Overcoming "the Silo Effect" in the Department of Defense 2019

Invited Perspective Series

Strategic Multilayer Assessment (SMA)
Future of Great Power Competition & Conflict Effort



AUGUST 5

STRATEGIC MULTILAYER ASSESSMENT

Author: Lt Col Dave "Sugar" Lyle, USAF

Series Editor: Sarah Canna, NSI Inc.

This white paper represents the views and opinions of the contributing authors.

This white paper does not represent official USG policy or position.



Lt Col Dave "Sugar" Lyle, USAF



Lieutenant Colonel David J. Lyle (BS in Humanities, USAFA; MBA, Louisiana Tech; MMAS, US Army Command and General Staff College; MAAS, School of Advanced Air and Space Studies) is an Air Education and Training Command (AETC) and Air University liaison in the National Capital Region, currently stationed in the Pentagon. He has served in various strategy and operational planning assignments, including as the Director for the Combined Personnel Recovery Center for Afghanistan, Deputy Director of Strategy & Concepts/Warfighting Education at Air University, the A-5 (Strategic Plans) of the 9th Air and Space Expeditionary Task Force—Afghanistan in Kabul; director of staff for the 505th Command and Control Wing, Hurlburt Field,

Florida, and has served on numerous joint air component coordination element (JACCE) assignments. Lt Col Lyle is an Air Operations Center initial qualification honor graduate and Command and Control Warrior Advanced Course graduate, holding US Army qualifications as a joint planner and distinguished master strategist. A master navigator with more than 2,400 flying hours in the B-52H, Lieutenant Colonel Lyle flew 43 combat missions over Kosovo and Afghanistan.

Overcoming "the Silo Effect" in the Department of Defense

Lt Col Dave "Sugar" Lyle, USAF1

ABSTRACT: Different perspectives and operational goals across services allows for specialized expertise, but also creates a vulnerability for silo creation. At times, these silos can inhibit cooperation, limit mission effectiveness, and leave critical decision points inadequately addressed. There is a need for more deliberate planning and operational execution that cuts across multiple services and perspectives in order to better balance requirements, more efficiently plan, and more holistically address national security challenges. This need applies not only to operational decisions but also in evaluating ongoing programs to determine their continued effectiveness.

Competition is an external activity, but the ability compete successfully depends on internal strengths and capabilities, as well as the ability to mitigate vulnerabilities and weaknesses. A new era of great power competition has begun between increasingly authoritarian governments in Russia and China versus Western style democracies, with the United States still serving as the primary guarantor of the liberal world order that emerged after World War II. While the variety of perspectives and capabilities built into the United States system provides potential adaptive advantages over more authoritarian centralized approaches in times of change and uncertainty, the US Department of Defense is not adequately configured to harness the power of its own capabilities and expertise at the level of policy and strategy. The writing has been on the wall for some time, but it is becoming increasingly clear-the United States needs to consider major, not incremental, institutional reforms in order to remain competitive in an increasingly inter-connected and complex operational environment. These reforms will ultimately require Presidential and Congressional action to break through embedded cultural roadblocks that are currently limiting our ability to think and act strategically in an age of connection. This change will be hard to accomplish, but it is necessary. While we need to innovate equally across our concepts (Ideas), organizational constructs (Groups), and technologies (Tools), ossification in our "Groups" is artificially holding necessary innovations in the other areas back. Specifically, we are unable to effectively bridge between our service and combatant command "silos" with our legacy bureaucratic structures and rules that determine the role of the Joint Staff.

¹ Author contact Information: david.j.lyle2.mil@mail.mil

Leveraging Ideas, Groups, and Tools for Competitive Advantage

There is no shortage of studies and books on military effectiveness and strategic efficacy. One can find them reappearing on an almost predictable basis every 7-10 years or less, often with the same recommendations with slightly different degrees of emphasis based on the specifics of that time. A common refrain across most of them is that successful organizations must balance the interplay of three major internal components to maintain fitness for competition: a conceptual component (Ideas), an organizational component (Groups), and a technical component (Tools). All three components continually coevolve to meet the external challenges of complexity and change, especially when adversaries are specifically trying to exploit weakness both within and between each component. Identifying promising new concepts is typically the most difficult part of that evolutionary interchange, but this is not typically due to a lack of new ideas. Diffusion of innovations is typically limited or slowed by cultural resistance to change, which becomes embedded in the power structures and internal incentives built into the standing norms and rules of the Groups.

Why Silos are Essential

Part of the challenge any social organization has is that we must constantly balance our perspectives between the general and specific in our thinking (Ideas), and seek multiple perspectives, as none of us can amass all of the necessary experience in one lifetime to grasp complex challenges. To deal with this, we break up big problems into parts, and create pockets of specialization (Groups) to encourage people to become thinkers, doers, and innovators within their niche area of interest; to give them ownership and autonomy over parts of a larger task; and to help create cultures that sustain the needed expertise. When you want to promote specific Ideas, you need Groups that incentivize, promote, nurture, and protect those ideas and cultural behaviors from threats from outside that inhibit the achievement of the organization's goals, whether those threats be accidental or deliberate. Groups are where Ideas become cemented into the psychology of social identity, perhaps the most powerful force guiding both deliberate and unconscious human action. We will always need well designed and conceptualized "silos" of specialization in order to produce the best innovations we can in specific areas, providing a safe home to those who are very passionate about what that silo is designed to accomplish. And we want to encourage diversity of thought and ideas between the silos-nature itself shows us that resilient biological systems survive by balancing levels of internal diversity that enable living systems to take a hit in one area without spreading contagion to all areas. In sum, silos are essential, and they need to be protected in order to produce competitive advantage, especially when you do not know for sure which skills you will need to confront the challenges of tomorrow. However, silos must work together in order to accomplish a unified mission, rather than a series of processrelated silo-specific missions. It is not that we do not need silos; it is that silos require effective bridges to keep them aligned on common strategy.

Successful survival in a constantly changing world requires that you always have something in your Ideas-Groups-Tools portfolio to deal with the challenges you actually face, versus the ones you planned

on having, or hoped to have. By promoting diversity of perspectives, like the Constitution of the United States does implicitly with its three-branch construct and the Department of Defense does by sustaining several unique military branches under one Department of Defense, we protect ourselves against the possibilities that a single problem or bad assumption will defeat our entire system. In some cases, we even encourage some overlap in missions, which can create beneficial competition and innovation, preventing us from betting all of our marbles on one service's ideas and assumptions. Diversity of perspective is our best bet against groupthink and common contagion or failure, an argument defenders of the nuclear triad have invoked for years, even if they did so out of a mostly tacit understanding of what more rigorous studies have recently demonstrated as applying to many areas of life.^{iv}

Why Silos Need Bridges

But there is a flipside to silos and tribes: what seems rational within a silo does not always produce the kinds of enterprise-level results that you want when the results of multiple siloed activities are aggregated at the enterprise level. Peter Senge wrote about this effect from a business systems perspective in his 1990 book *The Fifth Discipline: The Art and Practice of the Learning Organization* and, more recently, Gilian Tett described it in 2015's *The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers*. In either description, rational decisions made from within the perspective of the silos—whether they be tactical tribes, service branches, or our current functional and geographic combatant commands—most often do not integrate well at the global level, often pushing you beyond the limits of your constraints without your full awareness of where the shortfalls and risks are hidden. As silos become increasingly interconnected and interdependent, you need some kind of central oversight to monitor, inform, coordinate, and guide the activities within the silos. This requirement gets us to the challenge of Global Integration that the Chairman of the Joint Chiefs of Staff, Gen Joseph Dunford, has been talking about since 2016. Vi

Joint Staff Attempts to Integrate the Combatant Command Silos

The main point behind the push for Global Integration—overcoming the silo effect—was described by Dunford himself in a recent Joint Force Quarterly article: "In the past, we assumed most crises could be contained to one region. That assumption, in turn, drove regionally focused planning and decision—making processes. Today, this assumption no longer holds true. Our planning must adapt to provide a global perspective that views challenges holistically and enables execution of military campaigns with a flexibility and speed that outpaces our adversaries." Viii

The recent calls for Global Integration, and the Joint Staff's recent move to Global Campaign Plans, recognizes that in an increasingly connected world, what happens in one combatant command affects all other combatant commands, especially when they require special "high demand/low density" assets to accomplish their missions. VIII Our current laws and the Unified Command Plan defines command relationships for military operations as separate from the Title 10 "organize, train, and equip" missions

(OT&E) conducted by the individual service departments. The Joint Staff, and also staffs of the service chiefs as members of the Joint Chiefs, support the Joint Chief's roles as advisors to the Secretary of Defense and President, theoretically staying out of the chain of command between the warfighting combatant commanders and the SECDEF. In reality, the Joint Staff is already inside the operational chain because it makes decisions or recommendations as to which of the competing combatant commands gets resourced through Global Force Management processes. But absent a unifying strategic design, these decisions are probably being based more on a "fill the open requirements" crisis management methodology than questioning and balancing the requirements in total, and making hard decisions if one silo's plans are likely to seriously disrupt the larger global scheme of action and maneuver.

Our "Organize, Train, and Equip" Silo Challenge

But unintegrated silos are not just a problem in the operational sense that Dunford describes, it's also a problem with the "organize, train, and equip" functions of the services. As Anthony Cordesman of the Center for Strategic and International Studies (CSIS) recently stated regarding defense procurement, "For all the talk about defense reform, the Department of Defense remains a rigid, service-driven structure that budgets by military service, rather than mission requirement, and annually consumes a vast amount of its total budget simply doing what it has done in the past. It has failed dismally to modernize its defense planning, programming, and budgeting system despite some of the advances made during the Eisenhower and Kennedy Administrations." All three of the US military service secretaries have expressed their desire for reform at their levels, and have stood up organizations like US Army Futures Command (AFC) and the Air Force Warfighting Integration Capability (AFWIC) in order to "free up time, money and manpower to do modernization and readiness better," as described at a joint summit of the Secretaries by Secretary Mark T. Esper, when serving as Secretary of the Army. * But what has been less explored is reform at the level of OSD and the Joint Staff to consider improvements which might help to break unhelpful silo effects either between the services within the context of their "Joint Force provider" OT&E roles, or between the combatant commands within the context of the "Joint Force consumer" operational missions as described in the Unified Command Plan. But it is at these levels that changes will need to be made if our true desire is increased strategic efficacy, both in operations and in fielding a Joint Force.

Even with the reductions in Service Chief power brought in with the Goldwater Nichols act in 1986, it is still primarily the individual services that decide the future capabilities of the Joint Force. Prior to the recent threat-based National Defense Strategy that told the services to plan for specific adversaries and operational challenges, the services were able to use the looser construct of capabilities based planning to essentially pick and choose the tactical and operational challenges that best suited their service cultures with few internal incentives to challenge the status quo. A recent RAND report on service cultures concluded that in the wake of Goldwater Nichols Act reforms in the 1986, "While the give and take of competition has changed, services remain the most influential single entities inside

the DoD system, and they shape and constrain policy at the highest levels."xii Where the Joint Staff would be expected to play a greater role in resolving competing visions for the future Joint Force, what the RAND researchers found was the opposite: "Yet the general atmosphere of the Joint Staff is cordial. The Joint Staff plays a largely synchronizing role relative to the services. In fact, participants in a workshop we held told us that in the development of the DoD Analytic Agenda, the Joint Staff practice was to forgo tough choices and allow each service to put what it wanted into the underlying concepts of operations."xiii

So why does the Joint Staff seemingly avoid tough cross-portfolio discussions? The Joint Staff is often a required stepping stone for senior leader positions in one's service of origin, but ultimately the only thing that counts for career progression is your "family of origin" service and tactical community thinks of you, as they are the people who control your promotions and assignments. While most members of the Joint Staff are probably earnest in their attempts to set aside service identity to make the best recommendations for the Joint Force, these same professionals—who are often star performers selected by their own service—are also very aware that anything they do to threaten their home service's equities will also likely threaten their future advancement when they go back home to their original service. But by law, it is also no one's job on the Joint Staff to be the "Sacred Cow Slayer"—only the Secretary of Defense and his or her Principal Staff Assistants can make such a call, and their staffs are usually not designed nor trained to conduct the detailed planning required by such an effort.

Thus, the norm that has evolved on the Joint Staff is one of "cooperate and graduate," with few serious contentions being aired or discussed. As a result, the services continue to procure the same kinds of legacy weapons systems they were buying twenty years ago, despite dramatic changes in the operating environment threatening the efficacy of those systems that are either upon us already, or soon to be here. Xiv If half of acting strategically is knowing what you are going to stop doing or avoid doing, then there should be a clear answer to this question based on a hypothetical scenario: "We've just received incontrovertible reports that [insert huge sacred cow program of your choice here] will be completely compromised in future wars, and there's nothing cost effective we can do to save it. How do we initiate the process of turning his program off, and preparing our case to the President and Congress?" XIV If we cannot answer that question in terms of processes and process owners, we cannot act strategically. But the Joint Staff is not structured to do strategy, as we will see next.

Traffic Cops vs. Urban Planners

While there are undoubtedly many people increasing the level of global integration happening between the seams of different staffs and plans (mostly behind the scenes), the current Joint Staff is still mostly configured to act more like a traffic cop than an urban planner, handling the traffic thrown at it by the services and the combatant commands in a mostly short-term, crisis action mode. Under General Dunford's guidance, the Joint Staff has restructured the J33 Integrated Operations Division (IOD), attempting to wring out as much capability as possible for Dynamic Force Employment under the current Unified Command Plan (UCP). XVI But the IOD's focus is on ops in the near term, they have

zero impact on the service program submissions for the Future Force. The Global Campaign plans are reinforcing the degree to which the combatant commands and their overlapping requirements affect one another, but there is still no true entity to analyze and frame the global integration challenge for OSD and the Secretary, and insufficient common command and control infrastructure to help them make decisions at the speed of relevance. In short, there is no one specifically designated and prepared at the Joint Staff or OSD levels to think across the service missions and AOR boundaries at all times, to frame wicked problems and study their interlinkages, and to design true "all domain" options for OSD, SECDEF, and the President to consider that look beyond the current crises. And even if there are people thinking those kinds of thoughts in our current organizations, there is no formal mechanism for them to seriously impact the way the services are thinking and planning for the future, and more importantly, no one to tell them to stop doing something they are already doing but may not want to give up.

To give one example, there is currently common agreement between the services on the need for Multidomain Operations (MDO), but with no lead joint agency defining what "multidomain" (what the services are using to develop concepts) or "all-domain" means for the Joint Force. All-domain is a term that was only recently defined in the National Military Strategy. In this vacuum, the services have proceeded to develop MDO concepts starting mostly from their own siloed service perspectives, with some voluntary cross-collaboration with the other services. xvii It is not necessarily a bad thing that each service has different perspectives on the challenge (as we have discussed, there are benefits from diversity and competition), and there has even been an admirable degree of cross-service coordination on these concepts, even without a Joint Staff forcing function to compel them to work together. But as a popular saying among planners admonishes, "Whenever two or more are gathered, one must be in charge." Given the extreme budget pressures the services will be facing while trying to simultaneously address readiness, modernization, and contingency plans, at some point someone will need to make tough decisions about what multidomain or all-domain operations mean to the Joint Force, and how we should organize, train, and equip forces to carry out those operations. Defense Planning Guidance may provide general guidance addressing these issues, but is not nearly responsive enough to support the kind of Dynamic Force Employment (DFE) that modern challenges require. Modern all-domain challenges require positive command and control methods that link networks of planners from all of the commands together in the same virtual planning space so they can rapidly build all-domain teams to support commanders tasked with specific problems. The rapid change typical of these dynamic situations rapidly invalidate assumptions built into written plans, even if the latter are still useful and necessary to build the logistical and conceptual backbones upon which flexible execution still depends.

Poor Integration Up Front = Frankenstein's Monster Later

What we get without this globally oriented problem framing/setting "design" function between the combatant commands and OSD are "Frankenstein's monster" forces and plans that often do not synch up or move together well when run in combination. Critical shortfalls in global capabilities usually lie hidden between the boundaries of the silos and seams between their plans, with mostly unexamined

assumptions about external support usually found in small print in supporting annexes or footnotes that assume that one's own plan will be resourced at the expense of other operations (e.g., "This plan assumes that the rest of the world only gets XXX high demand/low density assets to make this plan feasible"). Our individually produced plans usually underestimate or "handwave" the logistics problems outside of their own silo, which should not surprise us—no one is incentivized to find ways and reasons that their plan cannot or will not work, it is their job to do the opposite. This lack of a common design, and deconfliction across the various plans up front, usually ends up costing the DoD even more time and money in the long run, as we design patches and work-arounds to try to get separately designed pieces of the force to work together and communicate, and try to determine who will actually get the resources when several commands are all requesting them all at once.

However, is that not what the Joint Capabilities Integration and Development System (JCIDS) is supposed to resolve, at least when it comes to procurement? While the current Joint Requirements Oversight Council (JROC) processes used to monitor acquisitions make sure the services build forces that meet basic minimum compatibility requirements, ensuring compliance to blanket rule standards does not guarantee that there will be a larger conceptual and technical cohesiveness between various programs, and their implied warfighting concepts. The JROC is reactive, not proactive. It does not compel the services to make any hard choices, nor does the JROC produce enterprise level designs that all services must comply with. It is pretty much the same story with the DoD Architecture Framework, more about compliance than innovation. In the absence of such an integration and design function at either the Joint or OSD levels, the silos proliferate independently designed Frankenstein parts with the minimum degree of connection points required, with true joint integration of capabilities (to include the warfighting concepts they are designed to execute) being more coincidental than intentional when it does happen.

Perhaps the reason we have not had to seriously look at our strategies (or lack thereof) in past decades was our abundant wealth in resources and competitive advantage, and also the ability to keep a crisis in one part of the world contained within that zone. But increasingly, even minor military actions rise to the level of national leadership, especially as we talk about how to roll in intelligence, space, cyber, and long-range strike effects held at the national level. As policy theorists/practitioners Peter Feaver and William Inboden have observed, "Strategic planning on national security is hard to do anywhere besides the White House because the long term fruits of strategic planning form such a central part of the president's vision and legacy, and only the President has the authority to cut across the various stove-piped interagency interests." While the Office of the Secretary of Defense has the primary connectivity across the interagency national security apparatus in terms of policy, there is a currently unfilled need for dedicated teams of experienced, service and combatant command agnostic military strategists and planners supporting the development of feasible and sustainable Dynamic Force Employment (DFE) options in the operational sense and working on future force design in the long term OT&E sense, no matter how the chain of command is drawn on the organizational chart.

How We Might Start Tackling our Silo Issues without Destroying the Goodness Within Them

It is instructive that nearly every organization in existence experiences silo challenges, yet no one in any field has figured out a magic formula for managing the balance between specialized and general perspectives. This is because there is no magic formula, no min/max function that can provide a definitive, universal solution when presented necessary creative tensions that must be managed rather than solved in the face of ever-changing political contexts. That said, there are two approaches to bridging across silos that might help to improve integration without destroying the goodness inside the silos:

Tying into informal communities of interest and practice. As described in Cultivating Communities of Practice: A Guide to Managing Knowledge, one way to bridge across silos, share and critique the latest knowledge and practices, to cultivate multidisciplinary perspectives, and to build networks for collaboration and innovation is to sponsor informal communities of interest and practice.xix A community of interest is a community of people coming from various organizations who share a common interest in a specific topic or area of inquiry. A community of practice is a subset of that group that bands together, mostly voluntarily, to tackle specific projects. Right now, there are lots of informal communities of interest across the National Security community, but they are often closed, invite-only affairs or mailing lists that may promote groupthink as much as they spur creative discourse and innovation. What if the Department of Defense sponsored communities of interest across various topics of interest, at various levels of classification and access, in forums open to all comers regardless of their institutional affiliation? At the very least, having public repositories to post, share, and critique ideas would add to joint synergy even with the current organizational structure, and could generate ideas and networks of collaboration that help get ideas they develop in the informal communities through the formal system. The Cross-Functional Teams that the Joint Staff and the services are developing to promote cross disciplinary and cross functional collaboration should also be reaching out to these communities, where those with the greatest passion for specific topics are likely already seeking and evaluating the best ideas and practices. It is also in these communities where current and rising thought leaders are most likely to self-identify themselves no matter where they live or who they actually work for. Connections made in the communities of interest, solidified in mostly voluntary communities of practice, should be linked into the talent management plans of the services to not only find those with talent as specialists within the community, but also to identify those who have a natural talent for bringing various communities together on topics of mutual interest.

There are some risks involved using this distributed approach of knowledge gathering and sharing. Wider and more open collaboration may expose problems and shortcomings within the silos before the leadership is ready to admit them, and those who participate in enterprise level Col/CoP activities may not be rewarded by their local commanders and supervisors as highly as those doing "silo stuff," especially if manpower and other resources are already protected within the silo. There is always the risk of exploitation of open networks of collaboration by adversaries or trolls. But the deeper question

one must ask is this: is it riskier to have open conversations in order to take advantage of the innovative potential one gains despite the potential for adversary collection and trolling, or is it riskier to keep working within highly compartmented silos where no one is aware of the others who are working on similar projects to yours, who might have the piece of the puzzle you're trying to solve?

Restructuring the Joint Staff to include a design team/strategy division that directly supports the Secretary of Defense strategic decision-making. The fundamental critique of our current strategic planning system in this Invited Perspective—and also in what the Chairman has said about the challenges of Global Integration with the Joint Staff at it was designed when he took the Chairmanship—is the proposition that there are broken strategy and design linkages between the policy level activities in OSD, the planning activities the Joint Staff, the combatant commands, and the service headquarters. This is not the first time we have experienced this challenge. In their article *The Chairman the Pentagon Needs*, Dr. Paula Thornhill from RAND and Dr. Mara Karlin from Johns Hopkins University's School of Advanced International Studies (also a former Deputy Assistant Secretary of Defense for Strategy and Force Development) suggest that in an era where the need for central coordination is approaching that of World War II, we should revisit George A. Marshall's post World War II recommendations for a separate staff to oversee global decision-making, separating it from the role of supporting the Chairman in his/her advisory role.** Creating such an entity—one that would operate much like a general staff for operations—may not be a viable course of action given current resource and cultural perspectives.

What might be more viable than a new general staff is a redesigned Joint Staff that fully acknowledges that despite what is written in the UCP, it is already inside the operational chain of command when it comes to operations due to the global force management responsibilities only it can perform. The Joint Staff should be deliberately prepared to support OSD with long term planning for both OT&E and operational missions, not just short-term crisis action management, similar to how the IOD is redesigning itself to do better. This new staff element-for now, let us call it the Joint Warfighting Integration Capability, or JWIC, mirroring the Air Force AFWIC construct and intent-would be specifically charged to work directly for SECDEF. JWIC would look across the service and combatant commands and be tasked to make difficult cross-portfolio recommendations agnostic to service prerogatives and preferences, thereby helping SECDEF craft planning and execution guidance that he or she then executes through traditional chain of command lines. In the case of difficult cuts and trades, the President and SECDEF would still wield the executioner's axe (and have the difficult talks with Congress who may resist major changes for their own reasons of interest), but this staff would help sharpen the axe, providing the centralized vision for future force development, and setting the common standards that the services must design their forces to fit within. This staff would need to put together larger coalitions of subject matter experts than are found within our current, less dynamic processes for Global Force Management, the Chairman's Program Recommendations, and Joint Military Net Assessments, which have thus far not provided a forcing function for more difficult decisions like slaying sacred cows instead of consuming even more resources trying to defend them

along increasingly steep investment curves, all while assuming opportunity costs in technologies and approaches that might help us shift the competition curves entirely.

As discussed previously, the Army and Air Force are standing up such cells at their own level (AFC and AFWIC respectively), but even if those attempts to integrate internal service silos wildly succeed, their recommendations will be irrelevant if there is no function above them to evaluate how changes in each service's force presentation will affect how all of the services will integrate and fight together-in an increasingly connected world, the risk one service chooses to take affects the risks in all of the other services and commands. Ideally, the JWIC would be working in parallel with organizations like AFWIC and AFC, to provide early guidance that prevents any one service from putting too much emphasis on systems that either ignore current operational realities and threats due to cultural inertia or assume too much regarding support or priority for their effort when considered against the broader long term global strategy, not just how well they supporting current combatant command plans.xxi It is fair to point out that AFWIC is new and is still trying to prove that it can fulfill the function of making crossportfolio trade recommendations, but it is also likely that they may not be judged fairly if there is not a parallel process above AFWIC—and similar efforts in the other services—to make their recommendations meaningful in the sense of influencing actual planning and programming in the 8 shops. And while there is still value in separating strategic planning functions from procurement, there needs to be some honest broker who can help us get closer to the "Holy Grail" of programming, which would be procuring a force that enhances current lethality and readiness, while still putting us on the path towards the future capabilities that a longer view shows we need to start developing now.

The biggest challenge of building this organization would be the same talent management problems that stymie our current process—the services own all of the incentives under the current paradigm, and activities performed while serving as an "axe sharpener" would be anathema to the services of origin who would disown true reformers and innovators in an attempt to protect their own turf, interests, jobs/positions of privilege and, perhaps, even their own sense of self-worth and importance within the organization. But even given this, you would still have a senior flag officer in charge of recommending options that are informed across the silos. Whether or not JWIC would require a separate cadre who can serve in the capacity of a general staff after some initial seasoning in their service of origin is a question that should be raised within the wider context of talent management reforms, as well has how we would find and develop the people who can think this way. Our current system overwhelmingly favors the promotion of tacticians from the preferred "hero story" tribes within that service, which is partly how we got to the stage we are now in with our operational and strategic challenges-perhaps a greater emphasis on all-domain force development would help us to improve strategic competence without major organizational reforms. xxii Creating a JWIC would require an act of Congress, and it is related to human capital management, acquisitions, the Unified Command Plan, etc. Instead of thinking small, we should be thinking big, adjusting each of these areas to new realities and capabilities, especially if we are already considering such an act to adjust for changes in how we organize, train, equip, and command our space and cyber forces. As we make these inevitable changes, creating culture and a higher sense of identity should be part of our considerations; we will always need our silos of specialized expertise, but we must create space in both our culture and talent management plans for those whose identity becomes not having a single tribal identity, those who think and act as generally as the general officers they serve.

Conclusion

Bureaucracy is necessary to coordinate human activities, but bureaucratic inertia tends to emphasize status quo power structures, near term payoffs, and narrow institutional interests within "silos" and "tribes" that provide the members of the group their sense of personal and social identity. It is this enduring tie to identities and cultures that does the most to stifle the collective ability of a complex organization to think and act appropriately in the face of even obviously needed change, let alone conditions of complexity and uncertainty. Right now, our current bureaucratic practices are not even acknowledging, let alone addressing, some of the significant competitive challenges that will require a very different Joint Force than the one we are building today, which looks a lot like the one we were building twenty years ago. We will never make the necessary changes if no one is assigned to "grip" these problems. While the Joint Staff has performed admirably in its attempts to bridge the silos with an organization designed to support the advice mission of the Chairman, the current operational environment requires something purpose-built to provide the best recommendations possible to SECDEF and POTUS, from both operational and OT&E perspectives. At every level, we need more places where innovative and disruptive all-domain thinkers are protected within the system and not seen as liabilities by those who value their silo's culture over achieving wider strategic effectiveness.

ⁱ Examples include Report of the Panel on Military Education of the One Hundredth Congress of the Committee on Armed Services, House of Representatives, One Hundred and First Congress, First Session, by Ike Skelton, Chairman (Washington DC: US Government Printing Office, 1989), PDF

 $[\]underline{http://www.au.af.mil/au/awc/awcgate/congress/skelton 1989/skelton.pdf}.,$

http://www.au.af.mil/au/afri/aspj/airchronicles/apj/apj96/spec96/orndorff.pdf; Carl Builder "Keeping the Strategic Flame." Joint Force Quarterly, Winter 1996-1997. http://www.au.af.mil/au/awc/awcgate/jfq/keeping.pdf; Gehler, Christopher P. Agile Leaders, *Agile Institutions: *Educating Adaptive and Innovative Leaders for Today and Tomorrow. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2005. http://handle.dtic.mil/100.2/ADA434868; *Strategic Planning for U.S. National Security: *A Project Solarium for the 21st Century by Michelle A. Flournoy and Shawn W. Brimley. Princeton: The Woodrow Wilson School of Public and International Affairs, 2006.

http://www.dtic.mil/docs/citations/ADA521724; Watts, Barry. US Combat Training, Operational Art, and Strategic Competence: Problems and Opportunities. Washington DC: Center for Strategic and Budgetary Assessments, 2008. http://csbaonline.org/publications/2008/08/u-s-combat-training-operational-art-and-strategic-competence/, Reveron, Derek S. and Cook, James L. "Developing Strategists: Translating National Strategy into Theater Strategy." Joint Force Quarterly No. 55:21-28 2009.

http://proquest.umi.com/pqdlink?did=1857384801&sid=13&Fmt=1&clientId=417&RQT=309&VName=PQD;; Kelly, Justin and Brennan, Mike. Alien: How Operational Art Devoured Strategy. Carlisle, PA, Strategic Studies Institute, Army War College, 2009. http://handle.dtic.mil/100.2/ADA506962; Krepenevich, Andrew F. and Barry D. Watts. Regaining Strategic Competence. Washington DC: Center for Strategic and Budgetary Assessments, 2009.

http://csbaonline.org/publications/2009/09/regaining-strategic-competence/; US House of Representatives Committee on Armed Services Subcommittee on Oversight & Investigations. *Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel*. Apr 2010.

http://www.au.af.mil/au/awc/awcgate/congress/hasc_pme_report_6may2010.pdf; Wells, Linton II, Theodore C. Halles, and Michael C. Davies, eds. *Changing Mindsets to Transform Security: Leader Development for an Unpredictable and Complex World*. Washington DC: National Defense University, 2013. http://ctnsp.dodlive.mil/2013/12/02/changing-mindsets-to-transform-security-leader-development-for-an-unpredictable-and-complex-world/; Freedberg, Sydney J. Jr. "How To Get Best Military Leaders: CNAS Says Split Warriors From Managers". Breaking Defense, October 25, 2013. http://breakingdefense.com/2013/10/how-to-get-best-military-leaders-cnas-says-split-warriors-from-managers/; Robinson, Linda, Paul D. Miller, John Gordon IV, Jeffrey Decker, Michael Schwille, Raphael S. Cohen. *Improving Strategic Competence: Lessons from 13 Years of War*. Santa Monica: RAND, 2014.

<u>http://www.rand.org/pubs/research_reports/RR816.html</u>; Rapp, William E. "Civil-Military Relations: The Role of Military Leaders in Strategy Making. "*Parameters* 45(3) Autumn 2015.

http://ssi.armywarcollege.edu/pubs/parameters/issues/Autumn_2015/5_rapp.pdf; and Polski, Margaret. "Strategy 2.0: The Next Generation," *Joint Force Quarterly* 81, March 29, 2016. http://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-81/Article/702002/strategy-20-the-next-generation/

"Here was a practitioner-theorist after Patton's own heart. Although DuPicq clearly argued that good arms, sound doctrine, and proper organization were necessary for success in battle, he emphasized the moral dimension of combat effectiveness." (From Harold R. Winton, "An Imperfect Jewel: Military Theory and the Military Profession" in Strategy: Context and Adaptation from Archidamus to Airpower, Naval Institute Press, 2016, page. 46. http://entersection.com/posts/1025-albert-einstein-on-problem-solving; "At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and

represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment, and tactics." Curtis LeMay, America is in Danger, (Funk & Wagnalls, 1968, page 23); "In brief historical sketches the pages above have shown that the pace at which weapons develop is determined by the effectiveness of the procedures established to translate ideas into weapons. The prior acceptance and application of the thesis that superior arms favor victory, while essential, are insufficient unless the "superior arms" are accompanied by a military doctrine of strategic or tactical application which provides for full exploitation of the innovation. But even doctrine is inadequate without an organization to administer the tasks involved in selecting, testing, and evaluating 'inventions'." IB Holley, Ideas and Weapons, (Maxwell Air Force Base: Air Force History and Museums Program, 1997, page 19); "People, Ideas, and Hardware...in that order!" — ascribed to John Boyd, See Greg Wilcox, "People, Ideas, and Things in that Order: Some Observations", Boyd Symposium proceedings, 12 October 2012, https://fasttransients.files.wordpress.com/2010/03/wilcox people ideas things.pdf; "A Military-Technical Revolution occurs when the application of new technologies into military systems combines with innovative operational concepts and organizational adaptations to alter fundamentally the character and conduct of military operations."

Andrew Marshall's construct for the Military Technical Revolution/Revolution in Military Affairs study as described by Krepenevich and Watts in The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy (Basic Books, 2015, pages. 200-205).

For contemporary discussions that back this general assertion, see *Tribe: On Homecoming and Belonging* by Sebastian Junger and Amy Chua's *Political Tribes: Group Instinct and the Fate of Nations*.

iv For one such example, see Dr. Scott E. Page's *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* (Princeton: Princeton University Press, 2007).

^v See Peter Senge, The Fifth Discipline: the Art and Practice of the Learning Organization. (New York: Doubleday/Currency, 1990) and Gillian Tett The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers (New York: Simon and Schuster. 2016)

Vi General Dunford announced a Joint Staff effort to frame and tackle the challenge of "true integration" in his "From the Chairman" introduction of Joint Force Quarterly 80 (NDU Press: Joint Force Quarterly 80, 1st Quarter 2016, pp. 3) https://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-80/Article/643048/from-the-chairman/, and discussed it continually in engagements like his speech at the Air Force Association conference in September 2016 – see "Dunford: Command, Control Must 'Keep Pace' in 21st Century" by Jim Garamone (Washington DC: DoD News, Jan 4, 2016, https://dod.defense.gov/News/Article/Article/639844/dunford-command-control-must-keep-pace-in-21st-century/) and "CJCS Dunford Calls for Strategic Shifts; 'At Peace or At War Is Insufficient" by Colin Clark: (Washington DC: Breaking Defense, September 21st, 2016 https://breakingdefense.com/2016/09/cjcs-dunford-calls-for-strategic-shifts-at-peace-orat-war-is-insufficient/ and

- xv During the course of editing this perspective, the new Commandant of the Marine Corps, General David H. Berger took a huge step to address this issue in his Commandant's Planning Guidance issued in July 2019. See "Sacred Cows Die As Marine Commandant Changes Course On Amphibs" by Paul McCleary, Breaking Defense, July 26th, 2019. https://breakingdefense.com/2019/07/sacred-cows-die-as-marine-commandant-changes-course-on-amphibs/xvi See "Air Warfare, Congress, Land Warfare, Naval Warfare, Networks / Cyber, space, Threats
 Joint Staff Must Boost Global Coordination; No New Powers Needed: J5" by Sydney Freedberg, Breaking Defense, April 27th, 2017 for the thinking that has guided the reorganization process. https://breakingdefense.com/2017/04/joint-staff-must-step-up-global-coordination-no-new-powers-needed-j-5/
- xvii See "Services Debate Multi-Domain: 'Battle' Or 'Operations' by Sydney Freedberg, *Breaking Defense*, April 10th, 2018, https://breakingdefense.com/2018/04/beyond-multi-domain-battle-services-brainstorm-broader-concept/, and "Army Multi-Domain Update: New HQs, Grey Zones, & The Art of The Unfeasible" by Sydney Freedberg, *Breaking Defense*, December 7th 2018. https://breakingdefense.com/2018/12/army-multi-domain-update-new-hqs-grey-zones-the-art-of-the-unfeasible/. Despite the sense of the participants at the April meeting that the effort should probably be a joint lead one, no joint lead has stepped up or been assigned.
- ^{xviii} From *Avoiding Trivia: The Role of Strategic Planning in American Foreign Policy* ed. Daniel W. Drezner, (Washington DC: The Brookings Institution, 2009).
- xix See *Cultivating Communities of Practice: A Guide to Managing Knowledge* by Etienne Wenger, Richard Mc Dermott, and William Snyder (Cambridge: Harvard Business Review Press, 2002).
- xx "The Chairman the Pentagon Needs" by Paula Thornhill and Mara Karlin *War on the Rocks* blog January 5th, 2018. https://warontherocks.com/2018/01/chairman-pentagon-needs/
- xxi See "Why Good Companies Go Bad" by David Sull, *Harvard Business Review*, July-August 1999. https://hbr.org/1999/07/why-good-companies-go-bad
- xxii See "Strategy 2.0: The Next Generation" by Margaret Polski, *Joint Force Quarterly* 81 (2nd Quarter, April 2016) https://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-81/Article/702002/strategy-20-the-next-generation/

vii General Joseph Dunford "The Character of War and the Strategic Landscape Have Changed". (NDU Press: *Joint Force Quarterly* 89, 2nd Quarter 2018, pp. 2)

viii See "Joint Staff Must Boost Global Coordination: No New Powers Needed: J5" by Sydney J. Freedberg, Jr. (Washington DC: *Breaking Defense*, April 27, 2017) https://breakingdefense.com/2017/04/joint-staff-must-step-up-global-coordination-no-new-powers-needed-j-5/

ix Anthony Cordesman, "The Mattis Resignation and the U.S. FY2020 Defense Budget and Strategy Crisis" CSIS Commentary posted on January 3, 2019. https://www.csis.org/analysis/mattis-resignation-and-us-fy2020-defense-budget-and-strategy-crisis

^{* &}quot;Service Secretaries Link Reform to Greater Lethality" US Department of Defense News release, Feb 8th, 2019. https://dod.defense.gov/News/Article/Article/1752710/service-secretaries-link-reform-to-greater-lethality/. For information of Army Futures Command, see their website at https://armyfuturescommand.com/. For a summary of AFWIC activities, see "Beyond 386 Squadrons: AFWIC's Four Futures For the Air Force" by Sydney J. Freedberg (Washington DC: Breaking Defense, Dec 19, 2018). https://breakingdefense.com/2018/12/beyond-386-squadrons-afwics-four-futures-for-the-air-force/

xi See Hew Strachan's arguments in "The Lost Meaning of Strategy" (Washington DC: *Survival* 47: 3, 2005, p. 33-54). https://www.tandfonline.com/doi/abs/10.1080/00396330500248102

xii Movement and Maneuver: Culture and Competition for Influence Among U.S. Military Services by S. Rebecca Zimmerman, Kimberly Jackson, Natasha Lander, Colin Roberts, Dan Madden, and Rebeca Orrie (Santa Monica: RAND, 2019, pp. 9). https://www.rand.org/content/dam/rand/pubs/research_reports/RR2200/RR2270/RAND_RR2270.pdf xiii Ibid pp. 12

xiv Mark Jacobsen describes one such threat here that challenges the fundamental assumptions behind most of the joint force's expeditionary concepts in "The Strategic Implications of Non-state Warbots', Real Clear Defense, December 15th, 2007, https://www.realcleardefense.com/articles/2017/12/15/the_strategic_implications_of_non-state warbots 112786.html