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On

Proliferation Prevention Programs

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Director Kenneth Myers SASC Testimony April 1, 2014

Madam Chairwoman, Ranking Member Fischer, and Members of the Subcommittee, it is an honor to be here today to share with you the work being done to counter the threats posed by the proliferation and use of weapons of mass destruction (WMD). There are three entities co-located at our facilities at Fort Belvoir: the Defense Threat Reduction Agency (DTRA), the United States Strategic Command Center for Combating Weapons of Mass Destruction (SCC-WMD) and the United States Strategic Command Standing Joint Force Headquarters for Elimination (SJFHQ-E). Each one of these entities has different mission areas, authorities, requirements, and funding, but they are all located together and intertwined in order to leverage expertise from each other and coordinate efforts. These three entities, as one Team, are engaged in nonproliferation, counterproliferation and consequence management missions throughout the world -- addressing the full spectrum of WMD threats.

Why We Exist- The Threat

Our combating weapons of mass destruction (CWMD) efforts are driven by the threats we face today. A terrorist attack utilizing WMD can result in enormous loss of life, negatively impact economies, constrain national budgets, create political unbalance in geographic regions, and most certainly promote additional proliferation and terrorist activity around the world.

Our mission is further complicated given the complex nature of countering weapons of mass destruction. During the Cold War, most of our focus was on nation states. We were worried about huge stockpiles of nuclear, chemical, and biological materials. And while there is no question that these stockpiles are still a threat today -- and some of my testimony will describe our efforts in these areas -- the more difficult area for us to track and address is terrorist acquisition of WMD materials that can be modified, grown, or enhanced for use as a weapon. The footprint is smaller in these cases, harder to track and thus harder to find and disrupt. We

are not talking about huge factories or facilities in most of these cases; sometimes it is a small laboratory that could fit inside a bathroom. Given this reality, no region of the world is impervious to potential chemical, biological, radiological or nuclear threats.

Our focus is to keep WMD out of the hands of terrorists and other enemies by locking down, monitoring, and destroying weapons and weapons related materials. We also assist Combatant Commanders with their plans and responses to WMD events and develop and deliver cutting-edge technologies to assist with all of these endeavors.

Who We Are

There is no other country or government that is focused on combating weapons of mass destruction 24 hours a day, 7 days a week. Every day, 2000 people from our organization come to work in locations around the United States and around the world focused on one thing, and that's safeguarding the American people against these threats. Our success is determined by what didn't happen –what we prevented, what we helped to interdict, what we eliminated, what we mitigated, and how prepared we are to respond. That is the basis of the shield that we can provide across the full threat spectrum -- chemical, biological, radiological, nuclear and high yield explosives (CBRNE).

Regardless of the time or day, our building is buzzing with activity and with a diverse and remarkable collection of talented workers. As you enter our building and walk through the hallways, you encounter personnel with highly advanced technical degrees and skills related to physics, chemistry, microbiology, and nuclear engineering. They are working right alongside those with expansive experience with program management, logistics, planning, special operations, targeting and military operations. Our operation is often described as unique in this way, and it is true.

The reason why is simple. Subject Matter Experts in the WMD field are highly specialized and hard to find. There simply are not enough experts to adequately staff the Services and

Commands. And even if you did, you would not have the right type of coordination and synchronization which is critical for WMD planning. The most effective way to utilize this expertise is to locate it in one place and provide efficient communication channels for collaboration.

One of the reasons we are successful is because of the breadth of services that we can provide. We combine our operational side of the house with our research and development side focusing all our assets on the issue at hand. Let me give you an example, when a Command or other customer calls into our Operations Center a watch officer takes the call. This officer represents the whole Team, the operations side, planning, and the research and development side of the house. The watch officer's job is to stay abreast of what is taking place throughout the Agency/Center and be able to quickly leverage the diverse expertise on our staff. If the watch officer recognizes that there's some technical complexity to the question, they will go straight to our Technical Reachback personnel. The whole process literally takes seconds. And throughout the response process, operational and technical subject matter experts are engaged. This set-up allows us to fully answer questions from all aspects of a WMD problem, anticipate the needs of the various Commands and special customers, and properly prepare in case there is any follow-up. Timing is critical when dealing with WMD and our Operations Center is organized for collaboration and time sensitive requests. Last year we responded to 947 Technical Reachback requests from our customers.

How We Are Structured

As a Combat Support Agency, we are available 24 hours a day, seven days a week, to support the Combatant Commanders and Services in responding to any WMD threat. This requires us to not only address current needs but also to anticipate future threats to our warfighters. In our Defense Agency role, we manage a research and development portfolio to develop tools and capabilities. In fact, DTRA provides the Special Operations Command with all of their counter proliferation Science and Technology. As a USSTRATCOM Center, we support USSTRATCOM's synchronization of Department of Defense planning efforts to counter

weapons of mass destruction. And the complementary Standing Joint Force Headquarters for Elimination provides both steady state CWMD planning support and can be deployed to provide direct operational support for US Military task forces in hostile environments.

While I am pleased to walk through individual programs with the Committee members and their staff, I would like to use my testimony today to highlight four real-world examples of our activities and the roles that different parts of our Team played in these challenges.

Syria

Beginning in 2011, we began looking at ways to address the CWMD challenges in Syria. The U.S. Government (USG) and international community were alarmed by the continuing civil war in Syria and particularly concerned about the threats of chemical weapon use and proliferation. DTRA's CWMD planners and intelligence officers worked closely with USCENTCOM to evaluate the WMD threats and options for the destruction of these weapons and materials. This analysis was coordinated with DTRA's research and development directorate who began the process of evaluating technologies to destroy these materials. Our Technical Reachback personnel provided modeling and analysis of the potential threats we faced. We were even able to utilize our expertise and knowledge of treaty implications to help shape and steer the Department's actions to respond. And, our Team led the synchronization effort within the Department of Defense and across the interagency to bring the right expertise to the technology review. This was truly a Team effort that allowed us to utilize our capabilities and expertise.

The conclusion that we came to was that we simply did not have a good way to get rid of bulk chemical agents in a foreign land, in particular hostile environments where we did not have a cooperative relationship. After reviewing a number of options, we were the first organization to invest in a prototype Field Deployable Hydrolysis System (FDHS), a capability that is suitable for the destruction of industrial quantities of bulk chemical agent. The FDHS was developed in fewer than six months and was designed to be transportable for rapid deployment in a variety of environments.

The Syrian chemical attacks on 21 August 2013 were a turning point for the international community. DTRA planners provided technical expertise to Department of State and White House-led diplomatic efforts at every step, including the seminal meetings between Secretary Kerry and Russian Foreign Minister Lavrov in Geneva. After the U.S.-Russia Framework and Syria's accession to the Chemical Weapons Convention, DTRA's Nunn-Lugar program was prepared to support the extremely rapid effort to destroy Syria's declared chemical materials. The Nunn-Lugar program provided the Joint (UN/OPCW) Mission with the majority of the logistics equipment to move chemicals out of Syria.

When the international community failed to identify a nation willing to host destruction operations for the most dangerous chemicals, a full court press was employed to develop a ship-based destruction option with only 60 days from the word "go". And with full cooperation across the interagency and Commands, we were able to deliver a sea-based destruction capability. I am proud to say that the Motor Vessel Cape Ray, the ship that houses the two field-deployable hydrolysis systems, stands ready to begin destruction of a large portion of these chemicals once the materials are taken out of Syria.

Building Partner Capacity

I would also like to share with the Committee our efforts to build partnership capacity in the countries surrounding Syria. It was clear in 2012 that the countries neighboring Syria both wanted and needed improvements to their military and civilian response sectors to counter the possible illicit WMD-related trafficking coming from Syria. Beginning in 2012, DTRA started working with USCENTCOM and the whole of the US Government to build the CWMD capacity of the Governments of Jordan, Turkey, Iraq, and Lebanon. In these countries, to varying degrees we train, equip, and exercise with the military and civilian sectors so they can address non-proliferation, counter-proliferation and consequence management issues.

One of our biggest projects is in Jordan which has hundreds of thousands of refugees from Syria. The Jordanians are concerned about Syrian WMD coming across its borders along with the refugees. Working with USCENTCOM and our inter-agency partners, DTRA's Nunn-Lugar program is building a 247 mile long security system that runs along the northern and eastern border. To put this in perspective, 247 miles is the distance from Washington, DC to Raleigh, NC. We are building the system in 29 months and should be at full operation by August of 2015. The system is designed to detect a person from 5 miles away and provides the Jordanians with a capability to safely detect, inspect, and apprehend someone suspected of smuggling WMD.

We also trained and equipped the Jordanian military and civilian first responders, approximately 1000 key personnel, to operate in a CBRNE environment. We have helped the Jordanians develop a National Response Plan for potential chemical attacks. We have conducted exercises to synchronize their efforts, reinforce and improve the operational implementation of their newly acquired capabilities.

DTRA's Nunn-Lugar program was the only Department of Defense solution that had the right expertise, authorities, and funding to respond to this emerging requirement in a timely manner. Our subject matter experts have decades of experience training international partners in border security and nonproliferation techniques. Through the Middle East Determination in October 2012, the Secretary of Defense and the Secretary of State were able to quickly approve and renotify funding toward this urgent end.

The Nunn-Lugar effort was enhanced by DTRA's CBRN Preparedness Program (CP2) and their ongoing engagements with USCENTCOM in the region. However, the CP2 work was limited in authorities under Title 10. Fortunately, last year Congress granted relief by authorizing the Secretary of Defense, with the concurrence of the Secretary of State, to provide assistance to the military and civilian first responder organizations of countries that share a border with Syria. This was a significant step because not all nations have their response capabilities resident within their military organizations. With the Congress' continued support, we plan to immediately use this authority and work within the Department to expand the authority to provide such assistance to other countries. This year, using both this new authority and our existing Title 10 authority,

we will build CBRN preparedness and response capacity in approximately 34 countries – thus creating stronger partners for a safer world.

CDC

Building partnership capacity is a good transition into discussing our cooperative relationship with the Centers for Disease Control and Prevention (CDC). The missions of DTRA/SCC-WMD and CDC touch in many places, and we often pursue global health security projects together internationally.

DTRA is well known for its successful projects in the former Soviet Union. But what may not be well known is that these types of projects are now being tracked alongside smaller, yet equally critical biological material projects in sub-Saharan Africa, the Middle East, and Southeast Asia. Why? The threat has changed. Because of our success in eliminating access to materials in the former Soviet Union, groups and states seeking WMD have shifted their attention to other geographic areas and potential WMD sources. We are evolving to address these threats and expanding our areas of cooperation to stay one step ahead.

In most cases, our new partners have no WMD aspirations. But, pathogens for endemic diseases can be weaponized and are not constrained by geographic or political boundaries. Pathogens for deadly diseases like Ebola, Marburg, and Anthrax that have been used to make biological weapons are being safely secured as part of the Cooperative Biological Engagement Program, now the largest activity within the Nunn-Lugar Program. For a relatively small investment, the program is reducing access to biological materials and expanding international partnerships to better counter natural and man-made biological events.

We are working closely with these countries to improve awareness, improve security, to train them in biological safety, consolidate dangerous pathogen collections into fewer facilities with better security, better safety standards, and better diagnostic equipment so we can get early warning of disease outbreaks – regardless if it is a result of a naturally occurring or a deliberate attack. Not only is this important for nonproliferation efforts but also for force protection and public health.

This is where our partnership with the CDC comes in. The CDC handles public health issues, but they are not tasked to address the security threats posed by deadly pathogens. This is a different mission altogether. The CDC has great experience and networks operating in Africa and Southeast Asia where many of these biological agents can be found. We can leverage their expertise by bringing the DoD security culture together with CDC's public health work. This allows us to see a pandemic problem from both sides.

As a result, we have worked very closely with the CDC over the last several years. However, we also realized that there was still a good amount of duplicative work being done by our two agencies. I am proud to announce that earlier this year, DTRA and the CDC's Center for Global Health signed two documents: (1) a Memorandum of Understanding and (2) a Strategy for joint work. The Memorandum of Understanding formalizes DTRA/SCC-WMD's relationship with the CDC and establishes a joint steering committee that will review and advise on future work the agencies pursue together. The Strategy document outlines the types of work that DTRA/SCC-WMD and the CDC will pursue together. The two agencies will work together on three broad biosecurity/global health goals: (1) Prevent, (2) Detect, and (3) Respond. Working on these three goals together, DTRA and CDC hope to (A) improve and expand a global network of international partners that can provide accurate and timely awareness of biological threats; and (B) build a reliable and sustainable capacity to detect, prevent, attribute, report, respond, and recover from CBRNE threats, as early as possible, for the United States and international partners.

This joint effort matters because timing is everything with biodefense. We have American military personnel, foreign service personnel, and other government personnel operating in every corner of the world right now. Improved biosecurity, safety, and surveillance is essential for their safety and the performance of their missions. And the better we can address a problem away from our shores, the safer our country will be. Our continued strong relationship with the CDC improves our odds of success, and sits at the center of the United States's contribution to the Global Health Security agenda, launched in February with 28 international partners.

Libya

Finally, I would like to share with the Committee that we are on the verge of another milestone in Libya.

In response to Operation Odyssey Dawn, DTRA/SCC-WMD deployed experts to Stuttgart, Germany to support USAFRICOM. The deployed personnel provided key planning and liaison support to U.S. and NATO operations in Libya. We made sure that any plans for action considered the consequences associated with chemical weapons. We also worked to make sure that the chemical weapons stored in the desert remained secure.

Subsequently, we played an integral role in the interagency effort to develop courses of action for security and destruction of the chemical weapons (CW) stockpile. Beginning in January 2012, the Nunn-Lugar team joined the interagency dialogue on action in Libya, and began discussions with the Government of Libya regarding security improvements at the storage site and technical options for CW destruction. Fast forward to today, weaponized mustard agent destruction is complete. Working with the Libyans, wedestroyed 517 mustard-filled 130mm artillery rounds; eight 500lb mustard-filled aerial bombs; and 45 mustard-filled tubes we believe were to be used in other bomb types as mustard filled inserts into the bomb casings. To put this into context, just one of the 500lb mustard-filled aerial bombs, detonated in an urban setting, could cause significant damage. The mustard agent would likely be dispersed as an aerosol, which could have a devastating impact depending on the environment and location. Now all of the declared Libyan chemical weapons have been destroyed and the team is helping Libya to rapidly eliminate the residual mustard agent.

FY15 DTRA Budget Request Overview

Our budget request for Fiscal Year 2015 (FY15) is \$1.27 billion and comprises Defense-wide Research, Development, Test and Evaluation; Operations and Maintenance; Procurement; and Nunn-Lugar Cooperative Threat Reduction (CTR) appropriation accounts. In addition, DTRA executes the \$407.3 million Science and Technology (S&T) portion of the DoD Chemical and Biological Defense Program (CBDP) and serves as the funds manager for the remainder of that program's funding, \$980 million. Therefore, the total DTRA resource portfolio is approximately \$2.66 billion. Details and highlights for these requests follow.

Operations and Maintenance Funding

O&M funding directly supports the warfighters and national missions as it pays for planning, training, exercises, and other means for collaboration across DoD and the USG, and with international partners. O&M funding is the fuel that enables us to reach out to our components and personnel, the warfighters, and international partners across the globe.

The requested O&M funding would be applied as follows:

** <u>Nonproliferation Activities (\$58.8 million)</u> for arms control activities including the conduct of USG inspections of foreign facilities, territories, or events; coordination and conduct of the escort of inspection teams for inspections or continuous monitoring activities in the U.S. and at U.S. facilities overseas; and the acquisition and fielding of technology capabilities required to implement, comply with, and allow full exercise of U.S. rights and prerogatives under existing and projected arms control treaties and agreements.

** <u>WMD Combat Support and Operations (\$176.4 million)</u> for a wide range of combat and warfighter support to the Joint Chiefs of Staff, the Combatant Commanders, and military forces as they engage the WMD threat and challenges posed to the U.S., its forces and allies. DTRA supports the essential WMD response capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces within their area of responsibility at all levels of war.

** <u>U.S. Strategic Command Center for Combating WMD (\$11.3 million)</u> for DTRA direct support to the SCC-WMD including providing strategic and contingency planning, policy, and analytical support; developing interagency relationships; and working closely with USSTRATCOM partners to establish the means for assessing and exercising capabilities to combat WMD.

** <u>Core Mission Sustainment (\$167.9 million)</u> for a wide range of enabling capabilities which include information management; resource management; security and asset protection;

acquisition and logistics management; strategic planning; leadership and professional development; and provide the safety, security, and efficiency necessary for mission success.

Nunn-Lugar Cooperative Threat Reduction

The request of \$365.1 million for this important program would be used as follows:

** <u>Strategic Offensive Arms Elimination (\$1.0 million)</u> for elimination activities of ICBMs, SLBMs, and land-based launchers to the Russian Federation in 2014. Elimination of ballistic missile submarines will continue under the recently signed bilateral protocol to the Multilateral Nuclear Environmental Programme in the Russian Federation (MNEPR). DoD will fully transition remaining responsibility for elimination activities to the Russian Federation in 2014.

** <u>Chemical Weapons Destruction (\$15.7 million)</u> for technical expertise and resources to support the UN OPCW joint mission to remove CW from Syria. It is also providing support for CW destruction of materials removed from Syria and providing technical advice and assistance in other Regions.

** <u>Global Nuclear Security (\$20.7 million)</u> for improving nuclear material security, including security for nuclear warheads and weapons-usable nuclear material. This program also assists in the secure transport of nuclear warheads and other qualifying nuclear material to dismantlement facilities, secure storage areas, or processing facilities for disposition.

** <u>Cooperative Biological Engagement (\$256.8 million)</u> for combating the threat of state and non-state actors acquiring biological materials and expertise that could be used to develop or deploy biological materials and weapons. This program destroys or secures biological agents of security concern at their source, and works in partnerships to ensure a secure disease surveillance system. This program works closely with other US Government departments and agencies, international partners and the private sector.

** <u>Proliferation Prevention (\$40.7 million)</u> to enhance the capability of non-Russian, Former Soviet Union (FSU) states and other partner countries to deter, detects, report, and interdict illicit

WMD trafficking across international borders. Beginning in fiscal year 2013, the Proliferation Prevention Program began expansion outside of the FSU to Southeast Asia and the Middle East.

** <u>Threat Reduction Engagement (\$2.4 million)</u> to develop active and positive relationships between the defense, military, and security establishments of the United States and the states of Eurasia and Central Asia. This program engages military and defense officials in activities that promote regional stability, counter-proliferation, and defense reform; build security cooperation with the partner states; and promote exchanges that enhance interoperability with U.S. and North Atlantic Treaty Organization (NATO) forces for multinational operations.

** <u>Other Assessments/Administrative Support (\$27.8 million)</u> to ensure that DoD-provided equipment, services, and related training are fully accounted for and used effectively and efficiently for their intended purposes. This account also funds Nunn-Lugar- program travel, logistics, translator/interpreter support, and other agency support.

Research, Development, Test, and Evaluation

DTRA RDT&E programs respond to the most pressing CWMD challenges including stand-off detection, tracking, and interdiction of WMD; modeling and simulation to support weapons effects and hazard predictions; classified support to Special Operations Forces; defeat of WMD agents and underground facilities; and protection of people, systems, and infrastructure against WMD effects.

DTRA RDT&E is unique in being focused solely on CBRNE; tied closely with the agency's Combat Support responsibilities; has a top-notch in-house field test capability; relies upon competitive bids, the national labs, industry, and academia rather than an in-house laboratory infrastructure, allowing for a "best of breed" approach to performer selection; and is nimble and responsive to urgent needs.

The agency has a comprehensive, balanced CBRNE S&T portfolio that supports DoD goals and is well connected with DoD customers, as well as interagency and international partners. Our RDT&E approach balances the need for near-term pay-off with the need for long-term

technology and capability development, knowledge and expertise, and is centered upon the following programs: Basic Research (6.1), Applied Research (6.2), Advanced Research (6.3), and System Development and Demonstration (6.5). The requested RDT&E funding includes \$37.8 million in Basic Research to provide for the discovery and development of fundamental knowledge and understanding by researchers primarily in academia and world-class research institutes in government and industry. The DTRA Fiscal Year 2015 request also includes \$151.7 million for WMD Defeat Technologies Applied Research, which is used to translate fundamental knowledge into useful materials, technologies, and concepts that address recognized CWMD needs. Our \$283.7 million budget request for Proliferation Prevention and Defeat Advanced Research funds development of systems, subsystems, and component integration to build, field and test prototypes to assess utility and feasibility of technology solutions to well-defined CWMD requirements. Finally, \$6.9 for WMD Defeat Capabilities System Development and Demonstration funds development, operational testing, and initial deployment of mature technologies and systems.

Chemical and Biological Defense Program S&T

The Department's CBDP S&T programs support DoD-wide efforts to research, develop, and acquire capabilities for a layered, integrated defense against CBRNE agents; better understand potential threats; secure and reduce dangerous materials whenever possible; and prevent potential attacks. Although funding for the CBDP is not part of the DTRA budget request, the agency executes the S&T portion of this program, for which the Department has requested approximately \$407.3 million in FY15. The agency also manages funding execution in support of CBDP advanced development and procurement.

Conclusion

I would like to thank the Committee for this opportunity to share some of our recent efforts and accomplishments. What I hope has become clear is that how we are structured, the breadth of services we provide, the mix of authorities which we can utilize, and the depth of our subject matter expertise is just as important as the strong funding allocated by Congress. We are not just a set of programs, agreements, or funding streams -- we are much more than that. We are a

problem-solving tool, a unique capability. Former Senator Richard Lugar describes us as a national security engine that can be utilized around the world.

We hope that we will continue to earn the Committee's trust and support in meeting these threats and ensuring our security. Thank you, again, for the opportunity to be here today. I would be pleased to respond to your questions.