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A WAY FORWARD FOR COUNTERING WEAPONS OF MASS DESTRUCTION

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WEAPONS OF MASS DESTRUCTION CHALLENGES TODAY AND BEYOND

The U.S. military's enduring mission to counter threats posed by weapons of mass destruction (WMD) has taken on renewed urgency due to troubling developments in recent years that have contributed to a more volatile and complex threat landscape. As the 2018 Nuclear Posture Review (NPR) warns: "There now exists an unprecedented range and mix of threats, including major conventional, chemical, biological, nuclear, space, and cyber threats, and violent non-state actors. These developments have produced increased uncertainty and risk."[1]

Russia and China are acquiring new advanced nuclear capabilities and giving those nuclear forces increased prominence in their plans and strategies. North Korea, in defiance of international laws and condemnation, is developing and testing nuclear weapons and missiles that can deliver those weapons across continents. North Korea also continues to pursue chemical and biological weapons that could also be delivered by missile. And Iran, while it has paused its nuclear program for now, is believed to possess the capacity necessary to develop a nuclear weapon within one year, should it decide to resume its nuclear ambitions.

Perhaps more troubling is a rising WMD threat from non-state actors, such as violent extremist organizations (VEOs). "The potential threat of non-state actors getting their hands on a nuclear weapon remains at the front of all of our minds. Nuclear terrorism is still a major threat in this century, and one we must work to mitigate at every opportunity," said Undersecretary of State for Political Affairs Thomas Shannon Jr.[2] A particularly vexing challenge today is the fact that threats from non-state actors often include single individuals who are inspired by VEOs and can be more difficult to detect in advance. James McDonnell, acting Assistant Secretary for the Department of Homeland Security's (DHS) CWMD Office captured the issue well at a recent conference: "The change, the dynamic that I've seen in my career is the shift from state actors being primarily who you're concerned with when it comes to WMD to non-state actors and the proliferation of information through the Internet. Now you really have to worry about a microbiologist that has access to a laboratory in a community college, which, 10-15 years ago, that wasn't something that we were dealing with like we are today."[3]

The evolving tactics and operations employed by terrorist organizations have compressed the time and space needed to plot and carry out attacks, further challenging traditional U.S. counterterrorism approaches. "Now they have become highly networked online, allowing them to spread propaganda worldwide, recruit online, evade detection by plotting in virtual safe havens, and crowd-source attacks. The result is that our interagency partners and allies have tracked a record number of terrorism cases," said Acting Homeland Security Secretary Elaine Duke.[4] As Homeland Security Department officials recently told lawmakers, "certain WMD, once viewed as out-of-reach for all but nation states, are now closer to being attained by non-state actors."[5] Unfortunately, the WMD threat today is not strictly academic – chemical weapons have been employed repeatedly with devastating consequences by both state and non-state actors.

Further complicating the threat landscape is the fact that the know-how and materials needed to produce WMD continue to proliferate and commercial technologies that enable threat actors to obtain and deploy these weapons continue advancing. As two WMD experts noted: "[These trends] are likely to reduce obstacles to the covert development of nuclear weapons as well as to the development of more sophisticated nuclear weapons. More sophisticated nuclear weapon designs are proliferating, and weaponization technologies that were once cutting edge are now integral to widely available commercial products. These developments should enable those with access to fissile material, primarily new and aspiring nuclear weapons states but perhaps also sophisticated non-state actors, to produce larger yield weapons in packages that are smaller, more transportable, and easier to conceal."[6]

MODERN CWMD PRESENTS SIGNIFICANT COORDINATION AND INFORMATION SHARING CHALLENGES

These troubling developments challenge traditional countering weapons of mass destruction paradigms and test the ability of U.S. government organizations to keep pace. As DHS' Duke noted: "We are rethinking homeland security for a new age. We sometimes speak of the 'home game' and 'away game' in protecting our country, with DHS especially focused on the former. But the line is now blurred. The dangers we face are becoming more dispersed, and threat networks are proliferating across borders. The shifting landscape is challenging our security, so we need to move past traditional defense and non-defense thinking."[7]

In response, the U.S. government is recalibrating its CWMD posture with agency reorganizations and reformulated strategies. In recent months, for example, the Department of Defense (DOD) transferred the CWMD mission lead from the U.S. Strategic Command to the U.S. Special Operations Command (USSOCOM), signaling a shift in strategy that places greater emphasis on identifying and preventing threats before they metastasize into crises. In addition, the Department of Homeland Security established a CWMD Office, consolidating numerous offices and functions across the department. Strategies and plans to address WMD threats are being overhauled with new or updated versions of the National Security Strategy, National Defense Strategy, Nuclear Posture Review, Combined Arms CWMD doctrine, and National Biodefense Strategy and Implementation Plan.

These are positive steps that constitute a tipping point in the nation's mobilization around the WMD challenge. But these steps, by themselves, cannot sufficiently address the myriad challenges that come with countering today's emerging WMD threats. These include:

- A lack of coordination at the national level to ensure that centers of CWMD activity, authority, policy, planning, and expertise are operating cohesively, effectively, and efficiently.
- Limited situational awareness across the Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) communities concerning threats and CWMD activities.
- The inherent complexity of the CWMD mission in which each CBRNE pillar consists of different stakeholders, authorities, required skillsets, strategies and tactics.
- Threat actors that continue to evolve their resiliency, adaptability, strategies, tactics, and organizations, often by employing digital innovations.
- A new lead agency – USSOCOM – that must rapidly develop the infrastructure, partnerships, expertise, strategy and tactics needed to address this mission successfully.

The transfer of the CWMD mission to USSOCOM, in particular, represents an important juncture that demands fresh thinking on how best to address these and other challenges. The policy decision to vest USSOCOM with this responsibility acknowledges that CWMD and counterterrorism share strong commonalities: Both missions face highly complex, multi-regional, and overlapping threats, and both call for a networked interagency and interorganizational response.

To prepare for the new mission, USSOCOM Commander Gen. Raymond Thomas said his staff is publishing a new Global Campaign Plan for CWMD to provide "a comprehensive, trans-regional approach which integrates ongoing regional and interagency efforts."[8] The plan, according to one description, "is about unity of effort, not unity of command."[9] Robyn Klein, former director of WMD terrorism threats at the White House National Security Council, explained this "unity of effort" concept as the collaboration among agencies to achieve a unified CWMD objective: "Each department or agency at the federal level has unique roles, responsibilities, authorities, and processes that shapes its perspective, equities, and operations. Unity of command resides with the President and typically not with a single department or agency lead, which means our system

requires that departments and agencies support a 'unity of effort' model, both in steady state and during crisis. This is not unique to CWMD, but [it] means that CWMD efforts across departments and agencies will always benefit from shared understanding of problems and close collaboration on the integrated sets of options to address them."[10]

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USSOCOM has adopted a similar approach to the counterterrorism mission, and today fields an unmatched capability to conduct global counterterrorism operations in coordination with its many partners. However, CWMD has the potential to be a vastly more complex and dispersed mission set than counterterrorism, raising the question of whether the counterterrorism model can scale as needed. USSOCOM must accommodate extensive coordination and information sharing responsibilities to optimally align the numerous partner communities inhabiting the CWMD mission. To illustrate this, the Department of Defense envisions the military's CWMD activity operating "within a Joint, Interagency (IA), and Multinational context integrated with other key elements of national power: Diplomatic, Information, Military, Economic, Financial, Intelligence, and Law Enforcement."[11] USSOCOM's coordination and information sharing responsibilities also extend to other DOD components having a role in the military's eight CWMD missions identified by the National Military Strategy to Combat WMD (NMS-CWMD): offensive operations, elimination, interdiction, active defense, passive defense, WMD consequence management, security cooperation and partner activities, and threat reduction cooperation.[12]

Moreover, the CWMD mission embodies non-proliferation, counter-proliferation, and consequence management responsibilities within each of the five CBRNE domains – and, likewise, each of those mission responsibilities consists of different stakeholder communities, skillsets, strategies and tactics. For example, counterproliferation responsibilities revolve around diplomatic, intelligence, and military efforts to combat the proliferation of WMD weapons and materials, such as through interdiction. Nonproliferation typically concerns collaboration with the diplomatic and legal communities to enact and enforce treaties and conventions. Consequence management involves the first responder and hazardous materials communities in the planning and execution of incident response strategies.

To be sure, USSOCOM's experience in counterterrorism brings critical advantages – namely, the know-how needed to establish, coordinate, and leverage needed relationships and partnerships; develop agile operational models and tactics; and employ innovative technologies and capabilities in pursuit of mission goals. But the sheer scale and relative complexity of the WMD threat; the support needed to sustain a "unity of effort" approach to the mission; and the extreme stakes intrinsic to CWMD that demand zero tolerance for failure all require a more deliberate approach to the intelligence and coordination challenges needed to keep the command and its mission partners on the front foot. Furthermore, these coordination challenges extend not only to USSOCOM's many mission partners, but also to the fundamental components of the CWMD mission itself – policy, operations, people, technology and management – need to be optimally integrated to deliver assured mission success, even as the threat intensifies.

AN INTEGRATED MISSION APPROACH EMPOWERED BY COMPREHENSIVE SITUATIONAL AWARENESS

Our experience, working with a wide variety of agency clients, has taught us that a critical first step when addressing a complex and multidimensional challenge involves aligning the five critical dimensions of the mission – *policy, operations, people, technology, and management* – into a single, mission-focused, integrated framework. This *Mission Integration Framework* should

rely on robust situational awareness, which will enable three critical mission capabilities:

- A shared view of mission status across the CWMD enterprise so all mission partners are aware, engaged, and in a ready state;
- Effective coordination of all mission partners; and
- A high degree of responsiveness, adaptability, and resilience to address the dynamic and multi-dimensional WMD threat.

By aligning policy, operations, people, technology and management into an integrated whole and empowering them with robust situational awareness, Booz Allen Hamilton's unique *Mission Integration Framework* combines strategy expertise and technical prowess to inform decision-making, reduce blind spots in mission coverage, and strengthen responsiveness and resilience across the board. We believe such a framework should address the following:

Policy: Policy is integral to leveraging resources; optimizing mission execution; reducing conflict and redundancy; setting expectations, responsibilities and authorities; and achieving long-term mission goals.

In the CWMD context, authorities and relationships of mission partners across the global CWMD community need to be clarified, aligned, and optimized to ensure that roles, responsibilities, and accountability are well understood and responsive to a dynamic, complex threat, thereby supporting a "unity of effort" approach. This should be done with an eye toward leveraging resources, effort, and expertise to the fullest potential. Priority also should be placed on optimizing and operationalizing the new Global Campaign Plan. Robust situational awareness will help ensure policies remain relevant and responsive to the dynamic needs of the mission.

Operations: The execution of mission policies, strategies and tactics is the day-to-day culmination of the people, training, management, and technologies that are brought to bear in achieving mission goals.

Within the CWMD context, operations include not only the execution of military tasks within USSOCOM's purview, but the coordination and linkages necessary to integrate the joint, interagency, and multinational activities that enable a "unity of effort" approach. Priority should be placed on coordinating and tracking existing activities across the CWMD community. A robust, integrated situational awareness capability that builds upon the existing capabilities of the USSOCOM's new CWMD Coordination Center should serve as a cornerstone for executing the new trans-regional approach, establishing intelligence priorities, monitoring global operations, coordinating activities with other agencies and international partners, and conducting assessments. This coordinated mission-wide effort should be built upon integrated strategies, tactics, doctrine, partnerships, and tools.

People: As the first truth of Special Operations Forces says: "Humans are more important than hardware." The human dimension encompasses everything from leadership and technical acuity to culture.

Focus should be placed on creating an elite CWMD culture built on world-class leadership, recruitment, training, education, domain expertise, and clearly defined roles and functions. Also, it will be important to map critical skillsets, areas of expertise, and functional duties across the CWMD mission enterprise to reduce redundancy and maximize the value of human capital. CWMD training across the enterprise should likewise be deconflicted and updated to ensure all individuals understand their specific roles and how they fit into an overall, integrated scheme. As USSOCOM implements manning strategies through transfers and hiring, it will also need to assess and mitigate risk to morale and readiness for existing and new components.

Technology: The tools that enable mission execution must be carefully aligned to the needs of operators and the command and control component.

Networks and other technologies across the CWMD community should be assessed, connected, and enhanced where needed to provide resilient, secure, effective command, control, communications, computers, intelligence surveillance and reconnaissance (C4ISR) coordination, and data fusion. CWMD efforts across the U.S. government and internationally generate immense amounts of information that must be integrated, analyzed, and shared across security domains

to enhance decision-making and produce a full-dimensional view of the operating environment.

Management: As the connective tissue throughout the mission enterprise, the management layer is where coordination and mission execution succeed or fail.

We suggest an integrated management strategy that addresses technology, policy, people, and operations. These interdependent elements are critical to managing all aspects of the CWMD mission. An integrated management approach provides a framework for prioritizing investments and resources based on their value to the mission, as well as the flexibility to quickly deploy new technologies or support a surge in operations. This function will also help to truly operationalize the connection with larger-scale defense strategies and with periodic assessments and feedback to determine if the right things are being done effectively and efficiently while managing the risks in a deliberate manner.

GOING FORWARD, THINK HOLISTICALLY

As the new mission lead for Countering Weapons of Mass Destruction (CWMD), USSOCOM is ideally suited to take on a coordinated, trans-regional approach to address today's increasingly dynamic and multi-dimensional WMD threat. We believe that our *Mission Integration Framework* for aligning all critical dimensions of the CWMD mission into an integrated whole and empowering them with a comprehensive view of the mission landscape will best position USSOCOM and its mission partners for maximum effectiveness.

NOTES

1. *Nuclear Posture Review 2018, Department of Defense, https://www.defense.gov/News/Special-Reports/0218_npr/*
2. *Thomas Shannon Jr., Undersecretary of State for Political Affairs, U.S. Department of State, News briefing on the 2018 Nuclear Posture Review, Feb. 2, 2018, https://www.defense.gov/News/Transcripts/Transcript-View/Article/1431945/news-briefing-on-the-2018-nuclear-posture-review/*
3. *James McDonnell, Acting assistant secretary for the Countering Weapons of Mass Destruction (CWMD) Office, U.S. Department of Homeland Security, Remarks at the Hudson Institute, December 13, 2017, https://againstnuclearterror.wordpress.com/2017/12/14/dhs-deputy-duke-details-departments-counter-wmd-terrorism-policies/*
4. *Elaine Duke, Acting Secretary, U.S. Department of Homeland Security, Testimony before the Senate Committee on Homeland Security and Governmental Affairs, Sept. 27, 2017, https://www.dhs.gov/news/2017/09/27/written-testimony-dhs-acting-secretary-elaine-duke-senate-committee-homeland*
5. *James F. McDonnell, Larry D. Fluty, and William Bryan, U.S. Department of Homeland Security, Combined testimony before the U.S. House of Representatives Committee on Homeland Security, Subcommittee on Emergency Preparedness, Response and Communications, December 7, 2017, http://docs.house.gov/meetings/HM/HM12/20171207/106719/HHRG-115-HM12-Wstate-BryanW-20171207.pdf*
6. *John P. Caves, Jr., and W. Seth Carus, "The Future of Weapons of Mass Destruction: Their Nature and Role in 2030," Center for the Study of Weapons of Mass Destruction, National Defense University, June 2014, http://ndupress.ndu.edu/Portals/68/Documents/occasional/cswmd/CSWMD_OccationalPaper-10.pdf*
7. *Elaine Duke, Acting Secretary, U.S. Department of Homeland Security, Testimony before the Senate Committee on Homeland Security and Governmental Affairs, Sept. 27, 2017, https://www.dhs.gov/news/2017/09/27/written-testimony-dhs-acting-secretary-elaine-duke-senate-committee-homeland*
8. *Gen. Stanley McChrystal, U.S. Army retired, Team of Teams: New Rules of Engagement for a Complex World, Penguin Publishing Group, page 20.*
9. *Erik J. Stanfield, "Lost in Translation: Lessons From Counterterrorism For a More Proactive Weapons of Mass Destruction Strategy," Naval Postgraduate School, June 2017, https://calhoun.nps.edu/bitstream/handle/10945/55539/17Jun_Stanfield_Erik.pdf?sequence=1*
10. *Ibid.*
11. *Department of Defense, Joint Integrating Concept for Combating Weapons of Mass Destruction, December 2007, http://www.jcs.mil/Portals/36/Documents/Doctrine/concepts/jic_cmwd.pdf?ver=2017-12-28-162002-573*
12. *Department of Defense, National Military Strategy to Combat WMD (NMS-CWMD), February 2006, https://www.hsdl.org/?view&did=461418*

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