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HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2011

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED PROGRAMS

BEFORE THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

TERRORISM, UNCONVENTIONAL THREATS AND CAPABILITIES SUBCOMMITTEE HEARING

ON

BUDGET REQUEST FOR THE DEFENSE THREAT REDUCTION AGENCY AND CHEMICAL BIOLOGICAL DEFENSE PROGRAM AND COUNTERPROLIFERATION INITIATIVES

HEARING HELD
APRIL 14, 2010

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HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
TERRORISM, UNCONVENTIONAL THREATS AND CAPABILITIES
SUBCOMMITTEE,
Washington, DC, Wednesday, April 14, 2010.

The subcommittee met, pursuant to call, at 2:06 p.m., in room 2118, Rayburn House Office Building, Hon. Loretta Sanchez (chairwoman of the subcommittee) presiding.

OPENING STATEMENT OF HON. LORETTA SANCHEZ, A REPRESENTATIVE FROM CALIFORNIA, CHAIRWOMAN, TERRORISM, UNCONVENTIONAL THREATS AND CAPABILITIES SUBCOMMITTEE

Ms. SANCHEZ. The subcommittee will now come to order.

I would like to welcome all of you, and to thank you again for joining us today to receive the testimony on the budget request for the Defense Threat Reduction Agency [DTRA] and the Chemical and Biological Defense Program for fiscal year 2011.

During this hearing, the assistant to the secretary of defense for Nuclear and Chemical and Biological Defense Programs will provide the context for the investment to be made by these two organizations, along with the updates on the current and future counterproliferation initiative. And I believe that this hearing comes at a good time, considering that we just saw the Nuclear Security Summit this week in Washington; and, of course, the release of our Nuclear Posture Review.

As you all know—that the United States is facing new and more challenging non-traditional threats on a daily basis, including the proliferation of nuclear weapons, the spreading of chemical agents, and the increasing biological threat that faces our global community. We live in this interconnected world, where technology allows the transfer of information to be quick and easy; however, this high-tech environment we all live in also makes it more difficult for us to respond to weapons of mass destruction in a more timely manner.

And as I was saying earlier to our panelists, one of my greatest fears is that one day we are going to detect a non-traditional agent or unknown pathogen in a certain part of the world, and before we can be able to figure out what it is and how we counteract that, it has already reached the United States' soil.

And for this reason, the Department of Defense and interagency partners have articulated their commitment to expanding their capabilities to counter the threat posed by weapons of mass destruction. The 2010 Quadrennial Defense Review Report, or the QDR, as we know it, provides policy guidance on combating weapons of mass destruction.

And the secretary of defense has directed that several initiatives be undertaken, including research and countermeasures to, and defenses against, non-traditional agents to counter the growing possibility of non-traditional chemical agents being used against the United States and on our soil; and securing vulnerable nuclear materials through the president's Global Lockdown Initiative; expanding the Biological Threat Reduction Program to create a global network for disease and pathogen surveillance and response.

So we don't know what is going to come up in the future, but we do know that we need to be prepared for whatever may come forward.

The Department of Defense has to have a reliable concept of how it would respond, what type of operations—should we face something—even something that, to this date—we have no idea or it is an unknown. It is also vital that we develop a firm and secure form of communication with our allies around the world in order to maintain good situational awareness of possible threats that may emerge, in particular, with respect to the security of our nation.

Today, we have three witnesses before us that are key to the execution of these initiatives. First, we have Mr. Andrew Weber, who is the assistant to the secretary of defense for Nuclear, Chemical and Biological Defense Programs. Welcome. And along with him, we have Mr. Kenneth A. Myers III, Director of the Defense Threat Reduction Agency. And we have Brigadier General Jess A. Scarbrough, Joint Program Executive Officer for Chemical and Biological Defense.

So, again, I would like to thank the three of our witnesses for being here today. I look forward to your testimony. I will tell you that we are very interested in your concepts today and what you have to tell us from an operational standpoint, and how you all work together.

[The prepared statement of Ms. Sanchez can be found in the Appendix on page 19.]

Ms. SANCHEZ. And, having said that, I am going to yield to——

Mr. LOBIONDO. Lobiondo——

Ms. SANCHEZ. Mr. Lobiondo—I was looking for Mr. Miller, but I didn't see him.

Mr. LOBIONDO. No, he is not here, Madam Chair.

Ms. SANCHEZ. Do you have an opening statement—I would assume—from the other side?

Mr. LOBIONDO. Thank you, Madam Chair.

Ranking Member Miller apologizes. He was not able to be here for the beginning of the hearing. He has a statement he has asked me to have submitted for the record—if I could make that request, Madam Chair.

Ms. SANCHEZ. So ordered.

[The prepared statement of Mr. Miller can be found in the Appendix on page 21.]

Mr. LOBIONDO. Okay. Well, thank you very much.

And I thank the panel for being here today.

Ms. SANCHEZ. Great. I thank the gentleman.

And without objection, the witnesses' prepared testimony has been submitted and accepted for the record. I will remind you that you each have five minutes or less in which to summarize your statements, or tell us something else that you want us to know that isn't in your statement.

So we will begin with Mr. Weber.

We will lead off with you, for five minutes.

STATEMENT OF ANDREW WEBER, ASSISTANT TO THE SECRETARY OF DEFENSE FOR NUCLEAR AND CHEMICAL AND BIOLOGICAL DEFENSE PROGRAMS, OFFICE OF THE SECRETARY OF DEFENSE

Mr. WEBER. Thank you very much, Madam Chairwoman.

Members of the subcommittee, it is an honor for me to be here today. I welcome this opportunity to discuss Department of Defense efforts to counter weapons of mass destruction [WMD].

The president is determined to implement a comprehensive strategy to prevent, deter and defend against weapons of mass destruction. His leadership over the past two days, hosting the Nuclear Security Summit, clearly has demonstrated the priority he places on this issue.

As he said this week, "The danger of nuclear terrorism is one of the greatest threats to global security." From the outset, the president committed the United States to take "concrete steps towards a world without nuclear weapons," and to ensure a safe, secure and effective arsenal for as long as such weapons are needed.

In his national strategy for countering biological threats, the president warned that, "Fanatics have expressed interest in developing and using biological weapons against us and our allies. Addressing these unique challenges requires a comprehensive approach that recognizes the importance of reducing threats from outbreaks of infectious disease, whether natural, accidental or deliberate in nature."

Secretary Gates restated this strategic direction regarding the full set of chemical, biological, radiological and nuclear threats. In the 2010 Quadrennial Defense Review, the secretary directed the department to rebalance its policy, doctrine and capabilities to better support six key mission areas. One of these is to prevent proliferation and counter weapons of mass destruction.

We are working diligently within the department to implement a comprehensive strategy to counter weapons of mass destruction. The president's fiscal year 2011 budget request seeks an 18 percent increase for the Defense Threat Reduction Agency, which is the U.S. government's resource for countering weapons of mass destruction. These additional funds are focused on high-priority efforts that will advance the nation's ability to counter WMD.

They fund significant increases in programs, as you mentioned, to secure biological pathogens and vulnerable nuclear materials around the world, as well as to pursue technologies to strengthen arms-control monitoring and verification. In addition, the president announced, in his State of the Union Address, that we are launch-

ing a new initiative that will give us the capacity to respond faster and more effectively to bioterrorism or an infectious disease.

The department is involved in shaping this White House initiative, which builds on the excellent work conducted by the Department of Defense Transformational Medical Technology Initiative, biodefense work at the Defense Advanced Research Projects Agency, DARPA, and other organizations throughout the department.

My colleagues here today, and I, are responsible for executing much of the DOD countering-WMD effort, in partnership with other actors across the department, the interagency, the United States Congress, and our friends and allies abroad.

Mr. Ken Myers, here on my left, serves as the director of the Defense Threat Reduction Agency, and he reports through me, to the under secretary of defense for Acquisition Technology and Logistics, Dr. Ashton Carter. Brigadier General Jess Scarbrough, to my far left, serves as the joint program executive officer for Chemical and Biological Defense, which is the office that develops and procures chemical and biological-defense equipment for the department.

The WMD threat poses an immense challenge. Our war fighters and our fellow citizens are vulnerable to WMD attack. We must shape our defense programs to more effectively prevent, deter and defeat this threat. To strengthen these programs, I ask for your support of the president's fiscal year 2011 budget request. I appreciate the opportunity to testify before you today, and would be pleased to answer any questions you may have. Thank you.

[The prepared statement of Mr. Weber can be found in the Appendix on page 22.]

Ms. SANCHEZ. Thank you, Mr. Weber.

And, now, we will hear from Mr. Myers for five minutes or less.

STATEMENT OF KENNETH A. MYERS III, DIRECTOR, DEFENSE THREAT REDUCTION AGENCY, OFFICE OF THE SECRETARY OF DEFENSE

Mr. MYERS. Madam Chairwoman, members of the subcommittee, it is an honor to be here today to address the counterproliferation programs performed by the Defense Threat Reduction Agency. The mission of the nearly 2,000 civilian and military personnel of DTRA worldwide is to safeguard the United States and its allies from chemical, biological, radiological and nuclear weapons, as well as high-yield conventional explosives. We do this by providing capabilities to reduce, eliminate and counter the threat, and mitigate its effect.

I am also the director of the U.S. Strategic Command Center for Combating Weapons of Mass Destruction. The center is responsible for the synchronization of planning and advocacy of related activities across the combatant commands. It is co-located with DTRA and fully integrated within the daily activities of the agency.

All studies that have looked at the WMD challenge, including, most recently, the QDR, have concluded that countering WMD capabilities are crucial to our security. The department considers this to be among its top priorities; and, therefore, the DTRA fiscal year 2011 budget request is 18 percent higher than last year's appro-

priation. This is the first significant increase requested by DTRA since the agency's establishment nearly 12 years ago.

I would like to explain how this increased funding responds to the president's non-proliferation goals and the QDR.

In response to the president's initiative to secure vulnerable nuclear materials worldwide, DTRA is requesting an increase of $74.5 million in Nunn-Lugar Cooperative Threat Reduction Funding, and $14.5 million in critical support funding for program execution. This will accelerate related efforts in the Russian Federation and the establishment of Centers for Nuclear Security Excellence in countries outside the borders of the former Soviet Union.

In response to the president's initiative to counter biological threats, DTRA is requesting an additional $59 million to accelerate ongoing efforts across the former Soviet Union, and to permit biosecurity upgrades and implement globally integrated disease surveillance and reporting systems in Asia and Africa.

To implement the president's strategy of revitalizing arms control as a tool for countering weapons of mass destruction, DTRA is requesting $9 million to establish a technology-development program for monitoring and verification of lower nuclear-warhead levels, a prohibition on fissile-material production, and a ban on nuclear testing.

We are requesting $48 million to expand and accelerate our development of technologies and other support to the U.S. Special Operations Command for its Combating Weapons of Mass Destruction Terrorism Activities.

We are also requesting $24 million to accelerate technology development, provide expanded training, and procure equipment to improve the war fighter's capabilities to search for, locate and interdict nuclear and radiological threats.

Lastly, we are requesting $38 million for expanded DOD and interagency information-sharing—provide rapid response to the combatant command's request for technical and WMD effects analysis; expand collaboration between WMD technical and intelligence expertise; and provide for reliable connectivity for the execution of the DTRA global mission.

DTRA is contributing to many other capabilities, including nuclear forensics, chemical-biological defense, the Proliferation Security Initiative, the International Counterproliferation Program, system survivability against WMD effects, and force protection.

For example, DTRA recently completed a series of tests in support of a massive ordnance penetrator, or MOP, the largest air-deliverable conventional weapon available for use against underground facilities, many of which are associated with WMD. The MOP program transitioned from DTRA to the Air Force, due to the close teamwork between our offices at Fort Belvoir, Virginia, Eglin Air Force Base, in Florida, Kirtland Air Force Base and White Sands Missile Range in New Mexico.

The MOP is just one example of the teamwork seen across DTRA and our other partners every day.

Before concluding, I would like to express my commitment to the efficient and effective management of the additional funding that DTRA is requesting. Our past performance indicates that we can obligate and extend funding made available to us. We have a

steady track record of efficient program execution. Recently, we effectively implemented a significant increase in nuclear-mission support that has produced real results.

Second, we have contracts in place with sufficiently high-funding ceilings to permit the rapid obligation and expenditure of additional funding. Third, efforts are ongoing to aggressively monitor and refine implementation plans to ensure timely and effective execution, and eliminate any potential obstacles.

I urge your support for the DTRA fiscal year 2011 budget request, the first significant increase in resources sought by the agency in some twelve years. We will put these resources to good use to better equip, train and protect our war fighters, and safeguard the American people. Thank you for your support of DTRA and the Strategic Command [STRATCOM] Center for Combating WMD [SCC–WMD] in prior years, and for the opportunity to be here today. I look forward to answering your questions.

[The prepared statement of Mr. Myers can be found in the Appendix on page 36.]

Ms. SANCHEZ. Thank you, Mr. Myers.

And, now, we will hear from General Scarbrough for five minutes or less.

STATEMENT OF BRIG. GEN. JESS A. SCARBROUGH, USA, JOINT PROGRAM EXECUTIVE OFFICER FOR CHEMICAL AND BIOLOGICAL DEFENSE, OFFICE OF THE SECRETARY OF DEFENSE

General SCARBROUGH. Madam Chair and distinguished members of the subcommittee, I am honored to testify on behalf of the Chemical and Biological Defense Program. I will identify what the program contributes in the areas of biosurveillance, medical countermeasures and non-traditional agents. Before I conclude, I will speak briefly about acquisition reform.

The Chemical and Biological Defense Program is uniquely positioned to leverage its enterprise capabilities for biosurveillance. We produce Food and Drug Administration [FDA]-approved medical diagnostics and develop and field systems that monitor the environment for biological threats.

For example, we have succeeded in tying medical diagnostic and surveillance capabilities together with biological detectors to provide a common operating picture within the United States Forces Korea theater of operations. Another example is our capability for medical response and preparedness, an important element of biosurveillance.

In 2009, working with the Centers for Disease Control and Prevention, we added identification of H1N1 flu as a capability on a system we developed that provides the war fighter a way to identify and diagnose human disease.

The Food and Drug Administration granted our emergency-use authorization request in short order. We are continuing to expand this diagnostic capability to include other infectious diseases.

With respect to medical countermeasures, we partner with government, industry, academia and international organizations for material development and manufacturing of Food and Drug Administration approved products and systems. We have interagency

agreements with the Centers for Disease Control and Prevention to share licensed anthrax and smallpox vaccines from the Strategic National Stockpile. The agreements establish the framework for the acquisition, storage, management and delivery of these vaccines to meet Department of Defense operational and inventory requirements.

Another example of collaboration and coordination is the Integrated National Biodefense Portfolio Initiative, also known as the One-Portfolio, which synergizes efforts of the Department of Defense and the Department of Health and Human Services, as well as other agencies whose missions involve addressing the same challenges; the vision of government-wide coordination of research and development of medical countermeasures for biological threats.

Regarding innovation, the Chemical and Biological Defense Program's Transformational Medical Technologies Initiative continues to gain momentum. Over the next 24 months, we will continue clinical studies in support of licensure of maturing hemorrhagic fever virus therapeutics and submit Investigational New Drug applications for additional medical countermeasures against intercellular bacteria pathogens and hemorrhagic fever viruses.

With respect to non-traditional agent threat, we are working to field solutions in the areas of detection, medical countermeasures, decontamination and protection, along with associated doctrine, equipment and training. We are planning to rapidly field, in the near term, capabilities, in fiscal year 2011, and will continue to improve upon those capabilities and provide them to other units.

Changes to the Defense Acquisition System, directed by Congress, are refocusing the way we manage acquisition programs. These are new requirements for analysis of alternatives prior to initiating the acquisition process: increased competition, competitive prototyping, and the evaluation of technology maturity so that our acquisition programs are ready for the next phase of development.

In order to reduce the risk of failure, we are applying the tools of acquisition reform to programs that pose particular technical challenges.

The bottom line for us remains providing capability to the war fighter. In fiscal year 2009, we fielded over 1.3 million individual pieces of equipment to our servicemen and women around the globe, representing improvements and capabilities they depend on for protection.

While our investments in biosurveillance, medical countermeasures and non-traditional agents are the focus, we must neither underfund nor deemphasize the range of investments that establish the layered defense-in-depth strategy we employ to protect and inform our personnel. This strategy requires significant investment, as reflected in the president's fiscal year 2011 budget request for our program, which consists of $370 million for procurement, $812 million for advanced development, and $396 million for science-and-technology efforts, for a total of $1.578 billion.

Madam Chair and members of the subcommittee, I greatly appreciate the opportunity to appear before you today, and look forward to your questions.

[The prepared statement of General Scarbrough can be found in the Appendix on page 59.]

Ms. SANCHEZ. Thank you, General.

And, now, as is the custom, I will remind the members that each of us will have five minutes to ask questions. And I will start with myself.

Mr. Weber, when we met earlier, I asked you, "What questions should I ask you guys?" And you said, "Ask us what keeps us awake at night."

So I will ask it in a different way: What threat to the homeland—chemical, biological, nuclear—has the highest likelihood of happening in the next five years, and why? What do you see as the hardest-hitting thing towards the U.S.?

Mr. WEBER. The——

Ms. SANCHEZ. Is your mic on?

Mr. WEBER. Yes.

Ms. SANCHEZ. Okay.

Mr. WEBER. The threat that I worry about—the two threats that I worry about most are the delivery by violent extremists of a ten kiloton blast with an improvised nuclear device in an American or allied city, and also a biological attack, for example, with one kilogram of anthrax, in a city.

Each one would have potentially catastrophic consequences. And the Congressional Commission on Weapons of Mass Destruction that Senator Graham and Congressman Talent co-chaired evaluated the risk of the different types of weapons of mass destruction. Their conclusion was that the biological-terrorist threat was the most likely.

In terms of the accessibility of the technology and the materials—the seed materials—that would be required for a terrorist group to obtain a biological-weapons capability—I agree with that conclusion.

Ms. SANCHEZ. Thank you.

Are we appropriately allocating our budget with respect to that understanding? And, if not, what would you change?

Mr. WEBER. Okay. I will answer that, and ask my colleagues to add to that.

But what you see in the president's fiscal year 2011 budget request is an increase in each of these areas. I believe this is the beginning of a trend.

The Defense Threat Reduction Agency, which is the Department of Defense—really, the U.S. government's Center of Excellence for the Countering WMD mission was more or less flat-lined during the last ten years, even after the 9/11 attacks on the United States. So the Obama administration has, in its budget, proposed an 18 percent increase, which reflects the increased priority on this mission set.

Those increases are at a level that we can absorb and execute responsibly. And I would ask my colleague, Ken Myers, the director of the Defense Threat Reduction Agency, to elaborate further. Thank you.

Ms. SANCHEZ. Great, because that is the question I had for him.

What are you going to do that—with that 18 percent, and is it enough? And——

Mr. MYERS. Madam Chairwoman, the 18 percent is a significant increase in the funding that we will have available to confront the threats posed by weapons of mass destruction. As the QDR lays out, one of our major strategies is erecting layers or lines of defense between the sources of these threats and the American people.

The most effective place for us to counteract and eliminate these threats before they adversely affect the U.S. war fighter, as well as the American people, is at the source, which is why I think the president has focused a lot of attention on global nuclear lockdown, eliminating these problems before they spread, and for countering biological threats, again, at their source.

If our programs and our efforts at the source are incapable of stopping these threats before they leak out—before they begin moving to harm the American people—we will seek to engage governments and countries at the borders, increasing their ability to interdict, to detect and, if need be, destroy these weapons and these materials, before they threaten the American people.

We are working to address the problem at each layer, each line of defense, that we are possibly able to erect between the threats and the American people. And I believe the 18 percent increase that we are requesting as part of the Defense Threat Reduction Agency budget is a good spread across all of the opportunities and all of the capabilities that we have to bring to bear against the threat.

Ms. SANCHEZ. Thank you, Mr. Myers.

General, as of February, 08, 2010, less than two percent of the fiscal year 2010 Chemical and Biological Defense Program [CBDP] procurement, or Research, Development, Test and Evaluation [RTD&E] funds have been expended. And only about half of the fiscal year 2009 procurement have been expended. Why is the execution rate at these levels? And is the low execution rate impacting our chemical and biological-defense capabilities? And can you provide updated information that demonstrates that the execution of CBDP funds is improving?

General SCARBROUGH. Madam Chair, first I would like to thank you for your support to the Chemical and Biological Defense Program. We have significantly improved our obligation and expenditure rates for both procurement and RDT&E in fiscal year 2008 and fiscal year 2009. And we exceed the established Department of Defense goals in both of those appropriations.

With respect to fiscal year 2010, we are a little bit behind. We have just received our allocation just a couple of months ago. But we are rapidly catching up, and we should be exceeding our goals by July of this year.

Ms. SANCHEZ. So, at the last point where we saw it, it was at two percent appropriation expenditure. Are you saying that you have—how far have you caught up, when you say that, "We have been working on this"?

General SCARBROUGH. With respect to the fiscal year 2009?

With respect to fiscal year 2009 expenditures, for the Chemical and Biological Defense Program, we are 60.8 percent expended for fiscal year 2009, which is above the established DOD goal of 43 percent.

Ms. SANCHEZ. And for 2010?

General SCARBROUGH. For fiscal year 2010, we are at—for expenditures, we are at 4.5 percent, and the goal is 11.5 percent. So we are below the goals, but we are rapidly catching up, given that we received our allocation authority a couple of months ago.

Ms. SANCHEZ. Is your inability to—is this a problem? It seems to me like what you are saying is, "Well, we didn't know the amounts—for maybe that way—we didn't really know what we had to spend, so we didn't really fully go into what we were going to do." Is that a problem as we try to gear up this program to face the threats that we have out there?

General SCARBROUGH. Ma'am, I would say it is not a problem. We have been operating at the pace that has been approved by the Department of Defense and Congress. And, then, once we got our funding-allocation documents, once the budget was approved in fiscal year 2010—in January, we, then, accelerated that. And, as I mentioned to you earlier, we have contractual vehicles in place, or will be in place, to be on pace to exceed the DOD goals, you know, by July.

Ms. SANCHEZ. Okay. Thank you, General.

I will now recognize the gentleman from New Jersey for his question.

Mr. LOBIONDO. Thank you, Madam Chair.

This could be, basically—be for anyone on the panel.

What is the current plan for weapon-system survivability from a chemical or biological attack?

General SCARBROUGH. Sir, may I ask for you to repeat the question again, please?

Mr. LOBIONDO. What is the current plan for weapon-system survivability from a chemical or biological attack?

General SCARBROUGH. First off, sir, we have delivered, as I said in my oral statement, over 1.3 million individual pieces of equipment to our war fighters across all of the services—Army, Air Force, Navy and Marine. Those pieces of equipment have included decontamination detection, medical diagnostics and individual protection such as masks, boots, gloves and suits. So we feel that we have equipped our soldiers, airmen, sailors and Marines with the capability to operate if they were to get hit with a chemical or a biological attack.

Mr. LOBIONDO. Anybody else that is——

Mr. MYERS. Much of the work that the Defense Threat Reduction Agency does, sir, in that area, is with regard to Electromagnetic Pulse [EMP] and nuclear potential. In that area, we perform technology assessments. We provide technical assistance to our war fighters, and to our systems.

We recently developed simulators and specialized equipment for testing of missiles, aircrafts or ships. We routinely provide support to STRATCOM, Northern Command [NORTHCOM], and the Office of the Secretary of Defense [OSD] on a wide range of EMP threats. And we are also actively involved in assessing the impact of such an attack on the U.S. power grid, our telecommunications systems, as well as emergency-service infrastructures.

Mr. LOBIONDO. Can you, in an open setting like this, talk any more about how we prepare for EMP attack, and the—there is a

lot of talk about what that may mean, and how we go about this. I don't know if we are in the right setting for that or not.

Mr. MYERS. I can talk—very general terms, obviously. We are seeking to harden all of those capabilities to the point where they would be, if not immune, able to withstand those types of strains and pressures that we—put on by that type of attack. Beyond that, sir, I would not——

Mr. LOBIONDO. Okay. Well, maybe can—talk to Mr. Miller, and talk to you, Madam Chair, about a closed session to talk about that a little bit more?

By which mechanisms are the intelligence community coordinating and sharing information pertaining to WMD threats with appropriate officials in the Department of Defense or other key U.S. agencies? Is that where it should be? Is it up to snuff? Does more need to be done?

Mr. WEBER. Congressman, we get briefed on a daily basis by the intelligence community on the whole range of WMD threats. In addition, the Office of the Director of National Intelligence [ODNI] participates in the Counterproliferation Program Review standing committee so we can align resources and investments that are being made in the countering-WMD area.

I would say that the reporting that we get on the threats from state programs is excellent and extremely helpful in helping us prioritize where we should be expending resources.

Generally, reporting on nuclear threats is quite good. There is, I would say, as a consumer of intelligence, room for improvement on collection and analysis on biological-weapons threats, which are a very difficult target.

Mr. MYERS. If I may just add very quickly—one of the efforts that is currently underway between the Defense Threat Reduction Agency and the Defense Intelligence Agency is working together in co-located spaces to work together on some of the potential WMD threats; in other words, bringing the intelligence analysts together with the technology experts, with those systems engineers that are responsible for designing the approaches that we would take in dealing with those WMD threats.

So, as the assistant secretary mentioned, there is work to be had, and to move forward and improve. But I think one of the things that we have found is that bringing the experts together at a working level is a good step in the right direction.

Mr. LOBIONDO. Thank you, Madam Chair.

Ms. SANCHEZ. Considering that most of our membership is not here today—I don't know if you have any other questions. I do know that they are about to call votes on the House floor. So if you have finished yours, I will end with one last question. And I will also let you gentlemen know that I am sure that the members will be submitting questions for the record. I don't know where they are. I am going to have to go round them up and push them a little bit about getting here to meetings.

So they will be submitting, I am sure, by writing some questions. We ask that you answer them quickly so that we can glean as much as we can from this. Again, I appreciate you coming before us today.

So my last question for you all would be: If there is something we should have asked, but we didn't ask about?

Let us start with Mr. Weber.

Mr. WEBER. Well, you mentioned at the opening, our discussion about—you know, "What do we lose sleep over?" And what I worry about is the day after an attack using weapons of mass destruction. Is there something that we should have been doing faster and more effectively to have prevented that? Or I worry as much—is there something that we should have been doing, but weren't.

And that is where we look to—certainly, we do some thinking internally within the U.S. government, but we also look to our partners in Congress to identify potential program areas where we don't have programs to address key gaps.

I would say that one question that, by the nature of these threats, is a good one to ask, is: How are we working across the interagency because these are, by definition, crosscutting problems? The biological threat is one that the Department of Health and Human Services plays a very important role in countering. And the Department of Defense works very closely under the White House leadership. We have been meeting once a week with the Department of Defense and counterparts—the director of the Centers for Disease Control and Prevention, Tom Frieden, and the FDA administrator, Peggy Hamburg—Tony Fauci, from the National Institutes of Health, and my counterpart in the Department of Health and Human Services, Doctor Nicole Lurie.

In the countering-nuclear-terrorism arena, we work on a daily basis with the Department of Energy—again, with very strong leadership from the White House, from the WMD czar and the so-called WMD czar, Gary Samore, and his staff, and also from the Homeland Security side, under John Brennan's leadership.

So there is, I would say—having spent some time in Washington, working on these problems—there is better-than-ever integration of effort and high-level attention on this problem. And it certainly makes our jobs easier having a president of the United States who understands and has made these threats a very, very high priority. Thank you.

Mr. MYERS. Madam Chairwoman, the one item I think that I would enunciate a little bit more is our role as a combat-support agency—our support for our servicemen and women.

Many don't consider the connection between the agency and our men and women in uniform because of our role in WMD. But we do our very best to support them in a number of ways—first and foremost, our role in helping them synchronize their planning and their activities to dealing with a WMD emergency or threat.

Secondly, we provide 24-hour-a-day, 7-day-a-week reach-back support. If the war fighter or combatant commander is in need of information analysis, we are a telephone call or a "send" button away in terms of being able to do everything from plume analysis to various different types of information provisions.

Thirdly, we help them with consequence management, force-protection assessments. We have teams that go out to our men and women in uniform, deployed abroad, and provide them with the assessments they need to improve the security surrounding their facilities.

And lastly, we do an awful lot of—provide an awful lot of support for both the functional as well as the combatant commands in terms of targeting; in terms of identifying the best planning that is necessary to take down these potential threats before they manifest themselves.

General SCARBROUGH. Madam Chairman, I would also like to add to what Mr. Weber and Mr. Myers stated with respect to interagency coordination. Within the CBDP program, we do a lot of interagency coordination with the Department of Health and Human Services, specifically on the recent H1N1 outbreak, where we worked a diagnostic assay that we built for a biodefense mission set, but we applied it to diagnosing infectious human disease—a dual-use capability.

At the same time, we were able to test potential broad-spectrum therapeutics via the Transformational Medical Technologies Initiative, to get capability out quickly to the war fighter, as well as to the population.

The other thing I would say with—the Department of Homeland Security—we work very closely with them, with our Installation Protection Program, and support them with respect to BioWatch, as well as supporting the weapons of mass destruction civil-support teams, and providing capability to the National Guard to support those homeland missions.

And, then, the last thing, ma'am, is I would highlight that we—one of my biggest priorities as a joint PEO [Program Executive Officer] is acquisition reform. And we work every day to improve our ability, taking the acquisition-reform initiatives before us under the Weapons Systems Acquisition Reform Act of 2009, to mitigate risk—do more work early on in the acquisition lifecycle to mitigate risk down the road.

Ms. SANCHEZ. Great.

I notice that Mr. Murphy, of New York, came in. Do you have any questions for our panel?

Well, welcome.

As I said, votes are ready to be called any moment. So I thank the gentlemen for being before us today. I thank you for your testimony. As I said, we will have, probably, some written questions from some of the members who weren't able to attend. And, again, I thank you, and thank you for the service to our country. And the subcommittee is adjourned.

[Whereupon, at 2:50 p.m., the subcommittee was adjourned.]

A P P E N D I X

APRIL 14, 2010

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

APRIL 14, 2010

Statement of Terrorism, Unconventional Threats and Capabilities Subcommittee
Chairwoman Loretta Sanchez

FY11 National Defense Authorization Budget Request for the Defense Threat Reduction Agency and Chemical Biological Defense Program and Counterproliferation Initiatives

April 14, 2010

"I would like to welcome you all and thank you for joining us today to receive testimony on the budget request for the Defense Threat Reduction Agency (DTRA) and the Chemical and Biological Defense Program for fiscal year 2011.

"During this hearing the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs will provide context for the investments being made by these two organizations along with updates on the current and future counter proliferation initiatives.

"I believe this hearing comes at a good time considering the recent Nuclear Security Summit that was held this past week and the release of the Nuclear Posture Review.

"As we all know, the United States is facing new and more challenging non-traditional threats on a daily basis, including the proliferation of nuclear weapons, spreading of chemical agents, and the increasing biological threat that faces the global community.

"We live in an interconnected world where technology allows the transfer of information to be quick and easy. However, this high-tech environment we all live in also makes it very difficult for us to respond to WMDs in a timely manner.

"One of my greatest fears is that one day we are going to detect a non-traditional agent or unknown pathogen in a certain part of the world, and before we are able to figure out what it is and how to respond, it will have already reached US soil. And unfortunately, as I am sure all our witnesses will agree, this is a very legitimate and realistic fear.

"For this reason, the Department of Defense and interagency partners have articulated their commitment to expanding capabilities to counter the threat posed by weapons of mass destruction.

"The 2010 Quadrennial Defense Review Report (QDR) provides policy guidance on combating weapons of mass destruction and the Secretary of Defense has directed that several initiatives be undertaken including: researching countermeasures to and defenses against non-traditional agents to counter the growing possibility of non-traditional chemical agents being used against U.S. and allied forces; securing vulnerable nuclear materials through the President's Global Lockdown Initiative, and expanding the biological threat reduction program to create a global network for disease and pathogen surveillance and response.

"We cannot dictate what threats may emerge in the future, but we must be ready and informed. The Department of Defense must have a reliable concept of response operations if we were to face any type of weapons of mass destruction.

"It is also vital that we develop a firm and secure form of communication with our allies around the world in order to maintain good situational awareness of possible threats that may emerge and affect US national security.

"Today, we have three witnesses before us who are keys to the execution of these initiatives. First, we have: Mr. Andrew Weber, Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs. Along with Mr. Kenneth A. Myers, III, Director of the Defense Threat Reduction Agency (DTRA) and Brigadier General Jess A. Scarbrough, Joint Program Executive Officer for Chemical and Biological Defense.

"Once again I would like to thank all of our witnesses for being here today and I look forward to hearing about the counter proliferation initiatives for FY11, and better understanding to what degree the budget request for these organizations reflects strategic counter proliferation priorities.

"I will now yield to the Ranking Member from Florida, Mr. Miller for his opening statement. Thank you."

Mr. Miller Opening Statement for Hearing on the Administration's Counter-Proliferation Policies and Programs

April 14, 2010

Washington, D.C.—House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities Ranking Member Jeff Miller (R-Florida) today released the following prepared remarks for the subcommittee's hearing on the Department of Defense Fiscal Year 2010 budget request for the Defense Threat Reduction Agency, Chemical Biological Defense Program and counter proliferation policy.

"I would like to thank Chairwoman Sanchez for calling today's hearing. Our nation must be prepared to respond to the use of weapons of mass destruction-biological, chemical and nuclear-and the witnesses we have with us today play critical roles in the Department of Defense's efforts to counter the spread of such weapons and in countering their effects.

"Today's topic is timely indeed, given this week's Nuclear Security Summit that focused on the threat of nuclear terrorism and how to better control the world's nuclear weapons technology. Preventing the proliferation of weapons of mass destruction (WMD) is incredibly important, as terrorist groups-Al Qaeda in particular-actively seek to obtain this technology to carry out a devastating attack.

"In the umbrella of programs that deal with the threat of weapons of mass destruction, non-proliferation and counter-proliferation are key pieces of the puzzle, and, the recently released Nuclear Posture Review rightly focuses on denying terrorists access to such weapons. Denying terrorist use must remain our number one priority, but we cannot ignore the importance of maintaining a strong deterrent to the use of any weapon of mass destruction, whether by a state or a non-state actor. Reliance on conventional deterrents is short-sighted and a dangerous constraint to our options to respond, should a weapon of mass destruction be unleashed upon our nation. Without a full-range of deterrence options, the motivation to restrain state-use or to collaborate in non-proliferation and counter-proliferation efforts is significantly diminished.

"With that said, I am encouraged that the 2010 Quadrennial Defense Review report recommends expanded military capabilities to identify, prevent, counter and respond to WMD threats. We have been necessarily focused on Iraq and Afghanistan, but cannot take our eye off of the unconventional threats that can bring destruction to our soil. Our special operations forces must be capable to interdict as needed; our military forces must have the capability to operate in a nuclear, biological and chemical environment; and the Department of Defense must stand ready to provide response capability should a WMD event occur.

"We will be very interested to hear from our witnesses how the Fiscal Year 2011 budget addresses the direction to expand the Department's capabilities and how your efforts align with the National Strategy to Combat Weapons of Mass Destruction and the National Military Strategy to Combat Weapons of Mass Destruction. The current version of the National Strategy was released over eight years ago, and I believe it is time for this document to be updated as it informs the National Military Strategy and subsequent investments in capabilities.

"Ensuring we have an integrated and comprehensive approach to the threat of WMDs is our purpose today. We appreciate your efforts in facing this challenge and look forward to your testimony as we discuss your Fiscal Year 2011 budgets."

Statement of Mr. Andrew Weber
Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs

On

Fiscal Year 2011 National Defense Authorization Budget Request for the Defense Threat Reduction Agency, Chemical Biological Defense Program, and Counterproliferation Initiatives

Before

Terrorism, Unconventional Threats and Capabilities Subcommittee
Committee on Armed Services
U.S. House of Representatives

14 April 2010

Not for Public Distribution until released by the
House Armed Services Committee

Introduction

Madame Chairwoman, Ranking Member Miller, and members of the Subcommittee, it is an honor for me to be here today to address the Department of Defense (DoD) counterproliferation efforts. I will summarize my remarks and ask that my complete statement be made part of the record.

I serve as the principal advisor to the Secretary of Defense, Deputy Secretary of Defense, and the Under Secretary of Defense for Acquisition, Technology, and Logistics on nuclear weapons, and chemical and biological defense. My primary responsibilities are to develop acquisition guidance in support of DoD policy, provide programmatic advice, and make related recommendations on nuclear weapons; chemical, biological, radiological, and nuclear (CBRN) medical and non-medical defense; safety, security, and the safe destruction of the current U.S. chemical weapons stockpile; the Countering-Weapons of Mass Destruction (WMD) mission; nuclear, biological, and chemical (NBC) arms control activities; and related plans and programs. I also serve as the Executive Secretary of the Counterproliferation Program Review Committee (CPRC), and my statement therefore updates the DoD CP accomplishments previously provided to Congress in the July 2009 Report on Activities and Programs for Countering Proliferation and NBC Terrorism. This report was developed by the interagency membership of the CPRC and provided to Congress.

Our office oversees the implementation of the Department's Cooperative Threat Reduction (CTR) program and manages the Department's treaty implementation activities to ensure compliance

with nuclear agreements, the Chemical Weapons Convention, and the Biological Toxins and Weapons Convention. It is also responsible for oversight, integration, and coordination of the department's Chemical and Biological Defense Program (CBDP). This effort brings together requirements, Science and Technology (S&T) execution, and acquisition. It delivers equipment for the detection and identification of CBRN agents, provides for personnel and equipment protection against chemical, biological, and radiological agents, and enables the decontamination of personnel and equipment.

In addition, the Director of the Defense Threat Reduction Agency (DTRA) reports through me to the Under Secretary of Defense for Acquisition, Technology, and Logistics. That agency's director, Mr. Ken Myers is also testifying before you today. The DTRA mission is to safeguard the U.S. and its allies from weapons of mass destruction (chemical, biological, radiological, and nuclear) and high yield explosives by providing capabilities to reduce, eliminate, and counter the threat and mitigate its effects. The agency is the Department of Defense's Combat Support Agency for the Countering-WMD mission that includes nonproliferation, counterproliferation, and consequence management and develops improved Countering-WMD capabilities for the warfighter. Mr. Myers is also the Director for the U.S. Strategic Command's Center for Combating WMD (SCC-WMD). This center assists the Commander, U.S. Strategic Command with the synchronization of Countering-WMD planning and coordination of related activities across the Combatant Commands; the identification of Countering-WMD capability needs; and the advocacy for Countering-WMD capabilities. The SCC-WMD also assists the

Combatant Commanders with their Countering-WMD effort planning and activities.

Also appearing before you is Brigadier General Jess Scarbrough, the Joint Program Executive Officer for Chemical and Biological Defense (JPEO CBD). General Scarbrough is responsible for the advanced development and acquisition of CBD equipment and capabilities and their delivery to the warfighter.

The three of us appearing before you today are responsible for executing much of the DoD Countering-WMD effort in partnership with others across the Department, with our U.S. Government (USG) interagency partners, and our allies and friends overseas.

My testimony will focus on DoD counterproliferation activities executed in support of the Administration's Countering-WMD approach; initiatives for counterproliferation capability enhancements; and recent program and capability achievements.

Countering-WMD Approach and Guidance

President Barack Obama has set a clear direction for us. In his Prague speech of April 2009, the President committed the United States to accelerate programs for threat reduction, nonproliferation, and countering WMD; reduce the roles and numbers of nuclear weapons globally; take "concrete steps towards a world without nuclear weapons;" and ensure a safe, secure and effective arsenal for as long as such weapons are needed.

In his National Strategy for Countering Biological Threats, the President warned that "...fanatics have expressed interest in developing and using biological weapons against us and our allies. Addressing these unique challenges requires a comprehensive approach that recognizes the importance of reducing threats from outbreaks of infectious disease whether natural, accidental, or deliberate in nature..."

Secretary Gates restated this strategic direction and broadened the challenge to encompass the full set of CBRN threats. In the 2010 Quadrennial Defense Review (QDR), the Secretary directed the Department to rebalance its policy, doctrine, and capabilities to better support the key missions identified by the QDR. Among these six key missions is "prevent proliferation and counter weapons of mass destruction." Furthermore, Countering-WMD contributes to three of the remaining five key missions identified by the QDR including: defend the United States and support civil authorities at home; succeed in counterinsurgency, stability, and counterterrorism operations; and build the security capacity of partner states. Thus, Countering-WMD is a contributor to success in four of the six key DoD mission areas.

As the ability to create and employ WMD spreads globally, so must our efforts to detect, interdict, and contain the effects of these weapons. Deterrence of such threats and defense against them can be enhanced through measures aimed at better understanding potential threats, securing and reducing dangerous materials wherever possible, monitoring and tracking lethal agents, materials and devices, as well

as their means of delivery, and defeating the agents and devices themselves.

The DoD Countering-WMD Effort

We are striving to prevent the emergence of new WMD threats by strengthening programs to prevent, deter, and defend against adversaries armed with WMD.

To reduce the risk of emerging nuclear-armed adversaries, the Department is working with the Departments of Energy and State in implementing the President's initiative to secure vulnerable fissile materials worldwide. Cooperative biological threat reduction activities are also being planned and conducted in close coordination with other USG organizations including the Departments of State, Health and Human Services, and Agriculture, as well as the Centers for Disease Control and Prevention. The Armed Services' overseas infectious disease labs make an essential contribution to these efforts by building and strengthening foreign partnerships and contributing to global biosurveillance.

In addition, the Department's FY 2011 funding request also calls for restarting investments in arms control monitoring and verification technology in response to the President's initiative to revitalize arms control as an effective Countering-WMD tool. The focus of this effort is to improve monitoring and verification of lower nuclear weapon levels and a nuclear test ban, as well as to set the foundation for possible future arms control initiatives in the areas of fissile material production and detection, accounting of non-strategic (tactical) weapons, and differentiating among various warhead contents. This new program

supports the Department of State Verification, Compliance, and Implementation Bureau and the OSD Acquisition, Technology, and Logistics Treaty Managers. The initial areas of focus for this new effort include technology development in support of the New (and future) START treaties and supporting the President's call for a verifiable Comprehensive Test Ban Treaty (CTBT). The National Nuclear Security Administration is a key partner in improving our ability to detect and verify underground nuclear testing.

Increased investments in such nonproliferation programs will reduce the size and scope of the potential WMD threats we may face, thereby reducing the challenge for our counterproliferation and consequence management efforts.

While we strive to prevent or deter a WMD attack, our efforts may not always be successful. We must be prepared to defeat or defend against the threat or use of WMD, and respond to its use.

The Department's counterproliferation activities and programs provide the warfighter with capabilities to defeat, deter, defend, respond to and to attribute WMD related threats and attacks. Key elements of DoD's approach include maintaining a strong deterrence capability; developing capabilities to identify, characterize, destroy, and interdict the production, transfer, storage, and weaponization of WMD; continuing work on active defenses to intercept delivery means; developing passive defenses to provide detection, medical countermeasures, decontamination, and individual and collective protection as part of the CBDP; training and equipping U.S. forces to operate effectively in a WMD-contaminated environment; and building

capabilities to support the National Technical Nuclear Forensics Program to assist with the identification of the source of the attack, provide information that may help deter or prevent follow-on attacks, and provide options for retribution. Robust capabilities in each of these areas are essential for an effective defense that will contribute to the deterrence of WMD attacks globally and on the homeland. DoD's contribution of Countering-WMD expertise and technology is also critical for building international partner capabilities and promoting coordinated Countering-WMD planning. The President's budget request for the CBDP includes $370 million for procurement, $812 million for advanced development, and $396 million for science and technology efforts, for a total of $1.578 billion.

WMD in Transit

Nunn-Lugar CTR activities have increased the maritime interdiction capabilities of Ukraine in adjacent Black Sea waters and Azerbaijan in the Caspian Sea.

WMD Offensive Operations

Following its completion of developmental responsibilities for the Massive Ordnance Penetrator (MOP), DTRA is transitioning this effort to the U.S. Air Force for final testing and fielding and continues to support the Air Force's MOP testing. The MOP is the largest conventional (non-nuclear), earth-penetrating weapon that can be delivered by B-2 bombers against underground targets. DTRA also improved our non-nuclear capability to destroy WMD inside hardened and underground facilities by developing a thermobaric (high-pressure and high temperature) agent defeat Joint Direct Attack Munition (JDAM) variant for Countering-WMD missions. In addition, DTRA

improved capabilities for modeling WMD effects and for determining the effectiveness of conventional weapons against hard and buried targets.

CBRN Passive Defense

I would like to highlight the important Countering-WMD contributions that the Chemical and Biological Defense Program is making in force protection and strengthening deterrence by reducing the motivation for an adversary to attack with chemical, biological, and radiological agents. The primary goal of the CBDP is to ensure protection for U.S. Service members and civilians at home and abroad from the threat of biological weapons and emerging infectious diseases. The United States has a critical national security interest in preserving the health of its population and livestock against these threats. Biosurveillance is the important first step in addressing the array of biological threats to our national security from natural, accidental, and intentional origins.

Effective defense against such attacks depends heavily on effective medical and non-medical countermeasures. The President directed in his recent State of the Union address that the nation must greatly enhance the nimbleness of its ability to develop, license, and procure countermeasures against both man-made biological attacks and naturally-occurring infectious disease. The Department is deeply involved in this effort and we have made notable successes with the Transformational Medical Technology Initiative (TMTI), work conducted by the Defense Advanced Research Projects Agency, and elsewhere in the USG, private biomedical sector, and academia.

Since 2006, TMTI has been working to establish the technical capability required for medical response to genetically engineered biological threats and emerging infectious diseases. TMTI has invested in the development of broad spectrum anti-bacterials and anti-virals that can be used in the event of an emergent infection, and in multiple technologies contributing to a response capability. The different components of this response capability are being tested to define the process and improve response times. Two of the technologies being evaluated for incorporation into the response capability are stable anti-sense chemistries and a DNA vaccine platform targeting the emerging infectious diseases and pandemic influenza. The intent is to demonstrate the flexibility and robustness of platform capabilities offered by anti-sense therapeutics and DNA based vaccines to produce multiple therapeutic candidates against unconventional threats and test their efficacy in different models of infection.

The issue of emerging threat agents presents complex challenges to safely detect hazards, to provide physical protection and medical treatments for the warfighter, and to effectively decontaminate after an attack. The CBDP is addressing the technical challenges as it conducts research and development to meet our needs and provide these capabilities against emerging threat agents. In fiscal year 2010-2011 alone we are allocating nearly $300 million to establish interim detection, physical protection, diagnostics, and decontamination capabilities for emerging and future threat agents.

Even with these increased investments, the best medical countermeasures work only when embedded in a structure that provides timely warning, characterization of the agent, and responsive

decision-making. Each of these steps in the structure of medical countermeasures use must be strengthened and integrated: warning of attack; providing medical pre-treatments; providing barrier protection; making post-attack characterization (including diagnostics) and decisions; and providing post-exposure prophylaxis. Improved capabilities in all these areas will better protect the warfighter and our citizens at home.

In the area of medical countermeasures, the CBDP implemented steps to assess and mitigate risks associated with emerging WMD threats, including analysis of NTAs and expanding the TMTI. In support of the QDR, we are developing a range of NTA defense initiatives that will address detection, medical countermeasures, decontamination and protection needs. These efforts are being coordinated with interagency and international partners.

As proof-of-capability, from May to December 2009, TMTI's platform biodefense capability was tested for responsiveness against the recent Swine Origin Influenza A (H1N1) outbreak, demonstrating a better than 99% reduction in viral titer levels as tested in a ferret animal model.

The Department has also participated in the Administration's interagency initiative aimed at transforming how investments are made in the countermeasure enterprise and enhancing performance through highly engaged end-to-end support and management. The goal is to markedly increase the return on the USG's investment in medical countermeasures against biological threats. Achieving this breakthrough will yield a new template for government support of

private sector drug development in areas where progress has been impeded by apparent market failures.

The CBDP also improved and augmented program management methodologies to foster continuous improvement and bring proven and innovative technologies to the warfighters; upgraded the CBDP capability development process to ensure our nation's competitive advantage in WMD contaminated environments; coordinated with interagency and international partners to facilitate operational collaboration between U.S. allies and to maximize CBDP capabilities; updated the Test and Evaluation (T&E) Infrastructure Investment Strategy, which ensures infrastructure is aligned with national priorities, to accurately reflect future investment needs; and completed the DoD CBRN Defense Doctrine, Training, Leadership, and Education Strategic Plan to enhance and streamline CBRN training and oversight, significantly advancing warfighter training structure and effectiveness.

The JPEO CBD fielded advanced detection and protective systems and more than one million pieces of equipment to our armed forces.

DTRA's contributions to passive WMD defense include the rapid development and fielding of the Occluding Six-Crystal Array Radiological (OSCAR) detection system that permits localization and tracking of radiological threats in near real time at the Pentagon.

DTRA also sponsored a successful demonstration of an Idaho National Laboratory Bremsstrahlung x-ray radiation active interrogation system

to stimulate detectable emissions from nuclear material that could ultimately provide a long-range standoff detection capability.

Additionally, DTRA performed 96 vulnerability and survivability assessments including 12 Balanced Survivability Assessments of critical installations and 84 Joint Staff Integrated Vulnerability Assessments focused on mission continuity and force protection, respectively, in 2009.

WMD Consequence Management

In 2009, DTRA responded to over 1,000 Technical Reachback requests for WMD related expertise and information, including hazard agent dispersal prediction, from the Combatant Commanders, other DoD organizations, interagency partners and customers, and the WMD Civil Support Teams.

DTRA also hosted a Nuclear Weapons Accident, Incident, Recapture, and Recovery Exercise involving recapture/recovery and consequence management activities with interagency and local participation in June 2009 at F.E. Warren Air Force Base. In March 2010, I attended the agency's MIGHTY GUARDIAN force-on-force exercise with interagency participation at Minot Air Force Base to evaluate DoD policy regarding the detection, combat, and defeat of threats against nuclear weapon storage sites. MIGHTY GUARDIAN assessments enable the development and sharing of procedures to improve the security and safety of U.S. nuclear weapons.

Conclusion

The WMD threat poses an immense challenge. Our warfighters and our fellow citizens are vulnerable to WMD attack. We must shape our defense programs to more effectively prevent, deter, or defeat this threat. Should a WMD attack occur, we must move swiftly and effectively to minimize the loss of lives and restore operations. President Obama and Secretary Gates have directed the development and implementation of a comprehensive approach to strengthen these capabilities. I ask for your support of our FY 2011 budget request. I appreciate the opportunity to testify today and would be pleased to answer your questions.

Statement of Mr. Kenneth A. Myers III
Director, Defense Threat Reduction Agency
and Director, U.S. Strategic Command Center
for Combating WMD

On

Fiscal Year 2011 National Defense Authorization Budget Request for the Defense Threat Reduction Agency, Chemical Biological Defense Program, and Counterproliferation Initiatives

Before

Terrorism, Unconventional Threats and Capabilities Subcommittee
Committee on Armed Services

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Introduction

Madame Chairwoman, Ranking Member Miller, and members of the Subcommittee, it is an honor for me to be here today to address the counterproliferation programs performed by the Defense Threat Reduction Agency (DTRA). I will summarize my remarks and ask that my complete statement be made part of the record.

The mission of the nearly 2,000 civilian and military personnel of DTRA is to safeguard the United States and its allies from Weapons of Mass Destruction (WMD) – Chemical, Biological, Radiological, and Nuclear Weapons (CBRN), as well as high yield explosives capable of destroying buildings and critical infrastructure by providing capabilities to reduce, eliminate and counter the threat, and mitigate its effect. The proliferation of WMD, their means of delivery, and related knowledge and materials pose a grave and current threat that is growing and evolving. The need to develop and field improved Countering-WMD capabilities is more important than ever.

In addition to serving as the Director of DTRA, I am also the Director of the U.S. Strategic Command Center for Combating WMD (SCC-WMD). Co-located with DTRA and fully integrated within the daily activities of the agency, the SCC-WMD assists the Commander, U.S. Strategic Command (CDRUSSTRATCOM) with the synchronization of Countering-WMD planning and coordination of related DoD activities across the Combatant Commands and with our interagency partners, identification of Countering-WMD capability needs, and advocacy for Countering-WMD capabilities.

The Department places the Countering-WMD mission among its top priorities and the DTRA Fiscal Year 2011 (FY11) budget request responds to this and, in particular, the 2010 Quadrennial Defense Review (QDR) initiatives. The requested 18% increase over last year's appropriation represents the first significant growth in the DTRA budget since the agency's establishment nearly 12 years ago. My remarks will cover the intended purposes for this increased investment and how it directly contributes to or supports counterproliferation. In addition, I will explain why I am confident that DTRA can efficiently and effectively manage this budget growth.

DTRA Roles, Responsibilities, and Relationships

DTRA provides Countering-WMD expertise and support at strategic (global and national), operational (regional and theater), and tactical (battlefield) levels. The agency initiates, stimulates, and participates in interagency, bilateral, and multilateral partnerships, often providing the essential expertise and leadership to get programs established and projects moving. However, the primary role of DTRA in the global Countering-WMD effort is that of an executing agency. Our programs support the full range of the National Strategy to Combat WMD: nonproliferation, counterproliferation, and consequence management. In partnership with others across the U.S. Government (USG), the private sector, and our overseas allies and friends, DTRA integrates a wide range of Countering-WMD technical, operational, and intelligence subject matter expertise to provide integrated, readily applicable solutions to Countering-WMD challenges.

DTRA provides its Countering-WMD expertise and responds to tasking through three distinct chains of command. First, as the DoD

Countering-WMD Combat Support Agency, DTRA provides direct support and assistance to the Combatant Commanders and is tasked directly by the Chairman, Joint Chiefs of Staff. Second, as a DoD agency, DTRA reports through the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs to the Under Secretary of Defense for Acquisition, Technology and Logistics. Third, as the Director of the SCC-WMD, I also report to the Commander, USSTRATCOM (CDRUSSTRATCOM).

While DTRA civilians and military personnel directly perform many of the agency's Countering-WMD activities, we also rely heavily upon contractors for the performance of parts of our mission. This is particularly the case for our Research, Development, Test and Evaluation (RDT&E) program, whose performers include the Department of Energy (DOE) National Laboratories, the Service laboratories, and the RDT&E capabilities of our interagency partners, private industry, academia, and international partners.

Although DTRA was formally established on 1 October 1998, the agency directly traces its origin to the 1940s Manhattan Project that developed the atomic bomb. Therefore, the agency and its predecessors have been acquiring and expanding CWMD expertise for nearly 70 years.

U.S. Strategic Command Center for Combating WMD

This expertise made DTRA the logical place for the CDRUSSTRATCOM to establish the SCC-WMD in support of his new responsibilities assigned in 2005 to synchronize DoD Countering-WMD planning activities across the Combatant Commands and with interagency

partners, identify needed Countering-WMD capabilities, and advocate for their development. The SCC-WMD leverages DTRA's full expertise, tools and capabilities. DTRA leverages SCC-WMD activity to improve its support to the warfighters and is a direct beneficiary of the CDRUSSTRATCOM's advocacy for improved Countering-WMD capabilities. USSTRATCOM has worked with OSD, DOE, and other Federal agencies to improve coordination across the CWMD mission. It completed Concept Plan (CONPLAN) 8099-08 Global Combating WMD Campaign Plan in March 2009, which incorporates national-level guidance for Countering-WMD with the Guidance for Employment of the Forces and Joint Strategic Capabilities Plan 2008 (JSCP 08). CONPLAN 8099-08 synchronizes DoD Countering-WMD plans by providing a common framework and methodology for Countering-WMD planning which puts into effect a DoD-specific global strategy for the Countering-WMD mission. USSTRATCOM also completed a Joint Integrating Concept, approved in December 2007, for Countering-WMD that describes how a Joint Force Commander will conduct future Countering-WMD operations. Based on CONPLAN 8099 and other analytical efforts not previously captured in Joint Capabilities Integration and Development System (JCIDS) documentation, USSTRATCOM produced a CWMD Joint Capabilities Document (JCD). The JCD, which was approved in October 2008, documents and prioritizes Combatant Command capability needs. Additionally, the Countering-WMD JCD forms the basis for initiating programs and making associated decisions and funding requests.

Strategy and Direction

Although the Countering-WMD mission is relatively new for DoD, it now rests upon maturing strategies and direction. For example, the

recently released Quadrennial Defense Review (QDR) states that: "The potential spread of weapons of mass destruction poses a grave threat. As the ability to create and employ weapons of mass destruction spreads globally, so must our combined efforts to detect, interdict, and contain the effects of these weapons. Deterrence of such threats and defense against them can be enhanced through measures aimed at better understanding potential threats, securing and reducing dangerous materials wherever possible, positioning forces to monitor and track lethal agents and materials and their means of delivery, and, where relevant, defeating the agents themselves." The QDR also states that the most troubling threat would be the instability or collapse of a WMD-armed state. Defending the U.S. against a catastrophic WMD attack is a vital national interest.

As the Countering-WMD mission matures, so do the relationships among those implementing it supporting programs. In House Report 111-166, the report accompanying the Committee's National Defense Authorization Bill for Fiscal Year 2010 (FY10), the Committee expressed the view that efforts, initiatives, and interagency coordination for the programs associated with counterproliferation have been improving over the past several years. However, the Committee also directed the Comptroller General to assess definitional clarity and commonality of usage regarding counterproliferation across the USG and to provide recommendations for improvements. DTRA appreciates the opportunity to address the Committee's concerns in this regard. The agency has, with others in the Department, met with the General Accountability Office (GAO) on this matter and the effort continues.

As the QDR notes, our capabilities must provide for a defense-in-depth against WMD attack based on multiple opportunities to prevent or respond to WMD threats. However, we need to think beyond defeating and defending against WMD threats to deterring such threats. WMD deterrence is also an important theme in Joint Publication 3-40, *Combating Weapons of Mass Destruction*, dated 10 June 2009, which states that WMD deterrence has shifted from a Cold War focus on a very small number of actors to a wide perspective on multiple and varied actors with multiple means of attack at their disposal. Traditional economic, diplomatic, informational and military deterrent measures, including the threat of overwhelming response, remain key aspects of deterrence, especially against state actors and state-sponsored terrorist groups. However, the difficulty of definitively attributing the source of a WMD attack, as well as the emergence of terrorists whose values and decision making process may be difficult to analyze, makes the capability to deny adversaries' objectives an increasingly important element of WMD deterrence.

The QDR and the DTRA Budget Request

Through the QDR, the Secretary has directed the undertaking of these initiatives, for which DTRA and/or the SCC-WMD have a direct or supporting role:

- Establish a Joint Task Force-Elimination Headquarters to better plan, train, and execute WMD elimination operations with increased nuclear disablement, exploitation, intelligence, and interagency coordination capabilities.
- Research countermeasures and defenses to meet emerging Non-Traditional Agents.

- Enhance nuclear forensics to meet the needs of the national attribution process, prevent follow-on attacks through more rapid identification and apprehension of an attacker, and strengthen deterrence against the use of nuclear and radiological weapons by state and non-state actors.
- Secure vulnerable nuclear materials at the source and promote stringent nuclear security practices for civilian and defense facilities across the globe in support of the President's Global Lockdown Initiative.
- Expand the Biological Threat Reduction (BTR) Program beyond the Former Soviet Union (FSU) by partnering with nations around the world to improve their capabilities for detecting, diagnosing, and determining the origin of pathogens to improve U.S authorities to better respond to future disease outbreaks and identify whether they are natural or man-made. This effort is part of the new *National Strategy for Countering Biological Threats*, issued on 23 November 2009 as part of Presidential Policy Directive-2.
- Develop new verification and monitoring technologies to support a robust arms control, nonproliferation, and counterproliferation agenda.

I will now explain how the DTRA FY11 budget request responses to these initiatives. The 18% budget growth requested for FY11 represents the first significant growth in resources – funding and personnel - since the agency was established in October 1998. It calls for complementary investments across nonproliferation, counterproliferation, and consequence management, as well as needed investment in DTRA information technology and infrastructure support

essential for the global conduct of expanded Countering-WMD activities and programs

The QDR and DTRA FY11 Funding Increases

DTRA is requesting $522 million for the Nunn-Lugar Cooperative Threat Reduction (CTR) program that will be expanded worldwide to support the President's goals of "locking down" weapons-grade nuclear materials and expanding biological threat reduction activities; $463 million in Operations and Maintenance (O&M) funding for arms control monitoring and verification, Countering-WMD support to the Combatant Commanders, training and education provided through Defense Threat Reduction University, and core operational support; and over $562 million for research and development leading to new Countering-WMD capabilities. In addition, DTRA will execute over $631 million in Chemical-Biological Defense Program (CBDP) Science and Technology (S&T) programs that support counterproliferation and consequence management. I will now turn to the details of the budget request.

Secure Vulnerable Nuclear Materials DTRA is requesting $89 million in new funding for the QDR-directed Global Nuclear Lockdown project within the Nunn-Lugar CTR program for the execution of the DoD part of the President's initiative to secure vulnerable fissile materials worldwide by the end of 2012, sustain security upgrades made, and transition enduring responsibilities to the respective countries by 2014. DTRA has been performing such activities for many years in Russia through the Nuclear Weapons Storage Security and Nuclear Weapons Transportation Security projects. For example, as a result of the Bratislava Agreement, DoD and the Department of

Energy (DOE) partnered to upgrade security at Russian nuclear weapon storage sites by providing training, equipment, and technical assistance. This program has also funded the establishment of security training facilities in Russia to improve security capabilities and provides secure railcars for the movement of nuclear warheads from operational sites to secure storage sites and from there to dismantlement facilities. The requested budget growth would accelerate nuclear security upgrades in the Russian Federation and permit the establishment of Centers for Nuclear Security in countries beyond the FSU. Attainment of the President's goals to improve the security of the vulnerable fissile materials around the world will significantly reduce the threat that our counterproliferation programs may need to address.

Biological Threat Reduction The Nunn-Lugar CTR Biological Threat Reduction (BTR) program consolidates dangerous pathogens into safe and secure repositories; enhances threat agent surveillance, detection, and response systems; and provides for collaborative biological research with successor states to the former Soviet Union. The QDR calls for expanding this effort to other nations around the world. The FY11 budget request for the expanded efforts includes an increase of $54 million in new funding. This will permit the commissioning and sustainment of a Central Reference Laboratory (CRL) in Georgia; oversight of CRL construction in Azerbaijan; construction of a CRL in Kazakhstan; design completion and permit work for a CRL in Ukraine; sustainment of 40 Zonal Diagnostic Labs and training for scientists in these partner nations; development and implementation of the Electronic Integrated Disease Surveillance System (EIDSS) in Armenia, Azerbaijan, Georgia, Kazakhstan, Russia,

Ukraine, and Uzbekistan; and, through the Cooperative Biological Engagement program, minimal bio security upgrades and EIDSS implementation as new partnerships beyond the former Soviet Union are established. These efforts are being conducted in close coordination with other USG organizations including the Department of State (DOS), HHS including its Centers for Disease Control and Prevention, and the Department of Agriculture. This effort directly supports the Combatant Commanders by improving their situational awareness of dangerous disease outbreaks and biological attacks, reducing potential bio threats, and expanding partner capability in their areas of operation. It will also enable the U.S. to better respond to future disease outbreaks and assist in identifying whether they are natural or manmade. This critical nonproliferation investment will reduce the size and scope of the threat that counterproliferation and consequence management challenge we will face in the future.

Arms Control Technology DTRA is the national execution agency for arms control inspection and escort, and is a key participant in monitoring activities. The agency advises on monitoring and verification technologies for arms control negotiators and assists USG and private organizations subject to foreign inspections. Additionally, DTRA is implementing the President's arms control vision of revitalizing arms control as a Countering-WMD tool. Accordingly, DTRA is requesting $9.2 million in new funding to reestablish an arms control monitoring and verification technology project as part of the agency's RDT&E program. We are developing a strategy for expanded verification and monitoring of lower nuclear weapons levels and a nuclear test ban, and setting the foundation for future arms control initiatives by exploring technological challenges and opportunities in

fissile material production and detection, accounting of non-strategic (tactical) nuclear weapons, and differentiating between various warhead contents. Without this new investment, arms control technology will lag rather than precede and inform our arms control proposals, resulting in missed opportunities that could reduce the size and scope of future WMD threats.

Combating WMD Terrorism DTRA provides technical support to the U.S. Special Operations Command (USSOCOM) Combating WMD Terrorism (CWMD-T) mission. Specifically, DTRA enhances Special Operations Forces (SOF) operational capabilities through identification, familiarization, and delivery of new and emerging technologies. We develop test programs to support USSOCOM and its components; deliver emerging technology solutions; provide equipment familiarization; and perform RDT&E to eliminate the threat of Improvised Nuclear Devices, defeat WMD pathways, and develop technologies to interdict, disrupt, and neutralize terrorist ability to acquire and use WMD. The agency is requesting $27.9 million in new funding in FY11 to accelerate research on the defeat of improvised WMD threats by two to three years, thereby reducing the risk of nuclear or radiological terrorist attacks on U.S. forces at home and overseas, as well as the U.S. homeland. DTRA is also requesting an additional $19.8 million to provide improved intelligence fusion, analysis, and planning assistance to USSOCOM to support operational planning and the conduct of counterproliferation and counterterrorism operations.

Nuclear Detection A top priority for the DTRA RDT&E program is the development of significantly improved nuclear detection capability.

Thanks to increased funding made available by DoD and the Congress in Fiscal Years 2008 and 2009, DTRA has a strong and promising effort focused on potentially "game-changing" active standoff nuclear detection, as well as needed improvements to existing passive capabilities. DTRA also performs technology development and procures equipment for the Combatant Commanders to search, locate, and identify radiological and nuclear threats. The agency is requesting $19 million in new funding in FY11 to support the standup of two additional nuclear search teams for the Combatant Commanders. DTRA is also requesting $5 million in new funding to develop passive detection technologies and components that will reduce dependency upon the nation's dwindling stock of Helium-3, allow for the continuing development of neutron detection technologies, and provide a path forward for future generations of neutron sensitive systems. Although DoD environment for its nuclear detection mission lacks the inherent infrastructure available for the Department of Homeland Security (DHS) and DOE nuclear detection missions, all three departments coordinate their related efforts regarding the basic science.

Reachback Support The national and DoD leadership, Combatant Commanders, our interagency partners such as the DHS and HHS, and first responders increasingly rely upon DTRA provided Countering-WMD reachback support. In just a few years, the number of reachback requests that the agency has answered has grown from several hundred annually to over 1,000 in 2009. Moreover, the requests are becoming more sophisticated, the extent of analysis required to respond is increasing, and the expectations for near real time responses are growing. Therefore, DTRA is requesting $3.0 million in new funding in FY11 for a technology demonstration to

provide reachback support in minutes instead of hours or days to the Combatant Commanders and first responders. This technology demonstration will focus on the development of decision support and analysis tools for more accurately predicting the spread of pandemic diseases. We are also requesting growth in our Operations and Maintenance appropriation for essential IT upgrades that will enable us to meet the warfighters' expectations for Reachback support.

Counter-WMD Analysis Cell The Counter-WMD Analysis Cell (C-WAC) is a collaborative venture by DTRA and the Defense Intelligence Agency to enhance the fusion of Countering-WMD technical and intelligence expertise to better support the Combatant Commanders. The warfighters use information provided by C-WAC to devise concepts for disrupting or defeating adversary WMD programs. DTRA is requesting $2 million in new funding to expand the analytical capabilities of the cell and its application to WMD threats, particularly to permit "deep dive" analysis of adversary processes, facilities and vulnerabilities.

Information Technology and Infrastructure Support

My greatest concerns regarding the future ability of DTRA and the SCC-WMD to perform their mission have to do with IT shortfalls in the systems we rely on to support growing customer needs and our expanding global mission, a larger workforce in response to expanded activities to meet the growing threat, and the necessary infrastructure to support that workforce. Therefore, DTRA is requesting $32 million in new O&M funding for these critical mission enablers. Without this additional funding, DTRA will be hard pressed to deliver the improved

capabilities previously mentioned. The specific purposes for this funding are:

- IT Support - $15.3 million for information system replacements, upgrades, and software licenses; outfitting of additional leased office space; and ensuring all related IT security needs are met. This investment is essential for technical reachback support, intelligence analysis, and the DTRA Operations Center.
- Infrastructure Support - $14.8 million for leasing and furnishing additional workspace for the expanding DTRA workforce; acceleration in workforce hiring including security clearance processing and mandatory training; specialized support for increased contracting needs.
- Future Operating System - $1 million for the evaluation of the current IT infrastructure; test and evaluation of various solutions to shortfalls; and design and implementation plan development and software suite upgrades toward the Future Operating System.
- Data Replication - $1 million to comply with requirements for off-site data replication/storage to support disaster recovery capabilities, mission assurance, and DoD continuity of operations.

As you consider our requested mission growth, I ask that you also support the budget growth essential to mission success.

Current Support to Other Counterproliferation Efforts

I will now address how current DTRA and SCC-WMD programs contribute to counterproliferation efforts.

Joint Task Force-Elimination Headquarters The QDR calls for the establishment of a Joint Task Force Elimination-Headquarters to better plan, train, and execute WMD elimination operations with increased

disablement, exploitation, intelligence, and coordination capabilities. DTRA and the SCC-WMD are assisting the DoD effort, led by the Joint Staff, to identify and define specific options that could satisfy this departmental need.

Enhanced Nuclear Forensics DTRA is the lead organization in the National Technical Nuclear Forensics (NTNF) program for managing post-detonation nuclear forensics R&D programs, and closely coordinates these programs with the U.S. Air Force and other DoD and non-DoD NTNF-relevant R&D programs. Additionally working closely with the DOE, the agency maintains a post-detonation ground collection capability, and is working closely with the U.S. Army to transition this capability to the 20th Support Command CBRNE. DTRA together with USSTRATCOM as the sponsor continues to support the NTNF Joint Concept Technology Develoment (JCTD) to address the shortfalls and gaps in nuclear/radiological forensics. Improved nuclear forensics and attribution capabilities will significantly strengthen deterrence against WMD attacks.

Counter Non-Traditional Threat Agents As the executor of the CBDP S&T, DTRA is developing solutions for detection, medical countermeasures, decontamination, and protection for doctrine, equipment, and training to the warfighter for defense against Non-Traditional Threat Agents (NTAs) that may result from the globalization of chemical and biological knowledge. DoD has developed a plan with interagency partners regarding the development of defensive countermeasures to such a threat. In the near term, the agency will accelerate the expansion of scientific understanding of the

physical properties of and medical countermeasures against NTAs and field interim defense capabilities.

Bio Defense Fusion The SCC-WMD enhances Countering-WMD situational awareness by fusing near real time, open source information and classified data into actionable indications and warnings intelligence in support of warfighter force protection and continuity of operations. This effort places special emphasis on indicators associated with natural and intentional biological threats.

WMD Combat Support DTRA provides a wide-range of Countering-WMD expertise to the Combatant Commanders including planning, training, and national-level exercise support; support to WMD accident/incident response; and support to current military operations. DTRA maintains globally deployable Technical Support Teams and Consequence Management Advisory Teams that provide equipment, training, and technical and operational subject matter expertise for the Combatant Commands.

Nuclear Mission Support DTRA supports the Office of the Secretary of Defense on programs that provide oversight for the DoD nuclear mission, and performs Defense Nuclear Surety Inspections so that the Secretary and Chairman have independent assessments of the mission performance of nuclear capable units. The agency performs nuclear weapon stockpile tracking and accounting for the Joint Staff and provides expertise in the areas of nuclear weapons safety, security, training, exercises, publications, and logistics.

International Counterproliferation Program The International Counterproliferation Program (ICP) is a DoD-led interagency effort that is an effective Combatant Commander Theater Security Cooperation tool to combat the trafficking of WMD and related material in some areas of the world. The requested FY11 funding would permit expanded training assistance in conjunction with our Department of Justice, Federal Bureau of Investigation, and DHS partners in the areas of border security, customs, and law enforcement with partner nations that have made long-term commitments to work cooperatively with the United States.

Proliferation Security Initiative The Proliferation Security Initiative (PSI) is an international cooperative effort to stop trafficking in WMD, their delivery systems, and related materials to and from state and non-state actors of proliferation concern. It is designed to support efforts to defeat WMD proliferation through international cooperation, information sharing and capacity building in cooperating states. With 96 participating nations, the PSI has proven itself an effective international forum supporting common counterproliferation goals. In support of the President's goal to turn the PSI into a durable international institution, the SCC-WMD supports the Joint Staff, OSD, the Combatant Commanders, and interagency and international partners with PSI training. The SCC-WMD is also embedding PSI-related activities into existing Combatant Commander exercises, thereby enhancing Combatant Commanders' security cooperation efforts and improving partners' interdiction capabilities.

Small Arms and Light Weapons DTRA's expertise in accounting for weapons covered by arms control treaties is being applied in a new

manner. The DTRA Small Arms and Light Weapons (SALW) Program assesses host nation arms, ammunition, and explosive (AA&E) stockpiles, conducts seminars to orient participants to international best practices for and recommends ways to improve the Physical Security and Stockpile Management (PSSM) of AA&E. This has program has provided PSSM orientation to over 1,000 foreign government officials in over 50 countries worldwide. The SALW Program also provides recommendations on the destruction of unsafe, unsecured, and excess weapons and ammunition. DTRA provides its assessment reports to the DOS Office of Weapons Removal and Abatement which, when requested by a foreign government, uses these reports to provide physical security upgrades and destruction assistance. Through this effort, DTRA has contributed to the destruction of over one million SALW, 90 million rounds of ammunition, and over 30,000 Man-Portable Air Defense Systems.

Hard Target Defeat DTRA develops technologies and demonstrates end-to-end capabilities to defeat Hard and Deeply Buried Targets (HDBTs), many of which are associated with WMD, their means of delivery, and related command and control. The objectives of the HDBT RDT&E program are to rapidly transition emerging technologies to the warfighter through JCTDs and Quick Reaction Capability projects; demonstrate novel tactics, techniques, and procedures to defeat HDBTs; and develop models for HDBT defeat planning and decision support tools. DTRA recently completed a series of tests for the Massive Ordnance Penetrator (MOP) program, the largest air-deliverable conventional weapon available for the non-nuclear defeat of HDBTs, and continues to support Air Force-sponsored MOP testing. This successful program transition from DTRA to the Air

Force was largely due to the close teamwork between DTRA's CWMD Technology Directorate at the Defense Threat Reduction Center on Fort Belvoir, Virginia; the DTRA Weapons and Capabilities Division on Eglin Air Force Base, Florida; and the DTRA Test Support Directorate on Kirtland Air Force Base and White Sands Missile Range, New Mexico. Our HDBT defeat efforts benefit from a unique partnership between DTRA and the Defense Intelligence Agency Underground Facility Analysis Center. This collaboration brings the R&D and intelligence communities together in a joint effort to provide warfighters with the information and tools necessary to defeat HDBTs and counter WMD.

System Survivability DTRA develops technologies to protect military systems against the effects of radiation and electromagnetic pulse (EMP). Agency radiation-hardened technology and nanotechnology R&D keeps pace with commercial capability; develops and demonstrates technology to support hardening of microelectronics and photonics to meet DoD's missile and space requirements; and develops materials, processes, layout and design methods to enhance radiation hardness and fabricate and test microelectronics. DTRA also performs EMP vulnerability assessments for national and DoD customers.

Vulnerability Analysis and Protection DTRA developed and updates a fast running facility vulnerability assessment software tool for force protection planning that integrates high fidelity models and supports a wide range of customers including the Combatant Commanders.

Integrated Munitions Effects DTRA developed and continues to update the Integrated Munitions Effects Assessment (IMEA) model that enhances the selection and employment of conventional weapons against fixed targets, including HDBT, and allows consideration of potential collateral effects should WMD be associated with those targets. IMEA permits rapid target characterization, high fidelity environment definition, fast weapon effects calculations, and accurate and accredited results.

WMD Persistent Intelligence, Surveillance, and Reconnaissance
DTRA is working to reduce gaps in persistent Intelligence, Surveillance, and Reconnaissance (ISR) and improve evaluation of potential solutions to fill those gaps.

Survivability and Vulnerability Assessments DTRA Balanced Survivability Assessment (BSA) Teams conduct mission survivability assessments against a broad spectrum of threats focusing on vital and critical national/theater mission systems. For example, BSAs provide all-hazard assessment capability to support survivability of key facilities and systems supporting USSTRATCOM's missions including Global Command and Control; Space Operations; Global Strike; Countering-WMD; Integrated Missile Defense; Information Operations; ISR; and Strategic Deterrence. In addition, at the tasking of the Joint Staff, DTRA performs Joint Staff Integrated Vulnerability Assessments that assess facility vulnerability to terrorist operations and means for reducing mass casualties and damage to mission essential capabilities. These assessments include terrorist operations, security operations, structural engineering, infrastructure engineering, CBRNE emergency management, and information assurance.

Chemical-Biological Defense Science and Technology DTRA also participates in the DoD CBDP. The agency executes the S&T portion of that program's RDT&E effort, transitions technologies through R&D, experiments, and demonstrations; maintains a robust technology base by investing in basic research and broadening research opportunities to industry and academia; and answers S&T questions on chemical and biological agents' characteristics and effects. DTRA also manages funding execution for the CBDP's advanced development and procurement effort.

A New DTRA Strategy for the Changing Security Environment

The QDR highlighted new security challenges including external and internal pressures to state fragility, increased global access to dangerous materials due to technological advancements, growth in terrorism, and increasingly complex black market proliferation networks. In response to these challenges, the President's nuclear and biological security initiatives, and QDR guidance, DTRA is embarked upon a new strategy to guide its Countering-WMD efforts. Called "Nunn-Lugar Global Cooperation" (NLGC), this strategy provides the model for DTRA support to and participation in global security engagement to prevent, reduce, and respond to WMD threats.

Named after the sponsors of the CTR legislation that created the CTR Program, Former Senator Sam Nunn (D-GA) and Senator Dick Lugar (R-IN), NLGC adapts and applies the lessons learned from the execution of the Nunn-Lugar program to the new global security environment. At the core of the strategy is the importance of agile, flexible, anticipatory and responsive programs and activities to meet emerging threats and exploit fleeting opportunities for WMD threat

reduction in cooperation with partners across the globe. NLGC more effectively employs the full range of DTRA and SCC-WMD CWMD capabilities and tools, integrating the CTR program, arms control, bilateral and multilateral threat response activities, global situational awareness, expanded interagency and international partnerships, and increased support to the Combatant Commanders' theater security engagement efforts.

Budget Execution

Before concluding, I would like to express my commitment to the effective and efficient management of the additional funding that DTRA is requesting. First, our past performance indicates that we can effectively and efficiently obligate and expend funding made available to us. Second, we have contracts in place with sufficiently high funding ceilings that will permit the rapid obligation of additional funding, where appropriate. Third, efforts are ongoing to aggressively monitor and refine implementation plans to ensure timely and effective program execution and eliminate any potential obstacles.

Conclusion

In conclusion, countering the threats posed by WMD is a national priority and DTRA and the SCC-WMD fulfill central roles in that effort. We work closely with DoD, interagency, and international partners and customers in all that we do. Our FY11 budget request responds to the QDR calls for increased investment in key CWMD mission areas. Although we are requesting significant budget growth, we believe that we can effectively and efficiently execute the additional funding. I urge your support for the DTRA budget request, thank you again for this opportunity, and look forward to answering your questions.

STATEMENT FOR THE RECORD

OF

BRIGADIER GENERAL JESS A. SCARBROUGH, USA

JOINT PROGRAM EXECUTIVE OFFICER FOR

CHEMICAL AND BIOLOGICAL DEFENSE

BEFORE THE

SUBCOMMITTEE ON TERRORISM, UNCONVENTIONAL THREATS AND

CAPABILITIES

COMMITTEE ON ARMED SERVICES

U.S. HOUSE OF REPRESENTATIVES

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INTRODUCTION

Madam Chair, Congressman Miller, and distinguished Members of the Subcommittee, I am honored to testify on behalf of the Department of Defense Chemical and Biological Defense Program, the U.S. Army as the Program's Executive Agent, and as the Joint Program Executive Officer for Chemical and Biological Defense. I am pleased to appear alongside the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs, Mr. Andrew C. Weber, and the Director of the Defense Threat Reduction Agency and U.S. Strategic Command Center for Combating Weapons of Mass Destruction, Mr. Kenneth A. Myers. Mr. Weber and Mr. Myers have set the context regarding the global security environment, strategic priorities, and the mission of countering weapons of mass destruction. I am going to identify what the Chemical and Biological Defense Program contributes to the mission, specifically in the areas of biosurveillance, medical countermeasures, and non-traditional agents. Before I conclude I will speak briefly about acquisition reform, which, as this Committee knows, is indispensible to developing the capabilities needed to counter weapons of mass destruction.

MISSION AND STRUCTURE

Of the eight military mission areas in countering weapons of mass destruction, the Chemical and Biological Defense Program's mission is largely in passive defense and weapons of mass destruction consequence management, meaning we provide technologies to minimize or negate the effects of chemical and biological agents employed against U.S. forces and the homeland. We provide capabilities to the U.S. Military so it may operate unconstrained in contaminated environments. Additionally, we develop multi-purpose equipment such as biological agent diagnostic capabilities that can be used by civilian first responders and medical professionals.

Enacted by Congress in 1993, Public Law 103-160 created the Chemical and Biological Defense Program. The law required the Secretary of Defense to assign responsibility for overall coordination and integration of chemical and biological defense programs to a single office within the Office of the Secretary of Defense. The Secretary designated the Assistant to the

Secretary of Defense for Nuclear and Chemical and Biological Defense Programs as the focal point for oversight of the Program. Public Law 103-160 also established the U.S. Army as the Chemical and Biological Defense Program Executive Agent to coordinate and integrate research, development, test and evaluation, acquisition, and the requirements of the Military Services.

Key organizational elements of the Chemical and Biological Defense Program now include the Joint Staff's Joint Requirements Office for Chemical, Biological, Radiological and Nuclear Defense to establish priorities and requirements, the Defense Threat Reduction Agency's Joint Science and Technology Office for Chemical and Biological Defense to execute science and technology programs that provide the technical basis for future capabilities, the Joint Program Executive Office for Chemical and Biological Defense for the advanced development and fielding of capabilities, the Chemical and Biological Defense Program Test and Evaluation Executive to maintain the readiness of test and evaluation infrastructure and establish test policy, and the Program Analysis and Integration Office to oversee budget execution. External to the Department of Defense, the Chemical and Biological Defense Program works closely with various Federal agencies. By necessity, we collaborate with our counterparts in the Department of Health and Human Services and the Department of Homeland Security.

FISCAL YEAR 2011 DEPARTMENT OF DEFENSE BUDGET REQUEST

The Fiscal Year 2011 Budget Request achieves a structured, executable, and integrated medical and non-medical joint Chemical and Biological Defense Program that balances urgent short-term procurement needs against the long-term science and technology efforts necessary to preserve our technological edge. In addition to supporting a comprehensive science and technology base program, this budget starts or continues procurement of a variety of defense systems which provide our Warfighter with the best available equipment to survive, fight, and win in contaminated environments. The President's budget request for the Chemical and Biological Defense Program includes $370 million for procurement, $812 million for advanced development, and $396 million for science and technology efforts, for a total of $1.578 billion.

BIOSURVEILLANCE

Status

As described by Mr. Weber, the goal of biosurveillance, global and domestic, is to prevent or mitigate the impact of an expected or unexpected infectious disease outbreak, be it introduced by humans intentionally or naturally occurring. Successful implementation of a comprehensive biosurveillance strategy requires an enterprise-wide government approach. The Chemical and Biological Defense Program is uniquely positioned to leverage its enterprise capabilities. Our efforts contribute to many functions across the biosurveillance continuum. We produce Food and Drug Administration-approved medical diagnostics, develop and field systems that monitor the environment for biological threats, and provide critical confirmatory analysis for these environmental sensor systems. Ensuring our ability to do the latter analysis, our Critical Reagents Program houses the most extensive collection of quality-controlled biological defense reagents and test materials used throughout the Federal Government and by Allied nations.

The Chemical and Biological Defense Program provides the Warfighter with an integrated early warning information system for responding to a threat. We envision a similar biosurveillance tool to share early warning threat indicators and associated pathogen or disease information across Federal agencies and to hold data repositories and analytical tools for intelligence gathering and epidemiological studies.

The protection of our forces against the biological threat expands beyond the traditional military focus – we must integrate with international and domestic capabilities to protect our forces from emerging infectious diseases. Accordingly, we provide analytical, survey, communications, protection, and response capabilities in support of homeland defense. We are heavily engaged with interagency stakeholders in the continuous development of concepts of operations, exercises, and missions that pertain to sampling, collection, and early warning

surveillance measures. For example, the Installation Protection Program is one of the first efforts to field a full spectrum of chemical, biological, radiological, and nuclear installation protection capabilities designed for military installations around the world. Under this effort, the Department of Defense works closely with state and local governments as well as with the Department of Homeland Security BioWatch program to assess and field environmental monitoring tools, sensor and detection technologies, and a joint concept of operations.

We have also succeeded in tying medical diagnostic and surveillance capabilities together with biological detectors to provide a common operating picture within the United States Forces Korea theater of operations. This is an example of the Chemical and Biological Defense Program applying its sensor and medical diagnostic capabilities to make biosurveillance a reality. Such efforts represent the strong precedence and partnerships in place that can be leveraged in support of a national biosurveillance strategy.

Looking Ahead

Additional integration and technology gaps must be addressed in order to achieve an integrated surveillance, warning, and response system for emerging and future threats. The Chemical and Biological Defense Program Science and Technology community, led by the Defense Threat Reduction Agency's Joint Science and Technology Office for Chemical and Biological Defense is working to address shortfalls in the synchronization and integration of information from all chemical, biological, radiological, and nuclear defense assets throughout the battlespace. A significant challenge is to integrate relevant information into the Military Services' information systems and architectures. The Joint Science and Technology Office for Chemical and Biological Defense is also working to address shortfalls in detection. Standoff (at a distance) identification of biological agents remains a fundamentally difficult problem. At least in the near to mid-term, standoff technologies are unlikely to provide the same fidelity of information provided by point (immediate) sensors.

Pursuant to Homeland Security Presidential Directive 10, *Biodefense for the 21st Century*, the Chemical and Biological Defense Program is working within the Department of

Defense and with interagency partners such as the Department of Health and Human Services and the Department of Homeland Security to both integrate existing capabilities and transition developmental capabilities as they mature. To accelerate this process, the Chemical and Biological Defense Program is employing innovative acquisition management through the Joint Program Executive Office for Chemical and Biological Defense "Trail Boss" concept. This effort seeks to increase the speed with which emerging threats are addressed by combining or using technologies already underway. The biosurveillance "Trail Boss" is working to improve how we currently integrate our products and systems into the existing national biosurveillance structure. We are positioned to aggressively pursue a global and domestic biosurveillance capability as an extension of current work in diagnostics, detection, and early warning.

Progress

Medical response and preparedness is an important element of biosurveillance. In 2009, the Secretary of Health and Human Services declared a Public Health Emergency due to pandemic influenza. The next day the Centers for Disease Control and Prevention asked us to add identification of 2009 H1N1 flu (previously known as swine flu) as a capability on a system we developed that provides deployable medical units with a way to identify and diagnose human disease. The Chemical and Biological Defense Program partnered with the Centers for Disease Control and Prevention and the Armed Forces Health Surveillance Center's Division of Global Emerging Infections Surveillance and Response Systems to prepare the submission for the Food and Drug Administration. A mere 83 days after submitting the request to the Food and Drug Administration, the Department of the Army Office of the Surgeon General received notice that the Food and Drug Administration granted our Emergency Use Authorization request. This is a process that normally takes 18 to 24 months. We are continuing to expand this diagnostic capability to include other infectious diseases.

In order to further ensure Department of Defense capabilities function as part of a complete system, we are working toward integrating the Chemical and Biological Defense Program's Transformational Medical Technologies Initiative with biosurveillance efforts. The Transformational Medical Technologies Initiative has made significant strides in moving our

response capability beyond disease surveillance and diagnostics toward the provision of effective medical treatments. Recently, the Initiative rapidly characterized and tested a treatment for H1N1 in an animal population. Studies are also planned to evaluate this platform for broad spectrum applicability against other influenza strains, including Tamiflu resistant H1N1, Avian H5N1 and a seasonal influenza virus, H3N2. Previously, this same platform generated therapeutics demonstrating pre-clinical efficacy against other threats, including the viral hemorrhagic fevers, Ebola and Marburg. Understandably, there is a long way to go for us to be able to work this type of capability through the Food and Drug Administration process for use in humans. Nonetheless, this is the kind of relevant and timely innovation produced by the Chemical and Biological Defense Program that advances the Nation's ability to counter emerging biothreats.

MEDICAL COUNTERMEASURES

Status

The Chemical and Biological Defense Program partners with government, industry, academia, and international organizations for the materiel development and manufacturing of Food and Drug Administration-approved medical countermeasures. These efforts leverage Department of Health and Human Services-BioShield and Department of Defense investments and purchase products once they are licensed. The Department of Defense has interagency agreements with the Centers for Disease Control and Prevention to share licensed anthrax and smallpox vaccines from the Strategic National Stockpile. The agreements establish the framework for the acquisition, storage, management, and delivery of these vaccines to meet Department of Defense operational and inventory requirements.

An effort is underway that integrates medical countermeasure development programs within the Federal Government. The Integrated National Biodefense Portfolio Initiative, also known as "One-Portfolio," synergizes efforts of the Department of Defense and the Department of Health and Human Services as well as other agencies whose mission involves addressing the same challenges. The vision is government-wide coordination of research and development of medical countermeasures for biological threats. Accomplishments of the Integrated National

Biodefense Portfolio Initiative to date include harmonization of a common set of standards for technology maturity, an improved understanding of the expected regulatory requirements on biodefense product development, and mapping of pipelines for several biological threat medical countermeasures. Actual cost, knowledge, and program sharing continues. The "One-Portfolio" effort responds to the clear need for an integrated end-to-end national biodefense portfolio to leverage investments and maximize preparedness. We hope to expand the "One Portfolio" effort to include chemical and radiological threats as well as biological threats.

As Congress is aware, surge capacity for emergency response within the biological medical countermeasure industrial base is problematic. Adding capacity in an existing or new facility requires significant time and resources to achieve Food and Drug Administration approval. Modular and flexible manufacturing concepts may save time in establishing manufacturing infrastructure, but Food and Drug Administration approval will still take time and resources. We will continue to work with our interagency and intra-agency partners to establish capabilities and acquisition strategies that provide us the maximum flexibility for surge production. An example of this partnership is the Memorandum of Understanding between the Chemical and Biological Defense Program and the Defense Advanced Research Projects Agency, under which the Agency manages the Advanced Manufacturing of Pharmaceuticals program. The goal of the program is to create a rapid, flexible, and cost-effective production system capable of producing bulk doses of protein for any vaccine within 12 weeks of notification.

Looking Ahead

The Chemical and Biological Defense Program's Transformational Medical Technologies Initiative continues to gain momentum. Over the next 24 months, program performers will conduct clinical studies in support of licensure of maturing hemorrhagic fever virus therapeutics and submit Investigational New Drug applications for additional medical countermeasures against intracellular bacterial pathogens and hemorrhagic fever viruses. They will develop validated models critical for drug safety and efficacy testing.

In the short-term, the funding profile of the Transformational Medical Technologies Initiative is dynamic, matching the progression of project development from basic research toward advanced development as its portfolio matures. As projects mature, the Initiative's funding profile must be stable and predictable, requiring a continuous infusion of funds for basic and applied research as well as a vigorous advanced development program.

Progress

The Chemical and Biological Defense Program maintains a high rate of success for programs on track toward Food and Drug Administration approval. Since 2000, our Chemical and Biological Medical Systems Office has received Food and Drug Administration approval, licensure, or clearance for seven medical countermeasures, completed 14 Investigational New Drug submissions, conducted 22 human clinical trials, and received one Emergency Use Authorization. We developed two enabling technologies and anticipate an additional 14 Investigational New Drug applications over the next five years. These accomplishments are directly related to the Chemical and Biological Defense Program's expertise in Food and Drug Administration regulatory compliance, drug development, full life-cycle management, and the ability to collaborate with other agencies and Allied governments.

NON-TRADITIONAL AGENTS

Status

The non-traditional agent threat presents complex challenges for the Nation and our Warfighter. In preparation for responding to a potential attack, the Chemical and Biological Defense Program is working to field solutions for detection, medical countermeasures, decontamination, and protection along with associated doctrine, equipment, and training. The Department of Defense, interagency partners, and international partners are working to establish a common response plan and a sensible research and development program that includes defensive measures, non-proliferation, and other mission areas. The Joint Program Executive Office for Chemical and Biological Defense "Trail Boss" for non-traditional agents is surveying

the entire Chemical and Biological Defense Program for upgraded technologies that will detect, protect against, or counteract these agents. Our understanding of the agents' physical properties, health affects, and the effectiveness of medical countermeasures is critical to our success.

Looking Ahead

Our strategy to address non-traditional agents is funded across the Future Years Defense Program. In the near-term (fiscal years 2010 and 2011), we plan to accelerate scientific understanding, field interim defense capabilities, continue to identify shortfalls, and incorporate tactical doctrine for safe execution of military operations in the presence of non-traditional agents. In the mid-term (fiscal years 2012 to 2017), the Chemical and Biological Defense Program will mature the scientific understanding and field integrated defense capabilities while looking ahead to evolving trends.

Progress

Among our efforts relevant to countering non-traditional agents, the Chemical and Biological Defense Program is developing the Bioscavenger medical countermeasure. It is a prophylactic regimen intended to prevent incapacitation and death from exposure to a wide range of nerve agents. Food and Drug Administration approval for the recombinant Bioscavenger product is estimated for 2017. The Department of Defense is also exploring development of a catalytic Bioscavenger to more efficiently eliminate nerve agent intoxication.

ACQUISITION REFORM

Status

Changes to the Defense Acquisition System directed by Congress are refocusing the way we manage acquisition programs. Recent regulatory and statutory changes, such as the Weapons Systems Acquisition Reform Act of 2009, target the early phases of the acquisition development cycle. There are new requirements for robust analysis of alternatives prior to initiating the

acquisition process, increased competition, emphasis on systems engineering, competitive prototyping, and the evaluation of technology maturity so that our acquisition programs are ready for the next phase of development. In order to reduce the risk of failure, the Chemical and Biological Defense Program is applying the tools of this acquisition reform to programs that pose particular technical challenges. Implementing these reforms reduces technical risk, validates design and cost estimates, supports evaluation of manufacturing processes during the later stages of development, and helps to refine requirements. The bottom line for us is a more holistic acquisition strategy and a better chance for success.

Looking Ahead

Our holistic approach for managing acquisition programs requires stakeholder collaboration and early involvement toward determining whether formal entry into the Defense Acquisition System is appropriate. If so, the reforms ensure we get the requirement and technology right before we proceed with a materiel solution (new capability). The decision to proceed is known as the Materiel Development Decision; we issued six within this enhanced process in fiscal year 2009: Transformational Medical Technologies Initiative-Hemorrhagic Fever Virus Therapeutics, Joint Biological Standoff Detection System Increment II, Joint Biological Tactical Detection System Increment I, Human Remains Decontamination System, Filovirus Vaccine, and the Joint Effects Model Increment II. In fiscal year 2010, the Chemical and Biological Defense Program has already conducted four materiel development decisions and plans to conduct six more before the end of fiscal year 2011.

Progress

In fiscal year 2009, the Chemical and Biological Defense Program fielded over 1.3 million individual pieces of equipment to our servicemen and women around the globe. This new equipment represents improvements to capabilities service members depend on for protection. We continue to plan and program for additional innovations.

CHALLENGES

Balanced Investment

Balancing the level of Research, Development, Test and Evaluation funding with Procurement funding is critical to our success. While our investments in biosurveillance, medical countermeasures, and non-traditional agents are the focus, we must neither underfund nor deemphasize the range of protection, medical, detection, decontamination, and information system requirements that establish the layered "defense-in-depth" strategy we employ to protect our personnel. The layered "defense-in-depth" strategy is necessary and requires significant and consistent investment as reflected in the President's fiscal year 2011 budget request for the Chemical and Biological Defense Program.

As we ramp up efforts in biosurveillance, medical countermeasures, and non-traditional agent defense, the preponderance of our investment will be Research, Development, Test and Evaluation dollars. It is important to note that medical countermeasure development is much more expensive compared to other systems. This cost is another factor in our shift towards a budget heavy in Research, Development, Test and Evaluation funds. Further, acquisition reform is driving us to do more up-front work and competitive prototyping, which again increases the demand for additional Research, Development, Test and Evaluation funding.

Test and Evaluation Infrastructure

One of the most fundamental challenges facing the Chemical and Biological Defense Program stems from the prohibition on conducting open-air test and evaluation using real biological and chemical agents. Developers and testers must rely upon the use of sophisticated test chambers in controlled environments to prevent release of agents while obtaining the most relevant information needed to confirm the function of our defense systems. Evaluation of defense system performance under operational conditions requires the employment of simulated biological and chemical agents in field tests. The use of test chambers, control methodologies,

and simulated agents is a significant portion of the Chemical and Biological Defense Program investment portfolio.

CONCLUSION

Today we face a broad array of threats, both natural and man-made. This challenge will only increase with the exponential growth in the field of biotechnology, global industrialization, and the wealth of scientific information available through mass communications. We are obligated to fund the development of improved chemical and biological defense capabilities to protect our citizens and ensure our security in this changing and uncertain environment. Madam Chair, Congressman Miller, and members of the subcommittee, on behalf of the men and women of the Chemical and Biological Defense Program—our military personnel, civilians, and contractors, thank you for the opportunity to appear before you and we greatly appreciate the tremendous support and leadership we receive from Congress.