation to substantiate its theoretical propositions and has applicability that extends to most, if not all, leadership contexts. A foundational

leadership theory line of effort offers the leader a framework against which to weigh the tasks and activities in the other lines of effort. These theoretical underpinnings prompt the leader to review and consider a range of leadership theories, and to apply one or parts of all of these theories in practice. Leadership theory yields a way, or a behavioral map, upon which the leader can weigh actions within a style or approach to leadership.

Northouse, Yukl and Burns all define several basic concepts of leadership *theory* that are central to the larger “leadership phenomenon.”⁵⁹ These theorists provide both insights and the basis for measurement and analysis of approaches, styles and methods. In essence, all leadership tasks and activities can be considered against one or more theories; it is this theoretical underpinning that helps give order to the other lines of effort. Morgan suggests that theory provides a model for “detailed analysis, describing patterns and possible solutions.”⁶⁰ While perhaps the least concrete of the lines of effort in terms of specific actions, the theoretical underpinnings provide the azimuth in terms of leadership styles, patterns and behaviors the leader wants to adopt and follow.⁶¹ Theoretical underpinnings are interwoven and translated into action in the other lines of effort listed directly above as depicted in figure 6. This line of effort, visually displayed on the bottom of the sketch to reinforce consideration and affirm its foundational role in the leadership design, is interrelated to each of the other lines of effort. The interrelationships and synergies of the multiple lines of operation are shown

as arrows connecting all of the lines of effort with one another. Each line is related to and has impact on the other lines; all lines are interdependent.

The Culture Line of Effort: Undeniable Impacts

Covey asserts that every leader or manager must 'be aware of the culture, of the nature of the situation, and of the social will.'⁶² Black et al. emphasize that understanding the culture of an organization is a mandatory leadership capability to succeed within contemporary global business-specific dynamics.⁶³ The need to understand an organization's culture, and the cultures of those in the organization, is critical to every leader today because the organizational culture relates directly to the organizational effectiveness and ultimately the organization's success. It is the organizational culture that "provides the framework" to implement and operationalize organizational strategies.⁶⁴ Without an understanding of the current and preferred cultures, the leader is likely to encounter underlying conflicts that will ultimately undermine any organization's ability to cope with its external environment and adapt to growing change.⁶⁵ The culture line of effort should prompt leaders to consider an essential and ongoing cultural audit to produce the requisite self-awareness to lead.⁶⁶ It is the culture line of effort that causes the leader to reflect and to better identify the "do's and don'ts" of making things happen within and across certain cultures."⁶⁷ In today's world, the importance of cultural understanding is undeniable.

This culture line of effort also serves to link the assessment findings and results to the organizations objectives, particularly in terms of developing community and organizational growth. Through an initial cultural audit during the leader's assessment phase, the leader leverages cultural understanding to create increased awareness across the organization, refute misperceptions, demonstrate openness, collect feedback and safeguard against harmful cultural deviations.⁶⁸ Each of these outcomes can be derived from specific actions taken along the line of effort. The culture line of effort clearly prompts the leader to embrace the role that culture plays in an organization and links directly to the leader actions in all other leadership lines of effort. The culture line of effort is also essential to managing the direction, depth, and disposition of an organization's values and culture. By mastering and integrating the many roles and impacts of culture, the leader can build relationship and bridges within and across the organization while creating a sense of wholeness that leverages diversity and responsibilities across the organization.⁶⁹ Culture, inextricably linked to values, sets the stage for consideration of the next line of effort.

Values and Ethics Line of Effort: Inescapable Realities

Leaders must understand their own values, the values of the organization and the variances between the two. The values line of effort is paramount. Values and ethics are both the individual's and the organization's criteria for their most important decisions while serving as measuring sticks for

priority determination.⁷⁰ Emphasizing this importance, Hultman and Gellerman assert that “without the capacity to formulate and act on values, life on the human level would not exist.”⁷¹ Nadler and Tushman emphasize that values and beliefs are “the basic building blocks of any organizational culture.”⁷²

Leaders must remain cognizant of the role and impact of values and professionalism in their organizations; aligning this line of effort with the others is critical for successful endeavors across all organizations. Collins noted that “the first task for leaders is to create an environment and a process that enables people to safely identify and eliminate values misalignments.”⁷³ For leaders to facilitate alignment with leader and organizational values, the leader must articulate, reinforce and exhibit desired values. Without identifying and consistently aligning the espoused and perceived values of the leader across all lines of effort, it may be impossible to further align the values that exist throughout the organization. The values line of effort is essential because ‘values influence organizational strategy, corporate decisions on strategy and define individual behavior and decision-making.’⁷⁴

Strategic Planning, Design, Implementation: The Heart of the Leadership Design

Organizational strategy occupies a central role in the leadership design process because strategic thinking and strategic planning are at the heart of the leadership design (and becomes even more so at higher levels of leadership): conversely, leadership design

should be the soul of strategic thinking and planning. Strategic planning focuses on collecting the right information (framing) while strategic thinking focuses on aligning the organization’s structure, design and environment to create synthesis.⁷⁵ The leadership design influences strategic planning which engenders reframing and adjustment of the leadership design through an iterative and somewhat spiral process. For many leaders, in most organizations, the strategic plan is constructed without ever engaging in any leadership design effort which would help foster the necessary strategic thinking requisite for success through synthesis. But by including strategic planning, design and implementation in the center of the leadership design drawing (see figure 6), it becomes a central pivot point and calls for integration with other leadership design considerations and actions.

The strategic planning line of effort develops both during and after the leader’s strategic thinking and should be viewed as less of a plan and more as a process that is “creative, dynamic, responsive...intuitive and part of an unpredictable and evolving environment.”⁷⁶ The strategic planning line of effort prompts the leader to think in time using “both the institution’s memory and its broad historical context to think well about creating its future.”⁷⁷ The strategic planning line of effort yields an orderly, clear, creative and unambiguous path into the future that lays out a series of interim goals, requisite activities and necessary actions to take the leader’s organization to the next level.⁷⁸ As the centrally depicted line of effort, it is inherently linked to all of the

other lines of effort and must be both deconflicted and synchronized with those other lines of effort. By orchestrating strategic planning, thinking and design along with all other lines of effort, the visualization becomes a more useful synchronization tool for the leadership design.

Change Management Line of Effort: Actions to Shape the Organization

“Change, rather than stability, is the today’s norm” for most organizations according to Daft.⁷⁹ Simply adapting to change is insufficient for today’s leaders; today’s leaders plan for and lead change. Today’s leaders must accept change in a proactive rather than a reactive fashion and must anticipate both the certainty and necessity of organizational change across a variety of areas. All organizations must cope with change, but through proper leadership and synchronization of change efforts, most challenges associated with change can be avoided.⁸⁰ The change management line of effort acknowledges that leaders must be prepared to “drive change, consolidate gains, and produce more change.”⁸¹ The change line of effort prompts the leader to develop a phased approach to change through the use of change-actions arrayed as definitive milestones while applying some type of change management model similar to Lewin’s three stages of change (“*unfreeze-change-refreeze*”) concept.⁸² Kotter’s change process or Lewin’s “generic recipe for organizational development” both serve as constructive examples from which to model the change management line of operation.⁸³ Like the others, this line of

operation demands synchronization and continuous assessment, development and update. This line of effort must be linked to all of the other lines as the leader moves from the current organizational state to the desired organizational state.

Organizational Design Line of Effort: Tying the Architecture Together

Organizational design cannot exist in isolation from the other lines of effort. Like the change management line of effort, the organizational design and implementation leadership line of effort focuses on the process of reshaping organization roles and structure. More precisely, it is the alignment of structure, process, rewards, relationships, metrics, learning abilities and talent on the path to the goals and vision of the leader’s.⁸⁴ The organizational design line of effort requires the leader to examine every facet of an organization’s existence to ensure organizational alignment that ensures competitive advantage while achieving strategic goals and the leader’s organizational vision. By addressing organizational design holistically, the leader discerns that the organization is right for the culture while organizational artifacts left over from an earlier era are reexamined for appropriateness and relevancy.⁸⁵

The organizational design line of effort should be inherently structured to facilitate achievement of activities, goals and objectives; it becomes the all-important formal framework for both communication and authority across the organization.⁸⁶ The organizational design also presents an inescapable effect on the culture and therefore on the behavior of everyone within

that organization.⁸⁷ The organizational design line of effort carefully synchronized with and linked to the other lines of effort, gives structure and form to the organization.⁸⁸ In consonance with the other lines of effort, the organizational design line of effort synthesizes elements from each of the other lines to transform to appropriate structure, policies and overall design of the organization to enable goal and vision attainment. It is the organizational design line of effort that allows the leader to begin moving away from a design process and, perhaps, more toward a planning process.

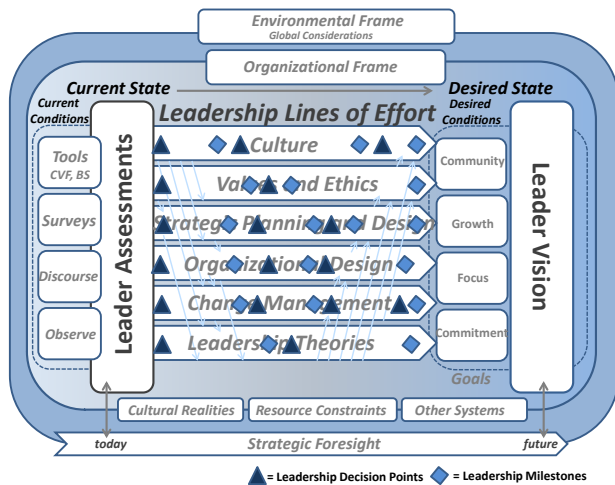


Figure 7: Facilitating Decisions, Milestones, Actions and Changes

Leadership Design: Linking the Art and Science of Leadership

As the leadership design reveals greater specifics about the environment, the organization, the current state, the desired state and the lines of efforts that require actions to ensure change, a series of decisions and milestones emerges. The leadership design begins to lend itself to interpretation as a program evaluation and review technique (PERT) model as the

leader is able to identify near, mid and long term goals and tasks (and their relationships) that may be required to accomplish these.⁸⁹ And because the global and organizational environments are very dynamic, the leader is able to envision a series of decisions that may be required after each milestone is achieved. By discerning required actions, potential milestones and decisions that may occur the leader is able to consider intermediate factors along each line of operation that could impact attainment of the leader's vision (see figure 7).

At this point in the methodology, the leadership design model begins to bridge between what Mintzberg might define as "strategic thinking" and "strategic planning."⁹⁰ Intermediate goals, or milestones, and decision points allow the leader to integrate considerations such as time, space and resources as a new level of granularity emerges from the leadership design process. At this point in the design process, the leader begins to go beyond conceptualization and understanding and instead moves toward pursuit of specific goals, task determination, determining responsibility for tasks, structuring of social systems to achieve goals, and initiative to find solutions to the problems previously identified (all leader characteristics identified by Stogdill).⁹¹ At this point the leadership design methodology substantially transitions from art toward science and the stage is set for a leadership planning effort.

Conclusion: Taking leadership Design for a Test Drive

Leadership design borrows heavily from the military's recent successful embrace of

design thinking and, at the same time, is modeled on the key components and most successful courses at leadership and management educational programs across the country. This process is not meant to be a mechanical approach to guaranteeing success for any leader, but rather a way to *plan and visualize* the integration of evaluation, analysis, synthesis, reflection, reasoning and critical thinking activities requisite to leading an organization. While depicted in successive steps, the leadership design methodology is actually meant to be a scaffold around a critical thinking process focused on leadership and, more importantly, leading.

Leadership design is not really linear but must instead be an iterative process that assists the leader in visualizing a holistic cognitive picture-map to guide an approach to leading an organization. It provides a pictorial framework upon which to plan, position and link concepts, activities and considerations for the organizational leader and his or her leadership team. It becomes a basic approach to leadership actions, behaviors, priorities and thinking. In essence, it shapes decision analysis regarding what actions the leader may, or will take to lead the organization. The design is meant to become a useful framework to remind, prompt and guide the art and science of leadership.

Leadership design is a first step in a new method aimed at integrating the multidimensional aspects of leadership. If it inspires a leader to make an effort toward visually depicting what is undeniably a complex human endeavor in a complex

environment, it will have served a small purpose. If it inspires others to expand the process and promulgate a new approach to guiding leader actions, it can be considered successful. When privileged to take on a new leadership role, try walking through this process and see if it helps connect the dots for the inherently complex and challenging job of leading at every level in today's global environment. It may not be an end-all by any means, but it provides a point of departure to think about assuming the challenging mantle of organizational leadership. As today's leaders and tomorrow's national security leaders evolve and map their own approaches toward leadership, the leadership design model might just help them be the kind of leader envisioned by the chairman of the Joint Chiefs of Staff.

Author Bio: Colonel (USA, Ret) Frederick R. Kienle is an associate professor and director of curriculum for the Joint Forces Staff College's Joint and Combined Warfighting School, headquartered in Norfolk, VA. He served 31 years on active duty in the U.S. Army as an infantry officer and strategic plans and policy officer across a multitude of leadership, command and staff assignments. A graduate of the Army's School of Advanced Military Studies and the Army War College, he also holds a Doctorate of Strategic Leadership from Regent University.

¹ Martin E. Dempsey, *Joint Education White Paper* (Washington, D.C.: The Joint Staff, 2012).

² Ludwig Bertalanffy, *General System Theory: Foundations, Development, Applications* (New York, NY: George Braziller Inc., 1969).

³ M. Scriven & R. Paul, Critical thinking as defined by the National Council for Excellence in Critical Thinking (paper presented at the 8th Annual

International Conference on Critical Thinking and Education Reform, 1987).

⁴ Ralph Stogdill, *Handbook of Leadership* (1st Ed.) (New York, NY: Free Press, 1974).

⁵ Barbara Kellerman, *Leadership: Multidisciplinary perspectives* (New York, NY: Prentice Hall, 1984).

⁶ Peter Northouse, *Leadership Theory and Practice* (Thousand Oaks, CA: Sage Publications, 2007), p. 3.

⁷ Northouse, p. 4.

⁸ Fred Luthans, Fred, *Organizational Behavior* (Boston, MA: McGraw-Hill, 2005).

⁹ Northouse, P. (2007), p. 4.

¹⁰ W. Bennis, & B. Nanus, *Leaders: Strategies for Taking Charge* (New York, NY: Collins Business, 2007).

¹¹ Donald Schön, *Educating the Reflective Practitioner* (San Francisco: Jossey-Bass, 1987).

¹² Nigel Cross, "Designerly Ways of Knowing," *Design Studies* 3.4 (1982): 221-27

¹³ U.S. Army, *Art of Design; Student Text Version 2.0* (Leavenworth, KS: School of Advanced Military Studies, 2010)

¹⁴ U.S. Army, *Field Manual 5-0, The Operations Process* (Washington, D.C.: Government Printing Office, 2010)

¹⁵ Tim Brown, "Design Thinking," *Harvard Business Review* 86, no. 6 (2008).

¹⁶ Gareth Morgan, *Images of Organization*, (Thousand Oaks, CA: Sage Publications, 2006), 341; G. Lakoff & M. Johnson, *Metaphors We Live By* (Chicago, IL: University of Chicago Press, 2003); Tim Brown, "Design Thinking."

¹⁷ Bryan Lawson, *How Designers Think: the Design Process Demystified* (Amsterdam, Netherlands: Elsevier, 2006).

¹⁸ Gareth Morgan, *Imagin-i-zation: New Mindsets for Seeing, Organizing and Managing* (Thousand Oaks, CA: Sage, 2007).

¹⁹ Joint Staff Joint and Coalition Warfighting. *Planner's Handbook for Operational Design* (Suffolk, VA: U.S. Government Printing Office, 2011).

²⁰ Tim Brown, *Change by Design* (New York, NY: Harper Collins, 2009).

²¹ Mary Jo Hatch, *Organization Theory: Modern, Symbolic and Postmodern Perspectives* (Oxford, UK: Oxford University Press, 2006). Hatch provides a conceptual and visual depiction of an organization demonstrating the interrelationships of systems including social structure, culture, physical structure and technology all within a defined environment.

²² Bryan Lawson.

²³ Lawson, 271.

²⁴ Andrew Sherman, *Fast Tracked Business Growth: Smart Strategies to Grow Without Getting Derailed* (Washington, DC: Kiplingers, 2002).

²⁵ Sherman.

²⁶ Daniel McCauley, "Design and Joint Military Planning," *Canadian Military Journal* 12, no. 1.

²⁷ McCauley.

²⁸ Stewart Black, Alan Morrison, Hal B. Gregersen, *Global Explorers; the Next Generation of Leaders* (New York, NY: Routledge, 1999), 158.

²⁹ Robert Rosen, *Global Literacies: Lessons on Business Leadership and National Cultures* (New York, NY: Simon & Schuster, 2000), 18.

³⁰ Bryan Lawson, 220-229.

³¹ Richard Daft, *Organization Theory and Design* (9th Ed.) (Mason, OH: Thomson Higher Education, 2007), 14.

³² Daft, 15.

³³ T. Sanders, *Strategic Thinking and the New Science* (New York, NY: Free Press, 1998).

³⁴ Roger Martin, *The Opposable Mind: Winning Through Integrative Thinking* (Boston, MA: Harvard Business School, 2007).

³⁵ Jay Gailbraith, *Designing the Global Corporation* (San Francisco, CA: Jossey-Bass, 2000); Charles Handy, *The Age of Paradox* (Boston: The Harvard Business School Press, 1994); David Nadler, & Michael Tushman, *Competing by Design: The Power of Organizational Architecture* (New York: Oxford University Press, 1997).

³⁶ Henry Mintzberg, Bruce Ahlstrand, Joseph Lampel, *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management* (New York, NY: The Free Press, 1998).

³⁷ Sanders.

³⁸ O. R. Woodbury, "I love it when a plan comes together," *Journal of Property Management*, 75, no. 4, 5 (July-August 2010).

³⁹ S. Nagarajan, A. S. Nallathambi, P. Palaniappan & B. Sundarakani, B. "Customer Relationship-Based Strategic Planning Using Balanced Scorecard - a Case Study," *International Journal of Enterprise Network Management*, 4, no. 2 (2010): 201.

⁴⁰ Kim S. Cameron & Robert E. Quinn, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* (3d. ed.)(San Francisco, CA: Jossey-Bass, 2011).

⁴¹ Bernard Bass & Bruce Avolio, *Multifactor Leadership Questionnaire for Research* (Menlo Park,

CA: Mind Garden, Inc., 1995); Richard Hughes & Katherine Beatty, *Becoming a Strategic Leader: Your Role in Your Organization's Success* (San Francisco, CA: Jossey-Bass, 2005).

⁴² Michael Porter, "How Competitive Forces Shape Strategy," *Harvard Business Review*, 2, no. 57 (1979) 137-145.

⁴³ Northouse, 188.

⁴⁴ Warren Bennis & Bert Nanus, *Leaders: Strategies for Taking Charge* (New York: Harper Perennial, 1985) 88.

⁴⁵ Cornelis de Kluyver & John Pearce, *Strategy: A View from the Top* (Upper Saddle River, NJ: Pearson Education, 2009).

⁴⁶ John Kotter, *A Force for Change* (New York, NY: Free Press, 1990).

⁴⁷ T. Sanders, *Strategic Thinking and the New Science* (New York, NY: Free Press, 1998) 141.

⁴⁸ Sanders, 141.

⁴⁹ P. Rajan Varadarajan & Satish Jayachandran, "Marketing Strategy: An Assessment of the State of the Field and Outlook," *Journal of the Academy of Marketing Science*, 27, no. 2 (1999) 120-143; Northouse; Michael Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York, NY: The Free Press, 1998).

⁵⁰ Porter.

⁵¹ Alfonso Montuori, "From Strategic Planning to Strategic Design: Reconceptualizing the Future of Strategy in Organizations," *World Futures: The Journal of General Evolution*, 59, no. 1 (2003): 3-20.

⁵² Woodbury, 5.

⁵³ Woodbury, 5.

⁵⁴ Jeffrey Pfeffer, *The Human Equation: Building Profits by Putting People First* (Boston, MA: Harvard Business School Press, 1998).

⁵⁵ Michael Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York, NY: The Free Press, 1998).

⁵⁶ The Joint Staff Director for Joint Force Development, *The Review of Joint Education* (Washington, DC: U.S. Government, 2012).

⁵⁷ Carl von Clausewitz, *On War*. (Howard, M. and Paret, P., Trans.) (Princeton, NJ: Princeton University Press, 1984).

⁵⁸ Richard Hughes, Robert Ginnett & Gordon Curphy, *Leadership: Enhancing the Lessons of Experience* (Boston, MA: Irwin Inc, 1993) 85.

⁵⁹ James M. Burns, *Leadership* (College Park, MD: Harper Perennial Modern Classics, 1978); Northouse;

G. A. Yukl, *Leadership in Organizations* (Englewood Cliffs, NJ: Prentice Hall, 2006).

⁶⁰ Morgan, *Images of Organization*, 58.

⁶¹ Northouse.

⁶² Stephen Covey, *Principle-Centered Leadership* (New York, NY: Simon and Schuster, 1992).

⁶³ J. Stewart Black, Allen Morrison, Hal B. Gregersen, *Global Explorers; the Next Generation of Business Leaders* (New York, NY: Routledge, 1999).

⁶⁴ M. J. Coolican, M. & J. L. Jackson, *Integrating Culture with Strategy*. (2002) Retrieved from www.leader-values.com.

⁶⁵ Edgar Schein, *Organizational Culture and Leadership* (San Francisco, CA: Jossey-Bass, 1992).

⁶⁶ Daniel Goleman, "What Makes a Leader?" *Harvard Business Review* (November-December, 1998).

⁶⁷ Thomas Zweifel, *Culture Clash: Managing the Global High Performance Team* (New York, NY: Select Books, 2003).

⁶⁸ Kim S. Cameron & Robert E. Quinn, R. E. *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* (3d. ed.) (San Francisco, CA: Jossey-Bass, 2011).

⁶⁹ Robert Rosen, *Global Literacies: Lessons on Business Leadership and National Cultures* (New York, NY: Simon & Schuster, 2000) 172-4.

⁷⁰ W. Gellerman, M. Frankel & R. Ladenson, *Values and Ethics in Organization and Human Systems Development: Responding to Dilemmas in Professional Life* (San Francisco, CA: Jossey-Bass, 1990).

⁷¹ K. Hultman & B. Gellerman, *Balancing Individual and Organizational Values: Walking the Tightrope to Success* (San Francisco, CA: Jossey-Bass, 2002).

⁷² Nadler & Tushman, 195-6.

⁷³ James C. Collins, "Aligning Action and Values," *Leader to Leader*, no. 1 (Summer 1996): 19-24.

⁷⁴ G. W. England, "Personal Value Systems of American Managers," *Academy of Management Journal*, no. 10 (1967): 53-68.

⁷⁵ Henry Mintzberg, "The Fall and Rise of Strategic Planning," *Harvard Business Review* 72, no.1 (1994): 152.

⁷⁶ Fiona Graetz, "Strategic Thinking Versus Strategic Planning: Towards Understanding the Complementarities," *Management Decision* 40, no. 5 (2002): 546.

⁷⁷ Jeanne Liedtka, "Linking Strategic Thinking with Strategic Planning," *Strategy and Leadership* 26, no. 4 (1994): 30-35.

⁷⁸ Alfonso Montuori, "From Strategic Planning to Strategic Design: Reconceptualizing the Future of Strategy in Organizations," *World Futures: The Journal of General Evolution* 59, no. 1 (2003): 3-20.

⁷⁹ Daft.

⁸⁰ Kotter.

⁸¹ Kotter, 131.

⁸² Kotter; Kurt Lewin, *Field Theory in Social Science* (New York, NY: Harper and Rowe, 1951).

⁸³ Karl Weick & Robert Quinn, "Organizational Change and Development," *Annual Review of Psychology* 50 (1999): 361-86.

⁸⁴ J. Galbraith, *Organization Design* (Reading, MA: Addison-Wesley, 1977); Daft.

⁸⁵ Simon Atkinson & James Moffat, *The Agile Organization: From Informal Networks to Complex Effects and Agility* (Washington, DC: DoD Command and Control Research Program, 2005).

⁸⁶ Daft.

⁸⁷ Muzafer Sherif & Carolyn Sherif, *An outline of social psychology* (New York, NY: Harper and Brothers, 1958).

⁸⁸ R. Ashkenas, D. Ulrich, T. Jick & S. Kerr, *The Boundaryless Organization: Breaking the Chains of Organizational Structure* (San Francisco, CA: Jossey-Bass, 1995).

⁸⁹ Dragan Milosevic, *Project Management Toolbox: Tools and Techniques for the Practicing Project Manager* (Hoboken, NJ: John Wiley and Sons, 2003).

⁹⁰ Henry Mintzberg, Bruce Ahlstrand, Joseph Lampel, *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management* (New York, NY: The Free Press, 1998).

⁹¹ Stogdill.

Joint Before Joint Was Cool: A Fresh Look At The Success Of Mosby's Rangers In The Civil War

By Lt Col Jeffrey A. Guimarin, Maj David F. Lawrence, and Lt Col Kevin M. Wenks

From 1863 through 1865, Confederate Colonel John S. Mosby conducted an effective and wide-ranging cavalry campaign of irregular warfare behind Union lines in Northern Virginia and Maryland, winning him praise from subordinates, superiors, and foes alike. Many contemporaries and historians attributed the success of Mosby's Rangers mainly to the personal attributes of its leader or the particular tactics he employed. However, viewing the operations of Mosby's Rangers through the lens of the six joint functions makes it clear that part of their success was underpinned by effective employment and integration of the six joint functions, demonstrating the universality of these joint functions to military planning and operations.

Colonel John S. Mosby was an unlikely military hero. Yet, the actions of his unit, the 43rd Virginia Battalion, also known as Mosby's Rangers, won him fame on both sides of the Mason-Dixon Line during the Civil War. A lawyer before the war started, Mosby initially joined a regular cavalry unit as a private. Later, he resigned from the Army after a disagreement with a commanding officer. Mosby had previously shown promise as a scout, so he was retained by General James E. B. "Jeb" Stuart on Stuart's personal staff despite not being

enlisted or commissioned. As a scout for Stuart, Mosby identified a weakness in the Union battle positions during the "Seven Days Battles" near Richmond, Virginia in June, 1862. His information was the key that enabled Stuart's famous "ride around McClellan," and Mosby personally scouted Stuart's cavalry reconnaissance that led to General Robert E. Lee's success against General George B. McClellan in the Seven Days Battles.¹

In April 1862, the Confederate Congress authorized the organization and use of partisan groups that fought behind Union lines, but were required to operate by the Articles of War and Confederate Army regulations. Confederate Secretary of War Leroy Walker believed that official authorization of partisan units and commissions for their officers would ensure proper treatment by Union forces should the partisans be captured.² Partisan units were allowed to keep whatever captured materiel they needed, but had to turn the rest over to the Confederate Army. By September, 1862, Confederate partisan units numbered six regiments, nine battalions, and several companies.³ While Mosby's Rangers were not the only partisan unit in the Confederate Army, its exploits would make it the most famous. In August, 1865, the *New York Times* claimed Mosby's career "will show a succession of...adventures unsurpassed by those of any partisan chief on record."⁴

After proving his skills and his worth as a scout and cavalryman, Mosby was given command of a group of partisans in January, 1863. This later group would be officially

organized as the 43rd Virginia Battalion. Mosby operated in Northern Virginia and the Shenandoah Valley, strategic battlegrounds for the duration of the war. Union forces in Northern Virginia not only had to defend the capital of Washington, D.C., they also had to take the war to the enemy in Richmond. The Shenandoah Valley was strategic. It was an important zone for forces of both sides moving between the south and the north, and it was a critical agricultural zone for the south. Crisscrossing the valley were lines of communication that the Union needed to supply and sustain its armies in the field. The outposts near Washington, D.C. and the lines of communication that extended into Northern Virginia became Mosby's prime targets.

As Mosby explained, a "small force moving with celerity and threatening many points on a line can neutralize a hundred times its own number...the line must be stronger at every point than the attacking force, else it is broken. The military value of a partisan's work is not measured by the amount of property destroyed, or the number of men killed or captured, but by the number he keeps watching."⁵ Mosby's primary intent was to wear down Union forces operating in and passing through his territory, reducing their ability to attack Confederate forces.

Mosby achieved outstanding success during his 28 months as the leader of the 43rd Virginia Battalion. A study of Mosby's Rangers clearly demonstrates that Mosby's leadership was the primary factor in the Rangers' success. Ulysses S. Grant

described Mosby in his memoirs, "There were probably but few men in the South who could have commanded successfully a separate detachment in the rear of the opposing army, and so near the border of hostilities, as long as he did without losing his entire command."⁶ While Mosby's personal attributes of bravery and intellect were important factors in his success, a comprehensive look at all of Mosby's operations shows an important key to his success was his ability to integrate what we call the six joint functions today.

The six joint functions are best defined in Joint Publication 1-0, Doctrine for the Armed Forces.⁷ They are defined as command and control, intelligence, fires, movement and maneuver, sustainment, and protection. While this is the current terminology used by joint planners in the U.S. military, they are timeless aspects of war that leaders have used to great success. Mosby succeeded by successfully integrating all of the joint functions in his operations. The following examples reveal how effective use of each of the joint functions was critical to his success, beginning with the most basic function of how a commander leads his forces, command, and control.

Command and Control

"Command and control encompasses the exercise of authority, responsibility, and direction by a commander over assigned and attached forces to accomplish the mission."⁸ A commander must have effective command and control over his forces to ensure unity of

effort and synchronization of forces and effects. Mosby began his partisan campaign with 15 men, so command and control was relatively simple. The unit operated as a whole and followed his lead. His orders were basic, such as, “Charge ‘em; charge ‘em and go through ‘em.”⁹

As Mosby’s fame spread due his increasing success, more and more recruits came to the command. As the unit grew, Mosby organized separate companies and designated commissioned and noncommissioned officers to lead them. Mosby’s area of responsibility grew accordingly, and he was soon operating in an area that ranged from the Shenandoah Valley to Alexandria, Virginia, and from Southern Maryland down to Richmond, Virginia. By war’s end, Mosby’s unit had expanded to a battalion with nine companies.

Such a wide operating area and span of control posed difficulties for a unit with no access to a reliable communication system. Mosby relied on support from trusted members of the local populace to quickly spread word to his dispersed men about impending attacks. Word was passed from town to town through otherwise innocuous signals by the civilians, alerting the Rangers to a specific meeting place and time. Once the Rangers gathered, Mosby provided mission-type orders that included an overall intent of the mission. However, the timing and tactics would often be determined by the specific situation the unit found once they arrived at the designated objective.

Mosby carefully selected the leaders of his companies. They were men he could trust implicitly, and men who understood Mosby’s intent and his operational method. This became crucial later in the war when Mosby’s Rangers operated against General Sheridan’s Union cavalry in the Shenandoah Valley in the fall of 1864. Mosby was able to divide his battalion into smaller units that would attack at multiple places simultaneously, increasing the pressure on Sheridan’s lines of communication.¹⁰

With communication channels coursing through the local populace via word of mouth, in person meetings, and what we term in today’s vernacular as “mission command,” Mosby effectively commanded the distributed operations of his many units over a wide operating area. His chosen command and control methodology fit the environment he was operating in and enabled him to conduct concurrent operations at multiple places without having to supervise and command the detailed execution of any one unit. Through careful selection of subordinate commanders using the criteria of trust, a shared understanding of the operational principles of the unit, and familiarity with Mosby’s “Commander’s Intent” the units were able to complete missions with relative autonomy, but unified in purpose and effect by Mosby’s expert direction. Mosby’s direction was often guided by the next of the joint functions, intelligence.

Intelligence

“Intelligence helps commanders and staffs understand the operational environment and achieve information superiority.”¹¹

Intelligence allows commanders to employ their forces where, when, and how they will have the greatest effect. It endeavors to prevent surprise by the adversary.

Mosby excelled at gathering intelligence and using it as a force multiplier. Mosby gathered much of the intelligence himself by scouting out objectives on his own or with a small number of trusted associates. One Ranger described that Mosby “was the fastest ‘scouter’ I ever knew...It was his constant care not to take his men into any place that he could not bring them out.”¹² Mosby constantly kept other scouts out along key lines of communication, looking for weakly defended outposts and lightly guarded supply trains.

Mosby employed the local civilian population in his intelligence gathering efforts, as most of the civilians in his area of operations were southern sympathizers. The civilians often told Mosby about the movement and location of Union forces. One particularly effective spy for Mosby was a young Fairfax County woman named Laura Ratcliffe. She had warned him of a nearby ambush Union forces had set for him. They often passed information to each other through letters left under a large stone that came to be known as “Mosby’s Rock.”¹³ Guided by intelligence and enabled by command and control, Mosby used his force to employ the third joint

function, fires, effectively.

Fires

“To employ fires is to use available weapons and other systems to create a specific lethal or nonlethal effect on a target.” Fires is the application of military power to achieve desired effects. It includes the obvious flash and fire of kinetic strikes, but it can also include the application of non-lethal capabilities.¹⁴

As one of the first modern wars that employed military power on the industrial level, the Civil War does not lack for examples of commanders who effectively employed fires. Mosby, however, is unique in that he employed fires in innovative ways. Mosby’s Rangers was one of the first cavalry units that eschewed the cavalry saber for the newly-developed .44 caliber, six-shot, Colt Army revolver. As Mosby explained, “I believe I was the first cavalry commander who discarded the sabre as useless...My men were as little impressed by a body of cavalry charging them with sabres as though they had been armed with cornstalks...I think that my command reached the highest point of efficiency as cavalry because they were well armed with two six-shooters and their charges combined the effect of fire and shock”¹⁵ Not only did he employ new weapons to conduct fires, but he employed them in creative ways to achieve multiple non-traditional effects in combination with fires, such as shock and awe.

Even though the revolver was the Rangers’

weapon of choice, Mosby modified his fire effects to match the mission at hand. In one of his most successful attacks at Anker's Shop in Loudon County in February, 1864, Mosby divided his force into three units. One unit dismounted and took up positions with long-range carbines. The long-range carbines were not as effective on horseback as the revolvers, but Mosby used their long range to fix an oncoming Union cavalry unit in place. Once the Union forces were pinned down by the carbines, the two mounted units of Mosby's force charged, firing revolvers. In the ensuing battle, Mosby's Rangers killed at least a dozen Union troopers, wounded about 25, and captured 70. They also captured about 100 horses, and all was at the cost of only one of Mosby's Rangers killed and five wounded.¹⁶

Mosby incorporated other innovative forms of fires into his partisan unit's repertoire of operations. As the unit began to focus more on Union train lines that were supporting forward-deployed Union forces in summer 1864, Mosby sought authorization from Confederate Secretary of War James Seddon for the authority to create an artillery company comprised of four mountain howitzers.¹⁷ Mosby used the howitzers and explosives to derail trains and capture the troops and supplies they carried. This unconventional use of fire fixed enemy forces at a time when they were extremely vulnerable and permitted their exploitation by a significantly smaller force. For a small, light cavalry force operating behind enemy lines, fires could only be brought to bear through the expert employment of the fourth joint function, movement and maneuver.

Movement and Maneuver

"Movement and maneuver encompasses the disposition of joint forces to conduct operations by securing positional advantages before or during execution...[and] allow a commander to choose where and when to engage an adversary or take best advantage of geographic and environmental conditions."¹⁸ As a mounted unit, Mosby's Rangers excelled at employing movement and maneuver operationally and tactically to achieve operational reach throughout their area of operations.

Reacting to orders from General Robert E. Lee to prevent Union cavalry from attacking Confederate railroad lines, Mosby decided, "The only way I could do so was to excite continual alarm in their camps. Their outposts were often attacked all along their lines on the same night. This was the only way we could keep them home. On the same day, three or four detachments would go out; some to operate on Sheridan west of the ridge, some to keep Augur in remembrance of his duty to guard the Capital."¹⁹ Through speed of maneuver combined with good intelligence of enemy positions and effective command and control of distributed units, Mosby was able to fix and harass significantly larger forces and prevent them from accomplishing their mission.

Mosby used movement and maneuver at the tactical level to seize the initiative and break up Union forces. Mosby explained, "If you are going to fight, then be the attacker. This is an old principle, and it is also my own

principle,” and later, “it was never my tactics to stand still and receive and charge, but always make a countercharge.” When Mosby’s Rangers attacked, it was not in ranks and files, but in a “wild swarm.”²⁰ Command and control challenges of the time contributed to limitations on maneuver. Thus, in order to command and control large forces, commanders often kept those forces arranged in rigid formations that limited their ability to move and maneuver around the battlefield. Mosby effectively integrated mission command, flexible weapons, such as pistols, and speed of maneuver to mass force quickly at vulnerable points and disaggregate enemy forces. However, none of the above could be accomplished if Mosby could not keep his forces in the field, which he accomplished through the fifth joint function, sustainment.

Sustainment

“Sustainment is the provision of logistics and personnel services necessary to maintain and prolong operations until mission accomplishment.”²¹ A force cannot exist for long without sustainment. Meeting the needs for sustainment can often drag down a force’s ability to move and maneuver, as supplies must be transported and guarded. The needs of the Union forces in Virginia to sustain themselves at long distances from their support bases provided Mosby’s Rangers with their primary targets.

Mosby’s Rangers sustained themselves through two main sources: supplies garnered from the local Southern-sympathizing population, and by capturing Union

supplies. When not on raiding parties, Mosby’s Rangers boarded in small groups with local citizens. The locals housed, clothed and fed the partisans, and even provided rudimentary communications for them, spreading the word when time came for the Rangers to gather for another raid or warning them of Union forces in the area.

One of the reasons the locals were willing to support the Rangers came from the fact that many of the Rangers were residents of that area. Eighty to ninety percent of the Rangers were from Virginia, with more than one-third of the force coming from the counties that comprised the primary area of operations, Loudon, Fairfax, Fauquier, and Prince William counties.²²

Mosby went to great lengths to integrate the joint function of protection beyond his own forces to the civilian population that sustained his force. He maintained civilian law and order in his area of operations once war deprived the area of civilian governance. He ruled the area so effectively, that his section came to be known as “Mosby’s Confederacy.” He acted as judge and jury. One of his men described him as “a civil power of unquestioned authority,” and a Federal officer claimed that Mosby’s word “was law in that section.”²³ By doing this, he was able to maintain influence and loyalty from the local population, which might have degenerated into chaos without his guidance.

Mosby’s Rangers exploited the largess of the Union states’ industrial and agricultural superiority by claiming Union materiel they

captured for themselves. The most famous instance was the October, 1864 “Greenback Raid” where the Rangers captured a Union supply train and \$168,000 in Federal Greenbacks from two Union paymasters.²⁴ The Rangers split the loot among themselves and used it to pay for sustainment and supplies from the local population. As one Ranger claimed, the captured money “circulated so freely in Loudon that never afterwards was there a pie of blooded horse sold in that section for Confederate money.”²⁵

As a small force operating behind Union lines, sustainment was a challenge and was provided for in an unconventional manner. It was the one joint function not completely under Mosby’s control. The Union saw it as a vulnerability and tried to exploit it, but with little success. Mosby was able to maintain his force in the field for the duration of the war due to the wider support from the residents of Mosby’s Confederacy. It is unclear, however, how much longer he could have sustained his force, had the war dragged on. Mosby was as vulnerable as the rest of the agrarian South, due to the Union blockade and the Union’s industrial production capability which could have sustained the war effort for much longer than the Confederacy could have maintained resistance.

Protection

Protection “focuses on conserving the joint force’s fighting potential through active defensive measures...passive defensive measures...procedures that reduce the risk

of fratricide.”²⁶ Operating far behind Union lines, protection was paramount for Mosby’s ability to survive, let alone operate effectively. It was, perhaps, the one joint function that was so important to the survival of his unit that it drove how Mosby employed all of the other joint functions. Much of what Mosby did in terms of command and control, intelligence, fires, movement and maneuver, and sustainment was driven by the need to protect his unit, keep it intact, and avoid set-piece battles where he could be overmatched by numerically superior Union forces.

Mosby achieved protection by designing his operations to integrate the other joint functions effectively and through his relationship with the local population. Mosby divided his unit into small, dispersed units that operated under mission-type orders. This enabled autonomous, yet simultaneous operations which were conducted to maintain the initiative and enable protection. Using the principles of dispersion, speed, and surprise, Mosby was able to conduct rapid strikes and subsequent withdrawals into protected locations. First, Mosby gathered detailed intelligence on Union positions to avoid strongpoints and strike where the Union outposts and supply trains were most vulnerable. Then, he employed fires in quick, violent strikes before Union forces could mount an effective defense. He moved against objectives at night to avoid detection and achieve an element of surprise. Then, his units retreated into the same local populace that sustained them, instead of staying out on the battlefield in large formations that

could be discovered and engaged by the Union. Mosby took care to ensure that his force was seen as a welcomed force that supported the local population as best it could, and not as a force that imposed itself on the people. As a result, the local population provided protection by not exposing the presence of the Rangers in its midst.

Conclusion

The above examination of the exploits of Mosby's Rangers shows that among Mosby's many leadership talents and skills, his innovation and integration of foundational military tenets contributed immeasurably to the effectiveness of his operations. By incorporating the foundational military principles now called the Joint functions with his assigned mission, forces, and operating environment, Mosby demonstrated that such functions have enduring application for military planning and operations.

Additionally, a few broad lessons about the employment of the six joint functions can be drawn from this study. Overreliance on one function, or the neglect of another may endanger the force or its ability to accomplish the mission. How functions are employed may have to evolve or change as an operation moves from one phase to the next, or as the operational environment changes. Innovative use of new technologies in any of the six functions can provide a unit with capabilities that quickly overmatch an opponent, such as Mosby's use of revolvers instead of sabres for cavalry

charges.

The names we call these functions may change and evolve over time as doctrines are updated and rewritten, but the importance to properly integrate them should be obvious to any military professional planning joint operations. Through the synergistic integration of all six joint functions, any military unit can best ensure it is incorporating the timeless fundamentals of war planning, and therefore increase its chances of success in battle.

Team Biographies

Lieutenant Colonel Jeffrey A. Guimarin, USAF. Lt Col Guimarin is currently serving as Director of Operations at the National Security Agency's ISR Portfolio Management Office. He was commissioned through Officer Training School in 1995. Lt Col Guimarin earned a BA in History from the University of Colorado, Boulder in 1993 and an MS in Computer Information Systems from the University of Phoenix in 1999.

Major David F. Lawrence, USMC. Major Lawrence is currently serving as Joint Planner, J-5, Allied Joint Force Command in Naples, Italy. He was commissioned through Officer Candidate School in January of 2000. Major Lawrence earned a BA in Political Science from the University of California, Los Angeles in 1999, an MBA from the University of Southern California in 2011, and an MA in Security Studies for Europe and Eurasia from the Naval Postgraduate School in 2012. Prior to his current assignment, Major Lawrence worked in the Operations Department of 3rd Marine Aircraft Wing and previously in VMA-513 and VMA-311 as an AV-8B Harrier Pilot.

Lieutenant Colonel Kevin Wenks, USAF. Lt Col Wenks is currently serving on the Joint Staff Directorate of Intelligence at the Pentagon. He was

commissioned through ROTC at the University of Washington in 1993. Lt Col Wenks earned a BA in Political Science from the University of Washington in 1993, an MA in Strategic Intelligence from the Joint Military Intelligence College in 1998 and an MA in International Security Studies from the Naval Postgraduate School in 2008. Prior to his current assignment, Lt Col Wenks served as chief of the International Affairs Policy Branch at Pacific Air Forces at Joint Base Pearl Harbor-Hickam, HI.

¹ John S. Mosby, *Mosby's Memoirs* (Nashville, TN: J.S. Sanders and Company, 1995), 111-114.

² Jeffry D. Wert, *Mosby's Rangers* (New York: Simon and Schuster, 1990), 70.

³ Wert, 73.

⁴ *Ibid.*, 290.

⁵ *Ibid.*, 34.

⁶ Ulysses S. Grant, *Personal Memoirs of U.S. Grant* (E-Book No. 4367. Project Gutenberg, 2004), 317.

⁷ Joint Chiefs of Staff (JCS), *Joint Publication 1: Joint Doctrine for the Armed Forces of the United States* (Washington, D.C.: Department of Defense, 2013), I-17.

⁸ JCS, I-18.

⁹ Howard R. Crouch, *Like a Hurricane* (Catlett, VA: SCS Publications, 2013), 148.

¹⁰ Wert, 202.

¹¹ JCS, I-18.

¹² Wert, 80.

¹³ *Ibid.*, 123.

¹⁴ JCS, I-18.

¹⁵ Mosby, 284-285.

¹⁶ Wert, 146.

¹⁷ *Ibid.*, 185.

¹⁸ JCS, I-18.

¹⁹ Mosby, 289-290.

²⁰ Wert, 83.

²¹ JCS, I-19.

²² Wert, 74.

²³ *Ibid.*, 124-125.

²⁴ Mosby, 321.

²⁵ Crouch, 169.

²⁶ JCS, I-18-19.

Pirates and Broken Windows

By CAPT Steven J. Marinello

In a 1982 article for *Atlantic Monthly*, social scientists George Kelling and James Wilson introduced the “Broken Windows theory” of criminology.¹ It asserts that a disordered environment (e.g., a neighborhood in which buildings have broken windows that remain unrepaired) negatively influences the behavior of residents resulting in further window breaking, additional vandalism and perhaps greater criminal activity (e.g., larceny or arson). Restated simply, an environment of perceived lawlessness leads to more lawlessness. Conversely, an environment that appears “policed” and “ordered” affects behavior in the opposite manner, and reinforces the stability of a neighborhood. In his book *Tipping Point*, Malcolm Gladwell further describes the phenomenon of surroundings affecting behavior as the “power of context.”²

The Horn of Africa (HOA) remains in a dramatic state of lawlessness. Weak or non-existent government, corruption, and poverty characterize the region. Piracy springs from the perception that the environment is “disordered,” and its proliferation contributes to the regional context of lawlessness. Piracy is one of HOA’s “broken windows,” and “fixing” it would help re-establish order, redefine the regional social context, and change societal behavior.

Commander Joint Task Force, Horn of Africa (CJTF-HOA) has as its mission the security and stability of the HOA region. It has the most to gain from fixing the “broken

window” of piracy. Due to its joint makeup, CJTF-HOA is a better choice than current anti-piracy actors and should have anti-piracy as one of its core missions.

Fixing “windows” in New York City

Violent crime in New York City during the 1980’s showed an almost linear increase that peaked in 1990 at about 175,000 violent crimes committed in a population of a little over seven million.³ This ten-year trend nested within broader historical state statistics dating back to 1965 that showed more than a threefold overall increase in violent crime from 1965 to 1990. Conventional wisdom would lead one to believe that this 25-year trend of increasing crime would continue unabated. Instead, violent crime was halved in just eight years,⁴ and the cause of the reversal was as surprising as the results themselves.

The beginning of New York’s reduction in crime can be traced back to 1985 and the New York City subway system. “Broken Windows Theory” co-creator George Kelling, an academic to that point, was hired by the New York Transit Authority (NYTA) as a consultant. He was to put his theory to the test combating rampant criminal behavior in the city’s underground train system. While conventional wisdom would lead one to target the most violent crimes first, Kelling’s recommendations centered on restoring order and reducing the perceived lawlessness, i.e., fixing the “windows” first. Graffiti and turnstile jumping (or fare-dodging) in particular helped define the subway system’s context that seemed to send the message, “anything goes.” Kelling advocated declaring war on

graffiti and fare-dodging as a way to reset the social context. Initially, those initiatives were “panned” until they began to achieve astounding results. Not only did non-violent crime decrease, but violent crimes, too, as his campaigns established the message that, “order and lawfulness is the new ‘normal.’” The NYTA had successfully reshaped social behavior by leveraging change in a social context.

The NYTA’s unprecedented success in reducing crime did not go unnoticed. In 1993, the head of the New York Transit Police was appointed head of the NYC police to apply the “broken windows” theory to the entire city. William Bratton, the man who put George Kelling’s recommendations into action in the subway system, would do the same for the streets of New York City. Bratton sought a reduction in violent criminal behavior, not by hiring more homicide detectives, but by restoring a sense of order. One of the most famous examples was his campaign against the “squeegee men.” These were people who would clean windshields at traffic intersections unsolicited and then ask for money, often demanding it under threat of violence. What amounted to tacit robbery became a touchstone for the perceived lawlessness of the streets. In an adroit application of the law, Bratton began having them arrested for jaywalking and trespassing. “Squeegee men” disappeared and the streets immediately appeared to be more ordered. Additional initiatives aimed at petty crimes like public urination and drunkenness also helped reinforce the new “ordered” context. The results were impressive as violent crime in New York City fell twice as fast and for

twice as long as the national average.⁵ Bratton restored order by “fixing broken windows” and leveraging the power of social context to change behavior.

Africa – Opportunity and Challenge

“The diversity and complexity of the African continent offer the United States opportunities and challenges.” - U.S. 2010 National Security Strategy

A secure and stable Africa is no longer a luxury. The global economy and security interconnectedness have made Africa’s challenges the world’s challenges. In his National Security Strategy, President Obama asserts that we will refocus our priorities in Africa on economic growth; combating corruption while strengthening good governance and accountability; and improving African security and rule of law.⁶ Challenges abound in a security initiative of this nature, and they are no more apparent than in the Horn of Africa (HOA). Of the eight nations that make up the HOA Area of Responsibility, six rank in the top 25 in Fund for Peace’s Failed State Index. Sudan is #3 while Somalia earned the #1 ranking as most-failed state for the fourth straight year.⁷ HOA, which offers arguably the greatest regional challenge, numbers among its problems drought, famine, poverty and nearly nonexistent public services. HOA’s main malady is, however, lawlessness, i.e., disorder. Like New York City in the 1980’s, this great challenge also presents a great opportunity.

In Somalia, organizations like the United Nations, the United States Department of State, and the African Union continue to try

to bolster the Transitional Federal Government while Non-Governmental Organizations like UNICEF and USAID attempt to address food and drought issues.⁸ These conventional measures are necessary and effective to a degree, yet lawlessness and disorder remain. Could the countless entities charged with helping the development of Somalia and HOA be missing an opportunity to bring real change by addressing the power of context?

What About the Broken Window? – The Current Anti-piracy Effort

Piracy is an obvious “broken window” in the HOA region and its continuation and proliferation sends a powerful message that disorder is tolerated. The cities of Garowe and Bosaso are “pirate towns”⁹ where piracy is big business for some. It has also proved a way for utterly poor Somalis to make a living and to attain a level of prestige within their communities. However, the proliferation and tolerance of piracy threatens international freedom of the high seas and regionally reinforces the social context that, “anything goes” in Somalia and the HOA region. There are some obvious, current anti-piracy efforts, but are they leveraging the power of context?

In January 2014, the destroyer U.S.S. Kidd, steaming in the North Arabian Sea, answered a cryptic distress call from a merchant vessel that indicated pirates may have been on board. The U.S.S. Kidd intercepted the suspected pirated vessel, boarded it, arrested the pirates, and transferred them to a detention facility.¹⁰ The remote intercept location and the lengthy prosecution process ensures that

justice is neither swift nor publicized. The law enforcement action will remove a handful of pirates from the operating area but has no other effect on the context of the region. This scenario is common in the war on piracy that is being waged by three multinational task forces along with unilateral operations by at least five other nations.

- Combined Task Force ONE FIVE ONE (CTF-151) is a Multinational Maritime Task Force answering to Commander US Fifth Fleet/Commander US NAVCENT, and comprised of approximately eight ships, Navy and Coast Guard boarding teams, a sniper team, military police and medical personnel. It was a ship from CTF-151 that conducted the well-publicized sniper operations that eventually freed the captain of the U.S.-flagged Maersk Alabama.
- Operation Atalanta (OA) is a European Union endeavor composed of between five and eight vessels, three maritime patrol aircraft and Vessel Protection Detachment Teams tasked with responding to distress calls, boarding vessels and detaining pirates. Additionally, OA ships perform escort duty for convoys of merchant vessels in its area of responsibility (AOR).
- Operation Ocean Shield is NATO’s contribution to the anti-piracy effort with forces composed of between two and six ships and with a mission set that closely mirrors the other major operations in the AOR.

Established separately by their parent organizations, the three anti-piracy forces

have enacted an informal daily communications regimen to coordinate their efforts, but it lacks any formal relationship.¹¹ What they do share is a one-dimensional, maritime-based, reactive, and largely singular approach to combating pirates. The established pattern—respond to distress, board vessel, arrest pirates, and transfer to detention facility—is always accomplished in the remoteness of the high seas, and lacks any ability to leverage the success in changing the social context of Somalia and HOA.

The Real Lesson of the Subway

When contemplating the use of a context reset in Somalia and HOA, it bears returning to the New York City example. When addressing the “broken window” of turnstile jumping, the process was as important as the result. “The [NYTA] team would nab fare-beaters one by one, handcuff them, and leave them standing, in a daisy chain, on the platform until they had a ‘full catch.’ The idea was to signal, as publicly as possible, that the transit police were now serious about cracking down...”¹² The immediacy of perceived justice and the physical public display of order helped to define a new context. Additionally, they “...retrofitted a city bus and turned it into a rolling station house...”¹³ They reduced the processing time for turnstile jumpers to one hour. Most importantly, they broadcasted the new message of order. Restoring lawfulness to the subway system was an important and well-covered news story, and the targeted society became aware of a new “ordered” context. If context is to be leveraged in the repair of the piracy “broken window,” that

process will also be just as important as the result.

CJTF-HOA - Anti-piracy Stakeholder and Best Fit for a Joint Solution

Combined Joint Task Force – Horn of Africa conducts operations in the Combined Joint Operations Area to enhance partner nation capacity, promote regional stability, dissuade conflict, and protect US and coalition interests. –CJTF-HOA Mission Statement

Approximately 2,000 personnel representing all U.S. Services comprise Combined Joint Task Force Horn of Africa (CJTF-HOA) in Djibouti. It currently plays no part in anti-piracy operations despite the fact that the success or failure of its stated mission hinges on stability, security and lawfulness—all of which are undermined by the context that rampant piracy provides. As an entity charged with reversing the trend of instability and lawlessness in the region, CJTF-HOA has much to gain by repairing the “broken window” of piracy. As was the case in New York, timely response, swift processing, and, most of all, public display are the keys to successful context reset. Additionally, where most anti-piracy efforts to this point have been maritime-centric, CJTF-HOA can bring all services to bear in crafting a more comprehensive solution to a context reset in the Horn of Africa.

Timely Response

The time it takes for pirates to seize a targeted ship is about ten minutes.¹⁴ With a limited number of surface ships and maritime patrol aircraft and an area of operations encompassing 2.5 million square

miles, anti-piracy forces can rarely interdict vessels while under attack.¹⁵ Additionally, pirates plan their attacks and avoid subsequent detection by exploiting large gaps in anti-piracy coverage.

A more timely anti-piracy response and an increase in patrol area coverage can be achieved through the incorporation of Unmanned Aerial Vehicles (UAV). By employing a unit like the Air Force's 3rd Special Operations Squadron, CJTF-HOA can leverage the capability of an asset like the MQ-1 Predator to provide long-range, high endurance coverage of the area of operations. The persistent tracking of known and suspected pirate vessels can optimally enable positioning limited maritime assets. Escorted convoys will know ahead of time if suspected pirate vessels lay along their charted course, and independently operating commercial vessels can be fore-warned allowing them to employ industry recommended countermeasures. Well-publicized use of UAVs would provide some level of deterrence and more importantly would increase the perception of a "policed" region.

Swift Processing

With the anti-piracy battle taking place in international waters, citizenship and jurisdiction issues make prosecuting pirates a challenging and lengthy process. One solution to the challenge of prosecuting pirates in the 18th Century was the Royal Navy's establishment of vice-admiralty courts. These courts allowed those accused of piracy to be tried anywhere in the world by a court of seven naval officers.¹⁶ A similar solution today, while expedient,

would likely not stand up to international scrutiny.

While bringing back vice-admiralty courts is not a possibility, there may be another way to streamline the trial process. CTF-151 currently uses Coast Guard personnel as boarding teams in a law enforcement capacity. Adding Somali law enforcement personnel to the maritime force would allow Somali suspects to be arrested and processed by agents from their country. With the majority of arrests involving Somali citizens, this would help speed the due process for a large number of suspects. Being able to publicize "swift justice" would allow CJTF-HOA to reinforce the new context of order further.

Public Display

In restoring a sense of lawfulness, the most important element is making the new ordered context visible to the target population. In the subway example, the public display of arrested suspects very visibly sent the message that turnstile jumping is not tolerated, and media reports showing increased order amplified the message.

CJTF-HOA can use a coordinated Information Operations (IO) campaign in order to promulgate the desired lawful, ordered context. Adding deployable elements from a unit like the Army's 1st Information Operations Command (IOC) can bring to bear military professionals who comprehensively plan IO campaigns and operationally integrate IO capabilities. To capture images from pirate arrests, the Navy's Fleet Combat Camera Group can be

employed aboard ship while a unit like the Army's 55th Signal Company could document the ground transport and processing of suspected pirates. The goal of a comprehensive IO plan is to capture and publicize the entire anti-piracy process. The publication will include images and video from UAV monitoring, arrests aboard ship as well as the ground transport, trial and eventual jailing of convicted pirates. An effective IO campaign is the key to CJTF-HOA establishing a regional context of lawfulness.

A More Joint Approach

While bringing all multinational anti-piracy efforts together is a practical impossibility, bringing United States' efforts under the control of one command is possible and desirable. As piracy is a maritime crime, one should not overlook the maritime aspect of the solution. However, it is only one portion of what should be a more joint solution.

By expanding its use of joint forces, CJTF-HOA will become the anti-piracy actor of choice. JJTF-HOA mission expansion should begin with the placement of CTF-151 under its operational control. While CTF-151 has limited elements of other services, CJTF-HOA is truly joint and scalable. By leveraging other service capabilities and building on the corporate experience and maritime operational success of CTF-151, CJTF-HOA can use its anti-piracy campaign as the bedrock for meeting its stated mission goal of a stable and secure region.

Conclusion

There is more at stake in the battle to stamp out piracy than just the \$7B lost each year¹⁷ due to higher insurance and increased security and operating costs. As demonstrated in New York City, initiatives which reinforce the perception of order and lawfulness reset social context and change societal behavior. By eradicating piracy, an obvious regional "broken window" is fixed and its increases the chance of resetting the social context of Somalia, the Horn of Africa and thus the African continent. An effective and comprehensive anti-piracy battle must be waged in a joint manner. CJTF-HOA, with its joint makeup and stakeholder status in African security, is clearly the logical choice as lead in anti-piracy efforts and stands to gain the most from fixing the "broken window" of piracy.

Author Biography: Captain Steven Marinello, USN, is an Active Reservist and designated Naval Aviator currently serving as Commanding Officer of NR NATO ACT Detachment Atlanta, in Marietta, GA. He was commissioned in 1990 upon graduation from the United States Naval Academy where he earned a BS in Computer Science. Prior to his current assignment, CAPT Marinello served as Commanding Officer of Fleet Logistics Support Squadron Four Six in Fort Worth, TX. In his civilian life, he is an International 767 First Officer with Delta Airlines.

¹ George L. Kelling and James Q. Wilson, "Broken Windows: The Police and Neighborhood Safety," *The Atlantic*, March 1982, 1-2.

² Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference* (Boston: Little, Brown and Company, 2000), 133.

³ United States Department of Justice Federal Bureau of Investigation, "Uniform Crime Reporting Statistics," <http://bjs.ojp.usdoj.gov/ucrdata/Search/Crime/Local/RunCrimeJurisbyJurisLarge.cfm> (accessed November 15th, 2012).

⁴ United States Department of Justice Federal Bureau of Investigation, "Uniform Crime Reporting Statistics," <http://bjs.ojp.usdoj.gov/ucrdata/Search/Crime/State/RunCrimeStatebyState.cfm> (accessed November 15th, 2012).

⁵ Franklin E. Zimring, *The City That Became Safe: New York's Lessons for Urban Crime and its Control*. (New York: Oxford University Press, 2011) ix-x.

⁶ National Security Strategy, May 2010, 45.

⁷ Foreign Policy Magazine Online, "Failed States Index 2012 Edition: An Eighth Annual Collaboration Between Foreign Policy and Fund for Peace," Foreign Policy Magazine, http://www.foreignpolicy.com/failed_states_index_2012_interactive (accessed November 15th, 2012).

⁸ United States Department of State, "U. S. Response to the Humanitarian Crisis in the Horn of Africa," <http://www.state.gov/r/pa/prs/ps/2011/11/176580.htm>

⁹ NATO Parliamentary Assembly, Sub-Committee on Future Security and Defence Capabilities, *The Challenge of Piracy: International Response and NATO's Role: Draft Report*, prepared by Raymond Knops, 053 DSCFC 12 E, 23 March 2012, 4.

¹⁰ Robert Mackey and J. David Goodman, "U. S. Navy Rescues Iranians Held Hostage," *New York Times*, January 6th, 2012, World News Section, Online edition.

¹¹ European Union Naval Forces Website, "Counter-Piracy 'Big Three' Meet at Sea," European Union, <http://eunavfor.eu/2012/08/counter-piracy-big-three-meet-at-sea-2/> (accessed November 15th, 2012).

¹² Gladwell, *The Tipping Point*, 144.

¹³ Gladwell, *The Tipping Point*, 145.

¹⁴ NATO Parliamentary Assembly, *The Challenge of Piracy*, 12.

¹⁵ NATO Parliamentary Assembly, *The Challenge of Piracy*, 2.

¹⁶ Bruce Elleman et. al., Eds., *Piracy and Maritime Crime: Historical and Modern Case Studies*.

(Newport, Rhode Island, Naval War College Press, 2010), vi.

¹⁷ NATO Parliamentary Assembly, *The Challenge of Piracy*, 1.

Leveraging Generational Differences in a Joint Staff

By MAJ Catie Boylston, LCDR Jed Espiritu, LCDR Jason Ilete, and Maj Steve Wick

Today's private sector organizations may not feature generational gaps in their organizational hierarchy—however, in the U.S. Military these gaps are almost guaranteed. The Defense Officer Personnel Management Act of 1980 mandates specific promotion gates for each military officer grade, creating a reasonable expectation that senior military leadership (i.e., three- or four-star general or flag officers) will be senior in age, with junior field-grade ranks approximately two generations behind. These generational gaps create a unique challenge for the military in which leaders will almost always be older than subordinates.

Personnel in today's military fall within one of three generations: Baby Boomers (Boomers, born between 1946 and 1964), Generation X (X-ers, born between 1965 and 1981), and Generation Y (Millennials, born between 1982 and 2005).¹ Although there are generational differences between Boomers and X-ers, this gap is not as pronounced as between Boomers and Millennials. In addition to reduced age differences, Boomers and X-ers are often peers, having served at lower echelons in the military together with shared professional and personal experiences. Most notably, technological changes have had a similar impact and effect on these peer generations. Millennials, on the other hand, have developed exclusively within a

technologically advanced military at war. Although the common characteristics that describe a single generation may not necessarily apply to every individual in these categories, these descriptors do explain an overarching trend within each group. Given the generational differences in technological savviness and the vast differences in life and military experiences between the Boomers and Millennials, an overarching strategy for developing a working relationship between generations is necessary.

At a minimum, this strategy should address the potential challenges and advantages of these two generations working together in the staff environment—particularly on a dynamic, fast-paced, joint staff. The stark generational differences between Boomer General and Flag Officers and the rising class of Millennial Majors and Lieutenant Commanders (O-4s) poses potential challenges to the effectiveness of a joint staff. These challenges require a staff interaction strategy that maximizes the strengths of both generations while overcoming differences. Today's Joint staff leadership must explore the underlying generational perceptions and characteristics, and leverage expectations of both Boomers and Millennials to capitalize on generationally influenced strengths and differences within the challenging Joint staff environment.

Millennial O-4s on a Joint Staff

Successful integration of personnel into a joint staff demands developing specific skill sets. Business and professional skills, such

as time management, analytical and critical thinking, effective communication, and information technology, must be fused with interpersonal skills.² Some of these skills, such as information technology, are second-nature to Millennials; other skills, such as face-to-face communication, require further development for this generation. A Millennial working on a joint staff for the first time marks a definite transition from a tactical and operational perspective to a strategic outlook. This transition results not only in a different viewpoint but also in stark differences in working environment and required daily tasks and projects.

A joint staff is different from a lower echelon staff in that joint officers must not only work collaboratively with peers at the strategic level, but must consider interagency contributions and the integration of all instruments of national power. For example, the Joint Operational Planning Process requires listening to and trusting peers, building an understanding of the commander's intent, and transforming strategic guidance into a viable plan. In this environment, Millennials will, often for the first time, be tasked to interact with very senior officers and senior representatives from other agencies on a regular basis. Their unique skill sets hold the potential to make a significant impact on the operations and effectiveness of a joint staff.

Overview of the Millennial Generation

The Millennials have emerged as part of the newest generation of American culture—one shaped by specific events and circumstances

occurring during members' formative years and characterized by common perceptions, characteristics, expectations, and preferences. Empirical research, popular literature, and the press suggest members of this generation are overly self-confident, self-absorbed, and self-important and lack a sense of loyalty, patience, and a strong work ethic.³ These resources also assert, however, that this generation tends to be upbeat, confident, open to change, and optimistic about the future, having been raised under heavy supervision by extremely protective and praise-giving parents, coaches, and teachers.⁴ Millennials grew up under sheltered and exceptionally encouraging conditions. As such, Millennials tend to be extremely achievement-oriented and highly educated. In fact, they have been called the “most educated generation in American history.”⁵ Millennials are the most connected and tech savvy generation in U.S. history, making them both technology-oriented and team-oriented due to the widespread availability of collaborative and networking tools. Millennial O-4s, therefore, stand to leverage a skill set that hinges upon optimism, achievement, collaboration, and technology—a significant skill set that leadership must cultivate to maximize Millennials' staff contributions.

Members of the Millennial Generation also exhibit a specific set of expectations that may run counter to the cultural norms of the older military generation. For most of their lives, Millennial O-4s have had access to endless amounts of data. This access facilitates the expectation of similar easy

access to organizational strategic plans and other “need-to-know” information before leaders are ready to release these plans to the organization (i.e. while they are still being formulated). It has been reported that, “Regardless of their low-level positions, Millennial workers feel a need to be kept in the loop of information.”⁶ Based on this expectation of free access to information, Millennial O-4s may also expect and seek to be assigned to important projects soon after being assigned to a joint staff.⁷

Additionally, given constant praise during their upbringing, Millennials may expect more frequent, more affirming, and more positive feedback from their supervisors than has been normal in traditional military culture.⁸ Millennial O-4s may also seek greater work-life balance than previous generations since they consider work to be “a less significant part of their personal identities.”⁹ Military leaders must understand these preferences and expectations because the first Millennial promotion to O-4 will occur sometime between 2014 and 2015, and they soon will arrive as members of a joint staff.

Overview of the Boomer Generation

Fully comprehending the dynamic in the work environment also requires an understanding of the general characteristics of the Boomer Generation. Like the characteristics outlined for the Millennials, many Boomer stereotypes serve as a starting point for addressing the potential challenges and advantages inherent in the Millennial and Boomer relationship. As a frame of

reference, every four-star general or admiral currently serving in the United States Military is a part of the Boomer Generation. The literature consistently labels Boomers as hard-charging “workaholics” that will make any necessary sacrifices to advance their careers. Fueling this motivation is an optimistic and idealistic outlook on life.¹⁰ Boomers prefer face-to-face contact and communication, recognize the value of collaborative team work, and place a premium on developing relationships in the workplace.¹¹ Boomers build these relationships by making everyone in the organization feel like an important part of the team.

Military Boomers, in particular, have been heavily influenced by three significant military states of tension: the Cold War, Operation Desert Shield/Storm, and Operation Iraqi Freedom. They understand the effects, impacts, and frustrations military conflict can have on the younger generations. Boomers expect to be consulted for their opinions and are likely to offer their intent, mindset, and strategy to alleviate some of the frustrations stemming from the joint planning process. Finally, although the Boomer works at the strategic level of the organization, it is likely they will want to monitor the planning process and track the objectives and measures toward achievement of desired end states closely. The characteristics of both generations are summarized in the Table below.

	Millennials	Boomers
Perceptions	<ul style="list-style-type: none"> • Overly self-confident, self-absorbed, self-important • Lack of loyalty, patience, work ethic 	<ul style="list-style-type: none"> • Willing to make any sacrifice for career
Characteristics	<ul style="list-style-type: none"> • Upbeat, confident, open to change, optimistic about future • Extremely achievement-oriented, highly educated • Technology- and team-oriented 	<ul style="list-style-type: none"> • Optimistic, idealistic outlook • Value collaborative team work, work relationships
Expectations & Preferences	<ul style="list-style-type: none"> • Free access to “need-to-know” information • Assignment to important projects soon after arrival • More frequent, affirming, positive feedback 	<ul style="list-style-type: none"> • Face-to-face contact/communication • Consulted for opinions • Close coordination on progress of projects

Generational Comparison: Millennials and Boomers

Areas of Opportunity

Analysis of the generational traits of Boomers and Millennials yields areas of opportunity that may lead to enabling advantages for a joint staff, if identified and harnessed. For example, the contemporary environment is marked by the immense growth and widespread availability of information. The technological savviness of the Millennials represents this generation’s most evident and greatest force multiplier. As pointed out by a private sector CEO, “They’re enormous consumers of information and can locate details about anything within seconds.”¹² This capacity could enable rapid processing of information for planning and other staff activities.

Boomers must harness Millennial O-4s’ technological capabilities by fostering a collaborative staff environment, understanding that both generations value teamwork as an effective means to accomplish strategic tasks. The Millennials also demonstrate a capacity to learn rapidly and the propensity for engaging in continuous learning and self-improvement. Boomers should recognize these Millennial traits as motivating factors and offer incentives such as additional educational opportunities. In return, the Joint staff will develop and benefit from a highly educated workforce.

Although the Millennials are an independent-minded and determined generation, their attachment to their parents represents another potentially advantageous trait. With a minimum of 17 years difference from the Millennial Generation, Boomers should create an environment for parental-like mentoring. This influence empowers the commander to shape the staff and ensure unity of effort. Boomers can focus on their shared optimistic views of both the global environment and the future, creating a connection with the younger generation. This interaction can ultimately produce a positive undertone to the overall direction of the staff.

Areas of Conflict

While opportunities exist because of the generational gap between Millennials and Boomers, potential risks may arise if Boomers are not cognizant of or do not address this gap. A joint staff represents a

very demanding environment and may require long duty hours, particularly in events such as crisis action planning. The Boomers expect to work protracted hours, making necessary sacrifices to ensure task or mission completion. Boomers readily conform to the schedules of the organization, whereas Millennials desire the flexibility to adjust schedules to accommodate their personal lives.¹³ A potential unwillingness of Millennials to sacrifice their work-life balance may lead to conflict. Although Millennials may not necessarily fail to accomplish their given task, their motivation may wane if sacrificing this balance becomes the norm, and they lose the flexibility they so desire.

The concepts of work and reward differ between these two generations. Boomers ascribe to the notion that by working hard they demonstrate their worth to the organization and, consequently, expect significant tasks. Millennials, on the other hand, believe they intrinsically add worth to the organization and immediately desire the assignment of significant tasks.¹⁴ Boomers find building a life-long career as a primary motivator while Millennials seek flexibility to accommodate their need for work-life balance.¹⁵

At this point in their careers, Boomers' focus remains primarily at the strategic level; however, due to their insatiable thirst for control and information, they tend to become involved in the operational details. Millennials, as more junior officers, tend to desire an autonomous work environment—one in which they are free to accomplish

their assigned tasks without interference or micromanagement. As a result of these opposing desires, Millennials may become discouraged or frustrated by perceived micro-management from the senior leader.

The Joint Officer Handbook Staffing and Action Guide (2012) identifies collaboration within a joint staff as a force multiplier to enhance the planning and staffing process. However, authority is required for one staff to reach laterally and directly liaise with another. Millennials, through their personal or professional relationships, are likely to think “outside the box” and reach directly to peers in another staff when needed to complete a task. It is possible that the commander may view this as a sign of disloyalty or a breach of authority.¹⁶ Additionally, this crossing of boundaries may cause friction between staffs if the appropriate staffing process is not followed.

Based on their respective personal experiences in the military—from kinetic operations to humanitarian operations—Millennials and Boomers may have differing opinions concerning the necessity of military participation in future regional or global conflicts. Boomers, shaped by the Cold War, will likely have the predisposition to take military action in conflict-ridden areas. Shaped by the ongoing and prolonged conflict in the Middle East, however, Millennials less likely will desire military engagement due to battle fatigue from a career deeply involved in constant war. This difference of opinion may cause Millennials to feel frustration and even disenfranchisement. Millennials in the

military will undoubtedly follow orders and maintain the standard of military bearing; however, lack of understanding of their perspective could lead to severe degradation of productivity.

Recommendations

Senior military commanders can leverage several methods to exploit the advantages of the differences between the Boomer and Millennial generations. These methods can also mitigate potential areas of conflict at the same time:

- ***Create two-way generational mentoring programs.*** Boomers and the Millennials share an optimistic view of the global environment and are confident about their future.¹⁷ A shared positive outlook, combined with the natural parent/child-like relationship (based solely on age differences), presents an opportunity for commanders to shape this younger generation for future leadership roles. Additionally, generational mentorship represents an avenue for senior leaders to share their vision and intent as well as to discuss the role and relevance of the U.S. military on the global stage.

Boomer mentors and Millennial mentees, in particular, will likely embrace this opportunity as a two-way growth experience across their wide generational gap. The greatest challenge will be carving out the time to establish regular mentoring sessions to maximize the continuity and effectiveness of the program.

- ***Offer advanced educational and training opportunities.*** Millennials are developing as possibly the most-educated generation in history. Access to private sector learning continues to expand, and advanced degrees and training are more abundant than ever. Commanders need to recognize that this younger generation particularly yearns for knowledge and growth. Offering educational opportunities to joint staffs that are outside of the standard professional military education training (such as certifications from private universities or attendance at seminars focused on professional skills development) represents an incentive that Millennials will value.

Another option for commanders is to provide personnel dedicated time during working hours to accomplish non-resident (online) training. This training provides commanders the ability to maintain a workforce that is at the leading edge of technology, collaboration, and other advances in today's rapidly changing workplace.

- ***Provide opportunities to obtain a broad range of skills.*** Millennials desire the thrill that comes with changing jobs. Joint staff assignments are typically at least 36 months, allowing ample opportunity for reassignment to another directorate and therefore preventing a sense of stagnation. After successfully demonstrating their abilities, Millennials (and the rest of a joint staff) should be given the chance to take on more

responsibility and expand their exposure to more strategic military issues. Increased opportunities will help foster a feeling of belonging to the organization, targeting the Millennial O-4's loyalty and productivity.

- ***Establish a transparent, collaborative culture and encourage (require) Millennials to participate, innovate, and communicate.*** A Millennial that feels involved will likely be a more effective team member. They will provide new perspectives within the collaborative environment, and be more committed to their supervisors than members from past generations.¹⁸ Collaboration with peers and the chain of command will help shape Millennials to become more strategic thinkers, providing them with a perspective that cannot be gained by reading doctrine or textbooks. This collaborative environment will also enable joint staffs to integrate fresh perspectives from the entire workforce into finding new solutions to old problems.

- ***Reward exceptional performance with additional time off.*** The demands of a joint staff are such that it is nearly impossible to accomplish every required task in the "normal" hours of the business day. The demand for after-hours work will certainly present a significant barrier to high performance if there is not a compensation system in place. Admittedly, the military is a volunteer force, and military members are professionals that will do what is

necessary to succeed—Millennials are no different. Millennials, however, value their personal time to a greater degree than past generations. Fatigue from the past ten years of conflict, exacerbated by a demanding staff job, must be acknowledged. Although quarterly awards and public acknowledgement are excellent incentives, awarding additional time off—time that can be spent with family and friends—will be an effective means of rewarding the exceptional performance of a joint staff, particularly its Millennial members.¹⁹

Conclusion

The generational gap between Boomers and Millennials is a significant consideration for today's military. A symbiotic and efficient working relationship between these two generations in particular is critical to ensure a cohesive force that can effectively accomplish the mission. To effectively maximize the potential of the incoming Millennial O-4s, it is important to recognize and foster their need to be included in the problem solving process and to acknowledge their accomplishments. Commanders must allow them the flexibility to balance outside interests and family with the military mission. Although the list of recommendations is not exhaustive, it represents a starting point for discussion on the future of staff dynamics. Boomers now have the opportunity to create a modern and effective command structure by recognizing the Millennials' many positive attributes and

effectively leveraging them within the current joint environment.

Team Biographies

Major Catie Boylston, USA. MAJ Boylston is currently en route to serve in the J2 section at U.S. Central Command (CENTCOM). She was commissioned through ROTC at the University of Tennessee. MAJ Boylston earned a BA in Political Science and an MSSSI in Strategic Intelligence from the National Intelligence University. In addition, she attended the Army's Command and General Staff College in 2013. Prior to her current assignment, MAJ Boylston served as the SIGINT Collection Chief for US Forces Korea J2.

LCDR Jed Espiritu, USN. LCDR Espiritu is currently a Personnel Planner at Headquarters, U.S. Africa Command. He was commissioned through the U.S. Naval Academy in Annapolis, MD. He earned a B.S. degree in Systems Engineering in 1998 and a M.B.A. in Financial Management from the Naval Postgraduate School in 2004. Prior to his current assignment, LCDR Espiritu served as the Officer in Charge of Personnel Support Detachment Yokosuka, Japan.

LCDR Jason Iletto, SC, USN. LCDR Iletto is currently an Operations Research Analyst at the Joint Distribution Process Analysis Center, US Transportation Command. He was commissioned through Officer Candidate School, Pensacola, FL in 2003. He earned a B.S. degree in Physics from Southern Adventist University in 2003 and a M.S. in Operations Research from the Naval Postgraduate School in 2011. Prior to his current assignment, LCDR Iletto served as Stock Control Officer and Aviation Stores Officer onboard USS BATAAN (LHD 5).

Major Steve Wick, USAF. Major Wick is currently a Joint Logistics Officer and Battle Watch Captain at the US Navy Military Sealift Command, Washington DC. He was commissioned through the United States Air Force Academy, earning a BS in Operations Research in 2001. In 2013, he also earned a MS in Logistics Management from the Air Force Institute of Technology. Prior to his current assignment, Maj Wick was an Intermediate Development Education

Student in the Advanced Study of Air Mobility Program.

¹ No consensus exists in the literature as to the specific date ranges that each generation encompasses.

² Joint Staff J-7 Joint Education & Training Directorate, *Joint Officer Handbook Staffing and Action Guide*, 3rd Ed., August 2012.

³ Karen K. Myers and Kamyab Sadaghiani, "Millennials in the Workplace: A Communication Perspective on Millennials' Organizational Relationships and Performance," *Journal of Business Psychology* 25 (2010), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868990/pdf/10869_2010_Article_9172.pdf>

⁴ Jessica Brack, "Maximizing Millennials in the Workplace." (University of North Carolina Kenan-Flagler Business School, 2012), available at <<http://www.kenan-flagler.unc.edu/executive-development/custom-programs/~media/DF1C11C056874DDA8097271A1ED48662.ashx>>; Headquarters, U.S. Strategic Command (USSTRATCOM), "Generational Make Up of USSTRATCOM, 2013 and 2020(+)," USSTRATCOM internal paper; Neil Howe and William Strauss, "The Next 20 Years: How Customer and Workforce Attitudes Will Evolve," *Harvard Business Review*, July-August 2007; Darlene E. Stafford and Henry S. Griffis, "A Review of Millennial Generation Characteristics and Military Workforce Implications," CNA Research Memorandum, May 2008, available at <<http://www.cna.org/sites/default/files/research/D0018211.A1.pdf>>.

⁵ USSTRATCOM, "Generational Make Up," 1.

⁶ Myers and Sadaghiani, "Millennials in the Workplace," 229.

⁷ Ibid.

⁸ Brack, "Maximizing Millennials in the Workplace"; Myers and Sadaghiani, "Millennials in the Workplace."

⁹ Myers and Sadaghiani, "Millennials in the Workplace."

¹⁰ Cathy Trower, "Traditionalists, Boomers, Xers, and Millennials: Giving and Getting the Mentoring You Want," (presented at Brown University, October 16, 2009), available at <<http://www.brown.edu/Administration/Provost/Advance/Trower%20Generations%20and%20Mentoring.pdf>>

-
- ¹¹ Mary Mack, “4 Generations in the Workplace,” (presented at TASC Conference, February, 2010), available at <<http://www.clemson.edu/t3s/workshop/2010/TASC%20Pres/4%20Generations%20In%20Workplace%20TASC%202010.pdf>>
- ¹² Kathryn Tyler, “The Tethered Generation,” *HR Magazine*, May 2007, 52(5), available at <<http://www.shrm.org/Publications/hrmagazine/EditorialContent/Pages/0507cover.aspx>>
- ¹³ USSTRATCOM, “Generational Make Up.”
- ¹⁴ Myers and Sadaghiani, “Millennials in the Workplace.”
- ¹⁵ Ibid.
- ¹⁶ Brack, “Maximizing Millennials in the Workplace.”
- ¹⁷ Howe and Strauss, “The Next 20 Years.”
- ¹⁸ Myers and Sadaghiani, “Millennials in the Workplace.”
- ¹⁹ Brack, “Maximizing Millennials in the Workplace.”

COLDCOM: New Ground for a Cold War?

By LTC Bart Hensler, Maj Benjamin Mather, and LtCdr David Palilonis

Regardless of the range of opinions concerning the effects of global warming, the Arctic ice cap is receding. This recession allows increased maritime access through the Northwest Passage and Northern Sea Route (NSR), and will result in dramatically shorter shipping lanes and access to the Arctic's vast natural resources. This access was previously unattainable due to persistent ice cover. Varied assessments exist, but most agree that the Arctic possesses upwards of 25 to 30 percent of the world's undiscovered natural energy resources, along with vast mineral deposits. There is potential that significant sums of these resources reside in unclaimed or international waters.

The United States is competing with actors whose aggressive Arctic strategies, politics, and ambitions perhaps run contrary to those of the United States and its allies.

Unfortunately, the United States' national strategy for the Arctic fails to articulate tangible actions for the Joint Force. DoD recently published its own Arctic Strategy, but it too fails to identify specific actions to focus military efforts.

Time remains a critical factor, and the United States already is behind the competition in developing a cogent strategy. To regain the strategic initiative in the Arctic, the United States must take immediate action that increases its capability

and capacity to project power, assure access, respond to crises, and secure claims to its natural resources.

Covering almost eight million square miles and touching the territories of eight countries (United States, Russia, Canada, Norway, Denmark, Sweden, Finland, and Iceland) the Arctic is both vast and sparsely populated. Although the Arctic covers almost six percent of the earth's surface, it is home to only four million people of which one-third are indigenous, and half are Russian nationals.¹ And yet, this desolate expanse is rich in natural resources. Per the U.S. Geological Survey's (USGS) 2008 Circum-Arctic Resource Appraisal, the Arctic (as defined by the USGS as north of the Arctic Circle) potentially contains "90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids." Of this amount, approximately 84 percent occurs in the offshore area.² This offshore area is now more accessible than ever due to the receding ice cap.

Despite the obvious value of the Arctic, however, the United States lacks the capability in the Arctic to rival other nations' ambitions, territorial claims, or potential incursions. Competition in the Arctic is not dissimilar to any other geographic area, and although the harsh climate and isolation perhaps limits the number of actors, economic and political ambitions are still driving a rapidly increasing level of competition. Both Russia and China have Arctic ambitions that affect the political and military environment.

The U.S. limitation to projecting enduring power in the region is evidenced by a lack of ice-protected vessels and strategic ports within the Arctic Circle. Presently, military assets projected into the region must originate from either United States Pacific Command (USPACOM) or United States European Command (USEUCOM), and either presence would be transient at best, without the ability to maintain a sustained above-surface maritime or air presence during a response scenario.

Basing and power projection aside, the United States also lacks the ability to provide enduring access to the Arctic during months where ice covers most of the region. Although the NSR currently only is navigable during the summer months, some research suggests that the route may remain open year-round by 2040.³ Russia possesses a large icebreaker fleet; most significant, the fleet is nuclear powered enabling them to break through Arctic ice and maintain critical SLOCs for Russian interests in the Arctic year round.⁴ The United States possesses no such capability, fielding a total of three icebreakers, only two of which are operational.

Modern-age icebreakers nominally cost about one billion dollars apiece—no small sum in an era of fiscal austerity. Further complicating this issue is the risk associated with relying so greatly on partner nations in the region to provide the required resources to access our Arctic claims. The United States' strongest partner in the Arctic, Canada, has its own national agenda, and claims territorial space up to the geographic

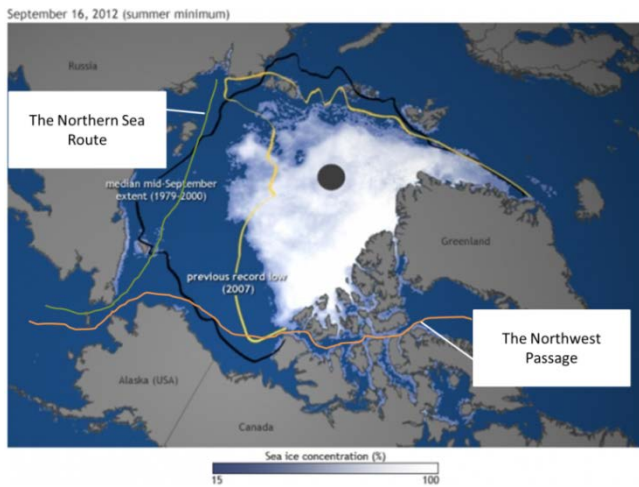
North Pole, a contestable claim from the U.S. perspective. While Canada enjoys much greater access and a viable claim to a significant amount of territory, The U.S. should only expect as much help as Canada is willing to provide without potentially infringing upon their national interests.

Altogether this lack of basing and access assets compounds the problem of response to an Arctic military contingency or manmade disaster such as a major oil spill from a tanker or drilling platform. Military conflict aside—an unlikely near-term issue—exploration and exploitation of natural resources in the Arctic by commercial actors presents a unique challenge. As the proliferation of cargo ships, commercial fishing vessels, and energy exploration entities descend on the region, it creates an imbalance in response capabilities. Search and rescue, oil spills, ships stuck in ice—the list grows and there are insufficient mechanisms in place to address them.

Strategic Context

In 2012, Arctic sea ice receded the farthest in recorded history. In September of that year, the 5.4 million square mile Arctic Ocean was covered with an Arctic ice cap of 1.3 million square miles. This cap was 18 percent smaller than the previous low set in 2007 and nearly 50 percent less than the long-term average of around 2.7 million square miles measured from 1979-2000.⁵ The map below is from the climate.gov website using data from the NOAA Environmental Visualization Lab and displays ice concentration on September 16,

2012 compared to the previous record (yellow line) and the previous mid-September median extent (black line).⁶ This smaller ice cap results in a larger



accessible sea area, and means more than increased access to natural resources. It also means more access for countries and their merchant fleets to transit through the Arctic. The map indicates routes for the Northern Sea Route (green line) over Russia and the Northwest Passage (orange line) over Canada. These passages are a boon to global shippers based in Asia and Europe, and also allow countries such as Russia and China to quickly and efficiently position military forces around the globe. The Northwest Passage cuts 2000 NM and two weeks from the normal transit through the Panama Canal. The NSR cuts the nominal distance between Yokohama and Rotterdam by 4700 NM, which at a speed of 20 knots, saves at least a week from what is typically a three-week transit.⁷ If current trends in Arctic sea ice continue, the Arctic could be almost completely ice-free in the summer by 2040, allowing almost any mariner to cross the Arctic.⁸

Recognizing the potential of the region even before Arctic ice recession was realized, the Ottawa Declaration of 1996 formed an Arctic Council.⁹ The Arctic Council is made up of the eight Arctic countries as permanent members and six international organizations representing indigenous groups as permanent (non-voting) participants. In addition, the council has as observers 12 countries, nine international organizations, and 11 non-governmental organizations. The council's mandate includes "common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic..." Noticeably however, the Arctic Council's mission does not include "matters related to military security."¹⁰

The Arctic Council has no regulatory or enforcement authority but rather relies on member states to enforce its decisions; such as with its recent cooperation agreement on Arctic search and rescue operations.¹¹ Canada is currently the chair of the Arctic Council, but in May of 2015 the United States will assume the 2-year chairmanship which is a potential opportunity to address U.S. concerns.

Arctic Actors of Interest

As a founding member of the Arctic Council, Russia possesses the greatest amount of Arctic coastline and therefore lays claim to a significant amount of resources. In an effort to maintain dominance of its assessed claims, Russia cleverly relies on a combination of policy

and diplomacy. Russia deems a series of straits along the NSR as internal waters, giving her the power to control access and transit of these waters, exempt from typical free passage in international waters. Russia further lays claim to territory outside of its Exclusive Economic Zone (EEZ), relying on the United Nations Convention on the Law of the Sea (UNCLOS). The UNCLOS is an international convention that codifies customary international law of the sea into a treaty regime. Over 160 nations signed onto the treaty that guarantees 200 nautical mile EEZs to littoral countries and delineates rules for claiming additional undersea territory by extension of the continental shelf. UNCLOS Article 234 states that nations may deny passage of foreign vessels that fail to conform to the owning nation's prescribed maritime regulations and enables a coastal state to apply temporary and non-discriminatory requirements on vessels operating in an ice-covered EEZ for the sake of environmental protection.¹²

Empowered by UNCLOS Article 234, Russia wields tremendous influence in its claimed waters, requiring significant economic compensation, advanced notice, ice-breaker support, and other administrative requirements that play to Russia's favor.¹³ The outcome of this policy is Russia's significant ability to influence – or restrict – use of its waterways. However, Russia's heavy-handed approach is not without its shortfalls. The key terminology in UNCLOS Article 234 is the provision of an ice-covered EEZ. Climate change's impacts to the amount of ice in the Arctic, i.e., rolling it back, hinders Russia's ability to

continue relying on its melting claim. Without the ice, Russia would have no lawful right to deny free passage of vessels transiting the NSR. Not to be caught off guard, Russia is quickly amending legislation and implementing new policy, while also still relying on a Soviet Union-era claim made in 1926 that identified an area of the Arctic up to the North Pole. Not surprisingly, the identified area is a vast portion of the Arctic that nominally would not pass the common-sense test of belonging exclusively to the Russians.¹⁴ If successful in its efforts to claim additional area beyond its EEZ, Russia could increase its control of the Arctic almost exponentially, securing resource-rich deposits while dictating terms of passage for other nations.

Complementing their diplomatic approach, Russia is attempting to build a credible military deterrence that could challenge would-be actors in the Arctic. Strategically, Russia announced a refocusing of military efforts in the summer of 2008. At that time, Russia's Security Council adopted the "Principles of State Policy of the Russian Federation in the Arctic up to 2020 and Beyond," which outlines the country's strategy in the region, including the deployment of military, border, and coastal guard units to bolster security in the region.¹⁵ In September 2013, the Russian Navy reported that a North Fleet unit led by the guided-missile cruiser *Peter the Great* arrived at the Novosibirsk Islands archipelago, and claimed that supporting airfields at the facility would be upgraded to support the largest Russian transport aircraft.¹⁶ The latest development is the

announcement that Russia is establishing a new headquarters designed to bring all major Arctic forces under a single unified command. The report states that the new command is comprised of the Northern Fleet, Arctic warfare units, and air force and air defense units. Referred to as the Northern Fleet-Unified Strategic Command, the HQ “will be responsible for protecting Russia’s Arctic shipping and fishing, oil and gas fields on the Arctic shelf, and the country’s national borders in the north.”¹⁷

China’s Arctic ambitions differ from Russia’s, mainly because China does not have a geographic connection to the Arctic and therefore no territorial claims. China’s strategic interests in the Arctic are centered on economics and access. China’s growing economy requires energy to continue stoking its growth, and with an estimated 25 percent of the world’s undiscovered energy resources potentially in the Arctic, China has a national interest in securing access to the region.¹⁸ Beijing has security concerns over their sea lines of communication with Europe and the Middle East. China depends on oil and gas shipments from the Middle East and volatile sea lanes like the Malacca Strait and territorial disputes in the South China Sea add to the concern. Though an Arctic passage does little to solve security concerns over energy shipments from the Middle East, it provides a much shorter route for China’s exports to Europe. It is estimated that the maritime route between China and Europe would be reduced by almost 40 percent using the NSR.¹⁹ A Chinese university academic surmises that Chinese shipping companies could save an

estimated \$60 to \$120 billion annually in costs by using the NSR to reach ports in Europe.²⁰

In May 2013, China earned admission to the Arctic Council as an Observer State, along with India, Italy, Japan, Singapore and South Korea. This inclusion as an observer is a tremendous accomplishment for China, who views admittance as an observer as a viable means of influencing the Council’s permanent members. Though Observer States are not voting members of the council, admittance constitutes recognition of China’s economic importance in the world.²¹ Whether Russia and China can agree to a limited tactical partnership in the near future may determine the course ahead. Russia needs investment and markets for its Arctic energy sources; China has money and requires more energy. Economic principles nominally dictate that the two could reach a mutually beneficial common ground.

Representing our strongest ally in the region, Canada published their Northern Strategy in 2009 articulating four pillars: Exercising Arctic Sovereignty; Promoting Social and Economic Development; Protecting the Arctic’s Environmental Heritage; and Improving and Devolving Governance in Northern Territories.²² The Canadian government’s most important concern is their sovereignty as evidenced by the increased funding they are providing to their Coast Guard and military to operate in the north. As an example, the Canadian Government has ramped up exercises in the far north with the creation in 2007 of the annual Operation Nanook. The 2012

iteration focused on exercising Canadian sovereignty by tracking and interdicting a vessel of interest in the Hudson Bay.²³ Although Canada and the United States are closely allied in the region, there is one major disagreement. The United States, along with the European Union and other nations, sees the Northwest Passage as an international strait, meaning any nation can sail through under the rite of Innocent Passage without seeking Canada's permission. Canada deems the Northwest Passage as internal waters that they control. Canada and the international community have "agreed to disagree" on this point.²⁴

Strategic Guidance

With an understanding of the importance of the Arctic region and the many challenges the U.S. faces, U.S. policy and strategy may be examined. National Security Presidential Directive 66 (NSPD-66), released in January 2009, clearly outlines the importance of the Arctic region. It identifies national security interests in the Arctic to include "missile defense and early warning; deployment of sea and air systems for strategic sealift, strategic deterrence, maritime presence, and maritime security operations; and ensuring freedom of navigation and overflight."²⁵

The NSPD also identifies freedom of the seas as a top priority and warns of a vulnerability to terrorism and criminal acts. NSPD-66 directs that Department of State (DoS), DoD and Department of Homeland Security (DHS) shall: "develop greater capabilities and capacity, as necessary, to protect United States air, land, and sea

borders in the Arctic region" and to "project a sovereign United States maritime presence in the Arctic in support of essential United States interests."²⁶ Additionally, regarding safe, secure, and reliable navigation as well as protecting maritime commerce, DoS, DoD and DHS shall "determine basing and logistics support requirements, including necessary airlift and icebreaking capabilities" corresponding to the current level of human activity.

In terms of Grand Strategy, little can be found in the 2010 National Security Strategy or the Defense Strategy within the 2014 Quadrennial Defense Review beyond general security concepts that are applicable to any region. There is, however, a National Strategy for the Arctic Region (NSAR) that was released in May of 2013. It soon was followed by an associated Implementation Plan for the National Strategy for the Arctic Region in January of 2014. These documents describe a strategy following three main lines of effort (LOEs): Advance United States Security Interests, Pursue Responsible Arctic Region Stewardship, and Strengthen International Cooperation.²⁷ Component objectives under NSAR's "security interests" LOE include the following: Evolve Arctic Infrastructure and Strategic Capabilities, Enhance Arctic Domain Awareness, Preserve Arctic Region Freedom of the Seas, and Provide for Future U.S. Energy Security.²⁸

Surprisingly, DoD is not the lead for a single one of the objectives or their myriad sub-components. In fact, the only component objective for which DoD has a lead role

involves developing a Framework of Observations and Modeling to Support Forecasting and Prediction of Sea Ice, under Increase Understanding of the Arctic through Scientific Research and Traditional Knowledge beneath the second LOE of Pursue Responsible Arctic Region Stewardship.²⁹ DoD appears to have the lead role simply because the sub-objective depends on the NASA's launching of the ICESat-2 (Ice, Cloud, and Land Elevation) satellite in early 2016.³⁰ Otherwise, DoD has no real part. With this in mind, it is clear the author of these two plans was not considering the actual strategic value of the Arctic region from a national *defense* perspective.

Between the release of the NSAR and its associated Implementation Plan, DoD published its own Arctic Strategy in November of 2013. The document defines DoD's desired end-state to be "a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is protected, and nations work cooperatively to address challenges,"³¹ but still falls well short of direction similar to that given by NSPD-66. Additionally, the eight "ways" identified in this strategy suggest little to no additional "means" to achieve this end state. The strategy uses the "leverage existing capabilities" statement that has become so familiar in the current fiscally-constrained environment and is largely about maintaining the status quo through already existing exercises and providing support "as needed." No specific objectives to better equip the military for increased Arctic operations were identified short of the

possibility of "a new hanger" if needed. While a whole-of-government approach is critical to employing all instruments of national power, it is clear that partnering is becoming DoD's alternative to congressional funding. It seems that the strategy is simply a reflection of the current fiscal environment where an explicit call for increased spending would likely run counter to an already established understanding that funds will not be approved. DoD's strategy admits "fiscal constraints may delay or deny needed investment in Arctic capabilities, and may curtail Arctic training and operations."³² Despite abundant evidence supporting the rapidly changing Arctic environment, and unquestionable matters of strategic importance within the region, recent U.S. policy lacks a definitive or fiscally-supported plan to "project a sovereign United States maritime presence in the Arctic"³³ in the foreseeable future.

Recommendations

If the United States is to secure its role as a dominant presence in the Arctic region, there are many tasks that need to be accomplished. First and foremost, strategic guidance must be revised to reflect a more proactive and funded role in developing our Arctic capabilities, thus bringing it in line with NSPD-66. Although DoD continues to experience significant cuts to the budget as we draw down from Middle East engagements, lawmakers must see the Arctic region as an entirely separate and distinct issue. While the direction to "leverage existing capabilities" is reasonable to an extent, the simple fact that the United States

does not possess an Arctic capable force cannot be ignored and demands appropriate funding—the bulk of which must initially take place within the DHS.

The Coast Guard's 2011 High Latitude study determined that six heavy and four medium (sized) icebreakers would be needed to fulfill its statutory mission requirements as well as the Navy's presence requirements in the Polar Regions.³⁴ These assets are critical to the nation's ability to operate independently throughout the region. While the U.S. has long enjoyed a strong relationship with Canada, particularly through our shared border and complete integration of NORAD, it cannot depend so strongly upon their Arctic capable ships to bridge this critical gap in capability as they too are limited. Surprisingly, Canada has only six ice-breaking capable ships³⁵ to cover their more than 125,000 miles of coastline, sufficiently monopolizing their time. If the U.S. were to have the capability to operate independently off its Arctic coast, let alone across the Arctic region, it needs the ships. Additionally, as the role of power projection goes beyond that of an ice breaker, the U.S. needs to invest in at least a pair of hull-reinforced destroyers or cruisers that will allow the Navy to project a dominant *above-surface* presence in the Arctic. With a pair of rapidly aging icebreakers and shipbuilding time taking up to ten years. The U.S. is already jeopardizing its ability to operate beyond 2020.

Besides the obvious matter of equipment, the issue of infrastructure must also be

addressed. The United States needs to develop a deep water port that allows direct access to the Arctic. While such a port would obviously provide critical support to our access and power projection, it would also open the door to future resource exploitation as an invaluable resupply hub for the entire region. Additionally, a stable access port in the Arctic would greatly enhance our ability to conduct search and rescue missions, respond to and support disaster response, and maintain future navigational assets in the region. While efforts are already underway to identify potential locations for deep water ports in Alaska, with Nome & Port Clarence as top contenders,³⁶ the United States is still nowhere near budgeting for such construction.

Despite the current fiscally constrained environment, the United States must budget for this project so that construction can begin the moment a suitable location is selected. Similar to ships, construction can take a very long time. In the case of infrastructure, however, the U.S. does not have the luxury of off-site construction with a favorable weather environment. Ports obviously must be constructed in place, and with Alaskan weather allowing only a few construction-friendly months per year, this is a daunting project. A planning charter in 2012 estimated such a project to be a 20-plus year endeavor.³⁷ Already missing the mark for 2025 operations, construction would have to start soon to be ready as a viable port before 2035.

Command, control, and cooperation is another issue that must be addressed promptly. The current U.S. military structure for the Arctic is fragmented, including three separate Geographic Combatant Commands (GCCs) involved in Arctic affairs. While the Unified Command Plan (UCP) assigned primary responsibility for the Arctic to CDRUSNORTHCOM since 2011,³⁸ the U.S. needs to consider formalizing control into either a consolidated sub-unified command under USNORTHCOM or into a Combatant Command of its own. Why not COLDCOM? Such an entity would absorb NORTHCOM's JTF-Alaska, PACOM's Alaska Command (both are already commanded by the same officer), and functions of EUCOM's Arctic Security Forces Round Table. Given the role the Coast Guard plays in the region, serious consideration should be made to having a Coast Guard officer as the Commander or Deputy of this command at all times. Consolidation of Arctic military responsibilities would allow the United States to focus on the region and coordinate DoD efforts in a whole-of-government approach to regional stewardship. Such focus would greatly reduce internal competition for resources and enable future international mil-to-mil partnering and cooperation under a true, single military spokesman for the region. This consolidation could not come at a better time as the United States will also be assuming from Canada the 2-year Chairmanship of the Arctic Council in May of 2015.

Lastly, and in preparation for this Arctic-states agreed upon leadership role, the United States must also identify and resolve internal political barriers to the signing of the UNCLOS. While doing so will have the obvious benefit of finally enabling the United States to claim sovereignty over portions of Alaska's resource-laden continental shelf, it will also better prepare the U.S. for leading the Arctic Council, by the use of already-established international agreements, in this rapidly emerging northern frontier. UNCLOS has been supported by the last four U.S. administrations, the Joint Chiefs of Staff, business groups, multinational corporations, and leading environmentalists. Ratification would give the United States a seat at the table to decide important uses of the ocean environment, including oil and gas exploration on the extended continental shelf in the Arctic.³⁹

The United States must take immediate action and address its strategic shortfalls in the Arctic region. Canada, Russia and China are all moving forward to achieve their national interests while the United States sacrifices readiness and capability. The lack of a coherent strategy undermines the United States' ability to prepare for the benefits of increased economic opportunity and the risk of ceding the strategic initiative to other actors whose ambitions are not nested with our own. Power projection, basing, and access must be, to achieve unity of effort, the hallmark of a thorough strategy that guarantees United States participation in a contested area of growing importance.

Team Biographies

Lieutenant Colonel Bart Hensler, USA. LTC Hensler is currently serving as a Civil Support planner in the Domestic Operations Division (J36) of United States Northern Command. He was commissioned through the United States Military Academy in 1997 where he earned a BS in Sociology, and an MA in Management from Webster University in 2009. Prior to his current assignment, LTC Hensler served as the Brigade Operations Officer for the 173^d Airborne Brigade Combat Team.

Major Benjamin David Mather, USAF. Maj Mather is the EUCOM Exercise Event Planner and Deputy Desk Officer for the Joint Exercise Division, Joint Training, J-7, Joint Staff. He was commissioned through ROTC at Purdue University in 2001 earning a BS in Computer Engineering and has an MBA in Business Leadership from St. Joseph's College of Maine. He is a Senior Pilot with over 2000 hours in the C-5B Galaxy and the KC-10A Extender.

Lieutenant Commander David Palilonis, USN. LCDR Palilonis is en route to the J87 at the United States Strategic Command. He was commissioned through ROTC at Cornell University in 1999. LCDR Palilonis earned a BS in Biology from Cornell University in 1999 and an MA in National Decision Making from the Naval War College in 2010. Prior to his current assignment, LCDR Palilonis served as the Executive Officer in the USS LOUISIANA BLUE SSBN 743.

¹ Roger Howard. *Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*. London: Continuum International Publishing, 2009.

² Kenneth J. Bird, Ronald R. Charpentier, Donald L. Gautier, David W. Houseknecht, Timothy R. Klett, Janet K. Pitman, Thomas E. Moore, Christopher J. Schenk, Marilyn E. Tennyson, and Craig J. Wandrey. "Circum-Arctic resource appraisal; estimates of undiscovered oil and gas north of the Arctic Circle: U.S. Geological Survey Fact Sheet 2008-3049." U.S. Geological Survey. July 23, 2008. <http://pubs.usgs.gov/fs/2008/3049/> (accessed Feb 18, 2014).

³ NOAA, "Will the Arctic be free of summer sea ice in 30 years?" May 12, 2010. <http://www.climate.gov/news-features/featured-images/will-arctic-be-free-summer-sea-ice-30-years> (accessed March 03, 2014).

⁴ World Nuclear Association 2014

⁵ Roger Howard, "Ice Breaking," *The World Today* 65, no. 10, 2009: 12-13.

⁶ Climate.gov 2012, "Arctic sea ice: 2012 record low was 18 percent smaller than previous record, nearly 50 percent below average." www.climate.gov. Dec 4, 2012. <http://www.climate.gov/news-features/featured-images/arctic-sea-ice-2012-record-low-was-18-smaller-previous-record-nearly> (accessed Feb 18, 2014).

⁷ Scott G. Borgerson, "Arctic Meltdown." *Foreign Affairs* 87, no. 2, 2008: 63.

⁸ NOAA 2010, "Will the Arctic be free of summer sea ice in 30 years?" May 12, 2010.

<http://www.climate.gov/news-features/featured-images/will-arctic-be-free-summer-sea-ice-30-years> (accessed March 03, 2014).

⁹ Wikipedia 2014

¹⁰ Andrea Charron, "Canada and the Arctic Council." *International Journal*, 2012: 765-783.

¹¹ Interfax: *Russia & CIS Military Daily*. "Corridors of Power; Search and Rescue Treaty Arctic Council's First Legally Binding Accord." ProQuest. May 13, 2011.

<http://search.proquest.com.ezproxy6.ndu.edu/docview/866399514?accountid=12686> (accessed Feb 16, 2014).

¹² *The United Nations Convention on the Law of the Sea*. Division for Ocean Affairs and the Law of the Sea, Dec 10, 1982,

http://www.un.org/depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm (accessed Aug 5, 2014).

¹³ Douglas R. Brubaker, "The Northern Sea Route Regime: Exquisite Superpower Subterfuge." *Ocean Development and International Law*, 1999: 320.

¹⁴ Lincoln E. Flake, "Russia and China in the Arctic: A Team of Rivals." *Strategic Analysis* (37:6), 2013: 681-687.

¹⁵ Alexandr Golts, "THE ARCTIC: A CLASH OF INTERESTS OR CLASH OF AMBITIONS." *Strategic Studies Institute*, 2011: 46.

¹⁶ *Voice of Russia 2013 Army*; Russia resumes constant military presence in the Arctic - Defense Ministry. September 16, 2013. http://voiceofrussia.com/news/2013_09_16/Russia-resumes-constant-military-presence-in-the-Arctic-Defense-Ministry-3541/ (accessed February 12, 2014).

¹⁷ Zachary Keck, *The Diplomat*. February 21, 2014. <http://thediplomat.com/2014/02/russia-to->

[establish-arctic-military-command/](#) (accessed March 02, 2014).

¹⁸ Wendell Minnick, "Ice Station Dragon: China's Strategic Arctic Interest." *Defense News*, May 16, 2011: 4.

¹⁹ Minnick, 2011.

²⁰ Michael Byers, *The Globe and Mail*, "Asian Juggernaut Eyes Our 'Golden' Waterways," August 29, 2011. <http://www.theglobeandmail.com/globe-debate/asian-juggernaut-eyes-our-golden-waterways/article626936/> (accessed February 17, 2014).

²¹ Steven Lee Myers, "Arctic Council Adds 6 Nations as Observer States, Including China." *New York Times*, May 16, 2013: A9.

²² Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, *Canada's Northern Strategy Our North, Our Heritage, Our Future*. National Strategy Document, Ottawa: Minister of Public Works and Government Services, 2009.

²³ *Targeted News Service*, "PM Participates in Operation NANOOK 12." ProQuest. Aug 24, 2012. <http://search.proquest.com.ezproxy6.ndu.edu/docview/1034941444?accountid=12686> (accessed Feb 28, 2014).

²⁴ James Brooke, "Arctic Shortcut for Shipping Raises New Fears in Canada: Arctic Shortcut Worries Canadians." *New York Times*, Jul 29, 2000.

²⁵ *The White House*. "National Security Presidential Directive - 66." Washington DC, 2009.

²⁶ Ibid.

²⁷ *The White House*, "National Strategy for the Arctic Region." Washington DC, 2013.

²⁸ Ibid.

²⁹ *The White House*, "Implementation Plan for the National Strategy for the Arctic Region." Washington DC, 2014.

³⁰ *National Aeronautics and Space Administration*, NASA's Ice, Cloud, and Land Elevation Satellite. 2014. http://icesat.gsfc.nasa.gov/icesat2/mission_overview.php (accessed February 13, 2014).

³¹ *The Pentagon*, "Arctic Strategy." Washington DC, 2013.

³² Ibid..

³³ *The White House*, "National Security Presidential Directive - 66." Washington DC, 2009.

³⁴ *United States Government Accountability Office*, "Arctic Capabilities." Washington DC, 2012.

³⁵ *USCG Office of Waterways and Ocean Policy*, "Mobility and Ice Operations Division." United States

Coast Guard. July 18, 2013.

<http://www.uscg.mil/hq/cg5/cg552/ice.asp> (accessed March 7, 2014).

³⁶ Kieran Mulvaney, "This Time No Nukes For Deepwater Port Plan." *Discovery News*. June 20, 2013. <http://news.discovery.com/earth/global-warming/a-deepwater-port-in-the-alaskan-arctic-130620.htm>.

³⁷ Paula Lowther, "Arctic Deep Water Port." *Alaska Business Monthly*. January 2012, 2012.

<http://www.akbizmag.com/Alaska-Business-Monthly/January-2012/Arctic-Deep-Water-Port/> (accessed February 13, 2014).

³⁸ Nathan Freier, "The 2011 Unified Command Plan - A Missed Opportunity?" *Center for Strategic & International Studies*. May 24, 2011.

<http://csis.org/publication/2011-unified-command-plan-missed-opportunity> (accessed February 13, 2014).

³⁹ John B. Bellinger, III, "The United States and the Law of the Sea Convention." Berkeley, CA: (speech given as remarks at the Law of the Sea Institute), Nov 3, 2008.

What's Next for NORAD?

By Maj Christopher J. Buckley, LtCdr Sebastian J. Kielpinski, and Lt Col Thomas Walsh

Introduction

No organization has had more to say in the defense of North America than the North American Aerospace Defense Command (NORAD). It has been popularized by Hollywood and conspiracy theory. The name itself has become synonymous with Cold War bunkers, nuclear war, and fighting to the end of the world. In the mind of the average American, nothing flies over North America without NORAD consent, not even Santa Claus. However, the reality of NORAD is more than just air defense. What started as a mutual defense arrangement between the United States and Canada has evolved into a bi-national command organization tasked with the defense of North America. The further expansion of NORAD is a logical step to increase the efficiency of North American defense. That expansion should be done geographically, by incorporating Mexico as well as expanding NORAD's domain to include cyber threats.

Evolution of NORAD

The attack on Pearl Harbor created a deep and lasting scar on the American psyche. Military leaders were determined to deter any future attacks on the United States. The post-WWII Soviet Union was building a long-range bomber capable of striking North America, and the United States was resolute in its defense against this threat. The shortest flight time between the two nations

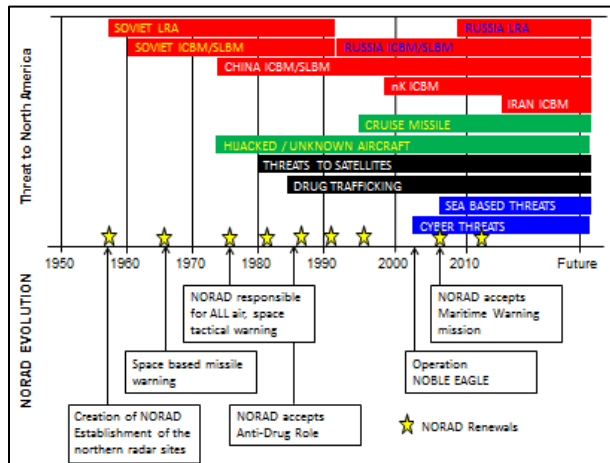
is over the North Pole; therefore the 'polar approaches' became the priority for American defense.¹ This 'polar concept' highlighted the need for increased cooperation between the United States and Canada. The United States understood that to achieve its strategic ends it must have capable partners. It became obvious that to secure the defense of the United States, Canada must become a partner.² This reality is as true today as it was in 1958.

The term 'Building Partner Capacity' is a relatively new one, first introduced to the Department of Defense in the 2006 Quadrennial Defense Review, but the concept is not new.³ When retroactively applied to 1950s Canada, this is exactly what the United States was trying to accomplish. What began as a crash program to build a system of layered early warning radars throughout Canada eventually became the North American Air Defense Command (NORAD). NORAD is not just a bi-lateral defense agreement, it is a bi-national command. The unique command and control (C2) that it executes is the realized benefit of NORAD. This C2 arrangement is unique because NORAD exercises operational, and sometimes tactical, control over its assigned or allocated forces, regardless of their country of origin.⁴

Throughout its existence, the threat that NORAD faced has changed constantly. By the 1960s, the primary threat to North America had shifted from Soviet Long Range Aviation (LRA) to ballistic missiles. Intercontinental Ballistic Missiles (ICBM) and Submarine Launched Ballistic Missiles (SLBM) had the ability to 'leapfrog'

NORAD's radar warning system. To counter the ballistic missile threat, the United States Air Force built a space-based surveillance and missile-warning system and NORAD quickly assumed control of it.

By the 1970s, NORAD had control over tactical warning and assessment of all air, missile, or space threats across the entirety of North America, and changed its name from North American Air Defense Command to the North American Aerospace Defense Command. In the 1980s, NORAD modernized. New ground-based radar sites, updated satellite capabilities, and newer, faster, more agile interceptor aircraft increased NORAD's capabilities exponentially. During that time, small, light aircraft were known to bring large quantities of drugs into America, and no organization was better equipped to detect and track these aircraft. Leveraging its increased capabilities, NORAD was now tasked to help fight the war on drugs.



The end of the Cold War brought about questions related to the continued relevance

of NORAD. Even though the Soviet threat was eliminated, their Russian successors still had long-range bombers, ICBMs and SLBMs to threaten North America. NORAD planners envisioned a world where other states and non-state actors could employ aircraft, cruise missiles or ballistic missiles against North America. The security of North America had not become easier with the Soviet demise, and the U.S.-Canada agreement became even more relevant to combatting the challenges of the 21st Century.

The 9/11 attacks highlighted what many people believed to be a failure of NORAD. Royal Canadian Air Force Brigadier General A.D. Meinzinger, NORAD deputy director of strategy said, “We weren’t postured to be looking *inside* the continent.”⁵ Given a new threat, Operation NOBLE EAGLE was conceived and immediately came under the purview of NORAD. NORAD was also finally invited into what became known as the ‘interagency.’ Interagency integration was not limited to the U.S.—the Canadian interagency sought NORAD’s capabilities as well.⁶

Up until 2001, threats to North America were focused on air and space. There was no need to explore threats in other domains. NORAD concluded that focusing solely on the air and space domains restricted its ability to protect North America. Therefore, NORAD added maritime warning to its expanding mission set. Through the years, NORAD has adapted to reach its three modern mission sets: aerospace warning, aerospace control, and maritime warning. As a historical case, NORAD can and should be viewed as a success story.

However, NORAD has yet to reach its full potential: it does not include all of North America, and its domains are limited.

United States-Canada Defense Relationship

The Guidance for the Employment of the Force requires all Combatant Commands to ‘partner’ and there is no closer partner than Canada and no security and defense agreement stronger than NORAD. This agreement remains a world-class model of defense cooperation and information sharing.⁷

USNORTHCOM and NORAD Theatre Strategy

As a result of 9/11, United States Northern Command (USNORTHCOM), a geographic combatant command responsible for defense of the homeland across all domains, was created in 2002. NORAD was already protecting the homeland against air and space threats; therefore USNORTHCOM was co-located with NORAD and the two command staffs were combined. The commander of NORAD is dual-hatted as the commander of USNORTHCOM. The creation of USNORTHCOM redefined the role of ‘homeland defense’ and NORAD’s role in that defense. USNORTHCOM’s mission statement is “United States Northern Command partners to conduct homeland defense, civil support and security cooperation to defend and secure the United States and its interests.”

The key word is ‘partner,’ and USNORTHCOM is a partner in all of its endeavors. With domestic issues, the partners are the U.S. interagency (DHS,

FEMA, FBI, etc.).⁸ With defense issues USNORTHCOM’s main partner is the Canadian Joint Operations Command (CJOC), formerly known as CANADA COMMAND.⁹ CJOC and USNORTHCOM have complimentary missions. Both are responsible for deterring and, when directed by their Heads of State, defeating direct attacks against their respective homelands.

Each nation recognizes that defense does not end at the border. How would these two new organizations bridge the gap between them? The air and space answer was easy. Success in air and missile defense rests on an integrated system of surveillance, warning and control at all altitudes. This approach was true decades ago and remains true today. NORAD is the cornerstone of that capability. The Canadian Chief of the Defence Staff and the U.S. Chairman of the Joint Chiefs of Staff initiated a study to investigate the roles, missions and relationships for CJOC, NORAD and USNORTHCOM. The result was the Tri-Command Study, which created three keystone documents:

The **Tri-Command Framework** (2009) described how the three Commands – CJOC, NORAD, and USNORTHCOM—will operate and interact. It highlighted fundamental relationships and underscored command responsibilities concerning mutual support and cooperation.

The **Tri-Command Vision** (2010) provided a strategic view on how the three Commands collaborate to achieve their missions and identified five strategic goals. Those goals are to strengthen the collective ability to detect, deter, defend against, and

defeat threats to our nations; improve unity of effort with respective mission partners; develop a culture of continuous collaboration and cooperation in planning, execution, training, information management, and innovation; enhance intelligence and information sharing and fusion to support mission accomplishment; and strengthen the collective ability to provide appropriate, timely and effective support to civil authorities, when requested.

The **Tri-Command Strategy** (2010) outlined a series of shared tasks designed to strengthen working relationships, including such things as improving the ability to share classified information and shared situational awareness in multiple domains (i.e., land, sea, air, space, cyber).¹⁰

USNORTHCOM's area of responsibility (AOR) is North America: the United States, Canada, Mexico, the Bahamas, and the waters surrounding them out to 500 miles. CJOC's AOR is Canada, the Arctic and the waters surrounding them. NORAD's AOR is North America, but its area of interest (AOI) is global. Threats to North America can originate from anywhere, which is why NORAD's early warning system is now global; it is no longer just a radar fence in the Arctic. This global perspective is why NORAD gives an assessment on every unknown penetration of the Air Defense Identification Zone and every detected missile and rocket launch on the planet.

When something significant occurs in North America, it could get confusing as to what organization is in charge. It is possible for a threat to be in all three commands' AORs simultaneously. In reality, the three

organizations operate seamlessly as a result of the working relationship between USNORTHCOM and CJOC that is based the 50-year foundation that is called NORAD. The close, interwoven defense relationship that currently exists is because of NORAD.

"USNORTHCOM and NORAD are two separate commands that are inextricably linked. Neither command is subordinate to, nor a part of the other...Our commands' missions are not only complementary, they are also inseparable."

*General Charles H. Jacoby, USA
Commander of USNORTHCOM and
NORAD
Transcript of testimony to House Armed
Services, March 2012*

The Politics of NORAD

NORAD is, at its core, a military agreement. To understand the politics behind NORAD, one must understand how the military fits into the political structure of the United States and Canada.

The United States is a hegemonic force with no equal. While Canada and the U.S. are similar in physical size, the United States has a population and gross domestic product (GDP) roughly ten times the size of Canada's and spends 31 times more on defense. It would take a major movement of Canadian policy to affect the US, but any movement of U.S. policy has profound effects on Canada.

The United States is a super-power, and its defense budget is the largest in the world. The U.S. Secretary of Defense has considerable influence in the political

process, as do the Flag and General officers within the Department of Defense. U.S. political policy decision makers are intimately involved in military affairs.

“[Being America’s neighbor] is like sleeping with an elephant. No matter how friendly and even-tempered...one is affected by every twitch and grunt.”

*Prime Minister Pierre Elliot Trudeau
From a speech at the National Press Club,
Washington DC, March 25, 1969*

Canada is a “middle power” nation. Their defense budget is relatively small, and the cabinet position of Minister of National Defense is not a relatively high-status position. The Minister and the Flag and General officers of the Canadian Forces (CF) do not necessarily yield much political influence. As a result, the military of Canada does not play a significant part in major policy decision-making. The reverse is also true; the Government of Canada does not exert considerable influence over CF affairs. The Canadian Forces do not see this as a weakness of their system, but as an opportunity.

This permissive political-military relationship allows Canadians to make necessary distinctions as to the “best interest” of defense, which allows them to pursue their professional interests as a classic ‘middle power’ military. In other words, they have the freedom to explore cooperative alliances to their advantage to meet what they believe is in the national interest. This freedom is the real strength of NORAD. While administrations change (Labour, Conservative, Democrat,

Republican), the military alliance endures. The advantage for the lesser force, Canada, is that it has access to a level of defense technical sophistication that is not achievable in the Canadian system. The danger for Canada is that the larger U.S. forces will naturally dominate the interests of both participants.¹¹ In fact, both of these outcomes have occurred already.

The Canadian Forces see the natural merger of needs with regards to national defense; they are willing to give up a certain level of control to gain an unparalleled level of access and security. However, the people of Canada see American hegemony over Canadian sovereignty. While there is an overwhelmingly positive feeling about Canada in the United States (84% favorable), the reverse is not true. Only 45% of Canadians have a positive feeling towards the US.¹² From the War of 1812 through U.S. plans to annex British Columbia (1860s) to NORAD, Canadians have always had a fear of ‘Americanization’ and U.S. imperialism.

NORAD is not the first time the United States and Canada have attempted bi-lateral defense agreements. In the 1930s, the United States proposed to integrate British Columbia into a unified West Coast military command. Canada opposed this involvement and feared American imperialism more than the possibility of Japanese invasion.¹³ Canada accepted NORAD only because of the overwhelming threat of Soviet nuclear attack, and the CF’s inability to stand alone.

Some Canadian pundits call for actions against NORAD or any type of agreement

that they see as threatening the sovereignty of Canada. Many Canadians feel that the result of a fully integrated continental security force would sacrifice Canadian sovereignty. There is a feeling within Canadian society that NORAD is the precursor for all military, security and foreign policy to be captured under the umbrella of a single, U.S.-dominated North American Command.¹⁴

This issue of Canadian sovereignty came to light twice with the question of Ballistic Missile Defense (BMD). In the 1980s, it was President Reagan's Strategic Defense Initiative (SDI). In that case, Prime Minister Trudeau's government held the NORAD agreement hostage until getting a clause added that eliminated Canada's involvement in an active ballistic missile defense. SDI died, but the NORAD agreement lived on.¹⁵

Again in 2004, BMD became a U.S.-Canada sticking point. President Bush's North American "missile shield" was to be built under the auspices of NORAD, but Canada did not have the economic or the political will to participate. It is Canada's position that "missile shields" are an inherently destabilizing force. Missile shields provide NORAD an offensive capability that violates the intent of the agreement, and shields undermine Canada's positions on arms-control with the United Nations.¹⁶

Pulling Canada into BMD through NORAD would have had drastic effects on Canadian foreign policy. In effect, the United States was changing Canada's foreign policy without their consent.

In the end, Canada opted out of the BMD agreement and the United States continued

alone. As a result, the Ground Based Interceptors at Fort Greely, Alaska and Vandenberg AFB, California are under the command and control of USNORTHCOM, not NORAD. While the commander of both organizations is the same person, the distinction is noticeable. Canada will receive warning of an attack through NORAD, but the decision to engage inbound missiles is decided wholly by Americans. This command and control arrangement is accepted by the Canadian government in order to maintain their sovereignty; they would not allow NORAD to change Canadian foreign policy.

How important is NORAD to U.S.-Canada economic relations? The United States and Canada have the largest trade relationship in the world. Each country is the largest trade partner of the other. In 2013 Canada exported US\$332B worth of goods to the United States and imported US\$300B from the US. The trade relationship between the two countries crosses all industries and is vital to both nations' success.¹⁷ This trade relationship is the basic foundation of the political framework between the two nations. One could argue that it was the creation of the North American Free Trade Agreement (NAFTA) that allowed economic prosperity to flow across the borders. Neither country wants to do anything that would diminish this flow.

NAFTA was, and still is, hotly debated, and remains controversial. When the questions arose concerning *if* the economic systems could work together, NORAD was shown in a positive light. The NORAD agreement demonstrated that security and defense could work across borders, so why not

economics. In other words, NORAD opened the door for NAFTA. To protect this new economic flow, security and defense was, and remains, crucial. NAFTA created the need for a stronger NORAD, and it enables the economic prosperity of North America.

The NORAD agreement is the pillar of US-Canada security and defense relations, which is reflected in the priorities for the Commander of USNORTHCOM and NORAD. The NORTHCOM theater campaign strategy prioritized its top issue as continuing strengthening and expanding international relationships like NORAD.¹⁸ The NORAD Agreement, and its associated terms of reference, provided the political connections that underpinned the longevity of the Canadian-U.S. defense relationship to the present.¹⁹ This bi-national construct represents a unique and special alliance that is vital to the U.S.'s defense and economic prosperity. NORAD's ability to operate across Combatant Command AORs and the United States' and Canadian interagency departments is a force multiplier for the security of North America.²⁰

The Future of NORAD

As NORAD leaves its Cold War roots behind it must continue to evolve. For purposes of discussion, it is useful to look at NORAD through two lenses: NORAD as an agreement and NORAD as an organization. Do these two entities need to exist in the future?

NORAD as an agreement is based upon a relationship and is therefore somewhat abstract. The argument for the NORAD agreement is as strong as ever. The

evolving threat base and the lack of Soviet threats do not eliminate the need for a combined defense of North America. In fact, the threats to North America are so wide and varied that the need for a combined North American defense is greater today than it was in the 1960s. The economic ties that bind North America together require protection. Therefore, the argument for a combined North American defense is strong.

The more germane question is does the requirement for combined defense require a physical organization? One can have an agreement without having a building, patches, or personnel. At the time of NORAD's creation, USNORTHCOM and CJOC did not exist. Today, both of these organizations are tasked with the defense of their homelands across all domains, including the air and space domain that resides with NORAD. It is possible for the organization of NORAD to be absorbed by the respective commands, and the agreement becomes the basis of the coordinating effort between the commands.

Does having that separate organization add any efficiency to the process? The answer is 'yes.' The fact that the command, the physical organization, is a bi-lateral command makes the United States and Canada equals. Without this equality, U.S. hegemony would occur not only in theory, but also in practice. USNORTHCOM and CJOC are not equals. USNORTHCOM has the capability to wield far greater forces than CJOC. USNORTHCOM units responding to threats would have the defense of America on their mind, not the defense of *North America*. That equal footing is

foundational to NORAD's success, and the physicality of the organization makes it a reality.

If one were to sit down today with a blank slate and design a defense of North America, a NORAD-like organization would be the result. It might not be called NORAD, but it would operate the same as NORAD does today. Its mission set would not be restricted to air and space; rather, its mandate would address all threats to North America across multiple domains.²¹

Since NORAD's inception, it has been focused on aerospace warning and control, and has continued to adapt to outpace these threats. While its manning has dropped by an order of magnitude from the hundreds of thousands that manned the Cold War landscape of the mid-1960s to the less than 10,000 personnel it has today, its reliance on technology has increased exponentially.²² This reliance of technology makes North America, and NORAD in particular, critically vulnerable to cyber threats.

In the current relationship that NORAD enjoys with CJOC and USNORTHCOM, NORAD leverages cyber capabilities that exist within CJOC and USNORTHCOM, but only to secure its ability to operate in air and space. In other words, NORAD does not combat cyber threats to North America, only cyber threats to the physical organization of NORAD. North America has become so integrated through commercial and industrial sectors, attacking any part of North America will have an effect on the rest of North America. Therefore, a cyber-attack on the United States is not only a U.S. problem—it is a

North American problem. Since North America as a whole can be affected through the cyber domain, NORAD must be given the authority and capability to combat that threat. That doesn't mean the organization of NORAD must grow or absorb other organizations like U.S. Cyber Command. However, the Bi-lateral agreement must grow to include the relationships to combat cyber warfare. This precedent has already occurred in the maritime domain when NORAD took on the maritime warning mission. It would not be as much of a paradigm shift as old-school NORAD participants may think.

Cyber warning is a mission set for NORAD to take on, similar to the aerospace and maritime warning missions that already exist. NORAD, both the organization and the agreement, is not capable of *cyber control* because any such mission would have profound effects on individual national sovereignty. The cyber control mission, if it is even possible, must remain inside each country.

To combat threats across more domains requires more partners. The blank slate NORAD design would partner with all nations in North America. There are six countries in North America proper: Canada, United States, Mexico, Bermuda, Saint Pierre and Miquelon, and Greenland (only US, Mexico and Canada are sovereign states, the others are self-governing territorial overseas collectives). The 31 nations of the Caribbean and the seven nations of Central America are also commonly referred to as part of North America.²³ While the 44 territories of North America combining into a defense and

economic bloc would be ideal, it is also unfeasible, especially in the near term.

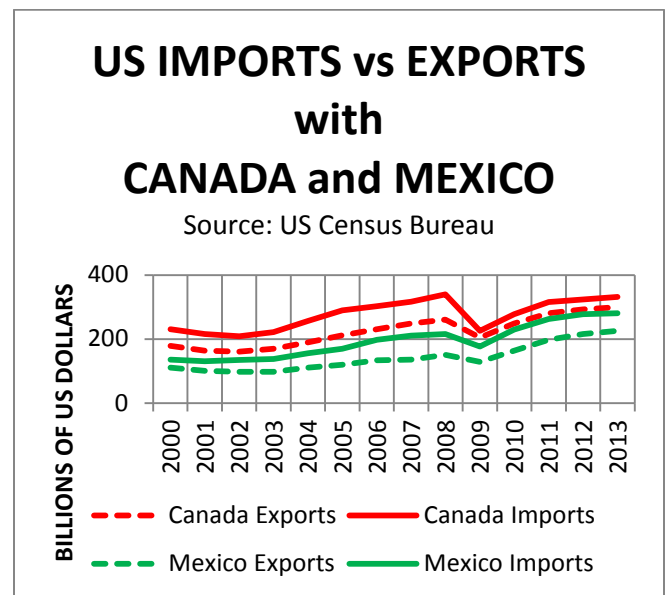
When we look at the physical threats to North America, where are the movement corridors? When it was Soviet bombers and missiles, the pathway was polar, which made Canada the obvious partner. Today the threats to North America travel through the south and create a definite need for Mexico's immediate inclusion into NORAD.

There are definite similarities between the US-Canada relationship and the budding US-Mexico partnership. Mexico is growing into a middle power similar to Canada. US-Mexican trade relations are similar in scope and size to those of the United States and Canada. The US-Mexican past is marred by wars and territorial conflicts, just like the United States' past with Canada. As NORAD takes steps towards mitigating any future threats, the addition of Mexico to NORAD is a logical pathway.

The main reason for strengthening security and defense ties with Mexico is the simple fact that Mexico is fighting a *de-facto* war right now. The United States and Canada cannot afford to have Mexico lose its war against the cartels and should provide any and all help to ensure a Mexican victory.

The Obama Administration has recognized this and has signed on to the Merida Initiative to the tune of US\$1.2B for counter-narcotics support. However, to demonstrate to the world that the United States and Canada are serious about Mexico's internal issues, and that Mexico is considered a true friend, ally, and partner, an invitation to join NORAD should be

extended. Given that NORAD already monitors the air and sea approaches to North America, it would immediately increase Mexico's capability to combat cartel activities in these domains. The joint command structure could facilitate intelligence and information sharing initiatives, and Mexico's inclusion into NORAD would pave the way for a comprehensive multi-national counter-narcotics enterprise in North America.²⁴ A trilateral organization is exactly what the past five U.S. presidents have dreamed of, and what the current Mexican president desperately desires.



The economics of North America are multifaceted and well developed. The three main nations (Canada, the United States, and Mexico) run vastly different models. Canada has a small population with immense natural resources and high productivity. It has a low home consumption and depends on foreign trade more than any other developed country on

the continent. The United States has a vast internal market and the highest per capita consumption of goods in the world, and it depends mainly on internal trade over external trade (approximately three-quarters internal to one-quarter external).

Mexico and Central America, by contrast, still have large sections of subsistence level populations.²⁵ There are three main economic efforts in North America: NAFTA, the Caribbean Community and Common Market (CARICOM), and the Central American Common Market (CACM).²⁶ Mexico is involved in all three of these arrangements. NAFTA itself comprises more than US\$17T and is the largest trading bloc in the world. Mexico is the number three trading partner of the United States while the United States is the largest trade partner of Mexico. In 2013, Mexico did US\$280.5B in imports and US\$226.1B in exports, roughly 84% and 75% respectively of US-Canada numbers.²⁷

This intra-continental economic flow is vital to all three nations and must be protected. The status of Mexico as an economic power is rising. NORAD would help Mexico secure and protect that economic relationship already in place. Adding Mexico to NORAD would help integrate more instruments of national power to a synergistic effect.

It will not be a simple task of placing the Mexican flag on the NORAD patch and claiming victory. Integrating Mexico into a North American defense structure will be difficult. First, there is no menacing Soviet threat to focus efforts. While Mexico is a

member of the G20, it is not a member of NATO.

Second, turning NORAD into a trilateral agreement may have a negative impact on US-Canada relations, signaling to the Canadian government that the United States does not need Canada as much as in the past. The United States and Canada believe that they have a *special* arrangement. Adding Mexico would make that arrangement less special.

Finally, the political, military and economic structures and processes of Mexico are not as well developed as the United States or Canada. The Mexican Air Force would have very little effect on NORAD's capabilities, and the United States would bear the brunt of the financial burden to get Mexico "up to speed" in aerospace warning and control.²⁸ Mexico cannot discount the pressure of U.S. hegemony on its security posture and operations should it join in an alliance.

Comparing 2014 Mexico to 1958 Canada leads to the conclusion that NORAD is right for Mexico. The cartel threat is as real to Mexico as the Soviet threat was to Canada. The United States' mainland was the Soviet objective, and to achieve their objective they had to go through Canada. Similarly, the drug cartels' objectives are also in the United States, and they have to get through Mexico to achieve their objectives. Today, the interrelated economics within the region require greater security. The Mexican Air Force is not properly equipped (to Western standards) similar to the Royal Canadian Air Force's inability to cover the massive Canadian territory and need for early

warning and modernization in the 1960s. The Mexican economy cannot support the internal development of a modern and technologically advanced military, similar to the Canadian Force's acquisition of U.S. weapons and aircraft.

Conclusion

Many look at NORAD as a physical organization. It has people, buildings and budgets. There is a commander and there are colored patches to wear on military uniforms. However, there is more to it than just the physical elements. There is also the agreement of NORAD that has evolved over time and through threats and domains. However, the best way to look at NORAD is as an enabling force to greater political ends. Defense agreements, like war itself, are established and maintained for political gains.

The NORAD brand represents much more than NORAD's focused missions. NORAD brings benefit to the United States through partnering and cooperation, and has become a model for defense and security agreements that all Combatant Commanders desire in their AORs. NORAD is most beneficial to Canada, creating a security umbrella over its vast territory that it could not protect on its own, and providing access to cutting edge military technology and intelligence data.

As evidenced by frequent citation in the speeches of national leaders, the NORAD agreement represents the best of military cooperation. Lessons drawn from the NORAD experience can apply in other AORs where partnering is vital to security and defense. A comparison between the Canada of NORAD's inception and the

Mexico of today is a valuable tool to determine the advantages of Mexican involvement in NORAD. Mexico's ongoing struggle against the cartels highlights a definite and immediate need for increased security cooperation. Aiding Mexico is in the national interest of both the United States and Canada.

NAFTA created and strengthened the economic ties that bind North America, and NORAD is strengthened by and strengthens those economic ties. To take NORAD to that next level, expanding into other domains, namely cyber with the addition of a cyber-warning mission, and growth to include Mexican participation should be pursued. The threat to North America certainly has changed—it's not focused primarily on Soviet bombers anymore. Rather, new threats to North America are growing across multiple domains. North American defense requires more partners and greater domain authority to protect North America fully.

Team Biographies

Major Christopher J. Buckley, USAF (BS, Westminster College; MS, Columbia University; MS, USAF Test Pilot School). Major Buckley is currently serving as Strike Advisor to CDR USNORTHCOM at Cheyenne Mountain Air Force Station, Colorado. He was commissioned in 2000 through the USAF Officer's Training School at Maxwell AFB, AL. He is a Master Navigator with more 2,500 hours in 40 different aircraft including five overseas combat deployments. Prior to his current assignment, Major Buckley was the Director of Operations for the 412th Flight Test Squadron at Edwards AFB, CA.

Lieutenant Commander Sebastian J. Kielpinski, SC, USN (BS, Campbell University, MBA, Duke University). Lieutenant Commander Kielpinski is currently serving as Supply Officer, Fleet Logistics Support Wing, Fort Worth, TX. He was

commissioned in 1999 through the USN Officer Candidate School at Pensacola, FL. He is a U.S. Navy Supply Officer specializing in Acquisitions and in Supply Chain Management, serving on multiple naval platforms and completing two joint tours at NATO and Defense Logistics Agency. Prior to his current assignment, Lieutenant Commander Kielpinski served as the ISAF Budget Officer, Joint Force Command, Brunssum, Netherlands.

Lieutenant Colonel Thomas B. Walsh II, USAF (BA, University of Texas-Arlington; MA, Webster University; MS, Air Command and Staff College). Lieutenant Colonel Walsh is currently serving as Branch Chief, Joint Officer Management on the Joint Chiefs of Staff at the Pentagon, Washington D.C. He was commissioned in 1994 through the Reserve Officer Training Corps. He is a Personnel Officer who has served at the flight, squadron, Air Force headquarters and joint staff level, including two overseas deployments. Prior to his current assignment, Lieutenant Colonel Walsh served as the Commander, 55th Force Support Squadron at Offutt AFB NE.

¹ Schaffel, Kenneth. *The Emerging Shield: The Air Force and the Evolution of Continental Air Defense 1945-1960*. Washington D.C.: Office of Air Force History, 1991.

² "A Brief History of NORAD." *NORAD History*. December 2012.
<http://www.norad.mil/Portals/29/Documents/History/A%20Brief%20History%20of%20NORAD.pdf> (accessed February 4, 2014).

³ Department of Defense. "QDR Execution Roadmap: Building Partner Capacity." Washington DC: Department of Defense, May 22, 2006.

⁴ "A Brief History of NORAD."

⁵ Miles, Donna. "US, Canada Think Ahead to 'NORAD Next.'" *US Department of Defense*. January 7, 2013.
<http://www.defense.gov/news/newsarticle.aspx?id=118926> (accessed February 14, 2014).

⁶ "A Brief History of NORAD."

⁷ Jacoby, Charles H. *NORAD and USNORTHCOM Theater Strategy*. Theater Strategy, Colorado Springs: NORAD, 2011.

⁸ Ibid.

⁹ Government of Canada. *Canadian Joint Operations Command*. January 21, 2014.
<http://www.forces.gc.ca/en/about-org->

structure/canadian-joint-operations-command.page (accessed February 4, 2014).

¹⁰ —. "The Canada-U.S. Defence Relationship." *National Defense and the Canadian Armed Forces*. November 22, 2013.
<http://www.forces.gc.ca/en/news/article.page?doc=the-canada-u-s-defence-relationship/hob7hd8s> (accessed February 4, 2014).

¹¹ Crosby, Ann Denholm. "A Middle-Power Military in Alliance: Canada and NORAD." *Journal of Peace Research*, February 1, 1997: 37-52.

¹² BBC. "BBC World Service Poll." *Globe Scan*. 2013.
http://www.globescan.com/images/images/pressreleases/bbc2013_country_ratings/2013_country_rating_poll_bbc_globescan.pdf (accessed February 4, 2014).

¹³ Perras, Galen Roger. "Who Will Defend British Columbia? Unity of Command on the West Coast, 1934-1942." *Pacific Northwest Quarterly*, 1997: 59-69

¹⁴ Gabriel, Daniel. "U.S.-Canada Perimeter Security and an Integrated North American Command." *Be Your Own Leader*. June 7, 2011.
<http://beyourownleader.blogspot.ca/2011/06/perimeter-security-and-integrated-north.html> (accessed February 4, 2014).

¹⁵ Crosby, Ann Denholm.: 37-52.

¹⁶ Ibid.

¹⁷ US Census Bureau. *US Trade in Goods with Canada*. <http://www.census.gov/foreign-trade/balance/c1220.html#2012> (accessed February 14, 2014).

¹⁸ Jacoby, Charles H.

¹⁹ "A Brief History of NORAD"

²⁰ Jacoby, Charles H.

²¹ Carafano, James Jay, Jena Baker McNeill, Ray Walser, and Richard Weitz. "Expand NORAD to Improve Security in North America." *The Heritage Foundation*. July 27, 2010.
<http://www.heritage.org/research/reports/2010/07/expand-norad-to-improve-security-in-north-america> (accessed February 4, 2014).

²² Lawson, Thomas J. "NORAD-Ever Evolving, Forever Relevant." *Canadian Military Journal*. May 16, 2012.
<http://www.journal.forces.gc.ca/vol12/no3/page5-eng.asp> (accessed February 14, 2014).

²³ Encyclopedia Britannica. *North America*. 2014.
<http://www.britannica.com/EBchecked/topic/418612/North-America> (accessed February 25, 2014).

²⁴ Carafano, McNeill, et.al.

²⁵ Encyclopedia Britannica

²⁶ UCSC. "Regional Trade Blocs." *University of California-Santa Cruz*. June 5, 2011.
http://ucAtlas.ucsc.edu/trade/subtheme_trade_blocs.php (accessed February 25, 2014).

²⁷ US Census Bureau

²⁸ Carafano, McNeill, et.al

Campaigning is a Joint Forces Staff College journal designed as a forum for students, faculty, and senior fellows to provide the broader joint professional military education community insights into the application of joint warfighting principles through critical analysis and strategic thinking on current and future operations at the operational level of war.

Prospective *Campaigning* authors are asked to note the following submission guidelines:

- As a general rule, manuscripts of articles should be between 1500 to 3500 words in length, including endnotes.
- All manuscripts will be unclassified.
- Manuscripts should be written in Times New Roman font, 12-pitch, and with 1 inch margins.
- Manuscripts must include a cover page with author's (or authors') name(s) and abstract (200 words or less).
- Manuscripts must be submitted in electronic format, on disc or by e-mail, in MS Word. E-mail address: mccauleyd@ndu.edu.
- Manuscripts should be accompanied by appropriate graphs, charts, photographs, maps or other illustrations which illuminate the context of the article. All images including photos and maps should be sent electronically or on a disc in high resolution as a JPEG file or other well-known formats for image reproduction.
- Manuscripts should conform to Turabian academic style with endnotes rather than footnotes. Endnotes should be embedded and not attached. Separate bibliographies are undesired. All bibliographic material is to be contained in the end notes.
- Acronyms and military abbreviations must be written out in full the first time it is used, followed by the abbreviated form in brackets. Military jargon and slang terms should, as a rule, be avoided.
- All submissions must be accompanied by a brief (one short paragraph maximum) biographical sketch of the author(s), which includes current position and e-mail address.
- All manuscripts normally will be reviewed anonymously by at least two external readers from the Editorial Board, who will make recommendations to the Editor as to suitability for publication. Manuscripts will be judged on the originality and quality of the argument or discussion, the relevance and timeliness of the topic, and on quality of the writing style. Unless otherwise agreed upon, *Campaigning* insists upon right of first publication of any given submission.
- All manuscripts selected for publication in *Campaigning* must go through a security and policy review process. JFSC will provide the necessary coordination with the NDU Northern Campus for Pentagon Security and Policy review.
- In general, the mentoring of manuscripts will not be done—authors are responsible for the quality of the content, adherence to academic standards, and adherence to the format requirements listed above. The Editor reserves the right to make minor editorial suggestions for style, grammar and length, but will not make editorial changes which affect the integrity of the argument or discussion without reference to the author.
- *Campaigning* will acknowledge manuscript submission within 10 days. If you have not received confirmation of receipt in that time, please contact the editorial staff at mccauleyd@ndu.edu. Authors will be notified of manuscript acceptance or declination.

JFSC Vision

The flagship institution for educating national security professionals involved in planning and execution of joint operations.

JFSC Mission

Educate national security professionals to plan and execute joint, multinational, and interagency operations to instill a primary commitment to joint, multinational, and interagency teamwork, attitudes, and perspectives.



Joint Forces Staff College
7800 Hampton Blvd
Norfolk, VA 23511