



INNOVATING U.S. STRATEGIC COMMAND'S DETERRENCE AND ASSURANCE OPERATIONS

SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS, COLUMBIA UNIVERSITY

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Authors:

Léo Isaac-Dognin (Project Co-Manager)

George Rano (Project Co-Manager)

Tedros Abraham

David del Cuadro-Zimmerman

Devansh Mehta

Thomé Nicocelli

Shakib Noori

Professor Howard W. Buffett (Faculty Advisor)

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EXECUTIVE SUMMARY

United States Strategic Command (USSTRATCOM) operates in a rapidly changing environment, characterized by the emergence of new strategic threats, including gray zone conflicts that defy traditional doctrine and established processes. The Command's ability to quickly and boldly adapt is crucial so as to avoid even the slightest prospect of a diminished global role for the organization and for the nation it defends. At the same time, USSTRATCOM budgetary constraints remain unpredictable, the organization is in the process of moving its headquarters to a new facility due to open in 2019, and it has experienced a recent change in Command. While these conditions all add to the complexity of USSTRATCOM's operating environment, they can be used as triggers to initiate change, and implement innovative ideas to overcome today's obstacles and anticipate tomorrow's challenges.

Building on the bold agenda for innovation established by General John E. Hyten in his Commander's Vision and Intent, this report identifies four goal areas that would enable U.S. Strategic Command to fully incorporate innovation into its processes, practices, and outcomes.

Structured in four sections, this report provides insights on these goals, and is coupled with specific recommendations charting a path for achieving specific outcomes. A strong signal from the Commander prioritizing and explaining the value of these recommendations is needed to initiate each work stream. The four sections can be summarized as follows.

First, we consider that USSTRATCOM should create a workforce and culture that is supportive of innovation. In his Commander's Intent, General Hyten spells out the need for "new and creative thinking." This objective can be met by establishing initiatives and new processes that enable experimentation of thought, such as ideation challenges, by adopting new ways of working that break down the barriers to creative thinking within the organization. This can also be accomplished by establishing mechanisms, such as externships, that bring outside ideas into USSTRATCOM.

Secondly, we recommend that USSTRATCOM innovate the way it measures and maintains readiness through an increased use of wargaming. Specifically, the Command should unlock the full potential of wargaming, particularly its ability to generate strategic insights and identify existing weaknesses. To achieve this goal, USSTRATCOM should start by raising the profile of wargames among its employees, then empower personnel in relevant directorates to tailor and integrate wargames as an essential part of their mission's toolkit.

Subsequently, we believe USSTRATCOM should seek to leverage and extend existing partnerships with universities and think tanks to design and conduct open-source wargames relevant to its needs. This process would provide USSTRATCOM with a cost-effective way of increasing the size and diversity of its dataset of outcomes on scenarios it wishes to analyze, while also helping develop the next generation of strategic thinkers.

Third, USSTRATCOM should cultivate and leverage its reputation. To this end, the Command should further prioritize the importance of communications activity so as to increase capability, humanize USSTRATCOM's image through proactive outreach, and thereby gain greater ability to shape the public agenda. In parallel, USSTRATCOM should look to position itself and its staff as thought-leaders to influence foreign and domestic policymakers, and inspire the next generation of defense and security professionals. USSTRATCOM's Public Affairs team can support these ambitions by integrating feedback mechanisms into external communications so as to tailor outreach, particularly on digital platforms, and segment messaging between partners, allies, and adversaries.

Fourth, and finally, USSTRATCOM should confront transformations in global power by embracing the need for partnership-building and multilateral collaboration. Greater engagement with external partners is necessary to leverage outside resources and expertise. We therefore recommend the creation of a Center for Partnerships within USSTRATCOM, led by a Chief of Partnerships charged with developing and implementing a new cross-sector partnership strategy. We also recommend the establishment of a senior-level Partnership Advisory Board that will keep leadership abreast of shifts and opportunities that emerge beyond the Command's direct reach.

President John F. Kennedy once said: "There are risks and costs to action. But they are far less than the long-range risks of comfortable inaction." The benefits of our recommendations are intended to outweigh the costs of inaction or forced transformation. Moreover, our last goal – collaboration – seeks to enable and offset the costs of achieving the goals that precede it by building USSTRATCOM's ability to leverage external resources and expertise through partnerships. Together, our recommendations will help implement General Hyten's vision of a powerful and dominant warfighting command.

There is no time like the present. Equipped with this report, our hope is that U.S. Strategic Command can move quickly to adopt our recommendations, modernize operations, and improve effectiveness.



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We would like to express our gratitude to Merit E. Janow, the Dean of SIPA, Dr. William B. Eimicke, and Suzanne Hollman and Saleha Awal from the SIPA Capstone office for making this project possible.

The report was informed by our many discussions with staff at USSTRATCOM, as well as by interviews with practitioners and academics. A partial list of those consulted is available at the end of this report (Appendix II). We thank them for their valuable contributions, and particularly extend our gratitude to Todd Saylor, Douglas Vance, Leo Florick, and Patrick McKenna for hosting us and acting as regular contact points throughout the project. We also wish to thank General John Hyten and Vice Admiral Charles Richard for their support of the project, Major General Karbler for his time, and Admiral Cecil Haney for making this collaboration possible.

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UNITED STATES
STRATEGIC COMMAND



LAWYER BUILDING

OPENING LETTER



U.S. Strategic Command has one of the world's most varied, expansive, and demanding set of national defense responsibilities. The men and women of USSTRATCOM oversee our nation's nuclear arsenal, and are responsible for deterring the use and expansion of nuclear weapons across the globe. They are also responsible for maintaining a safe operating environment in outer space, and for protecting our nation's and our government's assets in cyberspace. Few organizations have missions as critical and diverse as these, and success across all of them will require equally diverse skillsets, ideas, strategies, and partners.

It is within this context that leadership at U.S. Strategic Command invited me and my team at Columbia University to undertake the enclosed study. The initial dialogue outlining its scope and goals took place at USSTRATCOM Headquarters on October 19, 2016. During that discussion, and in previous conversations with USSTRATCOM's former Commander, I outlined an analytical framework called *social value investing* that I thought might prove useful for some of the Command's persistent management-related challenges.

The social value investing framework adapts private sector principles from finance and business into a management approach for organizations serving the public sector. Among other insights, this model provides guidance on the alignment of teams and team leadership, on building trust through stakeholder engagement, and on leveraging different types of resources through multi-sector partnerships. Each of these areas is imminently relevant to USSTRATCOM's evolving responsibilities and constantly changing operating environment.

Over the past six months, my team and I discussed this study and the application of social value investing principles with personnel from across every directorate at U.S. Strategic Command. We also spoke with personnel or former staff from a number of federal departments and other Combatant Commands, multilateral groups, including the United Nations, and representatives from a variety of public and private sector organizations. These individuals, especially the staff at U.S. Strategic Command, made themselves available for interviews, meetings, meals, and even inquiries during evenings and weekends. For this, I extend my personal gratitude.

The team at Columbia's School of International and Public Affairs went above and beyond the initial commitment of time in order to produce this report, and we were pleased to do so. The opportunity to engage with the men and women of U.S. Strategic Command, and its leadership, was an honor. We are pleased to share our findings with you.

Very respectfully,



Howard W. Buffett
Lecturer in International and Public Affairs
Columbia University

INTRODUCTION

“The enterprise that does not innovate inevitably ages and declines. And in a period of rapid change such as the present... the decline will be fast.”

– Peter F. Drucker (1909 - 2005)¹

United States Strategic Command (USSTRATCOM) operates in a rapidly changing environment, characterized by the emergence of new strategic threats, including gray zone conflicts that defy traditional doctrine and established processes.² The Command's ability to quickly and boldly adapt is crucial so as to avoid even the slightest prospect of a diminished global role for the organization and for the nation it defends. At the same time, USSTRATCOM's budgetary constraints remain unpredictable, the organization is in the process of moving its headquarters to a new facility due to open in 2019, and it has experienced a recent change in Command. While these conditions all add to the complexity of USSTRATCOM's mission, they can be used as triggers to initiate change, and implement innovative ideas to overcome today's obstacles and anticipate tomorrow's challenges.

'Innovation' is often touted as an easy fix to entrenched challenges faced by large, well-established public and private institutions. Yet, innovation itself is not a solution: solutions are derived by correctly identifying needs and tailoring the application of innovation to the specific program, team, or organization at hand.³ The leaders of McKinsey & Company's innovation practice define innovation as creativity that offers tangible value. For innovation to be successful, they say, aspiration and discovery are just as important as execution and delivery.⁴

Throughout this report, we therefore seek to balance the need for original, disruptive insights that would help USSTRATCOM gain an edge on its adversaries, with specific, actionable recommendations that can be implemented by the Command in the near-term.⁵

¹ Peter Drucker (1909-2005) was one of the earliest management consultants. Author of 39 business books, he has been described as the 'founder of modern management' science. See Denning S. (29 July, 2014), The Best Of Peter Drucker, Forbes.

² Gray-zone conflicts, also known as 'conflicts short of war', are defined by U.S. Special Operations Command (USSOCOM) as "competitive interactions among and within state and non-state actors that fall between the traditional war and peace duality. They are characterized by ambiguity about the nature of the conflict, opacity of the parties involved, or uncertainty about the relevant policy and legal frameworks" and "present novel complications for U.S. policy and interests in the 21st century." For more information, see USSOCOM (September 9, 2015), "White Paper: The Gray Zone." Retrieved at: <https://army.com/sites/army.com/files/Gray%20Zones%20-%20USSOCOM%20White%20Paper%209%20Sep%202015.pdf>

³ Levitt, T. (2002, August) "Creativity is Not Enough." Harvard Business Review. Retrieved from <https://hbr.org/2002/08/creativity-is-not-enough>

⁴ De Jong, M., Marston, N., and Roth, E. (April 2015). "The Eight Essentials of Innovation." McKinsey Quarterly.

⁵ Business leaders as well as academics like Michael Porter like to think of successful innovation as a change that disrupts the market, and allows a firm to gain an edge over competitors. See: Porter, M. (July 1985). "How Information Gives You Competitive Advantage." Harvard Business Review.

Building on the bold agenda for innovation already established by General John E. Hyten in his Commander's Vision and Intent,⁶ our research identified four goal areas that would enable U.S. Strategic Command to fully incorporate innovation into its processes, practices, and outcomes:

1. Create a workforce and culture supportive of innovation,
2. Improve strategic readiness through an increased use of wargaming,
3. Cultivate and leverage the Command's reputation, and
4. Expand engagement with outside partners and leverage their resources and expertise.

Our report is structured to provide insights on each of these four goal areas, coupled with recommendations supported by specific actions that chart a path to achieve each outcome.⁷



⁶ Gen. Hyten J.E. (2017) Commander's Vision and Intent, Page 9.

⁷ A number of terms, ranging from 'gaming' to 'simulation', are used to refer to what we call 'wargaming' in this report; a full description of our intended meaning is available in the introduction to Section 2. See inset titled "SCOPE OF RECOMMENDATIONS ON WARGAMING."

General Hyten's Priorities:

ENDS:

Strategic deterrence through innovative and integrated forces

Ability to provide a decisive response

WAYS:

Workforce and Culture of Innovation

Improved Readiness with Wargaming

Establish an innovation initiative

Break down barriers to out-of-the-box thinking

Bring outside ideas into the organization

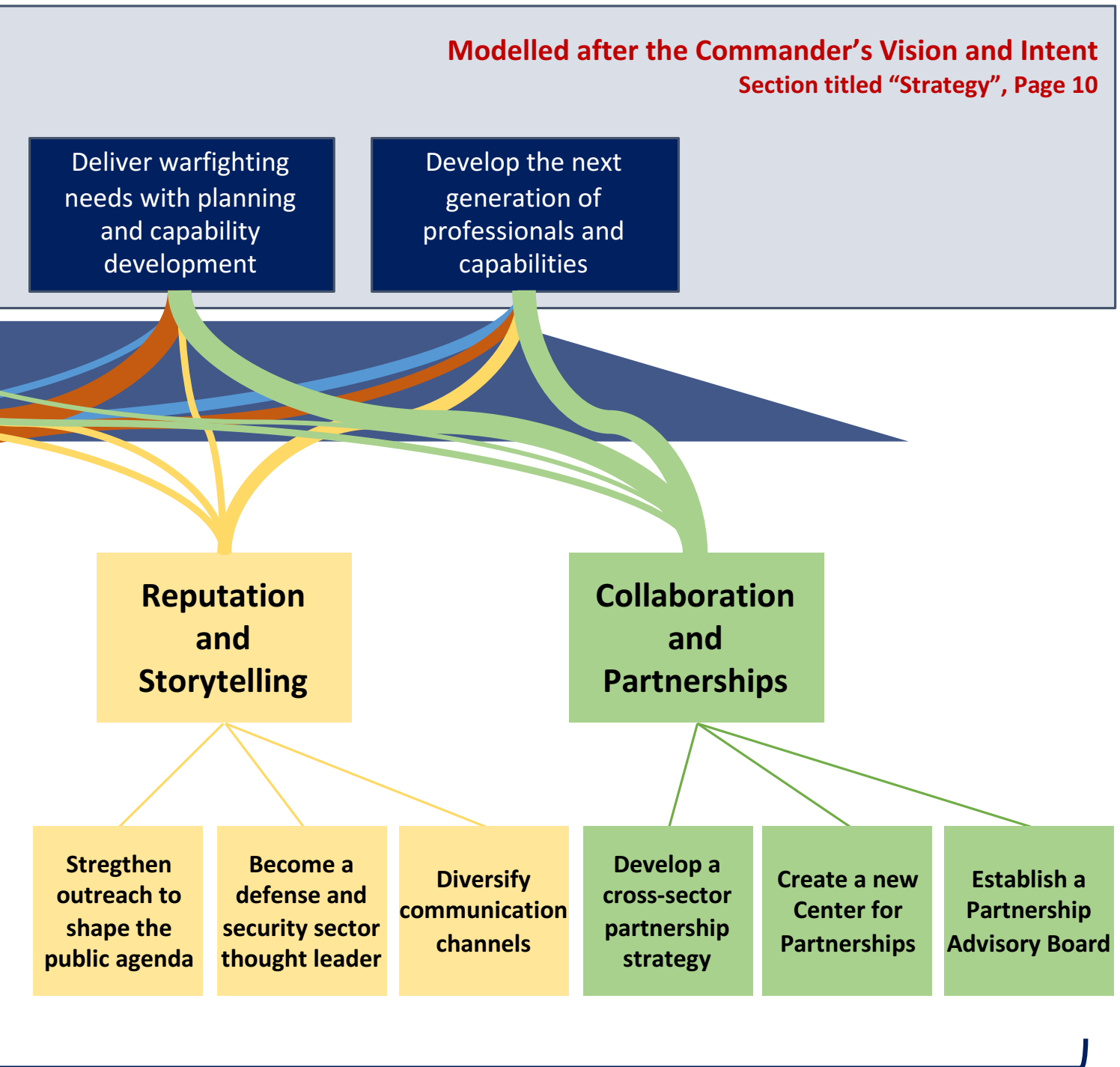
Raise profile of wargames among employees

Empower employees to integrate wargames in their toolkit

Leverage external resources to generate new insights

MEANS:

Report Recommendations



Line thickness between "Ways" and "Ends" denotes the weight of the recommendation's applicability to each priority.

GOAL 1 - CREATE A WORKFORCE AND CULTURE SUPPORTIVE OF INNOVATION

In his Commander's Intent, General Hyten spells out the importance of innovation, specifically the need for "new and creative thinking," along with the importance of "developing the next generation of professionals and capabilities."⁸ These objectives can only be met with an internal culture that provides opportunities for fresh ideas, outside perspectives, and experimentation of thought. It requires a process that enables workforce development, and an environment that encourages initiative.

Creating an environment favorable to these conditions requires intentional communication and demonstration from USSTRATCOM's leadership that an organizational culture shift is a priority. Unless and until the civilian and military staff of USSTRATCOM receive this signal from their chain of command, and see that leadership is invested in supporting innovative thinking, recommendations supporting such goals will fall short of their potential. As such, our proposal begins by recommending the Commander's deep engagement in a broad innovation initiative, which will be critical for executing many of the recommendations in this report.

We also wish to note that, during our initial research phase, we intended on recommending wider sweeping changes focused more directly on the recruitment and diversity of the Command's workforce (see Appendix I). After delving deeper into the barriers to implementing such changes, we found that many impeding processes are imposed on the Command by the Department of Defense, the Office of Personnel Management, or by Congress through statute. We have therefore chosen to focus on a set of pathways that would modernize USSTRATCOM's workforce management within the existing statutory and regulatory environment. These are to:

- Establish an innovation initiative for the workforce, ranging from strong top-down support to mid-level accountability, to bottom up ideation challenges;
- Promote fresh ideas within the organization by breaking down barriers to 'out-of-the-box thinking', including the creation of a more open and collaborative culture;
- Create opportunities to bring outside ideas into the organization, particularly through an increased use of external secondments.

The following recommendations are low-cost, high-yield, compatible with DoD regulations, and actionable once they receive approval from senior leadership. The business case for each of these recommendations is provided below, along with details of how to initiate their implementation.

⁸ Gen. Hyten J.E. (2017) Commander's Vision and Intent, Page 9.

Recommendation 1.1: Establish initiatives that enable innovation across the workforce

In his Commander's Intent, General Hyten identifies "new and creative thinking about strategic deterrence" as one of USSTRATCOM's priorities.⁹ In order to support this goal, innovation must be incorporated across many work streams at U.S. Strategic Command.

Specifically, building on the Commander's desire to create an "innovative joint fighting force," USSTRATCOM's leadership should establish processes for innovation across directorates.¹⁰ While technical roles relating strictly to the operation and maintenance of USSTRATCOM's nuclear arsenal may need to remain largely unchanged, other servicemembers and civilians should identify aspects of their role that could be made more effective, more efficient, or otherwise improved.

1.1.1 Launch an internal initiative on innovation

To deliver the call for innovation outlined in the Commander's Intent, USSTRATCOM's leadership should kick-start an internal initiative specifically aimed at creating staff awareness and collective understanding about the importance of disruptive thinking.

An initiative on innovation can serve as a highly visible and energizing program, and will also provide a supportive foundation for General Hyten's priorities, as well as other recommendations in this report. A clear signal from General Hyten to his entire chain of command will ensure that all staff understand the importance of this initiative and take action to accomplish its goals. If this initiative is supported only by mid- or junior- levels of command, there is a high risk that stasis and aversion to change will persist, leaving the status quo widely unchallenged.

The initiative should be treated as an internal campaign in which each grade of leadership persuades and supports their peers and subordinates to, not simply follow the letter of this initiative, but embrace the spirit of change. Private sector firms maximize the chances of success for culture change campaigns by creating distinctive branding that helps identify the change process, and by naming champions of change across divisions. Although an initiative of this kind can take significant upfront staff time to design and launch successfully, the cost will be outweighed by the expected savings downstream once innovative processes are identified and implemented. Furthermore, the following set of recommendations would be enabled by this initiative, and lead to an increase in staff morale and an improved sense of ownership and pride in work product output.

⁹ Ibid. Page 5.

¹⁰ Ibid. Page 8.

1.1.2 Identify directorate, division, and bureau-level barriers to innovation

Early in this initiative, the Commander should request that leadership across directorates, divisions, and bureaus identify what they and their teams see as the primary barriers to innovation within their respective areas. Leaders should feel empowered to employ surveys, open forums, or other channels they deem appropriate to identify and assess these barriers. In service of this goal, it is the duty of all civilians and servicemembers to communicate to their Commander what they see as areas for improvement. Importantly, these communications should be undertaken with candor and without fear of reprisal.

1.1.3 Praise existing examples of activities and programs that illustrate what is meant by 'innovation' and 'creative thinking'

Effective communication of the desired outcome of an innovation-based culture will create a common sense of purpose and identity across the workforce.¹¹ Clear examples of innovative practices will significantly improve the understanding, motivation, and loyalty to the initiative's goals and ensure that staff invest themselves into the intended mindset.

Managers in particular should seek to identify and promote the actions of individuals who have demonstrated creative thinking, improved performance, or innovative approaches to conducting their mission. In order for a culture of innovation to develop, senior leadership must allow for a certain level of mission-allowable risk-taking in the pursuit of innovative approaches, as creative thinking cannot, by definition, always generate valuable insights.¹² If successful ventures are commended but unsuccessful attempts to innovate are penalized, fear of change and resistance to new ideas will persist.

In parallel, USSTRATCOM should survey sister agencies for additional best practices to showcase to its workforce. Absent these examples, staff may unintentionally undermine innovation recommendations through incorrect implementation because they do not have guideposts for fully understanding the initiative. An ineffective rollout of the initiative could lead to staff resentment and disengagement because they feel they are arbitrarily being required to change their work habits.

1.1.4 Employ ideation challenges

Ideation challenges are a particularly effective tool and are recommended by DigitalGov, a U.S. government office in charge of promoting innovation within the administration. Ideation challenges help embed the need for innovation, normalize practices that favor new ideas, and create tangible examples of fresh thinking that can be showcased

¹¹ Mitchell, C. (2002, January) "Selling the Brand Inside." Harvard Business Review. Retrieved from <https://hbr.org/2002/01/selling-the-brand-inside>

¹² The authors would like to stress that they are not calling for risk-taking as it relates to the command or control of nuclear weapons; rather, as it relates to internal business and management processes of the organization.

around the organization. In an ideation challenge, participants compete to create new approaches to resolve a well-defined problem. For this to be successful, the evaluation metrics, range of available resources, and other relevant conditions must be established in advance of the challenge. These challenges have proven successful in different federal agencies, including the Federal Trade Commission and the U.S. Patent and Trademark Office.¹³



Research has shown that “creative [thinking] is more likely at workplaces where managers support employees and where work is organized to promote knowledge diversity.” Creative professionals are those who “engage in creative problem solving, drawing on complex bodies of knowledge to solve specific problems...What they (creative professionals) are required to do regularly is think on their own” and “apply complex bodies of knowledge...to interpret their work and make decisions.”¹⁴

Recommendation 1.2: Promote fresh ideas within the organization by breaking down barriers to ‘out-of-the-box’ thinking

Working with the nation’s secrets is a very codified and controlled task, where security is the preeminent concern. For strategic purposes, sensitive compartmented information is segmented and offered on a need-to-know basis, yet this promotes redundant work and process inefficiencies. A disjointed mindset, however, should not carry over into other aspects of an organization’s work where there is not a strict security requirement. USSTRATCOM should encourage staff to spend as much time as possible engaging in open and collaborative discussion, and enable cross-organizational mobility. These actions would foster the exchange of ideas within the workforce, a dynamic that has been proven to be at the core of innovation.¹⁵

¹³ Description of ideation challenges by the GSA can be found here: <https://www.digitalgov.gov/2013/11/14/ideation-challenges/>

¹⁴ Lorenz E. and Lundvall B.A. (March 2011). Cambridge Journal of Economics, Vol. 35, No. 2 (March 2011), pp. 269-294

¹⁵ Capgemini (2017), “Accelerated Solutions Environment (ASE).” Retrieved from: <https://www.capgemini.com/how-we-work/accelerated-solutions-environment-ase>

"Don't tell people how to do things, tell them what to do and let them surprise you with their results."

– General George Patton

1.2.1. Facilitate the flow of ideas through the design of USSTRATCOM's new headquarters

Open workspaces (within SCIFs), common use spaces (outside of SCIFs), and unclassified rooms for research (e.g. libraries or archive rooms) offer different means for facilitating creative thinking. Some offer areas that can be used for external interactions that may not involve sensitive information, such as partnership building. And others facilitate improved outreach and cross-organizational collaboration. The development of USSTRATCOM's new headquarters offers the possibility to incorporate open spaces in the most relevant locations, and favor day-to-day exchanges between members of different directorates. These discussions could streamline efforts and provide increased operational efficiency. In our discussions with USSTRATCOM personnel, we learned of a proposal for the main atrium of the new headquarters to be a non-SCIF environment.¹⁷ We strongly support such a course of action.

Collaborative learning

Collaborative learning, as it is referred to in academic research, is the idea that the active exchange of ideas within small peer groups increases "interest among the participants but also promotes critical thinking."¹⁸ Research has shown that "collaborative learning fosters the development of critical thinking through discussion, clarification of ideas, and evaluation of others' ideas."¹⁹ In fact, these behaviors have been promoted with success within the most profitable firms of the 21st century, from Silicon valley upstarts to long-standing companies that have sought to maintain market leadership.

1.2.2. Create ideation spaces; train and enable the workforce to use them effectively

In parallel, a section of the new headquarters should be specifically dedicated to ideation. These spaces, also called design thinking labs, allow for more deliberate and intensive "blue-sky thinking." While open spaces act as a catalyst for 'organic' creative thinking, ideation spaces enable more calculated and deliberate innovation.

¹⁷ Group discussion with USSTRATCOM personnel spanning J2, J3, J4, J5, J6, J7, and the former J9 directorates; March 14, 2017.

¹⁸ Gokhale, Anuradha (1995, Fall). "Collaborative Learning Enhances Critical Thinking." Journal of Technology Education. Retrieved from: <http://scholar.lib.vt.edu/ejournals/JTE/v7n1/gokhale.jte-v7n1.html?ref=Sawos.Org>

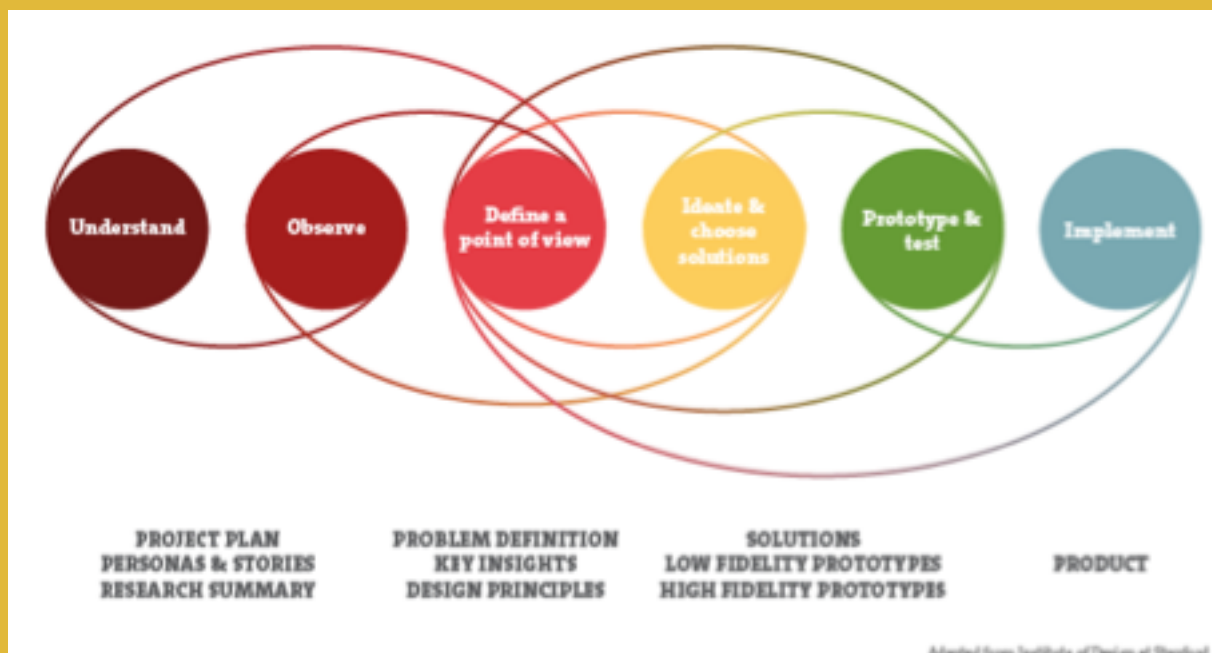
¹⁹ Ibid.

What are design thinking labs?

'Design thinking' emerged at the end of the 20th century as a field drawing on the collective teachings of cognitive psychology, engineering, and architecture. The process brings together the scientific method and the speed of agile development (also known as 'scrum').²⁰ Stanford's Institute of Design has played a leading role in formalizing the process into what is known as the 'Stanford Design Method'.²¹

Using this method, a number of consulting firms have implemented and operated ideation spaces within some of the world's most successful companies, as well as smaller businesses. In fact, ideation and out-of-the-box thinking is significantly more likely to occur when staff are placed in environments where they are removed from the traditional barriers to innovation: routine and hierarchy.²² This explains the value of having dedicated space within a headquarters building. Participants can be handpicked for ideation sessions, to ensure they represent the right variety of skills and backgrounds, and so that there are no direct hierarchical relationships. It is common to require participants to trade their business dress code (or uniforms and rank insignias) for casual clothing - this helps to change mindsets, but is particularly relevant in military contexts so as to dissolve the impact of rank.

Of note: Despite the restrictions on 'open' collaboration that come with information classification, ideation spaces are also being used in defense and intelligence settings. For example, the firms CEIS and Sopra-Steria have developed and operated a tailored design thinking studio for the French Armed Forces since 2013.²³ The facilities and sessions are customized to accommodate experts from external government agencies as well as from the defense industry, without breaching SCI requirements.



20 Takeuchi, Hirotaka; Nonaka, Ikujiro (January 1, 1986). "The New Product Development Game." Harvard Business Review.

21 Plattner, H. (2016). "An Introduction to Design Thinking - Process Guide." Stanford Institute of Design.

22 Brown, T. (June 2008). "Design Thinking." Harvard Business Review.

23 French Ministry of Defense (April 28, 2017), "DGA Lab." Retrieved from: <http://www.defense.gouv.fr/dga/innovation2/dga-lab>

Sopra Steria, (2016) "Concept - Sia Lab." Retrieved from: <https://www.sia-lab.fr/fr/concept>

At USSTRATCOM, ideation spaces could be used for one specific project at a time, and help participants anticipate unforeseen challenges on a given issue, or develop an innovative response to a specific or unexpected problem. Given the more structured, methodical nature of this innovation process (See 'What are design thinking labs?' inset), expertise in ideation methodology is needed to make effective use of time spent in these spaces.

If the skills are not available in-house, experts should either be hired or trained internally to prepare, facilitate, and synthesize sessions, and to maximize the use of time spent by staff in these spaces.²⁴ For training, USSTRATCOM can look to U.S. Special Operations Command (USSOCOM), which hired researchers and instructors who specialize in "breaking down silos" and overcoming new strategic challenges such as hybrid warfare through an application of design and systems thinking to the military sphere.²⁵

1.2.3. Engage in directorate-to-directorate personnel swaps (internal secondments)

Separate to the reconfiguration of workspaces, cross-organizational thinking would also benefit from swaps of personnel between directorates. The objective of creating a directorate-to-directorate internal exchange program is to expand individuals' perspectives and provide them with a broader view of how USSTRATCOM operates to meet national security requirements. Sometimes referred to as 'secondments', many companies have incorporated this practice into their human resource strategy. The old adage, 'where you stand depends upon where you sit' applies. Doing the same job repetitively, or without a call for improvement or innovation, generates a propensity for employees to develop a myopic view. Allowing those in the workforce who are high performers and desire change to volunteer for temporary placement in another directorate can reduce stagnation.

There are several benefits and costs associated with such a program, but we assess the overall outcome to be positive. Although the ultimate reason for interdepartmental swaps is to encourage learning and cross-fertilization of ideas, there is a temporary cost associated with the loss of high-performing staff in an employee's previous job and the requirement for a seemingly 'lower-performing' individual to learn a new job. We assume the learning curve for high performers is shorter than the average, and that there is a sufficient number of high performers to move in order for the overall exchange to be effective. While the short-term impact on efficiency is notable, it is

²⁴ Clegg, Brian. (April, 2006). "Blue-Sky Thinking." *Physics World*. Retrieved from: <http://iopscience.iop.org/article/10.1088/2058-7058/19/4/36/meta>

²⁵ Zweiberson, B. (19 February, 2017). "An Application of Theory: Second Generation Military Design on the Horizon." *Small Wars Journal*.

outweighed by long-term benefits. A swap of this nature comes at a low monetary cost and would only require changes to internal USSTRATCOM assignments. This program is intended to be strictly voluntary, therefore it would not affect individuals who do not wish to participate; however, high performers generally seek new and challenging opportunities for career advancement.²⁶ Furthermore, as civil servants take advantage of opportunities that they want to partake in, we expect employee job satisfaction to increase, which will itself improve on-the-job performance.

The anticipated results of such a program are employees that have a greater breadth of knowledge and foster an exchange of ideas where this would not otherwise normally occur. Those who participate in these swaps are able to examine processes in their former directorate and call on their experiences from their new directorate to improve on the organization's efforts. These swaps create a cross-trained workforce, better integrated (as called for in the Commander's Intent), and experienced in an array of tasks with improved ability to recognize synergies across the organization. This also creates the future potential for an individual to fill critical personnel gaps. We assert that one's professional growth in a new directorate after several years' experience is greater than what it would be in one's previous role. This program also fosters greater preparedness for managerial responsibility and leadership roles.

Research has found that "Workers may temporarily enter jobs for which they are overeducated to obtain the experience and training needed to progress upward during their careers...overeducated workers are more likely to change firms, change occupations, and move to higher-ranked occupations within the next year than adequately educated workers." ²⁷

Recommendation 1.3: Create opportunities to bring outside ideas into the organization

Similar to internal directorate-to-directorate swaps, we also recommend that USSTRATCOM engage in intergovernmental personnel swaps and training with private industry. Despite the cost, private firms find that fostering links with other organizations, as well as the local community, is worth the expense of providing staff time in support of public service. Secondments or detailing within the government serve to "maintain and increase the motivation of individual employees, bring benefits of organizational alliances, and enhance an organization's profile within a wider community."²⁸ This speaks to the expected payoff of such a program. Organizations that do not offer

26 Bersin, Josh. (Feb 19, 2014). "The Myth of the Bell Curve: Look for the Hyper-performers." Forbes. Retrieved from: <https://www.forbes.com/sites/joshbersin/2014/02/19/the-myth-of-the-bell-curve-look-for-the-hyper-performers/#1f5b93276bca>

27 Robst, John. (Fall, 1995). "Career Mobility, Job Match, and Overeducation." Eastern Economic Journal. Retrieved from: http://www.jstor.org/stable/40325672?seq=1#page_scan_tab_contents

28 Whyte, Lawrence. (April, 1999). "The route to successful secondment." Nursing Management (through 2013). Retrieved from: <http://search.proquest.com/docview/236963111/fulltextPDF/73CB00B542DC40BFPQ/1?accountid=10226>

sufficient opportunities for promotion risk stifling employee career aspirations, either draining employee motivation or pushing them to leave. Intergovernmental detailing offers important opportunities for career development within the public service.²⁹ For intergovernmental personnel swaps, we envision this program going beyond the traditional roles of liaison officers.

1.3.1. Develop an externship program for HQ staff to observe best practices in other sectors (external secondments)

An externship program would detail USSTRATCOM employees into other federal agencies or private industry with similar or overlapping areas of expertise. Ideally, externships would last a minimum of 3 months, and not exceed 2 years. The Intergovernmental Personnel Act (IPA) Mobility Program provides for the temporary assignment of personnel between the Federal Government and state and local governments, colleges and universities, Indian tribal governments, federally funded research and development centers, and other eligible organizations.³⁰ Per 5 CFR part 334, "assignment agreements can be made for up to two years, and...[t]he agency head, or his or her designee, may extend an assignment for an additional two years when the extension will be to the benefit of both organizations."³¹

In the public sector, we recommend engaging in IPA details with the State Department, intelligence agencies, and the Department of Energy, to name a few, due to their overlapping objectives with USSTRATCOM. In the nonprofit sector, externships could be arranged with think tanks and organizations that are thought leaders in their respective fields - depending on the type of skills that USSTRATCOM seeks to develop in its staff. Developing externships with private sector firms would be more complex, but would also provide invaluable insights. Potential collaborators could include technology and internet companies, management consultancies, and others relevant to USSTRATCOM's mission needs.

Because each agency or corporation has unique cultures and bureaucratic processes, an exchange would bring insights to USSTRATCOM about disruptive ideas already adopted by others within the U.S. government or other external entities. This would help identify areas where the Command can become more efficient, and also help USSTRATCOM identify internal biases.

Target outcomes for this program are the strengthening of staff's management capabilities, the transfer and use of new technologies and analytical methods, effective means of incorporating state and local officials in implementing federal policies and

²⁹ Ibid.

³⁰ See relevant OPM guidelines at: <https://www.opm.gov/policy-data-oversight/hiring-information/intergovernment-personnel-act/>

³¹ See relevant OPM guidelines at: <https://www.opm.gov/policy-data-oversight/hiring-information/intergovernment-personnel-act/#url=Provisions>

³² Whyte, Lawrence. (April, 1999). "The route to successful secondment." *Nursing Management* (through 2013). Retrieved from: <http://search.proquest.com/docview/236963111/fulltextPDF/73CB00B542DC40BFPQ/1?accountid=10226>

programs, and the overall enhancement of the secondee's performance in his or her permanent assignment at USSTRATCOM.³²

Returning from an externship, participants would conduct team debriefs, and identify new processes and approaches that could be successfully implemented in their section. Any lessons that could potentially improve the Command's performance would be shared with relevant divisions or directorates. Those teams would then take responsibility for determining the value and feasibility of any recommended changes, and if judged appropriate, implement such best practices.

On an individual level, an externship program provides an opportunity for USSTRATCOM staff to broaden their knowledge base and skill sets from other sectors, and to become more aware of how the government operates as an institution. This experience makes any employee at USSTRATCOM better prepared to face the unknown challenges of the future.³³ Talent management and human capital development is well established in the private sector. Especially when firms invest a great deal of time, resources, and money in employees it hopes to retain for future leadership roles.

1.3.2. Bring high-performing talent into USSTRATCOM from other government agencies or private sector organizations

To complement the exchange program, an agency receiving a USSTRATCOM extern could in turn offer a similarly experienced staff member to join USSTRATCOM, essentially creating an external swap. The outside agency staff member would be able to offer fresh perspectives, free of internal pathway dependency. They could also help minimize potential staffing shortages during the externship program period. In addition, having both USSTRATCOM and agency staff exchange roles would further strengthen the communication and relationships between both organizations, benefitting each in the long run.

The use of OPM detailing to temporarily augment external assets and promote intra-organizational learning is one potential solution. This approach has a unique advantage, as it allows USSTRATCOM to piggyback off of existing security clearances or use interim clearances as appropriate.

³³ Ibid.

Capacity building through secondment of staff: a possible model in emergencies? - by Pierson R. T. Ntata³⁴

This case study examines a secondment of staff as a possible model for capacity building. The author analyzes “the appropriateness of the model in terms of its administrative structure, focus, and impact, and draws lessons for practitioners for its successful application.” The excerpts below provide key takeaways:

- “the model offered the opportunity of having someone with vast experience in a particular field to be fused into the recipient organization”
- “the model offered excellent opportunities for strengthening the partnership between the seconding and the recipient organizations”
- “having someone ‘neutral’ within the recipient organization offered possibilities for critiquing aspects of the organization that insiders might be afraid to raise or simply be oblivious to”
- “the secondee had limited time in which to ‘perform’ - she was bound to be result-oriented and thus more likely to use time and resources effectively”



³⁴ Ntata, Pierson. (November 26, 2007). "Capacity Building Through Secondment of Staff: A Possible Model in Emergencies?" Development in practice. Retrieved from: <http://www.tandfonline.com/doi/pdf/10.1080/09614520601092725?needAccess=true>

RECAP

We consider that new approaches to staff management and internal processes will enable creative thinking sought by USSTRATCOM's leadership. Building on a clear call for innovation led by the Commander, the proposed collaborative spaces, ideation challenges, internal personnel swaps, and externships will spur the development of "an innovative joint fighting force."³⁵ These initiatives will yield substantial benefits, helping the Command develop its staff while at the same time identifying synergies and modernizing its operational culture.

USSTRATCOM will primarily need to consider the short-term impacts on staff's current responsibilities, as new ways of working require time to adapt. Specific budgets will need to be earmarked to cover the costs of internal and external personnel swaps, as well as to cover the costs of launching the innovation initiative and accommodating new work spaces. However, these costs should remain low, even relative to normal staff costs – in fact, the funds could be sourced by repurposing planned human resource and facilities budgets. Ultimately, our research indicates that the benefits of these initiatives would far outweigh their cost, particularly over the long term.



35 Gen. Hyten J.E. (2017) Commander's Vision and Intent, Page 9.

GOAL 2 - IMPROVE STRATEGIC READINESS THROUGH AN INCREASED USE OF WARGAMING

Winds of change are blowing across the government, especially as it relates to wargaming, which has experienced a “surge of attention among defense professionals” recently.³⁶ There were at least four directives from the highest levels of the Department of Defense calling for more wargaming in 2015-16, along with an allocation of \$55 million for FY 2017 and \$525 million over the next five years to support expanded wargaming activities.³⁷

As a primary strategic planner for assurance and deterrence operations in DoD, USSTRATCOM should take the lead in developing new insights through wargames. The recommendations in this section also provide a pathway for attaining the Commander’s vision of “embracing a warfighting mindset” and fostering “new and creative thinking about strategic deterrence.”³⁸

“When done right, wargames spur innovation and provide a mechanism for addressing emerging challenges, exploiting new technologies, and shaping the future security environment... we need to reinvigorate, institutionalize and systematize wargaming across the Department”

- Deputy Secretary of Defense Robert Work, 2015³⁹

We have dedicated a work stream to the topic of wargaming because our findings led us to believe that it represents a source of untapped, and potentially valuable innovation. By placing the human decision-making calculus front and center, wargaming is the only form of analysis that recreates the fog of war and forces participants to actively make decisions within a framework of incomplete information.

Recommendations 1 and 2 in this section are internal in nature and can be implemented by USSTRATCOM without the help of any third party. They are concerned with bringing about a cultural change – from the top-down and the bottom-up respectively – to make wargames a natural part of employees’ day-to-day job.

36 Perla P.P. (2015). Work-ing Wargaming Retrieved from: <https://wargamingcommunitywordpress.com/2015/05/14/peter-perla-on-work-ing-wargaming/>

37 Work R., Deputy Secretary of Defense (2015) Wargaming and Innovation Memo; Hagel C., Secretary of Defense (2014) Memo on innovation; we separately understand that two more memos were circulated internally, but cannot be sourced publicly: See <https://www.govtechworks.com/the-return-of-wargaming-how-dod-aims-to-re-imagine-warfare>

38 Gen. Hyten J.E. (2017) Commander’s Vision and Intent, page 5.

39 Work R., Deputy Secretary of Defense (2015) Wargaming and Innovation Memo Retrieved from: http://www.professionalwargaming.co.uk/WARGAMING_INNOVATION_9FEB2015.pdf

Recommendation 3, in line with our recommendations on partnership development, seeks to work with a network of external organizations - including the University Affiliated Research Centers and the Command's Academic Alliance - to improve wargames by conducting them on a scale that surpasses what USSTRATCOM could feasibly do by itself. This initiative would not only provide the Command with a larger and more diverse dataset of outcomes on scenarios that it wishes to analyze, it would also help develop the next generation of strategic thinkers.⁴⁰

"By creating for its participants a synthetic experience, gaming gives them palpable and powerful insights that help them prepare better for dealing with complex and uncertain situations in the future."⁴¹

- Dr. Perla, 'Why Wargaming Works'

SCOPE OF RECOMMENDATIONS ON WARGAMING

- We use the term wargame as defined by Dr. Peter Perla: "a warfare model or simulation... in which the flow of events shapes and is shaped by decisions made by a human player or players." We do not consider operations analysis in our recommendations, which focuses less on the human decision-making calculus and more on scientific and quantitative elements.⁴²
- Our recommendations are focused on analytic wargaming, whose purpose is to generate new insights. We do not touch on serious gaming, which is more akin to training, and primarily concerned with the impact or impression on participants.
- Wargames are increasingly being viewed as additional methods for conducting analyses. Accordingly, we treat wargaming as "another analytical tool on par with campaign analysis,"⁴³ with special relevance to Course of Action Analyses, in line with existing joint doctrine.⁴⁴

40 Gen. Hyten J.E. (2017) Commander's Vision and Intent, page 9.

41 Perla P.P. and McGrady E.D. (2011) Why Wargaming Works.

42 Of note: there was disagreement among officials at USSTRATCOM regarding the use of the term 'wargaming' in its present context for this report; although we could not effectively implement contradictory feedback, we acknowledge, respect, and appreciate all of the feedback we received.

43 Synthesis Group Report (2016) MORS Wargaming Special Meeting unpublished draft.

44 Joint Publication (JP) 5-0, Joint Operation Planning, 8/11/2011.

Recommendation 2.1: Raise the profile of wargames among USSTRATCOM employees

Wargames are often designed with particular players and directorates in mind. Ensuring participant attendance, and even more importantly, their active participation, is therefore critical to generating valuable insights from a wargame. USSTRATCOM staff shared that they “have yet to have a wargame where [they] achieve the player participation [they] desire.”⁴⁵

Accordingly, leadership should consider the following actions to signal the importance of wargames across the organization.

2.1.1 Establish norms and expectations surrounding the use of wargames

In an interview for this report, Dr. Peter Perla, a wargaming expert at the Center for Naval Analysis, underlined that “the first action necessary is to give permission to people to play [war]games...there are people within the uniformed officer community, officers who want to use gaming to develop their ideas, but are afraid to be public about it as they will not be taken seriously.”⁴⁶

Multiple USSTRATCOM staff also explained to us that “the word ‘game’ itself is a challenge,” as it makes “people question the seriousness of the exercise.”⁴⁷

Accordingly, the first and essential step towards unlocking the full potential of wargames should be a signal from the Commander to staff at all levels and in the appropriate directorates that they are fully expected to use and participate in wargames to construct and test ideas and strategic planning. USSTRATCOM’s top leadership should underline the value they derive from reviewing results and insights from wargame analysis, but make clear that these insights are only as valuable as the level of engagement invested by participants: greater engagement will provide greater reward to the individual, the directorate, the Commander, and to USSTRATCOM’s ability to achieve its missions.



⁴⁵ Interview USSTRATCOM official who requested that this comment be non-attributed; interview on 3/22/2017.

⁴⁶ Interview with Dr. Peter Perla on 4/11/2017.

⁴⁷ Interview USSTRATCOM official who requested that this comment be non-attributed; interview on 3/22/2017.

A key strategic insight obtained through a wargame in the 1980s

In the 1980s, as tensions with the Soviet Union reached a peak, President Reagan unveiled the Strategic Defense Initiative plan for national missile defense. Conventional wisdom at the time mocked the plan by arguing that it would be impossible to devise a shield against 15,000 potential nuclear warheads aimed at the U.S.

Two wargames were organized to test the effects of partial missile defense. In the first game, where the U.S. had no missile defense, the Soviets only needed to use half of their 15,000 warheads to demolish and defeat all U.S. targets.

The second game considered that the U.S. had the ability to shoot down 15% of all missiles. The results astounded the Pentagon and Strategic Air Command officials in the room - even by exhausting their entire stockpile of nuclear weapons, the Soviets only managed to destroy less than 2/3rds of their U.S. targets. Without the certainty that a missile would reach its destination, the Soviets needed to use 3 or 4 warheads to guarantee that sensitive targets would be taken down, which exhausted their supply.

Strategic planners drew the lesson that “a wargame probes an imagined future for teams with a stake in the outcome and does it in a risk-free environment, before a critical decision can be made in the real world.”⁴⁸

2.1.2 Clarify responsibilities among staff involved in wargaming, and designate clear responsibility for coordination across USSTRATCOM

Our exchanges with USSTRATCOM staff indicated that there is division of various wargaming activities among staff across the J2, J3, J5, J7 and J8 directorates. The ownership of tasks and goals can therefore be unclear. Specifically, there appears to be no nexus point or clear assignment of responsibility for the coordination of wargaming activity within the Command.⁴⁹

We therefore recommend that a specific division be charged as the office of primary responsibility (OPR) for strategic wargaming. An OPR is not only essential for coordinating activity across diverse participants and directorates, but it would serve as a single voice for identifying agency needs and prioritizing resource requests. Furthermore, the OPR would serve as a hub of expertise where lessons learned on wargames can be stored and shared. We were advised that J7 would be best positioned to host the OPR for wargames at USSTRATCOM.

⁴⁸ Herman M. (2008). Wargaming for Leaders - Strategic Decision Making from the Battlefield to the Boardroom.

⁴⁹ Interview with Joe Williams (USSTRATCOM) on 4/25/2017.

2.1.3 Authorize the use of incentives to encourage greater participation in wargames

Financial incentives are already in place at the DoD-level for combatant commands to implement and use wargaming. USSTRATCOM should consider decentralizing these benefits and allow directorates to incentivize managers and staff to participate in wargames organized by USSTRATCOM, as well as incorporate wargames into their day-to-day job. Individuals would thus receive benefits to participate and make use of this analytical tool.

Dr. Perla stressed that, while permission is an essential prerequisite at the individual level, the second element needed to create a wargaming culture is encouragement. “The results of [war]gaming should be recognized in the system as being of value. If a strategist who is supposed to be judged for strategic thinking does well in gaming, and their thoughts grow...that performance should be made an explicit part of their performance evaluation.”⁵⁰

In a similar vein, Mark Herman, a former Senior Partner in charge of wargaming at Booz Allen Hamilton, spoke about the need for the ‘gamification’ of wargaming to bring about a culture change.⁵¹ Under this concept of gamification, points could be collected for a certain action (such as participation in a wargame). These points could then be redeemed for real-world rewards, such as financial bonuses or extra leave.

2.1.4 Ensure that wargaming is fully incorporated into feedback loops to support the measure of battle-readiness and potential courses of action (COAs)

Top leadership should hold their subordinates accountable for ensuring that wargames are used in strategic planning, and that lessons are learned and incorporated into the plans that were tested. As one USSTRATCOM official clearly laid out, in its essence, wargaming is simply feedback on a proposed policy or course of action.⁵² The scientific method consists of coming up with a solution, testing it, and then implementing it. The official regretted the fact that the second step - testing - was often skipped due to time constraints, and thus advocated institutionalizing it within the planning process through compliance with national defense doctrine, as well as a change in attitude promoting receptiveness to feedback.⁵³

⁵⁰ Interview with Dr. Peter Perla on 4/11/2017.

⁵¹ Interview with Mark Herman on 4/13/2017.

⁵² Interview USSTRATCOM official who requested that this comment be non-attributed; date redacted.

⁵³ Specifically, in line with and expanding upon current minimum integration as outlined in Joint Publication (JP) 5-0, Joint Operation Planning, 8/11/2011.

"The intent is not to add another layer of bureaucratic process that must be followed to initiate an action, but rather to use wargaming when appropriate to think through a task in order to maximize its chance of success"

- Synthesis Group Report on the MORS Wargaming Special Meeting 2016.⁵⁴

Recommendation 2.2: Make wargames an essential part of employees' toolkit for identifying and improving on strategic strengths and weaknesses

Under this recommendation, USSTRATCOM's staff in relevant departments should view and apply wargaming as an essential component of their job, rather than consider it a separate or isolated activity done on an ad hoc basis. We lay out three actions that would advance the Command towards this outcome.

2.2.1 Hold frequent informal wargame sessions in ideation spaces

There is a consensus among the wargaming community that, as a "story-living experience", wargaming helps individuals "deal with complex and uncertain situations in the future."⁵⁵

Wargames are thus increasingly being used to analyze gray zone and Conflicts Short of War (CSW).⁵⁶ The military establishment in the Netherlands, for instance, has "looked at wargaming from a hybrid perspective, as a means for looking at future conflict beyond a classic kinetic fight."⁵⁷

USSTRATCOM employees deal extensively with gray zones and thus could benefit from the full use of wargaming to un-package these complex situations.

"On the operational side, a good example is how the Joint Staff J8 used a series of games to help the J3 sort through the issues associated with moving and destroying Syria's chemical weapon stocks. The games were able to address a full range of contingencies by thinking through the tasks, the players, and the environment, including the full range of what could go wrong, so the Joint Staff was ready to recommend a solution that ultimately worked."

- Synthesis Group Report on the MORS Wargaming Special Meeting 2016.⁵⁸

54 Synthesis Group Report (2016) MORS Wargaming Special Meeting unpublished draft.

55 Perla P.P. and McGrady E.D. (2011) Why Wargaming Works.

56 Popp G. (2017): Strategic Multi-layer assessment: Gray Zone conflicts-challenges and opportunities-a multi-agency deep dive assessment.

57 Synthesis Group Report (2016) MORS Wargaming Special Meeting unpublished draft.

58 Ibid.

Mark Herman (of Booz Allen Hamilton), explained that wargamers at his company held weekly Wednesday evening sessions where all employees could come and wargame issues they had been working on.⁵⁹

Joe Williams, one of the many USSTRATCOM employees we spoke with, mentioned that a similar informal construct existed a few years ago at Command, called the “Council of Wargamers.” This group would get together once a month to talk about what they were working on and apply wargaming to generate new insights. As all members had the same clearance level, there was no hurdle with classification problems.

Thus, in line with the content presented in recommendation 1.2.2, ideation spaces should similarly host weekly wargaming sessions where employees can come and express their desire to wargame out a particular scenario. This could also help employees think through the implications of various gray zone conflicts.

A key tactical insight obtained through a wargame

Mark Herman gave an interesting example of a wargame conducted in one of Booz Allen’s weekly wargaming sessions. An employee wanted to understand how ‘willingness’, specifically willingness to use chemical weapons, would affect events on the ground. A short 30 minute wargame was organized with two sides, Country A which had indicated a willingness to use chemical weapons, and Country B which had declared they would not.

He found that when the countries went to war against each other, Country A had a tactical advantage over the other side. Troops from Country B had to wear heavy bio-gear at all times during the war, as they were unsure when chemical weapons might be used against them. Country A, on the other hand, would only have to wear the hot and heavy bio-gear when the weapons were actually being used, giving Country A a tactical advantage even if no chemical weapons ended up in play.⁶⁰

⁶⁰ Interview with Mark Herman on 4/13/2017.

2.2.2 Train employees to use wargaming in a way that serves their existing or day-to-day responsibilities

Implement a certification course on wargaming pioneered by USSTRATCOM that helps employees understand how wargames can be used as a tool to help them in their job. This certification could be developed with and/or obtained through organizations that have experience offering these courses, such as the Naval Postgraduate School (see Story Box below) or the Military Operations Research Society.

Personnel in charge of wargaming at USSTRATCOM could also partner with the Workforce Development and Talent Management Office (J7) to develop onboarding programs specific to each directorate. This training would offer advice and guidance on how wargaming could be used to help staff achieve their respective missions more effectively.

2.2.3 Identify directorates where wargaming directly supports the mission

The wargaming team(s) at USSTRATCOM should clearly identify areas where wargaming directly supports directorate-level or Command-level missions and illustrate how the activity can be integrated as a tool employees utilize for their job duties.

For example, wargames have been previously used to increase integration between Commands,⁶¹ as well as to assure allies of the U.S. armed forces' ability to defend them in the event of conflict. Canada is actively using wargaming techniques to improve their own integration with allies.”⁶²

Recommendation 2.3: Leverage external resources and partnerships to improve the frequency, reliability, and visibility of wargames at minimal cost

First, USSTRATCOM staff's time is limited and personnel cannot be expected to constantly participate in wargames, even if those wargames generate new insights. Second, USSTRATCOM wishes to develop the next generation of strategic thinkers, as outlined in the Commander's Vision and Intent. The Command cannot do this by itself. Finally, there is a limited perception that senior leadership may use wargaming to “support decisions and conclusions already made.”⁶³

61 Booz Allen Hamilton (2011), Campaign Planning and Courses of Action Analysis.

62 Synthesis Group Report (2016) MORS Wargaming Special Meeting unpublished draft.

63 Dunnigan, J (1990) foreword to the Art of Wargaming.

Leveraging and extending existing partnerships with universities and think tanks could help USSTRATCOM overcome each of these challenges, and this recommendation provides specific actions that can be taken to do so.

2.3.1 Generate a large and diverse dataset by organizing a series of decentralized wargames across partner universities, providing multiple but comparable iterations for a given scenario

There is a growing trend at colleges to have events where students wargame strategic challenges around the world. One author of this report took part in two such wargames at Columbia University that focused on scenarios regarding North Korea.⁶⁴

USSTRATCOM should capitalize on this trend and disseminate wargames on challenges they are grappling with - such as North Korea's development of an ICBM - to their academic partners, who can conduct wargames with their students. In addition to providing a large dataset, results would benefit from diverse perspectives and backgrounds of students. Columbia's School of International and Public Affairs, for example, has alumni from more than 155 countries; open source wargaming could provide insights from foreign nationals that USSTRATCOM cannot otherwise directly engage.⁶⁵

"In the end, a wargame is an exercise in human interaction, and the interplay of human decisions and the simulated outcomes of those two decisions makes it impossible for two games to be the same."

- Peter Perla, 'The Art of Wargaming'⁶⁶

Multiple iterations can generate data and insights that open up a new form of strategic analysis. For example, let us imagine that a game designed to test whether North Korea will attack the U.S. after obtaining ICBMs is played at 30 different colleges. We can analyze the decision making processes and the results, and make statements such as: "in 30 different simulations played at various colleges, North Korea used an ICBM against America more often than not when x set of escalating actions took place." If data is captured correctly, deeper analysis on specific decision points and the use or potential use of escalation off-ramps could provide valuable insights.

64 "North Korea Crisis Simulation" wargame held at Columbia University in collaboration with West Point on 02/19/17 under the supervision of Professor Richard Betts; "Crisis on the Korean Peninsula" wargame held 04/12/17 with Professor Stephen Noerper.

65 Welcome Letter, Dean Merit Janow, Columbia's School of International and Public Affairs. Accessed May 1, 2017, <https://sipa.columbia.edu/experience-sipa/about-sipa/letter-from-the-dean>

66 Perla P.P. (1990) The Art of Wargaming - A Guide for Professionals and Hobbyists.

"There was broad agreement, if not true consensus, that such repeated gaming is beneficial because it allows broader and deeper exploration of issues, creates opportunities for more creative innovation, and inspires greater confidence in results that appear to be consistent across a range of players and circumstances"

- Synthesis Group Report on the MORS Wargaming Special Meeting 2016.⁶⁷

2.3.2 Coordinate with colleges and universities to develop important wargaming resources

To reduce costs and build strategic capability, USSTRATCOM personnel can limit their engagement by providing top-level guidance, wargame uniformity, specific design parameters, and scenario objectives. Professors and student teams at various colleges could then research, further design, and operationalize the decentralized wargames cited in 2.3.1, without USSTRATCOM's direct supervision.

These open-source wargames would have to incorporate a high degree of standardization in order to ensure cross-comparability. The 'War Gamer's Handbook' developed by the Naval War college provides a roadmap for how to standardize wargames.⁶⁸ The diversity of participants in each iteration would further allow for new and valuable insights.

Annual Wargaming Capstone Project at the Naval Postgraduate School⁶⁹

The Naval Postgraduate School has a long and successful history of designing wargames for the DoD, combatant commands, and international allies through teams of students headed by a professor. Over the last 5 years, they have orchestrated over 50 wargames, including one for USSTRATCOM in 2011.⁷⁰

'Wargaming Applications' is a popular, 11-week course for resident students that focuses on developing analytic wargames for a client to generate new insights. The final exam consists of students conducting the wargame at their client's headquarters, which have included exploring the Russian hybrid threat in the Arctic for USSOCOM, examining the Distributed Lethality concept for the U.S. Navy, and understanding the implications of Shia Militia Groups employed against ISIS for U.S. Central Command. Thus, high quality wargames can be designed by outside partners and schools and assist USSTRATCOM in developing wargaming resources at a minimal cost.

67 Draft copy of the Synthesis Group Report on the MORS Wargaming Special Meeting 2016.

68 Naval Postgraduate School (2015). War Gamer's Handbook.

69 Interview with Dr. Jeff Appleget, Professor for the Naval Postgraduate course, on 4/11/2017.

70 Appleget J, Cameron F, Burks R.E., Kline J (2016). Wargaming at the Naval Postgraduate School.

2.3.3 Engage universities and/or think tanks to analyze the data and generate actionable reports and recommendations

To minimize time costs to USSTRATCOM, allow the data from these wargames to be analyzed by external research partners. This could include a Strategic Multi-layer Assessment (SMA) Reach Back Cell, a University Affiliated Research Center (UARC), one of DoD's Federally Funded Research and Development Centers (FFRDCs), or some other think tank or university. This external analysis will be more useful if the partnering organization has required security clearances and protocols to tailor insights based on mission critical needs. Therefore, USSTRATCOM should prioritize institutions with relevant expertise and who already fit security requirements (such as the National Strategic Research Institute (NSRI) at the University of Nebraska⁷¹).

Separately, one USSTRATCOM official spoke of a vast repository of wargames that is under-analyzed. While security clearances may preclude sharing this repository publicly, USSTRATCOM should leverage the trust established within the Academic Alliance and make the repository available to think tanks, UARCs, and other relevant entities as appropriate.



⁷¹ NSRI recommended as a result of discussions with USSTRATCOM and NSRI staff on April 21, 2017.

RECAP

The section below provides an overview of the costs and benefits to consider when implementing each of the above actions. As some of the report's recommendations call for changes beyond what is minimally mandated by Joint Publication (JP) 5-0, Joint Operation Planning⁷², we have listed the implications of each action.

Overall, we consider that the benefits would far outweigh the costs of implementation, and would position USSTRATCOM as the DoD leader for using wargaming to generate strategic insights and identify existing or potential weaknesses.

RECOMMENDATION	BENEFIT(S)	COST(S) OR RISK(S)
2.1: Raise the profile of wargaming among USSTRATCOM employees		
2.1.1: Signal from Commander favoring use of wargames in testing out ideas	<ul style="list-style-type: none"> i. Employees are assured that they can use wargaming to develop ideas. ii. Wargamers find it easier to procure participants for their games and thereby generate new insights. 	<ul style="list-style-type: none"> i. Employees may read the signal too strongly and devote an excess amount of time to wargaming.
2.1.2: Assign a directorate to take charge as Office of Primary Responsibility for wargames	<ul style="list-style-type: none"> i. A nodal hub for wargaming in the organization facilitates lessons to be learned and shared. ii. Directorates know where to submit requests for wargaming of ideas. iii. Employees know where to submit paperwork related to wargames, such as wargame related travel grants. 	<ul style="list-style-type: none"> i. Directorates may be hesitant to take up the additional responsibility. ii. The remaining directorates that also have wargaming as an essential component may view this as a diminution of responsibility.

⁷² Joint Publication (JP) 5-0, Joint Operation Planning, 8/11/2011.

RECOMMENDATION	BENEFIT(S)	COST(S) OR RISK(S)
2.1.3: Authorize incentives for participation in and use of wargames	i. This will bring about an accelerated culture change where employees actively seek to participate in and test their ideas through wargames.	i. Employees may begin prioritizing wargames over their day-to-day responsibilities. ii. May result in perverse incentives where people wargame ideas simply to rack up more points. iii. Other directorates may begin demanding incentives for activities other than wargaming.
2.1.4: Institutionalize wargames into compliance doctrines	i. Additional step of testing lowers the probability of making policy missteps. ii. Mandating employees to receive feedback for an idea they develop and may be attached to, especially by making them experience its ramifications through a wargame, is likely to improve the idea.	i. Employees need to jump through additional bureaucratic hoops before bringing in fresh ideas.
2.2: Empower and educate employees by making wargames a part of their toolkit for identifying and improving on tactical weaknesses and strengths		
2.2.1: Hold weekly informal wargaming sessions at ideation space	i. More employees will use wargaming in thinking through their ideas as these sessions allow them to avoid the usual request process. ii. Promotes openness and fosters a collaborative spirit as a discussion may begin on the problem presented to the wargamers.	i. There are issues related to classification and breaching the need to know standard.

RECOMMENDATION	BENEFIT(S)	COST(S) OR RISK(S)
2.2.2: Create a certification course to help employees understand how wargaming can help them in their day-to-day job	<ul style="list-style-type: none"> i. Informs employees of all the tools that are available to them. ii. With the high turnover rate of military officers at USSTRATCOM, the certification course will help provide continuity. iii. Will help develop the analytical abilities of officers as wargames are used to critically evaluate policies and ideas. 	<ul style="list-style-type: none"> i. There is a cost in terms of time and money for designing these courses and ensuring new employees take them.
2.2.3: Identify directorates where wargaming directly supports the mission and expand the role of wargames accordingly	<ul style="list-style-type: none"> i. This will serve as an innovative and unconventional means for USSTRATCOM to achieve its core missions. ii. Other countries such as Canada are explicitly using wargames for assuring allies, and the U.S. should not lag behind on this front. 	<ul style="list-style-type: none"> i. There could be an inherent contradiction in the role of wargames as a means for edification and its purpose in supporting a mission. For example, if a wargame with an ally goes poorly, this may be useful from a learning standpoint, but it would have failed in its assurance objective.

2.3: Leverage external resources, including existing partnerships, to improve the frequency, reliability and visibility of wargames at little monetary cost

2.3.1: With the help of the Academic Alliance, organize events at various colleges where a particular wargame is played, so as to generate multiple iterations per wargame	<ul style="list-style-type: none"> i. Engaging students in thinking about the top strategic challenges of the day will help build the future generation of strategic thinkers. ii. The participants in these wargames will be from different countries and cultures, leading to more representative results and insights. iii. Availability of a large number of iterations of a wargame will open up an unexplored form of strategic analyses. 	<ul style="list-style-type: none"> i. Open-source wargames will have to be unclassified, restricting the scope or depth of the scenarios. ii. Unless the game is conducted at military colleges, participants may lack the necessary background knowledge.
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2.3.2: Coordinate with colleges to develop wargaming resources

i. This can enable recommendation 2.3.1, and as potential capstone projects, student teams can design open-source wargames to be disseminated to various colleges.

ii. No significant monetary cost to USSTRATCOM as a majority of the work is undertaken by outside researchers.

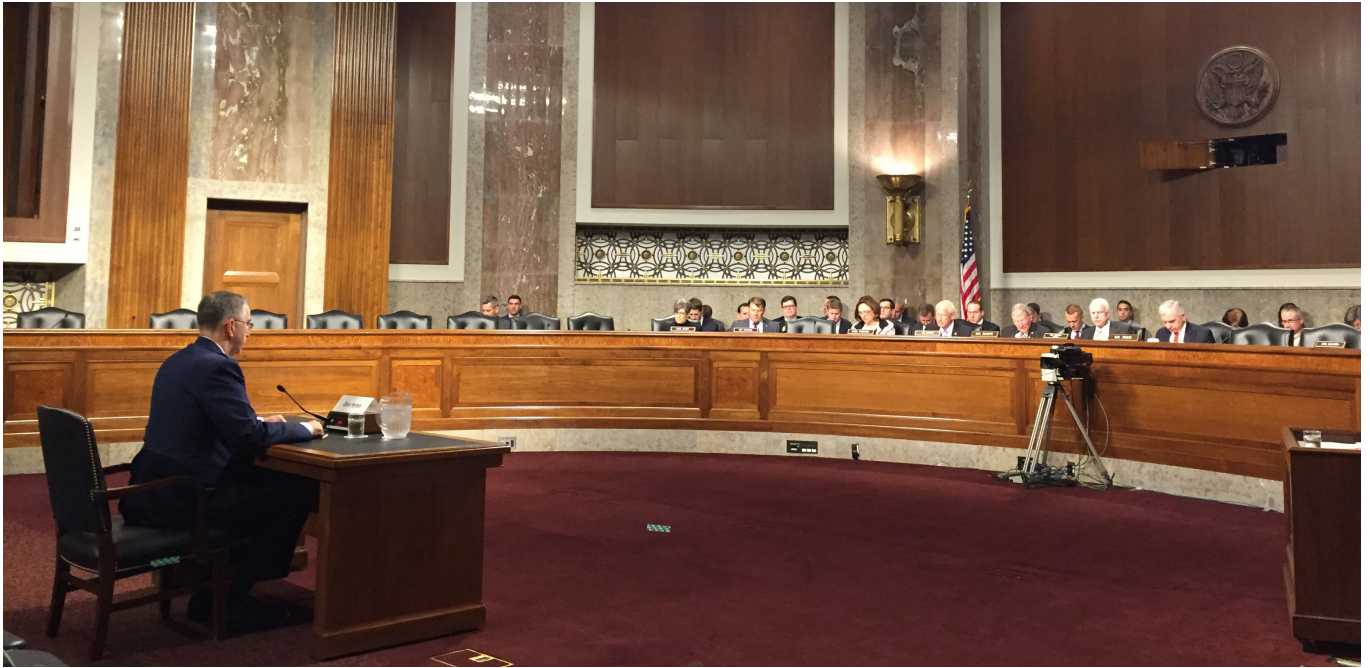
i. Time and challenge of organizing and maintaining these different networks.

2.3.3: Coordinate with think tanks and universities to use wargaming data to generate new insights

i. There are entire databases of past wargames that are unanalyzed; making these available to researchers with requisite security clearances will be a zero-cost benefit to USSTRATCOM.

ii. This can enable recommendation 2.3.1 as the data generated from wargames at multiple colleges can be analyzed by outside researchers.

i. There could be security issues with expanding access to this repository outside the organization.



GOAL 3 - CULTIVATE AND LEVERAGE THE ORGANIZATION'S REPUTATION

Two of USSTRATCOM's most important functions are to deter strategic attacks from adversaries and assure allies of a decisive response, should one be required. Commander Hyten outlines these as his top priorities in his Commander's Vision and Intent statement. However, the Command's ability to deliver its deterrence and assurance missions depends on its perceived capability and willingness to act.⁷³ This perception is almost entirely dependent on USSTRATCOM's reputation, and therefore, public messaging and communications is both delicate and difficult.⁷⁴

Further complicating this situation is the fact that today's information environment turns on a continuous and rapidly moving media cycle - an environment that is hazardous for building and maintaining long-term reputation. Public and private organizations are under closer and more immediate scrutiny for their actions, while competition for people's attention - from an organization's closest contacts to the wider American public - gets tougher day by day.

At the same time, information confidentiality and classification creates an inclination to limit external outreach, leading government organizations to remain inwardly focused. This can produce outdated depictions in the eyes of the American public which, in turn, can lead to shrinking of public support and a lack of awareness. Ultimately, it can affect political will for critical government funding or policy action.⁷⁵ In the case of USSTRATCOM, it can also negatively impact the organization's ability to assure its allies and deter adversaries.

73 Bevir, M. (2006). Encyclopedia of Governance, volume 2, page 218.

74 Bonini, S., Court, D., Marchi, A. (June 2009). "Rebuilding Corporate Reputations." McKinsey Quarterly.

75 Herzlinger, R. (March 1996). "Can Public Trust in Nonprofits and Governments Be Restored?" Harvard Business Review.

Compounding these challenges, the Public Affairs team at USSTRATCOM in charge of facilitating many of these external communications has seen its staff reduced by a third over the past five years.⁷⁶

Yet, looking at the way the private sector has sought to address many of these challenges, there are a number of actions that the Command can undertake to cultivate and leverage its public image, and ultimately strengthen its reputation. As we detail in this third section of our report, the highest return opportunities include:

- increasing proactive outreach,
- developing platforms for thought leadership, and
- drawing on technology and social media to better target messaging and integrate data-driven feedback loops into the communications process.

Together, we believe these actions will help USSTRATCOM strategically expand its external engagement in a meaningful way, and foster multiple layers of external support for its mission and operations.

"The art of communication is the language of leadership"

– James Humes, former speechwriter for Presidents Eisenhower, Nixon, Ford, and Reagan

Recommendation 3.1: Proactively build USSTRATCOM's image to better shape the public agenda

In our discussions with USSTRATCOM staff, we found that the Command struggles to overcome a public affairs challenge faced by organizations around the world, particularly by those that serve the public, and whose missions carry high stakes.

Shaping public discourse, projecting the desired image of an organization, and reaching those beyond a small circle of already-engaged individuals is difficult enough. Doing so is even more demanding while also fulfilling the organization's obligation to both protect and provide information, reassure stakeholders, and react to threats. In short, the communications challenge is to be proactive, while still being highly responsive to day-to-day pressures. Two challenges that call for creativity, long-term thinking, as well as dedicated staff time and resources.

⁷⁶ Interview with USSTRATCOM Public Affairs team, March 29, 2017.

To overcome these challenges, USSTRATCOM's leadership should consider undertaking the following actions.

3.1.1 *Humanize the missions of the organization*

USSTRATCOM's missions are complex, far reaching, and can be difficult to grasp for the general public. This creates challenges for messaging and outreach, especially for those who are not otherwise familiar with the military, its nuclear operations, or foreign affairs.

A long-established solution to these challenges is to attempt to humanize the organization's missions, and to tell its story through a variety of proactive communications pieces.⁷⁷ These could include profiles of staff or anecdotal accounts of past events told through the eyes of service members. Such humanizing stories could be done in multiple formats – short videos, blog posts, placed articles, and structured interviews – many of which are already called for in USSTRATCOM's existing Public Affairs Communication Strategy.⁷⁸

The key emphasis is on proactive messaging and outreach, and on raising issues confronting USSTRATCOM that would not naturally come up is the public debate, but which make the case for the Command's activities and funding requirements. Businesses that rely on their public image (particularly consumer facing businesses) make significant investments into proactive communications that seek to shape their public image: from advertisements that feature employees at different levels of hierarchy to those that seek to relate to the day-to-day of their stakeholders (usually consumers). These pieces may feature C-suite executives in mainstream or specialist media, or use online videos to outline the way the firm manages to overcome challenges. In past studies, business investment in proactive communication has shown to increase consumer understanding and engagement by as much as 86%.⁷⁹

The world's most successful companies make great strides toward projecting a specific picture to the outside world - going far beyond reactive communications.⁸⁰ And while the above formats or examples are not all directly relevant to USSTRATCOM, they demonstrate that proactive communication efforts are essential for shaping the public image.

77 Mackay, H. (March 1988). "Humanize Your Selling Strategy," Harvard Business Review.

78 "U.S. Strategic Command Public Affairs Communication Strategy 2017." Unpublished. Reviewed March 31, 2017.

79 Toman, N., Adamson, B., Gomez, C. (March 2017). "The New Sales Imperative," Harvard Business Review.

80 In comparison to proactive communication, reactive or "responsive" communication with customers decreases engagement by as much as 18%, and increases purchase regret by 50%. Ibid.

"The highest priorities of the CEO for the communications function are to provide leadership in the positioning of the company with all audiences— investors (and activist investors), customers, and employees. This speaks to brand—but also to ensuring that our messages resonate with the audiences and that we are 'taking new ground' in our efforts to shift perception."

– Chief Communications Officer of a Fortune 500 firm

3.1.2 Authorize additional resources to enable proactive outreach

Proactive communications, along with the other outreach initiatives recommended in this section, take significant amounts of time and effort to develop. The Command relies on this activity to promote awareness and understanding of the organization's mission, and of the evolving challenges it must overcome, to ultimately build support for its activities, policy positions, and funding requirements. Yet, as a public organization that reports to DoD and Congress, and whose activities or external challenges can quickly land on the front page of mainstream media, asking the current Public Affairs team to de-prioritize its reactive activities could come at a significant risk. The team must continue to develop counter-narratives to negative coverage, and fulfill information requests from government and media alike.

For this reason, there is a clear need to further prioritize Public Affairs within USSTRATCOM's staffing and budgeting process, in order to provide for expanded headcount and capacity. Furthermore, such support is in line with the recommendations and requirements as outlined in existing joint doctrine.⁸¹

We recommend additional staff to carry out media-related research and analysis, to increase outreach, to expand the use of current newsletters, to support the use of social media, to improve creative graphics, to conduct daily news briefs, and to develop long-form communication pieces. To support these activities, the Public Affairs team needs uninterrupted access to tools and digital platforms required to carry out its mission. The team should not lose such access when transitioning to the new headquarters facility.

Inset box source: Korn Ferry Institute, The Chief Communications Officer: Survey and findings among the Fortune 500, 2015, page 3.
81 Joint Publication 3-61, CH 1 Page II-5 (Responsibilities and Relationships).

3.1.3 Leverage expertise and resources from private sector firms and communication experts

The Public Affairs team should work in tandem with the Center for Partnerships (see recommendation 4.2), to leverage external resources and incorporate best practices from the private sector into an expanded communications strategy.⁸² Furthermore, the Partnership Advisory Board (see recommendation 4.3) should include at least one leading expert from the communications field to continually provide feedback to senior leadership.

Recommendation 3.2: Position USSTRATCOM as a thought-leader for current and future defense and security professionals

Thought leadership is often developed strategically by businesses like Booz Allen, IBM, or Apple in order to gain an edge over competitors in a saturated market. Thought leadership is also developed to influence future consumer demand and build long-term brand credibility.⁸³ In fact, it has come to be seen as a stand-alone and highly cost-effective corporate growth strategy that strengthens reputation and builds resilience to short-term shocks. For USSTRATCOM, thought leadership offers an opportunity to reach foreign and domestic policy leaders, and influence the perspective of defense and security professionals – presently and in the future.

Developing thought-leadership goes hand-in-hand with innovative thinking – it spurs internal processes for carving out time to think and develop positions. And it serves as a reward for new ideas, platforms for dialogue with external stakeholders, and as a feedback mechanism whereby audiences serve as sounding boards.

It is important to note that public-facing thought leadership does not mean giving away one's strategy and innovations. Apple, Google (now known as Alphabet), IBM, and General Electric, have consistently featured at the top of Fortune's *World's Most Admired Companies*,⁸⁴ as well as Thought Leadership Group's annual ranking,⁸⁵ two key indicators of global influence and stakeholder trust. Yet these firms continue to disrupt markets with innovative models and products.

82 This should be done in a manner that builds upon and complements USSTRATCOM's existing Public Affairs Communications Strategy, reviewed March 31, 2017.

83 Prince, R. A. (2014, June 17). The Future Of Thought Leadership. Retrieved May 02, 2017, from <https://www.forbes.com/sites/russalanprince/2014/06/17/the-future-of-thought-leadership>

84 Ibid.

85 Gooderham, M. (2014, July 23). How Does a Brand Become a Thought Leader? Retrieved May 02, 2017, from <https://hbr.org/2010/11/how-does-a-brand-become-a-thou>

Therefore, positioning USSTRATCOM as a thought-leader would complement other recommendations made in this report, and help achieve objectives laid out in the Commander's Intent. To this end, we recommend that USSTRATCOM consider the following actions.

3.2.1 Regularly develop and promote 'thought pieces' from USSTRATCOM

Developing thought leadership requires consistent and proactive communication that carefully supports the author's credibility and reputation. Furthermore, such communication pieces require fresh thinking and innovative research. USSTRATCOM should formalize a process to regularly develop thought pieces of varying lengths, and targeted to the audiences the Command wishes to influence.

McKinsey & Co. and the origins of thought leadership

The consulting firm McKinsey & Company spearheaded the development of thought-leadership when it launched its McKinsey Quarterly newsletter in 1964.⁸⁶ The newsletter remains one of the most respected platforms for the exchange and birth of new business ideas, on equal standing with publications like the Harvard Business Review. Today, in addition to its quarterly newsletter, McKinsey sends speakers to public and private forums, produces regular podcasts, and maintains a number of mailing lists to reach its audiences. For the firm, these publications and platforms offer unparalleled influence on global business trends, as well as a mechanism for feedback on its ideas.⁸⁷

Under Major General Clinton Crosier's leadership, the J5 began recently publishing a Deterrence and Assurance Academic Alliance Newsletter. While this newsletter is currently tailored for the Academic Alliance, there is potential to build on this concept and incorporate research taking place across all directorates. An expanded Public Affairs team could coordinate a publication process similar to the McKinsey Quarterly newsletter (see inset) whereby thought pieces are sourced from relevant directorates, and reviewed/formalized for release.

Internal research papers, cleared for public distribution, could be submitted to defense journals, and white papers could be developed through collaboration with universities and think tanks. Excerpts from these thought pieces could also be pitched to traditional

86 Buday, B. (November 25, 2008), "A Brief History of Thought Leadership Marketing," The Bloom Group. Retrieved from: <http://bloomgroup.com/content/history-thought-leadership-marketing-consulting-and-it-services> ; See also:

Price, R.A. (June 17, 2014). "The Future of Thought-Leadership," Forbes. Retrieved from: <https://www.forbes.com/sites/russalanprice/2014/06/17/the-future-of-thought-leadership>

87 Young, L. (2013). Thought Leadership: Prompting Businesses to Think and Learn. Kogan Page Publishers. Pages 26, 25.

media and repurposed to reach more general audiences. This material could be used to support public appearances and speaking engagements, and also targeted for universities and other academic institutions.

"You can have brilliant ideas, but if you can't get them across, your ideas won't get you anywhere"

—Lee Iacocca⁸⁸

3.2.2 Feature partnerships and activities with partners who shape the future workforce

An organization or individual cannot simply declare themselves a thought-leader – the status is conferred by others in the field, particularly by those who already have established credibility. USSTRATCOM should therefore deepen its ties selectively with those organizations that will enhance its reputation. Leveraging its Academic Alliance and the Center for Partnerships recommended in 4.2, USSTRATCOM should strategically increase outreach to universities, military academies, think tanks, and defense and security firms, who are collectively developing the next generation of assurance and deterrence professionals.

Furthermore, partnering with such institutions will also facilitate the development of fresh ideas and improve the quality of the Command's thought leadership publications, generating a positive and self-supporting cycle.

3.2.3 Increase participation in open forums and external events focused on thought leadership

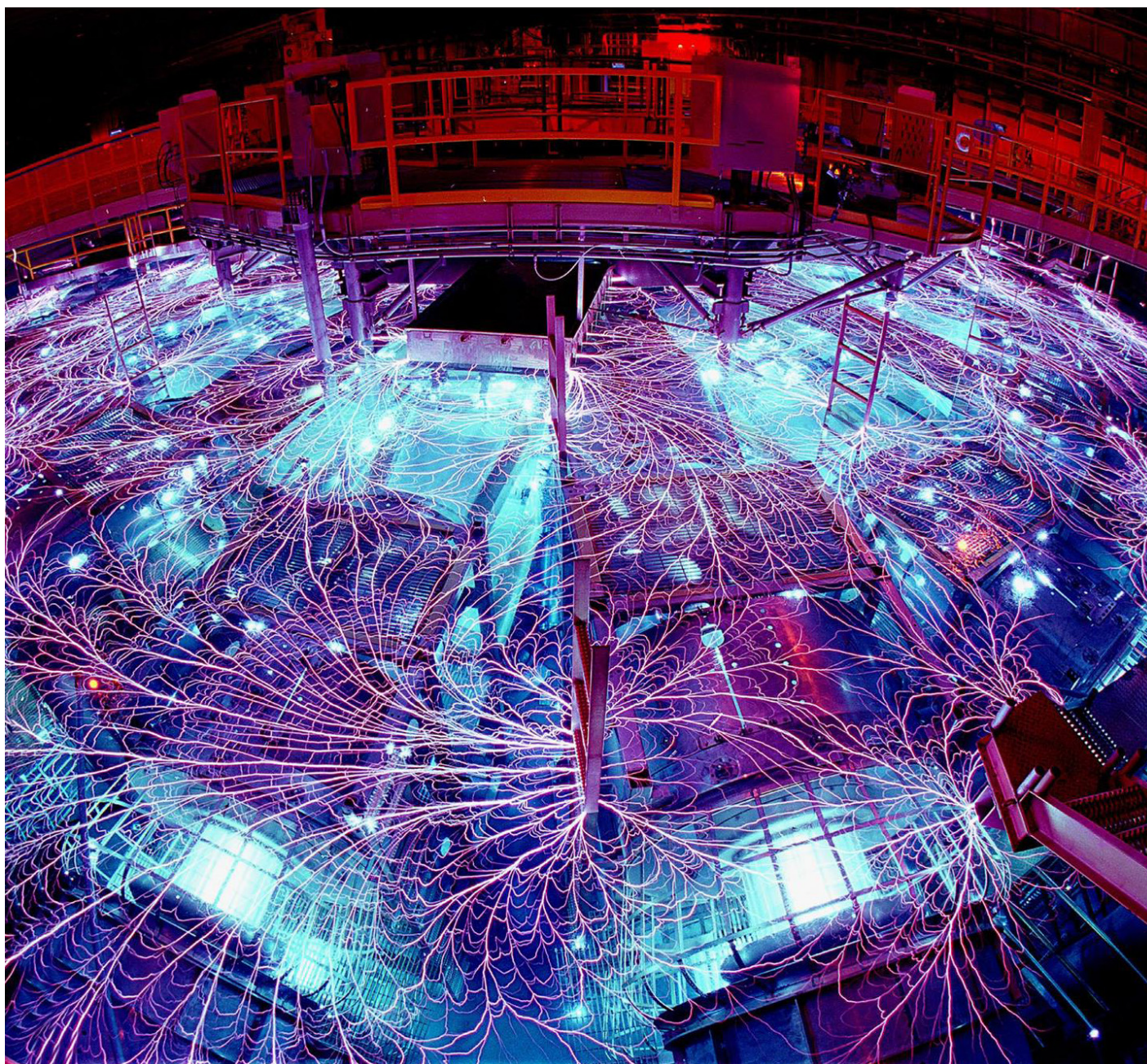
In the same vein, USSTRATCOM should consider increasing staff participation in external events with recognized thought leaders, and share the stage in order to leverage the standing of other organizations. Importantly, these individuals, organizations, and events should be at the vanguard of their field of discipline.

Participation in such events creates increased awareness and recognition from the communities considered to have demonstrated expertise. It offers excellent platforms to attract talent and valuable media opportunities. Bidirectional public events could take the form of focused "town halls," or TED-style talks, which could reach event attendees as well as virtual audiences.

⁸⁸ Lee Iacocca is an American auto executive who became a national celebrity for steering the Chrysler Corporation away from bankruptcy toward record profits in the 1980s.

"Thought leadership status can't be achieved through a single article, social media post or networking event. You have to build your experience and create credibility over the long term"

—Walt Rakowich⁸⁹



⁸⁹ Walt Rakowich is a leadership speaker and recently retired executive of Prologis, a global real estate company that was near collapse when he took over as CEO in 2008.

Recommendation 3.3: Tailor external outreach using feedback mechanisms and targeted messaging across a diversified set of channels

Today's messaging landscape is increasingly complex given the various social networks and media channels available, as well as the presence of a continuous global cycle of information. From government agencies, to legislators, to the American public, and from allies to adversaries, USSTRATCOM has a vast and diverse set of audiences. Each of these audiences has different needs and expectations, and tailoring content to each one while maintaining consistency is delicate to manage.

To help strike this balance, USSTRATCOM should take greater advantage of feedback mechanisms and target messages across diversified channels when conducting external outreach.

"The single biggest problem in communication is the illusion that it has taken place"
– George Bernard Shaw

3.3.1 Integrate feedback mechanisms into external communications, particularly for digital platforms

Integrating and automating feedback mechanisms wherever possible into public-facing communications will help USSTRATCOM better understand perceptions, reach, and future needs in messaging, and also ensure that effective communication strategies are implemented.⁹⁰ The expanded use of software analytics, and development of key performance indicators (KPIs) aligned with the Commander's Intent, would help track progress against USSTRATCOM's objectives. As part of these efforts, the Public Affairs team should consider acquiring or creating a 'live' dashboard view of these KPIs that could offer regular (or immediate) feedback and data allowing the team to identify trends and reactions.

Furthermore, this would position USSTRATCOM to develop an organizational Reputation Index to track the long-term performance of the effectiveness of its deterrence and assurance messaging. This Index would combine the KPI data referenced above, humanizing media pieces (from recommendation 3.1) tracking from thought leadership pieces (developed in recommendation 3.2), and insights on key leadership engagements with external stakeholders (including those recommended in 4.3, and in the existing Public Affairs Communication Strategy).⁹¹

90 Twersky, F., Buchanan, P., Threlfall, V. (Spring 2013). "Listening to Those Who Matter Most, the Beneficiaries." Stanford Social Innovation Review.

91 Cravens, K., Oliver, E.G., Ramamoorti, S. (April 2003). "The Reputation Index: Measuring and Managing Corporate Reputation." European Management Journal, Volume 21, Issue 2, Pages 201-212.

Aside from the monetary cost of developing and maintaining these feedback loops, the success of this recommendation rests upon the Public Affairs teams' ability to access external data feeds. USSTRATCOM should seek to improve the team's current access, and use the move to the new headquarters to create an environment where they can use tools that would be otherwise readily available to communications professionals in other sectors. We recognize that this must be done without compromising internal security.

3.3.2 Integrate message segmentation to effectively communicate capability to allies, partners, and adversaries

USSTRATCOM should increase segmentation of messaging between adversaries, allies, strategic partners, and domestic stakeholders. Striking a balance between these actors is both critical and at times contradictory. For example, needs-based messaging is important for conveying funding requirements to Congress. However, this runs the risk of sending a mixed message to adversaries, where the mission of deterrence requires a posture of strength and readiness. Furthermore, messaging to allies and partners will differ from that of servicemembers and military families.

Ongoing development of the Command's comprehensive communication strategy should take these challenges into account, and constantly partition messaging in ways that build and strengthen the organization's reputation.

3.3.3 Increase use of social media and calibrate the tone for a more intimate dialogue with the public

Frequent, proactive, and sophisticated use of digital and social media is necessary for organizations struggling to capture the public's attention and shape perceptions. USSTRATCOM should increase its use of social media, as appropriate,⁹² to promote engagement within and outside the Command, and to convey to today's globally-connected citizens that USSTRATCOM is a ready and willing partner.

The use of new media platforms offers significant cost efficiencies but comes with risks. The potential for an adversary to hack into a social media account and communicate false information to the public is a danger that could carry serious consequences. USSTRATCOM should work to address and mitigate these risks while also increasing their use of social media.⁹³

⁹² Cespedes, F. (March 2015). "Is Social Media Actually Helping Your Company's Bottom Line?" Harvard Business Review.

⁹³ James Thurber was an American cartoonist best known for his contributions to The New Yorker magazine.

Best Practice – NATO's StratCom Centre for Excellence:

In July 2014, NATO stressed the importance it places on communications by creating a separate *StratCom Centre of Excellence*⁹⁴ (or COE for Strategic Communications). This move seeks to expand NATO's communication tools and calibrate external outreach to objectives and audiences.

Based in Riga, Latvia, the COE "contributes to improved strategic communications capabilities within the Alliance and Allied nations. The mission of NATO StratCom is to contribute to the Alliance's communication processes by providing comprehensive analyses, timely advice and practical support to the Alliance. Its strength is built by multinational and cross-sector participants from the civilian and military, private and academic sectors and usage of modern technologies, virtual tools for analyses, research and decision making."

NATO's current view sees strategic communications as a two-way process rather than seeing it in its more traditional view as a one-way engagement.⁹⁵ Now, NATO highlights strategic listening and dialog. It recognizes the importance of personal contact between NATO personnel and target audiences to better understand their opinions, perceptions, and cultures.

RECAP

As the executive of one Fortune 500 enterprise reported to the Korn Ferry Institute for their annual survey of communications functions, "the highest priority... is both [to] build brand and protect reputation."⁹⁶ Achieving this dual set of objectives at USSTRATCOM calls for new ways of communicating – proactive engagements that humanize the mission, thought leadership pieces, targeted messaging integrated with strong feedback mechanisms – but it will also require adequate resources.

By cultivating its public image, USSTRATCOM can turn its reputation into an asset: a reliable component of its assurance and deterrence toolkit that can be leveraged to deliver the Command's mission and avoid the greater cost of military action.

94 StratCom | NATO Strategic Communications Centre of Excellence Riga, Latvia. N.p., 09 Mar. 2017. Web. 19 Apr. 2017.

95 Ibid.

96 Korn Ferry Institute, The Chief Communications Officer: Survey and findings among the Fortune 500, 2015, page 3.

GOAL 4 – EXPAND ENGAGEMENT WITH OUTSIDE PARTNERS AND LEVERAGE EXTERNAL RESOURCES

USSTRATCOM is under pressure to reduce its workforce and lower spending. At the same time, the Commander faces an expanding mandate due to the emergence of asymmetric threats in an increasingly complex and nonlinear environment.

In his Commander's Intent, General Hyten discusses these challenges and underlines "the importance of alliances and partnerships" in this context.⁹⁷ He reminds personnel of the need to "seamlessly integrate with other Combatant Commands, partners and allies" and to capitalize on the organization's unique capabilities to deliver its mission. In his own words, USSTRATCOM "cannot do this alone."

Following our discussions with USSTRATCOM officials and with other organizations that collaborate with external entities, we acknowledge the difficulties of engaging in meaningful partnership-building. However, we also recognize the critical role such outside partners can play, if done right, and the ability of partnerships to enhance mission delivery in creative and unforeseen ways.

To make this vision a reality, and facilitate a number of the actions that we advocate for throughout this report, we strongly recommend that USSTRATCOM place partnerships at the very core of its planning and activity over the coming decade. For the term "partnership," we use the definition provided in the Defense Department memorandum titled "Public-Private Partnerships Supporting the DoD Mission." It describes partnerships as "voluntary, non-contractual collaborations between DoD and non-Federal entities through which both parties leverage the expertise, resources, and incentives of the other to achieve mutually agreed goals."⁹⁸

This final section sets out how the Command could establish a cross-sector partnership strategy, supported by an internal Center for Partnerships, and a new Partnership Advisory Board.

"Alone we can do so little; together we can do so much."

– Helen Keller⁹⁹

97 Gen. Hyten J.E. (2017) Commander's Vision and Intent.

98 Deputy Secretary of Defense Ashton Carter and Vice Chairman of the Joint Chiefs of Staff Admiral James Winnefeld, DoD Memorandum "Public-Private Partnerships Supporting the DoD Mission," April 25, 2013.

99 Helen Keller was an American author, political activist, and lecturer.

Partnerships: the pillar of power in the age of multilateralism

Every five years, the National Intelligence Council (NIC)¹⁰⁰ publishes its Global Trends report, which seeks to identify the “key trends driving change in the global landscape,” anticipate challenges and opportunities for governance, and map “future power dynamics.”¹⁰¹ In its most recent volume, published January 2017, the NIC identifies the rise of “multi-stakeholder multilateralism” as one of the core drivers of power in the coming decades.

The convergence of technology and historically unprecedented levels of wealth held in private hands “expands the range of players who can block political action or influence security dynamics.” As this happens, “managing global issues becomes harder and more complex.”¹⁰² This global trend is “changing the strategic context in ways that make traditional, material forms of power less sufficient for shaping and securing desired outcomes.” While “material power, typically measured through gross domestic product, military spending, population size, and technology level,” has traditionally been the “prime lever” of state power, the NIC concludes that “the most powerful actors of the future will be states, groups, and individuals who can leverage material capabilities, relationships, and information in a more rapid, integrated, and adaptive mode than in generations past” (emphasis added).¹⁰³

The challenge for government institutions like USSTRATCOM is therefore to develop the ability to coordinate or collaborate with non-state actors of global or regional influence, ranging from corporations, NGOs, intergovernmental organizations, and civil society to decentralized communities and individuals empowered by technologies platforms and social media.

Recommendation 4.1: Establish a robust cross-sector partnership strategy guided by the Commander

Many U.S. government agencies have demonstrated their use of partnerships to help deliver their mission. Combatant Commands, for example, including U.S. Southern Command and U.S. Pacific Command have dedicated partnering divisions or directorates (J92 and J9 respectively).¹⁰⁴ The National Guard has the State Partnership Program (SPP), which has been operating for over 20 years.¹⁰⁵ SPP links state-level National Guard units with the armed forces in the DoD or to the equivalent in a partner nation.¹⁰⁶ The U.S. Department of State launched its Office of Global Partnerships in 2008 to engage partners across sectors in support of U.S. diplomacy (see inset next page). The list of examples goes on.

100 The National Intelligence Council is the U.S. intelligence community's center for long-term strategic analysis. It reports to the Director of National Intelligence.

101 National Intelligence Council. (January 2017). *Global Trends: Paradox of Progress*. Page 3.

102 Ibid. Page 6.

103 Ibid. Page 28.

104 See: (n.d.). Retrieved May 02, 2017, from <http://www.pacom.mil/Contact/Directory/J9/Strategic-Partnerships>; and J9 Partnering Directorate. (n.d.).

Retrieved May 02, 2017, from <http://www.southcom.mil/About/Leadership/J9-Partnering/>

105 SPP track record includes 73 unique security partnerships involving 79 nations around the globe.

106 “State Partnership Program.” National Guard. N.p., n.d. Web. 24 Apr. 2017.

USSTRATCOM can follow in these steps, build on its current patchwork of collaborations, and establish a similarly robust cross-sector partnerships strategy. Set out below are actions that would help move towards this recommended outcome.

4.1.1 Map out existing 'partnership' activities across the directorates

USSTRATCOM should first conduct an internal survey of current and ongoing partnership activity to understand existing capacities and opportunities. This will help with strategy development by identifying dormant or nascent partnership engagements, and also identify relationships that may be currently underutilized. This information will also help inform the activities of the Center for Partnerships (recommendation 4.2). If necessary, partnerships should be re-configured or re-evaluated if they have not shown to be beneficial to USSTRATCOM in their current form.

U.S. State Department's Office for Global Partnerships

The State Department's Office for Global Partnerships, has a clear vision for the value of their partnership office. As stated on their website: "The Secretary's Office of Global Partnerships (S/GP) is a center of excellence for collaboration between the U.S. Department of State, the public and private sectors, and civil society.

Founded in 2008 on the recommendation by the Advisory Committee for Transformational Diplomacy, S/GP capitalizes on the significant opportunities offered by partners beyond the Department to advance foreign policy goals and expand the scope and effectiveness of the Department's initiatives. Non-traditional partners include businesses, philanthropy, and community organizations that have become a core feature of 21st century statecraft as outlined in the Quadrennial Diplomacy and Development Review."¹⁰⁷

¹⁰⁷ "About Us, The Secretary's Office of Global Partnerships." U.S. Department of State. U.S. Department of State, n.d. Web. 24 Apr. 2017.

4.1.2 Identify current and future unmet needs that strategic partnerships could help address

As part of this strategy, USSTRATCOM should identify current and future unmet mission-related needs that external engagements could help address. This could include rapidly changing areas such as data analytics, social media, WMD detection, or health/emergency nuclear response. Or it could include more traditional areas, such as workforce development, brand reputation, or technology deployment. Some of these unmet needs may be identified through the ideation and innovation processes outlined in Section 1 of this report.

A successful example of where strategic partnerships are helping USSTRATCOM meet future needs is the Command's Deterrence and Assurance Academic Alliance. At little to no cost, the Alliance operates as a collection of university partners who collaborate with USSTRATCOM to "encourage development of deterrence professionals [and] meet the Nation's need for future generations of leaders to address these challenges."¹⁰⁸

The "fight in the year 2030," as referenced by General Hyten in his Commander's Intent, could be exclusively conducted through cyberspace, or occur in geographies unseen or unknown to us today. In such scenarios, partnerships could play significant roles by allowing USSTRATCOM to quickly expand action or alter a given approach with collaborators who are more nimble or fast acting. The private sector could become a strong point of support in this context. Bringing together the best of industry as partners (rather than just service providers or contractors) could become the key to ensuring that USSTRATCOM is "postured to win in the year 2030 and beyond."¹⁰⁹

As part of this recommendation, it will be important to define the scope of appropriateness for these types of collaboration, and the level of involvement of specific types of partnership engagements.

"If everyone is moving forward together, then success takes care of itself."

– Henry Ford

¹⁰⁸ (n.d.). Retrieved May 02, 2017, from <http://www.stratcom.mil/Academic-Alliance/>

¹⁰⁹ Gen. Hyten J.E. (2017) Commander's Vision and Intent, page 11.

4.1.3 Organize partnership outreach based on unmet needs

In developing a robust partnership strategy, USSTRATCOM should host multiple, open yet targeted stakeholder meetings to provide valuable insights, map partnerships, and identify early opportunities for high-return engagements.

In speaking about USSTRATCOM's mission delivery, General Hyten explained that it "should be modernized, not expanded."¹¹⁰ We believe this applies to functions and operations across the Command, and will require new partnerships with private and public entities alike. Organizations from different sectors should be invited to comment on the modernization of USSTRATCOM, and help identify ways that their respective knowledge can apply to the modernization approach.

Stakeholder meetings could be held at USSTRATCOM's headquarters outside of Omaha, Nebraska or at sub-unified commands or components. They should include annual meetings to bring together all partners on a regular basis. And as the Center for Partnerships widens in scope, additional regular meetings will become important to the overall partnerships strategy, the Center, stakeholder engagement, and USSTRATCOM itself.



¹¹⁰ Omaha World-Herald, 26 Liewer, Steve. "StratCom chief Hyten: Nuclear arsenal should be modernized, not expanded." Omaha.com. Feb. 2017. Web. 24 Apr. 2017.

Recommendation 4.2: Create a new Center for Partnerships to develop and implement the partnership strategy

The latest “Insights and Best Practices, Joint Operations” document published by the U.S. Armed Forces’ Deployable Training Division provides a compelling argument. It states that, “Centers provide a permanent cross-functional integrating structure - [an] example is the Joint Operations Center, or JOC, responsible for monitoring, assessing, planning, directing and communicating within the current operations event horizon.” The document continues, “Despite classification challenges, many headquarters are able to include coalition and host nation representation in their JOCs to great advantage.”¹¹¹

The document also highlights that “interdependence may be viewed by some as a risk [because] we are depending on capabilities that we don’t command and control.” However, this is offset because “access to others’ unique capabilities is often essential to mission accomplishment.”

Furthermore, the report acknowledges that “The challenges of gaining synergy and harmony with other USG agencies and multinational partners are somewhat greater than with our joint partners because there may be no clear authority directing a clear relationship with them to mitigate risks of interdependence.

We see commanders mitigating this risk through development of personal relationships to build trust, use of liaison elements, and conscious decisions on the degree of reliance upon those stakeholders for critical tasks.” In line with our recommendations in Section 3 of this report, the document argues, “In this manner, influence replaces authorities in mission accomplishment.”¹¹²

To overcome the risk of maintaining an ad hoc set of liaisons with partners, and to build partnerships that last beyond the strength of personal relationships, we recommend that USSTRATCOM’s establish a Center for Partnerships within headquarters. Creating a Center for Partnerships will send a message to all staff that the organization is embarking on a new approach, and setting a higher level of priority for external engagement.

¹¹¹ “Insights and Best Practices, Joint Operations.” Deployable Training Division of the Joint Staff 4 (2013): 39-40. Print.

¹¹² “Insights and Best Practices, Joint Operations.” Deployable Training Division of the Joint Staff 4 (2013): 39-40. Print

4.2.1 Recruit a Chief of Partnerships to carry out the Commander's vision

To head the Center for Partnerships, a Chief of Partnerships position should be created, and tasked with realizing the Commander's vision by integrating with external stakeholders. The Chief should be familiar with USSTRATCOM and DoD, but also bring a fresh and external perspective into the building; for this reason, the Chief should be hired externally. The Chief will ultimately be responsible for developing new links with organization that will help the Command fulfill its mission, and for developing new ways of collaborating with these partners.¹¹³

4.2.2 Position the new Center for Partnerships to win by providing adequate access to leadership

The Center for Partnerships should be situated within the JO / Special Staff and have the Chief of Partnerships report directly to Commander. The FBI has adopted a similar structure for their Office of Partner Engagement.¹¹⁴

Access to both the Commander and the Deputy Commander is necessary for the Center for Partnerships, especially in the implementation phase, to make sure that the office follows the Commander's Intent. Enduring access to top leadership, leadership insight, and strategic priorities will allow USSTRATCOM to fully benefit from having a partnerships office.

4.2.3 Empower the Partnerships team with broad outreach and engagement authority

To support the Chief of Partnerships, USSTRATCOM should dedicate full-time personnel and allow the Center for Partnerships to effectively channel exchanges between USSTRATCOM and current and potential partners. We forecast, at the outset, that at least three staff should be assigned to support the Chief of Partnerships. A "One stop shop approach" is important and this newly created Center for Partnerships office should consolidate other partnership efforts and information inside USSTRATCOM as appropriate. In addition to reporting directly to the Commander, the Chief of Partnerships should be assigned a Partnerships liaison at each directorate.

¹¹³ Additional material regarding the establishment and design of a new partnerships office and its staff is available upon request.

¹¹⁴ Office of Partner Engagement. (2017, March 30). Retrieved May 02, 2017, from <https://www.fbi.gov/about/partnerships/office-of-partner-engagement>.

General Hyten explains in his Commander's Intent, that if his plan is clearly followed, it can be implemented without the need for his express approval. Once the new Center for Partnerships is fully established, and that the Commander and Chief of Partnerships are clear about the Center's mandate, the Chief of Partnerships should be granted flexibility to be creative and innovative, as long as it supports the Commander's vision.

4.2.4 Dedicate partnership space within USSTRATCOM's headquarters

USSTRATCOM should commit a physical location for the office at its new headquarters at Offutt Air Base. Many large public institutions we researched, including the U.S. State Department and the United Nations, have dedicated or available space for partnership meetings onsite at their headquarters.¹¹⁵ One outstanding example of this is U.S. Southern Command's dedicated Conference Center of the Americas, which we recently toured.¹¹⁶

The new USSTRATCOM headquarters building, to be ready in 2019, should designate dedicated and accessible space for the Center for Partnerships. As far as possible, the design of this space should facilitate meetings with external attendees in a SCIF-free environment.



115 Interview with Amir Dossal, former Director of the UN Office for Partnership, on March 22, 2017

116 Visit with SOUTHCOM Commander Adm. Tidd and the J9 Partnering Directorate, April 26-27, 2017. More information on the Center can be found here: <http://www.southcom.mil/Military-and-Family-Services/Conference-Center-of-the-Americas/>

Recommendation 4.3: Establish a senior-level Partnership Advisory Board to provide continual insight for the strategy

Finally, we recommend the creation of a USSTRATCOM Partnership Advisory Board¹¹⁷ to provide outside perspectives on topics of importance to the Command — technology, artificial intelligence, professional services, business management, recruitment, diplomacy, and others. This group can act as a ‘sounding board’ for USSTRATCOM’s programs and for the Center for Partnership’s new ideas.

A model for external advice: the Defense Innovation Board

On July of 2016, U.S. Defense Secretary Carter launched the Defense Innovation Board, which has an impressive list of members. Chaired by Alphabet’s (formerly known as Google) Executive Chairman Eric Schmidt, the board is comprised of 15 innovators, scholars, and leaders of large private and public organizations focused on new technologies and organizational behavior and culture. The board is tasked with identifying innovative private-sector practices and technological solutions that the DoD could employ in the future. Secretary Carter remarked that members of the board “represent some of the most innovative minds in America,” and “their willingness to join this effort [will] keep the Department of Defense on the cutting edge.”¹¹⁸

Current Board members include:

Eric Schmidt, Executive Chairman, Alphabet Inc. (Defense Innovation Board chair)

Jeff Bezos, President, Chairman and CEO, Amazon Inc.

Adam Grant, Professor, Wharton School of Business

Danny Hillis, Computer Theorist & Co-founder, Applied Inventions

Reid Hoffman, Co-founder, LinkedIn, and Partner, Greylock Partners

Walter Isaacson, President & CEO, Aspen Institute

Eric Lander, President and Founding Director, Broad Institute of MIT and Harvard

Marne Levine, Chief Operating Officer, Instagram

J. Michael McQuade, Senior VP for Science and Technology, United Technologies

William McRaven, Chancellor, University of Texas System

Milo Medin, Vice President, Access Services, Google Capital

Richard Murray, Professor, California Institute of Technology

Jennifer Pahlka, Founder, Code for America

Cass Sunstein, Professor, Harvard Law School

Neil deGrasse Tyson, Astrophysicist and Author

¹¹⁷ At the outset, we recommend this board serve in an open, non-consensus manner, not in the form of a Federal Advisory Committee.

¹¹⁸ “Secretary Carter Names Additional Members of Defense Innovation Advisory Board.” United States Department of Defense.

USSTRATCOM would benefit from implementing a model similar to the DoD's Defense Innovation Board, bringing together leaders from across industries to meet in Omaha and help deliver on the Commander's Intent. USSTRATCOM should aim to source a diverse group of individuals from public and private sector organizations with the most relevant expertise for the Board.

To support board selection for this kind of effort, the World Bank developed a set of guidelines for sourcing and appointing external advisors. A modified version is featured below.¹¹⁹

Do's	Don'ts
Run a competitive process to identify and appoint external advisers.	Don't make selections purely on the basis of cost or pre-existing relationships.
Only shortlist those advisers with first-hand, directly relevant experience and a successful track record of advising similar initiatives.	Avoid a complicated "stop-start" selection processes.
Carefully monitor the value-added being delivered by external advisers.	Avoid separate appointments between legal, technical, financial etc. This simplifies managing the external advisers.
Set up systems to capture the knowledge transfer, so that future projects start further up the curve.	Avoid requiring *joint and several liability among an advisory consortium, as this will usually reduce the talent pool of willing advisory firms or individuals.
Use advisers to manage the interfaces between multiple parties — but keep close tabs on deliverables and outcomes.	Remember that advisers will know a lot but may not know what government thinks is best overall. Don't blindly follow all recommendations.
If applicable, use payment milestones to enforce accountability and delivery of product.	Don't expect the advisers themselves to run the process. Government still needs its own team to make timely decisions on critical path issues.
Push back on suggestions when necessary, and make sure a tailored solution is being put forward by the advisers.	Don't allow internal politics to dictate decision making/consideration of advisers' inputs.
Carry out regular workshops across public, private, and philanthropic sector organizations to broaden the talent pool.	Don't expect a "one size fits all" solution from advisers. Local and international advisers should provide tailored solutions for government consideration based on domestic and offshore best practices.
* In cases of joint and several liability, a person who was harmed or wronged by several parties could be awarded damages and collect from any one, several, or all of the liable parties.	

119 Harris, J., & Reidy, J. (2017, March 23). Best practices in governments making the most of their external advisers. Retrieved May 02, 2017, from <https://ppp.worldbank.org/public-private-partnership/best-practices-governments-making-most-of-their-external-advisers>

4.3.1 Plan meetings around the Commander's and Deputy's schedule to increase participation

The Board should be chaired by the Commander, with the Deputy Commander designated as vice-chair, acting in place of the Commander when required. Given the profile and diversity of its potential members, successful meetings of the Advisory Board will depend on timing and location. Offering a degree of flexibility to board members will increase attendance. Overall, attendance by the Commander or Deputy Commander will be the biggest driver of board member participation.

It is particularly important to be flexible regarding the location of meetings. While Omaha is the ideal location to bring together advisors closer to USSTRATCOM's headquarters, meetings may need to be decentralized or hosted in locations based on leaderships' travel schedule. Logistically, staff in charge of supporting the Board can turn to the World Bank and IMF to learn from their experience organizing regular key meetings that bring together external advisors from different fields and locations.¹²⁰

4.3.2 Ensure a diverse and balanced representation of partners from different sectors

The Advisory Board should include leaders with expertise spanning media, industry, technology, finance, academia, philanthropy, diplomacy, and others. Balanced and diverse backgrounds on the Advisory Board will ensure that the path charted by USSTRATCOM's leadership takes into account the latest and most widely representative thinking. Diversity also enables a board to effectively fulfill its role as a 'check and balance' on executive leadership, which is especially important for public organizations who typically serve the greatest diversity of stakeholders.¹²¹

Studies conducted by Russell Reynolds, a firm with expertise in senior-level recruitment, demonstrate how every echelon of an organization benefits from the input of a broad variety of perspectives. "Diversity of perspective does matter. Having a broad range of collective attributes, rather than overlapping or redundant qualities, helps the board significantly in fulfilling its responsibilities of providing good corporate governance and strategic oversight." The firm continues, "Boards that can collectively draw upon a broad assortment of competencies, priorities and insights are an invaluable resource for CEOs and senior management teams working in complex business environments with wide-ranging, multiple constituencies."¹²² In a second study, the firm also found that, "diversity of perspective leads to *more innovation, better risk management, and stronger connections with customers, employees and business partners* [emphasis added]."¹²³

120 Factsheet. (n.d.). Retrieved May 02, 2017, from <http://www.imf.org/en/About/Factsheets/Annual-Spring-Meetings>

121 Saidel, J. (1998). "Expanding the Governance Construct: Functions and Contributions of Nonprofit Advisory Groups." *Nonprofit and Voluntary Quarterly* 27: page 433.

122 <http://www.russellreynolds.com/insights/thought-leadership/different-is-better-why-diversity-matters-in-the-boardroom>

123 <http://www.russellreynolds.com/expertises/risk-and-compliance-officers>

4.3.3 Leverage member's broad networks to identify untapped resources and opportunities

Another core value that companies and governments derive from their advisory boards is access to board members' partners and networks. A study by the Smithsonian Institute's Office of Policy and Analysis outlines the value gathered from advisory boards, and explains how board members can serve as 'bridges' or 'liaisons': "Advisory group members can connect the governance board with particular constituents...[they] can link nonprofits to key stakeholder groups in the environment, and strengthen ties of cooperation and shared purpose with other community actors...In addition, some groups establish new ties to various elites; others connect or reconnect nonprofits to grassroots community constituencies."¹²⁴ In this sense, a diverse Partnership Advisory Board would also complement and support the ambitions of the proposed Center for Partnerships (see recommendation 4.2).

While it is hard to predict the full extent of benefits that these connective networks would yield, two things are certain. First, the creation of an Advisory Board would provide a highly cost-effective mechanism to keep USSTRATCOM abreast of changes in the Command's rapidly evolving external environment, as well as of emerging solutions. Second, the more diversity is incorporated into the Board's structure, the more value it will offer, through wider access to outside resources and a greater ability to identify new opportunities.

"This isn't a matter of altruism; it's a matter of our national interests, because in this uncertain world our security partnerships are more important than ever before. Trust and understanding can't be urged when crisis hits, and complex threats can't be addressed by any one nation or agency."

– Admiral Kurt Tidd, Commander, U.S. Southern Command¹²⁵

124 Neves, C. (2007). "Advisory Boards as an Instrument of Governance." Smithsonian Institute. Retrieved from: <https://www.si.edu/content/opanda/docs/Rpts2007/07.09.AdvisoryInstrument.Final.pdf>

See also: Saidel, J. (1998). "Expanding the Governance Construct: Functions and Contributions of Nonprofit Advisory Groups." *Nonprofit and Voluntary Quarterly* 27: pages 421-36.

125 Admiral Tidd, K. (April 6, 2017). Posture statement before the Senate Armed Services Committee. U.S. Congress.

RECAP

Overall, USSTRATCOM's ability to collaborate with the ever-expanding set of non-state global actors is essential to guarantee the organization's influence on international security dynamics. Partnership-building must be prioritized and remodeled to keep the Command's internal operations at the forefront of innovative progress while expanding the reach of the enterprise.

While the creation of a new office within USSTRATCOM could, at first glance, raise cost concerns, it is important to view this strategy as a fundamentally cost-saving measure. As other Commands are already experiencing, the cost of creating a Center for Partnerships is minimal, particularly relative to the value of direct and indirect support provided by partners to the Command's mission.¹²⁶ Furthermore, a Joint Staff Report to Congress on conclusions of the DoD's Defense Business Board reported the findings": "public-private cooperations efficiently leverage the resources of private entities to save taxpayer dollars - usually at very modest cost to the Department of Defense."¹²⁷

The activities of the Center for Partnerships, coupled with those of the Partnership Advisory Board, will be equally instrumental to the success of many, if not most of the recommendations made in this report. The core challenge and first priority for the partnerships strategy will be for USSTRATCOM to identify the type of expertise and external support it needs to collaborate with, and to build a strong value proposition to attract the corresponding stakeholders.



126 Importantly, Commands like U.S. SOUTHCOM do not provide funding or reimburse expenses to the organizations that they partner with. See: U.S. Southern Command (April 24, 2017). "U.S. Southern Command interested in collaborating with the private sector." Retrieved from: <http://www.southcom.mil/Work-With-Us/Public-Private-Cooperation/Collaborating-with-Private-Sector/>

127 "Joint Staff Report to Congress: DoD Response to Conclusions of the Defense Business Board Public-Private Cooperation Report," prepared by Col William Whittenberger, September 30, 2013.

APPENDIX I - Blue sky recommendations for workforce innovation requiring changes beyond USSTRATCOM's exclusive authority

In 2015, the Atlantic covered major reforms to the military and its hiring process undertaken by then-Secretary of Defense Ashton Carter. The publication captured the importance of these measures by describing the situation as follows:

Leadership and people are the real advantages that the U.S. military will bring to the future battlefield—superior technology can be stolen or neutralized, brilliant operating concepts outflanked, and unexpected surprises at hand around every corner of the next conflict. The margin of victory for the United States will often be decided by whether it has the smartest, most capable, most dedicated people the nation has to offer on the battlefield.

*The stakes here are enormous: they involve nothing less than the ability of the military to prevail in future conflicts. The military has long acknowledged that people are its most valuable resource, far more than weapons and technology. And the unpredictable and complex nature of future warfare make that truer than ever.*¹²⁸

USSTRATCOM's hiring and human resource practices remain primarily restricted by regulations promulgated by DoD, the Office of Personnel Management, and Congress. USSTRATCOM must, for example, hire through USAJobs, and abide by statutes that restrict hiring authority. These realities limit USSTRATCOM's flexibility and prevent a number of measures that would favor workforce innovation within the Command. This report acknowledges the restraints imposed on the Commander and focuses on how best to innovate within this restricted space. It is valuable, however, to consider reform beyond USSTRATCOM's direct purview that the Commander could call for from DoD and/or Congress, which would allow the Command to better innovate and modernize its operations.

This section of the report contains "blue-sky thinking": ideas that are not actionable in the near term due to exogenous barriers, but that could have significant, positive impacts if they were implemented. With these "blue-sky" recommendations, USSTRATCOM would be able to demonstrate to Congress and executive leadership the innovations that could better assure our allies, deter our adversaries, and safeguard America's long-term interests. Our recommendations fall into two categories: recruitment and career development.

¹²⁸ Barno, D and Bensahel, N. (2015, November 5). "Can The U.S. Military Halt Its Brain Drain?" The Atlantic. Retrieved from <https://www.theatlantic.com/politics/archive/2015/11/us-military-tries-halt-brain-drain/413965/>

Innovations in recruitment policy

The current system is arduous for employment applicants and frustrating from the perspective of the hiring manager because it often does not yield an ideal or most obvious candidate. There are three steps for creating a sustainable pipeline of talent coming into USSTRATCOM:

Target universities more effectively

The first step is to define the specific skills that USSTRATCOM is looking for in junior civilian staff and identify universities producing graduates demonstrating excellence in that skill set. Develop relationships with these target programs (or build on existing relationships through the Academic Alliance) and establish summer internship programs for students in courses of study of interest that could lead to a position as a junior civilian staffer.

Recruit private sector talent

USSTRATCOM has a unique and important mission. It offers a type of professional experience that cannot be obtained in the private sector. These two facts would make the Command highly competitive in recruiting top tier talent from the private sector who do not wish to dedicate their career to the military, even if USSTRATCOM cannot compete on salary. Essentially, USSTRATCOM must understand, develop, and capitalize on its brand to recruit top tier talent.

Further, USSTRATCOM must define the skills sets needed for mid-career staff, identify where these skills are found in the private sector, and actively target them. Directly hiring from the private sector rather than primarily relying on staff with public sector and military experience would create a more diverse team and one that has benefitted from and is more willing to implement private sector innovations.¹²⁹

Onboarding

Finally, USSTRATCOM should leverage private sector expertise to design and execute a formalized and thorough onboarding process. A successful onboarding process gives new staff the ability to quickly and effectively execute the Commander's vision, improves productivity, as well as legal and policy compliance, and supports a culture that embraces innovation.¹³⁰

129 Wilden, R et al. (Vol. 26, Iss. 1-2, 2010). "Employer Branding: Strategic Implications for Staff Recruitment." *Journal of Marketing Management*. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/02672570903577091>

130 Snell, A. (Vol. 5 Issue: 6). "Researching onboarding best practice: Using research to connect onboarding processes with employee satisfaction." *Strategic HR Review*. Retrieved from <http://www.emeraldinsight.com/doi/pdfplus/10.1108/14754390680000925>

HR innovations

Over the past 15 years, the internet has revolutionized the way private sector organizations identify and develop workforce talent. The government, however, has failed to adopt most of these human resource practices, causing it to lag behind its competition. Websites like Facebook, LinkedIn, or the average dating application have more information about a worker than many employers do. Disruptive companies such as Google, Amazon, and Uber are leveraging their technological advantages along with their branding to hire the best and brightest college graduates and top tier talent alike.

The U.S. government and its sub-organizations like USSTRATCOM must make changes in an effort to maintain its status as the most elite public sector organization responsible for the strategic defense of the United States. This can be accomplished by creating a culture of innovation that sources the right people, develops each individual's human capital throughout their tenure with the organization, and supports innovative ideas.

Career map

Creating career maps will be a useful tool to demonstrate how junior staff can progress within the organization and eventually become competitive candidates for senior roles. The process of creating career maps will also encourage current leadership to consider what skills they believe future leaders of USSTRATCOM will require, and then implement strategies to build those skills into mid-level and junior staff positions.

Lateral mobility

USSTRATCOM leadership should allow for greater lateral career mobility between directorates within the organization (going beyond temporary swapping called for in Recommendation 1.2). Having staff that better understands the roles and responsibilities of their peers in different directorates will improve the effectiveness of the organization as a whole and reduce the current stove piping within the organization.

Skills mapping

USSTRATCOM HR should maintain and actively update an inventory of employee skills. This skills survey should include professional skills that may not be directly relevant to the employee's current position and may not have immediate utility for the organization. As new initiatives are proposed, this database could be consulted to ensure that existing employee capacity and skillsets are not overlooked. Furthermore, simply having a regular skills survey will encourage employees to continue developing skills and will help identify those who are allowing their skills to stagnate.



APPENDIX II – List of individuals consulted

During report development, members of our team consulted with, interviewed, discussed with, briefed, or presented draft findings to the following individuals, all who were helpful in considering different views and perspectives:

Mark Herman, Former Senior Partner, Booz Allen Hamilton
 William Eimicke, Professor of Practice, Columbia University
 Peter Perla, Director, Interactive Research Products, Center for Naval Analyses
 Eric Madison, Foreign Policy Advisor, USSTRATCOM, U.S. Department of State
 Robert T. Lalka, Former Global Partnerships Liaison, U.S. Department of State
 Jeff Appleget, Director, Wargaming Activity Hub, Naval Postgraduate School
 James M. Taylor Jr., Senior Research Engineer, NSRI, University of Nebraska
 Jack Riley, VP, National Security Research Division, RAND
 Julia Loughran, President, ThoughtLink
 Amir Dossal, Former Director, Office of Partnerships, United Nations

U.S. Southern Command

Nivia Butler, J9, SOUTHCOM
 Kris Meyer, J9, SOUTHCOM
 Shawn Powell, J9, SOUTHCOM
 Vic Ramdass, J9, SOUTHCOM
 Paul Rock, J5, SOUTHCOM
 Jorge Silveira, J9, SOUTHCOM
 Kurt Tidd, Commander, SOUTHCOM

U.S. Pacific Command

Richard Berry, Former J92, USPACOM

U.S. Strategic Command

Cecil Haney, Commander, USSTRATCOM
 Steve Balmer, USAF, USSTRATCOM
 Kim Bech, Danish Liaison Officer
 Kevin Boyce, J405, USSTRATCOM
 Kevin Bryski, Canadian Liaison Officer
 Michael Byington, J8, USSTRATCOM
 John Carozza, J91, USSTRATCOM
 Rebecca Clark, J020, USSTRATCOM
 Clinton Crosier, J5, USSTRATCOM
 Brook DeWalt, J020, USSTRATCOM
 Donald Duralia, J76, USSTRATCOM
 Terry Eisenbeisz, J622, USSTRATCOM
 Stephen Erickson, J39, USSTRATCOM
 Davis Florick, J5, USSTRATCOM

U.S. Strategic Command (Continued)

Leo Florick, J55, USSTRATCOM
 Katherine Geeser, J6F, USSTRATCOM
 Daniel Karbler, J0CS, USSTRATCOM
 Kerry Kelley, J6 - SES, USSTRATCOM
 Kory Khoury, J7, USSTRATCOM
 Gregory Klumper, J2, USSTRATCOM
 Joseph Kost, J1C, USSTRATCOM
 Bonnie Kristensen, J020, USSTRATCOM
 Morgan McGary, J62, USSTRATCOM
 Patrick McKenna, J55, USSTRATCOM
 Patrick McMahon, SEL, USSTRATCOM
 Patrick McVay, J7 - SES, USSTRATCOM
 Matt Miller, J020, USSTRATCOM
 Chris Miller, Australian Liaison Officer
 Samantha Peatrowsky, J76, USSTRATCOM
 Brandon Pollett, (F) J921, USSTRATCOM
 Kevin Rooney, JF52, USSTRATCOM
 Mary Saunders, J64, USSTRATCOM
 Mark Sisson, J552, USSTRATCOM
 Linnea S.-Weddington, J6, USSTRATCOM
 Alvin Tarrell, (F) J93, USSTRATCOM
 John Trefz, J030, USSTRATCOM
 Doug Vance, J55, USSTRATCOM
 Joe Williams, J5, USSTRATCOM
 Sara Wilson, J7, USSTRATCOM
 Julie Ziegenhorn, J020, USSTRATCOM

