[H.A.S.C. No. 112–18]

# HEARING

ON

# NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2012

AND

# OVERSIGHT OF PREVIOUSLY AUTHORIZED PROGRAMS

BEFORE THE

## COMMITTEE ON ARMED SERVICES
## HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

---

SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES HEARING

ON

# COUNTERPROLIFERATION STRATEGY AND THE FISCAL YEAR 2012 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FOR THE DEFENSE THREAT REDUCTION AGENCY AND CHEMICAL BIOLOGICAL DEFENSE PROGRAM

---

HEARING HELD
MARCH 11, 2011

---

U.S. GOVERNMENT PRINTING OFFICE

65–466 WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office,
http://bookstore.gpo.gov. For more information, contact the GPO Customer Contact Center,
U.S. Government Printing Office. Phone 202–512–1800, or 866–512–1800 (toll-free). E-mail, gpo@custhelp.com.

SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES

MAC THORNBERRY, Texas, *Chairman*

JEFF MILLER, Florida
JOHN KLINE, Minnesota
BILL SHUSTER, Pennsylvania
K. MICHAEL CONAWAY, Texas
CHRIS GIBSON, New York
BOBBY SCHILLING, Illinois
ALLEN B. WEST, Florida
TRENT FRANKS, Arizona
DUNCAN HUNTER, California

JAMES R. LANGEVIN, Rhode Island
LORETTA SANCHEZ, California
ROBERT ANDREWS, New Jersey
SUSAN A. DAVIS, California
TIM RYAN, Ohio
C.A. DUTCH RUPPERSBERGER, Maryland
HANK JOHNSON, Georgia
KATHY CASTOR, Florida

PETER VILLANO, *Professional Staff Member*
MARK LEWIS, *Professional Staff Member*
JEFF CULLEN, *Staff Assistant*

# CONTENTS

## CHRONOLOGICAL LIST OF HEARINGS

### 2011



### FRIDAY, MARCH 11, 2011

### COUNTERPROLIFERATION STRATEGY AND THE FISCAL YEAR 2012 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FOR THE DEFENSE THREAT REDUCTION AGENCY AND CHEMICAL BIOLOGICAL DEFENSE PROGRAM

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS



WITNESSES



APPENDIX

# COUNTERPROLIFERATION STRATEGY AND THE FISCAL YEAR 2012 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FOR THE DEFENSE THREAT REDUCTION AGENCY AND CHEMICAL BIOLOGICAL DEFENSE PROGRAM

---

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES,
*Washington, DC, Friday, March 11, 2011.*

The subcommittee met, pursuant to call, at 12:44 p.m., in room 2212, Rayburn House Office Building, Hon. Mac Thornberry (chairman of the subcommittee) presiding.

## OPENING STATEMENT OF HON. MAC THORNBERRY, A REPRESENTATIVE FROM TEXAS, CHAIRMAN, SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES

Mr. THORNBERRY. The hearing will come to order.

Let me thank all our witnesses and guests for their patience as we have had votes on the floor.

I appreciate everybody being with us today on this hearing related to counterproliferation strategy as well as the 2012 budget request for the Defense Threat Reduction Agency and the chemical biological defense programs.

I think that there has been widespread agreement among those who have run for President and most others that the greatest single danger to this country's national security is a weapon of mass destruction, which could be detonated here on our shores.

As a matter of fact, I noticed in yesterday's *Washington Times* is a press report quoting a study to Congress that says: While counterterrorism actions have disrupted Al Qaeda's near-term effort to develop a sophisticated WMD [weapon of mass destruction] attack capability, we judge the group is still intent on its acquisition.

So all of us ought to remember their intention and what they will do if they can get their hands on such a weapon.

I notice that the 2010 QDR [Quadrennial Defense Review] says that 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 those weapons. And that is what this hearing is about.

Since 2002, the government has basically had a three-prong strategy: Nonproliferation, counterproliferation, and consequence management. This hearing focuses primarily on counterproliferation, but it is important I think for us to look at the

whole strategy. And I appreciate the witnesses' statements that have helped us do that.

I do notice that as far as the budget goes, for 2012 for DTRA [the Defense Threat Reduction Agency], the request is about $76 million less than the 2011 request and the amount that this committee authorized. And for the Chemical Biological Defense Program, it is about $52 million less than the 2011 request. So it does lead one to wonder, why are these accounts going down? Although, we all are, of course, aware of the budget situation the country faces.

So, again, I appreciate our witnesses being here. Before I turn to them, let me turn to the ranking member for any comments he would like to make.

[The prepared statement of Mr. Thornberry can be found in the Appendix on page 37.]

**STATEMENT OF HON. JAMES R. LANGEVIN, A REPRESENTATIVE FROM RHODE ISLAND, RANKING MEMBER, SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES**

Mr. LANGEVIN. Thank you, Mr. Chairman.

I want to likewise welcome our witnesses before the subcommittee today. And, Mr. Chairman, I want to thank you for holding this very important hearing on a clearly important topic to our national security. The work obviously being done at the Defense Threat Reduction Agency, and Chemical Biological Defense Program is essential to keeping the Nation secure. With so many other pressing things going on in the world, it can be often easy to forget that we face many threats around the world, in particular with respect to chemical, biological, radiological, and nuclear threats to the country.

Likewise, so I am glad that we are focusing attention on the work being done at DTRA and the Chemical Biological Defense Program. I look forward to getting an update on the work that you all are doing.

I likewise, Mr. Chairman, am concerned about the reduction and the decrease in the budget request for fiscal year 2012 or fiscal year 2011, and I would like the witnesses to delve into those things in particular. And then I have other questions.

So, with that, I thank you, Mr. Chairman, for holding the hearing. And I look forward to the witnesses' testimony.

[The prepared statement of Mr. Langevin can be found in the Appendix on page 39.]

Mr. THORNBERRY. I thank the gentleman.

We will now turn to our witnesses.

We have the Honorable Kenneth B. Handelman, Acting Assistant Secretary of Defense for Global Strategic Affairs; Mr. Andrew Weber, Assistant Secretary of Defense for Nuclear and Chemical and Biological Defense programs; Mr. Kenneth Myers, Director of Defense Threat Reduction Agency; and, Brigadier General Jess Scarbrough, Joint Program Executive Officer for Chemical and Biological Defense.

If you all could, we would appreciate summarizing your statements in the interest of time. And, without objection, your complete written statements will be made part of the record.

Mr. Handelman.

**STATEMENT OF HON. KENNETH B. HANDELMAN, ACTING ASSISTANT SECRETARY OF DEFENSE FOR GLOBAL STRATEGIC AFFAIRS, U.S. DEPARTMENT OF DEFENSE**

Mr. HANDELMAN. Mr. Chairman, Mr. Langevin, members of the subcommittee, it is an honor to testify today with three close colleagues on the Department's counterproliferation strategy and our efforts more broadly to counter the threat of weapons of mass destruction. I would like to focus my opening remarks on an area that has attracted some significant attention; that is DOD's [the Department of Defense's] work on biodefense.

Now, let me be clear about the administration's WMD priorities overall. The President has said that the greatest threat to the United States is a nuclear weapon in the hands of a terrorist. However, the President has also given a similar high priority to biodefense. The December 2010 National Strategy for Countering Biological Threats highlighted the significant threat to our people, our coalition partners, and our forces posed by especially dangerous pathogens.

Sometimes it is not so obvious why DOD should care so much about biodefense issues. Let me briefly highlight why we care, and very much.

First, biodefense is not merely about the health of U.S. troops and their families. It is about the ability of U.S. troops to fight and win in an environment that might be compromised by diseases against which we have no protection or treatment.

Second, even if U.S. Forces are prepared to fight in such an environment, our doctrine and our force structure require that we fight alongside coalition partners. If our partners are vulnerable to biothreats, then we can count them out of the fight right from the start.

Third, biodefense is an area where we can use modest investments prior to a conflict to maximize our capabilities during a conflict. Here are some of the things we are already doing in this area. To limit proliferation of especially dangerous pathogens, we are working with partner countries in areas where dangerous diseases are endemic to improve laboratory, physical security, and security practices.

To improve our understanding of dangerous diseases that could impact our troops, we are expanding our cooperative research projects with partner countries and leveraging the U.S. military's overseas lab network.

To improve our early warning posture we are pursuing a disease surveillance capability that will give us a heads up about the origin and potency of outbreaks that could threaten our forces or our population.

These are just a few examples of how DOD is trying to get ahead of what we believe is an underaddressed challenge. I want to emphasize how closely we coordinate with our colleagues in the public health business without getting into their business.

We have been careful to maintain our focus on national security and avoid overlap with the efforts of established U.S. public health outreach overseas. But it is very important that DOD engage aggressively in this global biodefense effort. DOD and State are the only U.S. agencies with authority to develop biodefense relation-

ships with partners around the globe in support of U.S. national security, and DOD, of course, has a special equity given how frequently and far afield we deploy our troops.

Our work in this area is still in its infancy. We have a great partnership with other U.S. agencies, and we are learning important lessons. I want to leave you with two of those lessons as I wrap up.

First, we have learned that, as with other weapons of mass destruction, threats to our forces are best addressed at the source in regions where dangerous diseases originate. And, second, we have learned that even as we carefully deconflict our biodefense work with the activities of our public health colleagues, there is really no way to draw a bright line between national security and public health.

Mr. Chairman, I wanted to use my opening remarks to focus on DOD's biodefense activities because this is a conversation that we need to expand with the committee. As biological science becomes more accessible and borders less secure, we believe that this threat will only increase and DOD's biodefense activities will increase as well. And I look forward to discussing these and other issues with you today.

[The prepared statement of Mr. Handelman can be found in the Appendix on page 40.]

Mr. THORNBERRY. Thank you. I appreciate it.

Mr. Weber.

**STATEMENT OF HON. ANDREW WEBER, ASSISTANT SECRETARY OF DEFENSE FOR NUCLEAR AND CHEMICAL AND BIOLOGICAL DEFENSE PROGRAMS, U.S. DEPARTMENT OF DEFENSE**

Secretary WEBER. Chairman Thornberry, Ranking Member Langevin, and members of the subcommittee, thank you for giving me this opportunity to discuss with you Department of Defense efforts to counter weapons of mass destruction. It is an honor to come before you today to testify with my close colleagues.

Our offices work to ensure the Department of Defense's posture to counter 21st-century WMD threats to our warfighters and citizens here and abroad. Accomplishing this has become more difficult recently due to the constraints of operating under a continuing resolution.

Rapid advancements in technology and manufacturing techniques are making it easier for an adversary, whether state or nonstate, to develop biological and chemical weapons. The threat is real. As stated in the National Strategy for Countering Biological Threats, fanatics have expressed interest in developing and using biological weapons against us and our allies.

The Chemical and Biological Defense Program provides the capabilities needed for a layered set of defensive measures against chemical, biological, radiological, and nuclear attacks. These integrated capabilities improve our ability to sense chemical and biological warfare agents, shield our servicemembers, shape our operations, and sustain our forces.

One capability that is fielded now with our forces in over 300 locations worldwide is the Joint Biological Agent Identification and

Diagnostic System. It is capable of rapidly identifying multiple biological agents, such as anthrax, plague, and avian influenza.

Detection and diagnostics capabilities like this play a large role in biosurveillance, which is critically important to the Department. We need early warning of a biological attack within minutes, not days, through a comprehensive global biosurveillance network. Should an attack occur, we must be prepared to respond.

In last year's State of the Union address, President Obama directed the enhancement of the Nation's capability to develop, license, and procure countermeasures against both bioterrorist attacks and naturally occurring infectious diseases. We are preparing to execute a medical countermeasures initiative that will provide agile and flexible advanced development and manufacturing capabilities to protect our warfighters against known agents and emerging threats for which countermeasures do not exist.

President Obama has stated that one of today's greatest dangers is nuclear terrorism. We believe Al Qaeda and their associates are seeking nuclear and other weapons of mass destruction. It is clear that they would use such weapons if they managed to obtain them. Our offices are the focal point within the Department for both maintaining a safe, secure and effective nuclear deterrent, and countering nuclear and weapons of mass destruction threats.

In February, I visited the 341st Missile Wing at Malmstrom Air Force Base in Montana. I observed the execution of this critical deterrence mission and thanked the extraordinary airmen responsible for providing our Nation with this essential capability.

In order to reduce the risk of emerging nuclear-armed adversaries, the Department of Defense is working with the Departments of Energy and State to implement the President's Global Nuclear Lockdown Initiative to secure vulnerable fissile materiel worldwide. We are also working to improve the Nation's capabilities in nuclear detection and forensics.

To keep Congress fully informed of the U.S. Government's development and fielding of countering WMD capabilities, the Counterproliferation Program Review Committee will provide an updated report in May of this year. It will relate prioritized capability gaps to programs and resources.

The threat of a nuclear, chemical, or biological attack on our troops or the homeland is real and constantly evolving. This means the Department of Defense must develop and implement agile and effective programs to counter weapons of mass destruction. In support of the vision of President Obama and Secretary Gates, the Department is working to strengthen our capabilities to effectively prevent, deter, defeat, and respond to these threats. I ask for your support of the fiscal year 2011 appropriations bill and the President's fiscal year 2012 budget request so that we can work to achieve these goals.

I appreciate the opportunity you have given me to testify today, and would be pleased to answer any questions. Thank you.

[The prepared statement of Secretary Weber can be found in the Appendix on page 55.]

Mr. THORNBERRY. Thank you.

Mr. Myers.

## STATEMENT OF KENNETH A. MYERS III, DIRECTOR, DEFENSE THREAT REDUCTION AGENCY

Mr. MYERS. Mr. Chairman, Ranking Member Langevin, and members of the committee, it is an honor to be here today.

I will address the roles of the Defense Threat Reduction Agency and our Nation's counterproliferation and consequence management efforts in the fiscal year 2012 budget.

The mission of the nearly 2,000 civilian and military personnel of DTRA is to reduce, eliminate, detect, and counter weapons of mass destruction and mitigate their effects. We proudly serve as the combat support agency for the WMD mission.

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 across the combatant commands.

The threat is very real. It is growing in scope and evolving in its potential applications. The presence of international terrorism, the proliferation of weapons know-how, and the emergence of infectious diseases have all changed the game. The consequences of an attack would cause mass casualties, have a crippling economic impact, and cause major sociological harm. Terrorists are determined to acquire WMD and, if successful, will use them.

We have an increasingly effective national strategy for countering the threat. It harnesses expertise across the whole of government and the international community. The new National Strategy for Countering Biological Threats, the Quadrennial Defense Review, and the national military strategy all highlight the pressing need to build additional and more effective barriers between the threat and the American people.

We work to reduce WMD threats at their source, detect, interdict and defeat them, and minimize the effects and consequences of possible attacks. We provide subject matter expertise to national, global, and battlefield levels. We conduct technology development and assist the warfighter with planning and help maintain a safe, secure, and effective U.S. nuclear deterrent.

As you walk down the halls of our facilities, you see nuclear physicists, microbiologists, and Special Forces operators working together to solve complex problems. We truly are a unique institution. I would like to highlight some of our recent accomplishments.

We successfully transitioned the Massive Ordnance Penetrator to the Air Force. It is a 30,000-pound penetrating weapon significantly more lethal and accurate than current weapons in the inventory to defeat hardened, deeply buried, potential WMD targets.

In the past year, DTRA responded to 1,500 reach-back requests from the combatant commanders and the National Guard WMD civil support teams for subject-matter expertise. The total number of requests has more than tripled since 2008, and the product has become increasingly more complex. We provide support to everything from the wars in Iraq and Afghanistan to the Super Bowl and the State of the Union address.

Over the last year, we have made great strides in improving the Department's counter-WMD campaign plan. It details what the Pentagon will do to address the threat over the next 5 years, and

will have goals, tasks, and assessments that will gauge our progress.

DTRA is placing great emphasis on protecting our military personnel against naturally occurring and manmade dangerous pathogens. Through the Nunn-Lugar Cooperative Biological Engagement Program, we are working with the Departments of State, Health and Human Services, and Agriculture to improve biosurveillance and security with new partners in Africa and Asia.

In addition, through the Medical Countermeasures Initiative, we will safeguard our troops against disease and deadly pathogens. Force protection programs such as these are a top priority for our warfighter and for DTRA.

DTRA is reshaping our efforts through our latest strategic plan. It responds to evolving threats while taking into account the difficult economic situation. Our plan has three goals: First, adapt to and shape the dynamic global security environment; two, provide counter-WMD capabilities to meet current threats and challenges; and three, institutionalize a whole of DTRA and whole of government approach to enhance mission execution through collaboration.

Members of the subcommittee, I thank you for the invitation to testify on our mission and for your support of the DTRA SEC in prior years. I look forward to answering your questions.

[The prepared statement of Mr. Myers can be found in the Appendix on page 66.]

Mr. THORNBERRY. Thank you.

General.

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

General SCARBROUGH. I thank the chairman and ranking member for the honor of testifying on behalf of the Department of Defense Chemical and Biological Defense Program. This program provides the joint warfighter with chemical and biological detection and reconnaissance systems, individual and collective protection capabilities, decontamination products, information management systems, and medical countermeasures.

In fiscal year 2010, we provided over 1 million pieces of integrated chemical and biological defense capability to our soldiers, sailors, airmen, and marines.

Consistent with our mission to protect the joint warfighter and the Nation, we are tasked with the mission of developing and integrating biological defense technologies to enable biosurveillance, which includes the early warning, identification, and tracking of biological threats. Toward that end, we are collaborating with the Department of Homeland Security's BioWatch program to maintain a domestic capability.

Regarding our acquisition portfolio, we are developing adaptable and flexible approaches to detect biological threats early enough to initiate a rapid and effective response as called for in the National Strategy for Countering Biological Threats.

Improved detection and precise diagnostics are fundamental to biosurveillance and are key areas of our expertise in the Chemical and Biological Defense Program. We develop and integrate state-of-

the-art detection and diagnostic systems to enable both force protection and force health protection. A new program start in fiscal year 2012, the Next Generation Diagnostic System Program will develop a family of systems that provide improved diagnostics capabilities across all operational echelons.

Another new start in the budget request before you is the DOD Medical Countermeasures Initiative. Based on the President's request to redesign the United States medical countermeasures enterprise in collaboration with the Department of Health and Human Services, DOD plans to execute or establish a dedicated advanced development and flexible manufacturing capability for medical countermeasures. HHS [the Department of Health and Human Services] is focused on large-scale production to address the needs of the national population while we in the DOD are looking to address the unique needs of the joint warfighter.

During early fiscal year 2012, the DOD plans to award a long-term contract to establish and commission this advanced development and manufacturing capability. This new effort is aligned with the DOD mission of protecting our people.

In addition to the biological threat, the Chemical and Biological Defense Program is focusing on other challenges, such as nontraditional agents. These are chemicals and biochemicals reportedly researched or developed with potential application or intent as chemical warfare agents but which do not fall into the category of traditional chemical warfare agents. I can assure this subcommittee we are developing capabilities to counter this threat.

Critical to making required investments in biosurveillance diagnostics, the DOD Medical Countermeasures Initiative and nontraditional agent defense is finding efficiencies within the current programs and operations. Pursuant to the Under Secretary of Defense for Acquisition, Technology and Logistics directive for better buying power, we are integrating measures to ensure all of our programs are affordable and provide a positive on return on investment for the taxpayer.

This subcommittee understands we face a broad array of threats within a changing and uncertain environment. Accordingly, I urge support for funding the development of improved chemical and biological defense capabilities as outlined in the fiscal year 2012 DOD budget request.

On behalf of the men and women of the Chemical and Biological Defense Program, I thank this subcommittee for the opportunity to testify, and I look forward to our discussion.

[The prepared statement of General Scarbrough can be found in the Appendix on page 90.]

Mr. THORNBERRY. Thank you.

And let me thank you all for your brevity in summarizing what is an important and somewhat complex topic. Let me just ask one question, and then I will turn it to Mr. Langevin.

When we talk with folks—and probably for you primarily, Mr. Handelman—when we talk to folks about cybersecurity, they tell us that the numbers and the sophistication of the threat is growing at a very rapid rate, but our ability to deal with the threat is not growing as fast. So the gap between the problem and the solution is growing wider.

My question for you all is, how is the gap doing between the proliferation in numbers and in sophistication of chemical, biological, and nuclear weapons around the world, and our nonproliferation and counterproliferation efforts to deal with that? Is the gap growing bigger, or are we closing in on it?

Mr. HANDELMAN. Mr. Chairman, it is an apt comparison. In the cyber world, which actually, in another hat, I share some responsibility for, one of the real intriguing challenges is that it is almost completely dual-use. Among the WMD areas, the three areas, nuclear, chem, and bio, bio is the one that is mostly dual-use. In other words, it is not strictly military.

So, in terms of your construct of the gap, my own view is that we are actually doing a little bit better in the bio area than in the cyber area. Part of that is just because, even though biological science is expanding, accessibility to it is expanding rapidly, it is not expanding the way access to the Internet and computer skills is expanding.

As a bonus item, I would say, just as a comment, that one of the things that keeps me up at night that I have trouble figuring out is the combination of threats across domains. In other words, the unimagined, what I haven't been able to imagine, combination of a bad guy who wants to somehow combine a biothreat with a cyber attack.

Mr. THORNBERRY. Let me just ask, Mr. Myers, what is your opinion? Is it getting worse? Are we closing in on it, or is it getting further away from us?

Mr. MYERS. Mr. Chairman, I will tell you. I go to work every day with 2,000 people who dedicate themselves to eliminating that threat. To date, we have been successful. As you pointed out in your statement, and my colleagues have as well, the threat is constantly evolving, and the challenge is to stay ahead of it. To date, we are doing that.

I believe every successful encounter that we have with states of the former Soviet Union, with our expansion into places in Africa, Asia and elsewhere, every new technology we develop, every new relationship that we create brings us closer to a successful in-depth defense for the American people. But it is a challenge every single day. To date, we have met that challenge, and we will continue to do so.

Mr. THORNBERRY. Thank you.

Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman.

Gentlemen, again thank you for your testimony.

If I could, Secretary Handelman, I would like to return to an area that I mentioned in my opening statement, and the chairman did as well, about the budget for fiscal year 2012. As you know, the pending fiscal year 2011 defense budget contains a significant increase in funding for our counterproliferation efforts, especially for DTRA, but it is decreased in the fiscal year 2012 proposed budget. I am sure you would agree that the world is not likely to be significantly safer in fiscal year 2012 than in fiscal year 2011. And I would like you to explain the Department's choice to lower the spending amounts for DTRA and chem-bio protection efforts in fiscal year 2012.

Mr. HANDELMAN. Sir, with respect to the DTRA budget, as you may know, the budget request and the appropriated and authorized amount was really flat for many years. The fiscal year 2011 request was actually a significant ramp-up. The fiscal year 2012 request reflects a hard balancing of priorities across our whole department, decisions made at levels above all of us.

I guess I am confident in the capability that that budget request can deliver. I would characterize it as a moderate ramp-down of what had been a previous ramping up. That is my view from the strategy and policy level. Mr. Myers has to live this every day as the director of the agency. He might want to amplify.

Mr. MYERS. Thank you.

We have taken a number of steps over the last 6 months to make the agency as effective and efficient as we possibly can, and we found a number of areas where we could combine operations, lower our overhead, specifically in two to three different areas. We have also gone and closed down two facilities, offices that we had. One was in Dugway, Utah. The other was supporting efforts at NATO [North Atlantic Treaty Organization] SHAPE [Supreme Headquarters Allied Powers Europe]. The efforts that they were supporting will continue on, but we believe that we will be able to provide the same amount of support and expertise from our headquarters at Fort Belvoir than we were on site.

Lastly, we did a strong and very strict rack and stack of all of our priorities, starting from the very top all the way to the very bottom. And those items that were at the bottom—I will give you one example, we have an in-house think tank that is called ASCO [Advanced Systems and Concepts Office]. Its job was to go out, do research, to find the latest thinking on various subjects. And we have cut back significantly in that arena. So savings from each of those three elements will allow us to continue operations, even at a lower budget level.

General SCARBROUGH. Sir, if I could just add one comment as well. From an acquisition and a programmatic standpoint, we have been able to get some efficiencies by being joint. For example, we now deliver one ground respirator, the Joint Service General Purpose Mask, to all four services, the same protective mask, on the ground side. That has reduced some of our operations and support costs by being joint and delivering a common solution. The same thing is with our Joint Chemical Agent Detectors. We have been able to deliver one of those detectors across all of the services, thereby presenting a common solution which can then streamline some costs as we maintain that in the operational force.

Mr. LANGEVIN. Thank you, gentlemen.

I have studied WMD issues and been involved with them for many years now, whether it is in my role in the Homeland Security Committee or in the Armed Services Committee or Intelligence Committee. I clearly think that the threat in the chemical, biological, radiological and nuclear threat fields continues to increase. We know our enemies are dedicated and determined. I am particularly concerned about the chem-bio and, of that, probably the biological threats that we face because of dual-use technologies, because of the knowledge that is out there and how that can be proliferated. What is the Department doing to ensure that it supports new and

evolving technology, especially in the chem-bio protection field, as well as surveillance?

Secretary WEBER. First, I would like to thank this subcommittee's leadership in this area and your leadership and Chairman Thornberry's leadership in this area.

Although the top line for the Chem-Bio Defense Program, from our 2011 request to our 2012 request declined $52 million, down from $1.578 billion, so about a 3.3 percent decline, within that we were able to eliminate some poorly performing programs and actually add two significant new programs in the area of biodefense. We have put more emphasis within the CB Defense Program on biodefense and, in particular, medical biodefense, because that had been underinvested in over the last decade.

So we are launching in the fiscal year 2012 request a Medical Countermeasures Initiative that will leverage the rapid growth in new technologies in the biotech sector for biodefense purposes. And there are two sides to the advancement and spread of biotechnology. One is that our adversaries like Al Qaeda and Al Qaeda in the Arabian Peninsula in their *Inspire* publication just put out a call for microbiologists and chemists to help develop weapons of mass destruction. So we are very concerned about that.

But we have put more focus on leveraging cutting-edge biotechnology to improve our biodefenses. And this is in partnership with other departments like Health and Human Services and Homeland Security. Thank you.

Mr. THORNBERRY. Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman.

Gentlemen, thank you for being here.

There were two big spending initiatives, for lack of a better phrase. One that Secretary Gates said, let's find $100 billion across DOD and redeploy that in better, more effective uses. The other is the $78 billion in, I guess, efficiency initiatives. Collectively, were you involved at all in the first initiative in which you were part of the $100 billion? And, if so, how did you redeploy those assets? And then take a couple seconds on each one of those, each of you.

Mr. MYERS. Yes, sir.

The Defense Threat Reduction Agency was certainly a part of that process. And as I was explaining earlier, we really took three steps. We looked at all of the programs that we were running, and we tried to identify, where can we combine those efforts to become more efficient, provide a more integrated product for our customers? Where can we combine the leadership and support functions for these efforts? Secondly, we took a very long look across. We have a number of facilities——

Mr. CONAWAY. Excuse me. I understand that piece. Help me out, where did you put the money? Or were you able to use the money that you found in efficiencies under that $100 billion umbrella, were you able to redeploy that somewhere else for more effective use, or that went to a pie somewhere else?

Mr. MYERS. No, sir. That was returned to the Secretary.

Mr. CONAWAY. So that was collectively a loss; you just had to come up with things that were less priorities than others, and then that money went somewhere else?

Mr. MYERS. Yes, sir.

Mr. CONAWAY. Then you had to come back and find $78 billion, your share of that. Help me understand the difference between the two. I can understand the motivation for, if I get to spend it somewhere else, the motivation to find something and then redeploy that. That is a different motivation than I am just going to cut. So it appears that the $178 billion was asked of you just to cut and give those dollars to the Secretary and/or taxpayers. How did you distinguish between the two? Or is it just another layer further up your priority chain off your bottom stack that you had to go to get your part of the $78 billion?

Mr. MYERS. The approach we took, sir, was really across the board in terms of identifying just each and every single thing we do, how can we do it more effectively, more efficiently? So while they were separate efforts, we didn't really distinguish between them. We really saw that as an effort that had to be undertaken because of, obviously, the economic situation that we are facing. And we are not done there. We are continuing to look for more ways to do more with fewer funds. And it is across the board.

So, sir, I don't believe—we didn't look at it that way. We didn't look at it as two separate things. We looked at it as an overall across-the-board process that we are not done yet.

Mr. CONAWAY. Okay.

Others want to enlighten us as to how that might have worked?

Mr. HANDELMAN. Sir, the organization I work in is OSD [Office of the Secretary of Defense] policy, so, frankly, we don't own a whole lot of money. Just in terms of looking across the whole Department and reflecting on the mission space that is represented here, I have to tell you, I think that the importance of the countering-WMD mission area to the Department was reflected in the fact that, by and large, if you could add up everything across the entire mission space, which actually is very difficult—it depends on how you define countering-WMD—there actually weren't massive reductions. I think Mr. Weber reflected 3.3 percent——

Mr. CONAWAY. Let me ask you a different way, because I am a little frustrated here. The $100 billion, you sent that money to the Secretary. Did he send any of it back across your spectrum?

Secretary WEBER. Within the Chemical and Biological Defense Program, the efficiencies that we identified were reinvested back into the CB Defense Program. So the answer is yes. And for the services, that was especially true. In terms of the big picture, they were able to reinvest their efficiencies in priority procurement areas for the warfighter.

But the point I would like to emphasize is that the President's fiscal year 2012 budget request to Congress from this program represented today already includes a significant amount of belt tightening in it. And we would ask that you fully support the request. Now, for the fiscal year 2011 request, which it is unfortunate that after 10 years of flatlining, especially for the Defense Threat Reduction Agency, we had succeeded in putting an 18 percent increase into the fiscal year 2011 request, but the effect of the continuing resolution is that we are actually operating significantly below the fiscal year 2011 request because fiscal year 2010 was so much lower.

Mr. CONAWAY. We share your frustration operating under a CR for Department of Defense-wide. We understand what a wreck that is. Any help you can give us with the good folks on the other end of the building would be helpful. I yield back.

Mr. THORNBERRY. I thank the gentleman.

Mrs. Davis.

Mrs. DAVIS. Thank you, Mr. Chairman. Thank you all for being here.

I think, Mr. Myers, you spoke of one of the strategic goals, the whole of DTRA approach. And we kind of throw around whole-of-government approaches a lot, too, and I think from many of our efforts, it is easier said than done. So could you tell me, where do you see some of the blocks in that? And it is not so much funding, right? It is more culture? Or what is it that you see, and how do you really see that making a difference?

I know that you have spoken of the jointness, and that is an important part of this, I think. But could you speak a little bit more to that and how we ought to be thinking and framing that?

Mr. MYERS. Certainly. Thank you.

When I was speaking of the whole of DTRA approach, I mentioned also that we are a pretty unique organization. We have a full 24/7, 365-days-a-year operation, capability, that we run, as well as research and development. So we really have two parallel processes. And my main goal at DTRA is to make sure that the research and development is fully supporting the operations and vice versa. We must work as one, as one entity, one unit, because we are the WMD.

Mrs. DAVIS. Where is the biggest disconnect in that?

Mr. MYERS. I don't believe I could say or identify one specific thing. But let me give you a potential example. Arms control inspections: The operational side of DTRA does the inspections, and we also host the inspectors that are doing inspections. On our research and development side, we are developing the technologies to verify arms control commitments. We must make sure that the equipment that we are producing in our research and development side fits the needs and the constraints and the conditions that our inspectors are going to have to operate in. So we need to make sure that the equipment is rugged; it can move long distances and be strapped to somebody's back; come off on site and work exactly as advertised. So we need to make sure that those things are all working together as one with one common picture. And we have made a lot of progress in that area.

On the whole of government, I would say to you that we have worked extremely hard on that, specifically with our friends at the NNSA [National Nuclear Security Administration], the Department of Energy. The three of us just participated in what we call the bridge meeting. It is DTRA, policy, NCB [Nuclear, Chemical, and Biological Defense Programs] and NNSA all sitting down identifying where we are working in similar areas and fully coordinating, making sure there aren't gaps, making sure there aren't overlaps, making sure that the communication is there. Not only at the strategic level, if you will, but at the action officer level, that the contracts that we are letting in certain areas are meeting it, not overlapping and not leaving gaps.

Similarly, a couple of months back, Mr. Handelman and I spent an afternoon at the Department of State making sure that our biological engagement efforts were completely in synch, completely synchronized with the work that the Department of State and HHS do in those areas.

I think those would probably be the best examples I could give you.

Mrs. DAVIS. Mr. Weber.

Secretary WEBER. If I could please just add to that. Countering weapons of mass destruction by its very nature is a cross-cutting issue, interagency and globally. So this presents a challenge within the Department, within the U.S. Government. Also, within the Congress, there are so many committees that have jurisdiction in this area, as Ranking Member Langevin mentioned the Homeland Security piece. And so leadership from us within the Department, from your subcommittee and committee is critically important. And I will just give one little example.

Mrs. DAVIS. And we know we don't make it easy.

Secretary WEBER. Well, we really need to work together on this, and we are committed to working with you on this. But just one example, biosurveillance: There is a very small program that the Centers for Disease Control executes called the Global Disease Detection and Response Program. It is critical to our national security. But because it is over in CDC [the Centers for Disease Control], it gets very little funding. These are the types of cross-cutting issues.

But I will say that although it is difficult, under this administration—and I have served in public service for 26 years—I have never seen better leadership from the WMD coordinator's office, from the counterterrorism coordinator's office, and interagency cooperation. We have an excellent team that works across agencies, whether it be at the Department of Homeland Security, Department of Health and Human Services, or the Department of Energy or State.

Mrs. DAVIS. Thank you, Mr. Chairman.

Mr. THORNBERRY. Thank you.

Mr. Franks.

Mr. FRANKS. Well, thank you, Mr. Chairman.

And thank all of you gentlemen for being here. I appreciate you keeping watch on behalf of all of us.

Secretary Weber, I wanted to address my first question to you. I know that many have already expressed a concern about the aftermath of a chemical or biological or radiological attack, and I share that concern. But it occurs to me for many reasons that with the terrorist threat, it seems to me that the nuclear threat is one that they would most like to affect if they could, something about the psychology of it I am afraid.

With that in mind, I am concerned about the potential, sort of the ultimate asymmetric weapon that they might use if they had one warhead and some ability to put it above our country and launch an EMP [electromagnetic pulse] attack on our country. And I know that that is something that has grown to be more and more aware on the part of many of us.

But I guess I would like to know, in light of the potential of an EMP attack leaving us with a severely damaged grid and without electrical power for an extended period of time, what is the strategy to redress a scenario of Americans without power for an extended period of time?

Secretary WEBER. Well, preventing terrorist use of an improvised nuclear device is our number one priority. The hardening against EMP attacks is also a priority for the Department of Defense and other areas. And we work with leadership from DTRA in hardening. This year we did testing at Pax River, EMP testing on the E4B aircraft, and in the coming year we will be testing the B2 aircraft. So we have significant expertise in this area.

And although the domestic power grid is not the primary responsibility of the Department of Defense, we are lending our expertise in this area to the Department of Homeland Security. And I would ask my colleague Ken Myers how DTRA contributes to this effort.

Mr. MYERS. Thank you.

DTRA is the technical lead within DOD for the EMP challenge. We are involved in technology development, technical assessments, technical assistance, and we develop the standards by which we judge our ability to withstand an EMP attack or situation.

As Mr. Weber said, we are not the lead, but we have provided specific technical assistance to our interagency partners on exactly the type of threat that you have identified there.

We continue to work, again, as an interagency process, bringing those skill sets that we have to bear to the EMP threat on specifically the grid, as you mentioned.

Mr. FRANKS. Well, thank you, Mr. Myers.

I am hoping that perhaps you might take a look at the Shield Act designed to ameliorate the danger of an EMP attack or, for that matter, a geomagnetic storm, which is certainly an inevitable reality at some point. But for the purposes of this committee, the EMP application is the most significant.

I have sponsored that bill and a number of members of this committee are cosponsoring it. We would love to have your input on it because it is something that, from my perspective, it represents a real opportunity for terrorists to do us a catastrophic harm. And it is one of those things that is difficult sometimes to articulate without seeming to employ hyperbole, but it is, as you know, a very real threat, and it is something that I am afraid that there is still a fundamental lack of awareness of, and I am hoping that you folks will keep an eye on it. I would love to have your response on the Shield Act.

[The information referred to can be found in the Appendix on page 103.]

Mr. FRANKS. And with that, Mr. Chairman, I am going to I yield back. Thank you, sir.

Mr. THORNBERRY. Thank you.

Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman.

It pains me that during our consideration of the 2011 budget, Congress degenerated into the politics of "just say no." And as a result, or as one of the results, DTRA's budget, which had been upped 18 percent, with good reason, ended up remaining at 2010

levels. So it didn't get the bump that was justified, apparently, and now, due to political realities, a movement to reduce the 2011 proposed level of funding downward. This comes at a time when the detonation of a nuclear device or the release of a chemical or biological agent on American soil coupled with a coordinated cyber attack, it could have—it just, the consequences are unimaginable. And that threat is certainly a foreseeable event.

And this is a clear example of politics putting the people of the Nation at risk, and we are further hurting ourselves by funding the government in 2-week increments. And we just cannot, as much as this committee is bipartisan, we cannot fail to look at the results of our overall political strategies in this country, which have gotten into just which party is going to be in control as opposed to what is best for this Nation.

Mr. Myers, I think our annual budget or your annual budget is about worth 1 week of fighting in the war in Afghanistan. And I have heard you say that you have refigured your operations; your think tank you dismantled? Is that basic research? How do you compensate for the dismantling of your think tank? And also, I would like to know if the likelihood of a state or nonstate actor could detonate a nuclear device or a chemical or biological event on U.S. soil? Is the likelihood of that lower or higher than it was 10 years ago?

Mr. MYERS. Thank you, sir.

On the first step, when we were talking about ASCO, ASCO did not do basic research. That was done at our research and development enterprise at the agency. ASCO was responsible for funding think tank research and efforts such as that, multilateral dialogues and things such as that. Those efforts will continue. The funding stream will still be there. The infrastructure that surrounded it will be cut back, and we—I guess, as I said, we have reprioritized those billets to our highest priorities. So for the foreseeable future, those efforts will continue. But we have been able to do them in a much more efficient and a much more effective manner.

Secondly, with regard to your second question, from my perspective, the number one threat, the threat that, as we always say, keeps us up at night is the intersection of the weapons and the materials and the know-how of mass destruction and terrorist groups. That is an extremely daunting task, both in terms of detecting, interdicting, stopping as well as deterring. So I would answer the question that way.

Mr. JOHNSON. Thank you.

Mr. THORNBERRY. I thank the gentleman.

Mr. Gibson.

Mr. GIBSON. Thanks, Mr. Chairman.

And I appreciate the panel being with us today, and I am learning from your testimony. Thank you very much.

I would like to follow up on some of the points that Mrs. Davis I think was bringing to the fore, concerns I have with regard to our whole-of-government approach and particularly how we streamline command-and-control work requirements and field those requirements.

So why don't we begin with General Scarbrough. And I am interested to know both in terms of your agency, and then if you could

comment on across the spectrum of how we defend ourselves from chemical and biological agents, the interactivity and command-and-control relationship between your organization, the Department of Defense, the Department of Homeland Security, the Northern Command. And as you are working in your response, I am interested in particularly, who identifies requirements, and how do you prioritize those requirements? And then if you could speak to RAID [Rapid Assessment and Initial Detection] teams, the RAID teams at the state level in terms of their command and control, state adjutant generals, State Department of Homeland Security, Federal Department of Homeland Security, and Department of Defense.

General SCARBROUGH. Yes, sir. Thank you very much. I appreciate the opportunity to address those questions.

First, with respect to interagency coordination strategically, my particular organization and the Chem-Bio Defense Program work very closely with the Department of Homeland Security in the area of BioWatch and biomonitoring. This is an entity that the Department of Homeland Security has put in a command and controlled aspect that they have put in 30 major urban areas.

Mr. GIBSON. Can you operationally define "work closely"? I mean, you have working groups? Is there like a battle rhythm that you go through? What do you mean by that?

General SCARBROUGH. Yes, sir. We do have working groups, and we also have interagency agreements that define roles and responsibilities of how we move forward.

At the same time, we take some of those particular areas that the BioWatch program is doing and we put it on some of our major installations, and those installations are obviously prioritized by the threat. Case in point, Andrews Air Force Base is one; some of the other installations in some major urban areas.

With respect to Department of Health and Human Services, we work very closely with them, as I have a medical countermeasure portfolio, and I deliver or I bring certain vaccines, like anthrax and smallpox, to FDA [the Food and Drug Administration] approval. At the same time, we work with DHHS as they manage the Strategic National Stockpile. So the services draw on that capability based on the needs that they have and the requirements that they have wherever they go throughout the entire world.

With respect to requirements. With respect to requirements, we work very closely with the Joint Staff. They identify, with the services, the gaps and the requirements. They also take into account what Mr. Weber was talking about, national priorities. But at the same time, they look at their—each service—particular areas that they would like for us to deliver to them based on their mission sets.

With respect to command and control, I would offer one of the things that I am trying to do within my particular organization and within the CBDP [Chemical and Biological Defense Programs] portfolio and have been working very closely with Mr. Myers and DTRA on this, is to develop an integrated holistic solution set for the warfighter. Basically, in the area of biosurveillance, I have multiple programs that I deliver that meet that particular integrated concept in the area of detection, in the areas of diagnostics, and in the areas of information management. What we want to do

is we want to bring those all together, deliver that to the warfighter, so the commander can make measured responses quickly in any type of WMD incident.

Mr. GIBSON. In terms of fielding the joint alarm, do you get requests for fielding from the Department of Homeland Security for some of their subordinate organizations?

General SCARBROUGH. Sir, we work very closely with the Department of Homeland Security, and we would trade. But, for example, I would deliver capability to the National Guard, and then the National Guard has a role that they work very closely with NORTHCOM [United States Northern Command] in the area of consequence management. So some of my capabilities, I would say a lot of my capabilities are dual-use, both for the warfighter but yet at the same time can help the National Guard and be defense in depth to the first responders under the homeland defense with NORTHCOM.

Mr. GIBSON. Well, thank you very much. I had further interest, but I think in the interest of yielding back here, I will just say that the whole-of-government approach and who is in charge and how the Department of Defense works with the Department of Homeland Security and all the subordinate agencies is something of concern to me, and I look to explore that in future opportunities.

Thank you very much, Mr. Chairman.

Mr. THORNBERRY. Thank you.

It is of interest to me as well.

Ms. Castor.

Mrs. CASTOR. Thank you much.

And welcome, gentlemen. I wanted to start by complimenting the Obama administration and all of you and everyone on your team for the progress made over the past year on nonproliferation, and I look forward to fruits from your further efforts as well.

I am interested in some of the biodefense detection and diagnostic tools that you have, particularly the Joint Biological Agent Identification and Diagnostic System. Can you discuss the research and development and acquisition? You say you have 300 in various locations. I have seen some research devices back home in Florida that may be similar on detection of disease and diagnostics. But are these efforts, are most of the efforts coming from the private sector? Or are you all in the lead, or are you giving direction?

Then with the FDA approvals on some of the things you are doing, I know that the underfunding of that review process is a problem for the private sector. Does that hamper what you all want to accomplish?

And then, could you also highlight to some of the next-generation detection and diagnostic tools that you are working on?

General SCARBROUGH. Yes, ma'am. Thank you.

The first one, when we talk about diagnostics, the Joint Biological Agent Identification and Diagnostic System was a requirement that was levied onto us by the services so they can increase their diagnostics and surveillance activities globally throughout the world.

I work very closely on the science and technology and the research development side with Mr. Myers and his office, because they do the joint science and technology for the Chemical and Bio-

logical Defense Program. At the same time, what we are doing with the diagnostics program is that we have FDA-approved assays in there that can detect plague, tularemia, avian flu. At the same time, we have 70 prepositioned emergency-use authorizations for multiple influenza or bio-incidents that could be dropped immediately within the FDA in case we have a national emergency. We have to get those licensed by the FDA.

On the next-generation diagnostics, what we are looking there is providing a capability on the back end that can tie into an information management system. JBAIDS [the Joint Biological Agent Identification and Diagnostic System] kind of stands on its own; that program stands on its own. But what we would like to do is now tie it into an information management system so we can get into command and control and things of that nature.

Mrs. CASTOR. Do the rest have another brief answer? Because I want to try to get one more question.

Secretary WEBER. I would just add quickly that time is everything in biodefense. So to the extent that we can improve our early warning and detection capabilities and have rapid accurate diagnostics, and then if we detect an event, delivery of medical products quickly, we will save lives. So it is an area we are going to be putting a lot of increased investments into.

Mrs. CASTOR. Let me ask one other quick question.

Director Myers, do the current events in the Middle East, have they informed anything new in what you are doing? Has CENTCOM [United States Central Command] given you additional requests for support?

Mr. MYERS. We provide support to the combatant commands on a constant continual basis. As I laid out in my opening statement, in terms of the reach-back, it is almost a continuous conversation and sharing of information and expertise. We do have significant subject-matter expertise that they reach back to us to identify in terms of how to plan, how to prioritize and the like. And that is all ongoing and continual. That is probably as far as I would like to go in this forum.

Mrs. CASTOR. Thank you.

Mr. THORNBERRY. Thank you.

Mr. West.

Mr. WEST. Well, thank you, Mr. Chairman, Mr. Ranking Member.

Of course, one of the great things having a name that starts with a W, you are always last. But it really is an honor to be here with each and every one of you today. And 3 weeks ago I had the opportunity to go down and have a nice visit with U.S. SOUTHCOM [United States Southern Command], and then also I had an office call with the CGF [Commander Ground Forces] SOUTHCOM and CGF NORTHCOM. Very concerned, because we know that in the SOUTHCOM AOR [Area of Responsibility], Hezbollah has a footprint; Iran has a footprint as well. And some of the recent developments that we have seen coming out of there, these mini submersibles. I believe one was recently discovered in the last 3 or so weeks. Very hard to detect. And then also, of course, we have a very porous border down South. And if you go to the Border Patrol Web site, you have a category called OTMs. OTM stands for

"other than Mexicans," and I think you know where we are going with this.

I just want to know, how is the agency working with SOUTHCOM and NORTHCOM? Because I really believe we have a soft underbelly. Right now it could be drugs coming up in these mini submersibles, but the next thing you know, we have some of these nontraditional agents or some other type of weapons of mass destruction. So what are your resources that you have down there to cover that SOUTHCOM AOR and then, of course, as it transitions to NORTHCOM and into the continental United States? Thank you.

Mr. MYERS. Thank you, sir.

Our support to SOUTHCOM is robust. We have a number of what we call LNOs [Liaison Officers] that are based at SOUTHCOM to facilitate the coordination and communication. We do work with them on a number of different fronts. One of the areas that is getting a lot of attention is proliferation prevention, as you point out. You know, whether it is a counternarcotic issue or whether it is a counterproliferation issue, whether it is a human-trafficking issue, very often the technologies that are used for one have applicability to all. So we are again trying to maximize the leverage we have on all the different efforts that are under way.

In our research and development programs, we also spend an awful lot of time working with our interagency partners on detecting tunnels, just as we do in terms of hard deeply buried targets. Obviously, slightly different skill sets are brought to bear on each. But it is something that we are working on. It is something that we communicate and we collaborate and we share lessons learned, experience and expertise. And perhaps most importantly, we share the products. If our research and development organization develops a tool that works for counter-WMD, we want to share it across the board to get the maximum impact from that taxpayer investment. And to date, we are doing that today with a number of technologies and look forward to continuing.

Secretary WEBER. If I could please just briefly add to that. These are all global problems, and we have to work with our international partners, because the weakest link is the one that is going to come back to bite us. So we are increasing cooperation with all of the geographic combatant commands to build partner capacity for countering weapons of mass destruction. And this is a little bit of a different focus. It is not always military forces that are the leads in these governments, as we know from counterterrorism and counterdrug.

So this is an area where we are increasing our investment. But I think it is vitally important that we work around the world to build capacities to prevent and prepare for and respond to countering potential weapons of mass destruction.

General SCARBROUGH. Sir, if I could just add one other note. Important to all this tactically and programmatically is to get feedback from the field. So we have a joint acquisition chemical and biological, radiological, nuclear knowledge management system that allows soldiers to give us immediate feedback on their capabilities as they support the COCOMS [combatant commanders].

This is an invaluable tool, as you can imagine, because the bottom line is we want to make sure we are giving them good equipment that is effective and combat-ready. And at the same time, tactically, I do do and conduct joint quarterly equipment readiness reviews, where the services as well as the enterprise come in and we talk about some of their issues as we work together as a team.

Mr. WEST. Thank you, Mr. Chairman.

I yield back.

Mr. THORNBERRY. Thank you.

Let me—I don't know to whom to direct this, so whoever makes it. My impression is that there is not a uniform definition across the U.S. Government on WMD. I was thinking about it a while ago, Mr. Langevin's question. He mentioned radiological, but often that is not included with what one hears.

And I guess my question is, does it matter that there is not a uniform definition of what is included in a weapon of mass destruction? And in your all's work day to day, does that create impediments? Should there be some standardization, and should radiological weapons be included in it?

Mr. HANDELMAN. Sir, perhaps I will take the first stab. I think your observation is trenchant. But when I look at what we do on a day-to-day basis, I can't recall an instance or some situation where the admitted flexibility of the definition has been an impediment to our work. I think, to some extent, this is like obscenity. You know, when we are dealing with uranium of a certain level of enrichment or a certain type of pathogen, we know how to prioritize it. The radiological threat I think is certainly different than a full-up nuclear weapon. But it is certainly within the broad ambit of what we work on and what we think about it. Because one might look at an RDD [radiological dispersal device] as not your stereotypical WMD, it doesn't mean that it is not part of our planning or our thinking. I am not sure if my colleagues would want to amplify.

Mr. MYERS. The definition of weapons of mass destruction in a lot of ways are defined by some of the international agreements that we are a party to. You know, one of the examples that comes to mind is the Chemical Weapons Convention, and in the Chemical Weapons Convention, you have a number of different schedules: Schedule I being an actual weapon; Schedule II being a direct precursor; Schedule III perhaps being a more distant precursor.

And as Mr. Handelman was saying, identifying where the threat stops or where it begins is often difficult. And that is why, specifically in the nuclear and radiological area, the communication in terms of the types of expertise different departments and agencies bring to bear on this threat is critically important. Obviously, most of our work, most of the work that the Defense Threat Reduction Agency has done in the past has really been weapons-focused. I mean, implementation of arms control agreements and things such as that. Our colleagues at the NNSA have an awful lot of experience in the nuclear materials and the radiological sources and things such as that. But from our perspective, we really look at WMD as chemical, biological, radiological, and nuclear. And we—I think that is a pretty common understanding if it is not specifically written down in law.

Mr. THORNBERRY. And we are preparing for a radiological weapon just as we prepare for a chemical or biological weapon?

Mr. MYERS. Yes, sir. In fact, there are a number of programs that our partners at the NNSA run specifically are focused on identifying radiological threats and sources and materials, and collecting those up and bringing them back into safekeeping. We have a role as well.

Mr. THORNBERRY. And I presume also consequence management, which is going to be a completely different sort of thing than chembio.

Let me turn, if I could, to the Medical Countermeasures Initiative. I am interested in exactly what gap this initiative is designed to fill and how it differs from other activities, both within this Department and other departments. And let me give you just a little bit of background.

GAO [the Government Accountability Office] came out with a report recently that said the Federal Government lacks strategic oversight mechanisms and international and interagency efforts in the area of biodefense and biosurveillance; that our efforts are fragmented; and some of these programs were in its report about duplicative programs that got so much attention a week or two ago. So, on one hand, you have got GAO saying we are scattered all over the place. Then you all come and propose a new program in that very area. So I need some help in bringing this together, if you please.

Secretary WEBER. Let me start answering that. The H1N1 pandemic, it exposed a national gap, a vulnerability. It took us 8 months to deliver a vaccine to our public. You may recall the long lines. And so we need and the President has really taken a lead on this and been personally involved in building a concerted national approach to creating a capability for agile, flexible development, enhanced development, and manufacturing of medical countermeasures. And the Department of Defense has to contribute to that, because whether it is a member of our Armed Forces in the field deployed or whether it is a citizen on the street, the same FDA-approved medical countermeasures are required to save lives in the event of a bio-attack.

The GAO report I believe is in a little bit of a time warp because last year, Secretary of Health and Human Services Sebelius led a review of the medical countermeasures enterprise. And as DOD, we participate in the biodefense countermeasures enterprise, and we were part of that review. The report itself had some recommendations, and with strong leadership from the White House, we are implementing those recommendations.

In terms of the gaps that it is meant to address, there are infectious diseases for which we have no vaccines or effective antimicrobial drugs or antiviral drugs. So we need to fill those gaps. Again, whether it is in Northeast Asia or here in the homeland, we can't afford to have it take 15 years to develop a vaccine against a particular drug.

DOD is also very, and has been since the late 1990s, very concerned about the potential for bio-engineered threats, and that is why we are exploring some of these platform technologies that could be multi-use against the unknown threat that would give us

an ability to quickly characterize a pathogen and then develop a countermeasure once we have been able to characterize that.

And then a specific example I will cite is during the H1N1 pandemic, we did a live-fire exercise with an antiviral capability that we had developed through our Transformational Medical Technologies Initiative. We obtained a sample of the H1N1 strain, and within 14 days, we were able to produce a new antiviral drug targeted at that particular strain. And then we conducted testing in ferrets, and it had better efficacy than Tamiflu®, and that particular effort has now resulted in an IND [Investigational New Drug] drug candidate that General Scarbrough through his program is pursuing advanced development of.

Mr. THORNBERRY. Well, I think I want to learn more about it. I am concerned that too many medical issues have been put over on DOD, largely as a result of Congress. And I do appreciate the fact that it is not easy to draw a line between what sort of infectious disease scenario could be a matter for the Department of Defense and what should be CDC, Department of Health and Human Services, and others. I just, again, want to understand the issue about duplication and coordination, which you may well be right, the administration may be ahead of GAO, but also the proper role of DOD in doing certain things in the medical area. Because I think, my own view is that it has shifted probably outside of scope.

Mr. Weber, let me stick with you and ask another question. In the 2010 Defense Authorization Act, the House report proposed disestablishing the Counterproliferation Program Review Committee, and I believe the Department of Defense was okay with that. Now, it got dropped in conference, so it did not make it into law. But I still think it is worth asking, what are they doing now? And how, in the various reorganizations, have other entities taken over some of that coordinating function?

Secretary WEBER. Well, since the requirement was not dropped, we will deliver a report to you in May of this year. And based on some of the GAO comments, we hope it will be a more useful and effective report in that it will not just track the budget request but also the actual appropriations and expenditures.

The leadership has really changed with the filling of the position of a WMD coordinator at the White House. Gary Samore and his team have done an excellent job, and also, on the homeland security side, under John Brennan's leadership, of coordinating these efforts. And I think that is something that didn't happen as effectively before that position was established and filled.

So the CPRC [Counterproliferation Program Review Committee] is a useful venue. In fact, it is meeting this afternoon at the Pentagon, and we have representatives from the Department of Energy, State, Homeland Security, and the Office of the Director of National Intelligence and others participating in that. So it is useful, and we hope to make the report this year more useful. And we hope to use it to better align our resources and investments against gaps.

Mr. THORNBERRY. Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman.

For the panel, the last question that I have, in the range of threats that we face from nuclear, radiological, chemical, or biologi-

cal, obviously the consequences of such an attack would be devastating. Worst-case scenario likely is that of a detonation of a nuclear device. Results would be, obviously, the damage would be catastrophic and loss of life. But not to be overlooked and perhaps almost, if not equally, devastating would be that of a chemical or biological attack. The thing that concerns me the most is a biological attack. With nuclear, Mother Nature didn't make it easy to make highly-enriched uranium or weapons-grade plutonium, and in many cases, it is very difficult for terrorists to get their hands on it. If they stole it, at this point, it would take a nation-state to make the nuclear fuel. But that is not like the chemical or biological weapons. And the thing that bothers me the most, of course, is if they can develop a biological weapon and they can disburse it, they can do it again and again and again.

My question is, particularly on anthrax, which is a highly likely biological agent that they would—terrorists would develop and use, how close are we to developing the next-generation effective antidote for an anthrax attack and biological agent? And also, tell me about where we are in terms of surveillance. Right now, our surveillance capabilities are really lacking in many ways, very human dependent, human interactive. It requires a few days before we actually test and then do the analysis and get the results of the biological tests. What we really need is real-time surveillance. How close are we to having a real-time nonhuman interactive surveillance system deployed?

Mr. HANDELMAN. Let me take a crack briefly at the second part of your question, the surveillance piece. And I will focus on one aspect of it.

To have the surveillance system of ultimate elegance, we are some time off. But I think we are a lot further ahead in our efforts than we were just a few years ago to sort of move that surveillance system farther away from our borders, to move our defensive perimeter as far out as we can. We are starting to build new relationships in Africa. We just did a trip with Senator Lugar to establish some cooperative relationships in some of those countries last fall, and we will be looking to build similar relationships in Southeast Asia soon, I hope. There is a long way to go, and it is labor-intensive.

Let me turn to my other colleagues on the antidote piece.

Secretary WEBER. Secretary Danzig has written on this reload problem that you described, because an improvised nuclear device would probably be a one-time event because of the finite supply of fissile materiel. But with bio, it is different. There could be a capability, if you can launch one attack, that you could launch multiple attacks.

We have looked at some of the historical examples of biological attacks. One in particular, the Aum Shinrikyo, is well known for its attack with sarin gas on the Tokyo metro, but they also launched two attacks using anthrax. And the only reason those two attacks failed was because they had not acquired the correct virulent strain of anthrax. So that tells me that we need to focus and continue to focus more efforts on keeping virulent strains of *Bacillus anthracis* out of the hands of terrorist groups. And we are doing

that globally through the Nunn-Lugar program, by consolidating and securing pathogen collections around the world.

And as my colleague mentioned, we traveled, the three of us, with Senator Lugar to east Africa this last fall and saw for ourselves anthrax being stored in a regular veterinary laboratory with hardly any security. So that nexus between terrorism and the materials is of great concern to us.

On your point about biosurveillance and just preparedness for such attacks, time really is everything. And whether it is detection to know that an attack has occurred, if you don't know about it until people are symptomatic and start showing up in hospitals, your ability to treat has significantly declined.

We are better positioned with antibiotics in our National Stockpile, and of course, the force is vaccinated against anthrax. But we need to do everything we can to reduce the times to use our environmental and medical diagnostics, to quickly and accurately become aware of an attack and get early warning, but also in the event of an attack, to deliver medical countermeasures in time to save lives because it really is the case where hours matter. And with DARPA [the Defense Advanced Research Projects Agency] and some of the efforts in the Chem-Bio Defense S&T program, we are going to be investing in presymptomatic diagnostics that will allow us to know even before somebody is showing symptoms that they have been exposed to a dangerous agent like anthrax.

Mr. LANGEVIN. I guess my question, though, is on airborne surveillance systems that we have take days right now between the time something is detected and tested. That is too long for to administer prophylactic antibiotics. You have to get it into someone within the first 24 to 48 hours. Or by the time people start showing symptoms, it is too late. So what I want to know is, how close are we to having that real-time airborne biosurveillance system in place?

Secretary WEBER. In terms of the domestic capability and I believe in 30 of our urban areas, the BioWatch program of the Department of Homeland Security is developing its next generation that will have automated detection capability. Right now, the air samplers have to be taken back to a laboratory for analysis, and clearly, we can't afford to lose that time. But I understand they are fairly close to achieving a capability to have that real-time surveillance.

But I also want to emphasize the domestic biosurveillance is extremely important, but so is global biosurveillance. And the Department of Defense has a network of overseas laboratories around the world that help us provide an early warning system on a global basis, including in countries where some of these rare diseases are endemic. And so we have to look at it in terms of protecting our own urban areas, but also, it has to be a global approach to be effective, given how quickly an H1N1, whether it was mild form of the virus, it showed how quickly these self-spreading contagious diseases can move around the world.

Secretary WEBER. If Mexico had had a bio-surveillance system, perhaps H1N1 could have been isolated and contained within that part of Mexico where it originated.

Mr. LANGEVIN. Thank you, Mr. Chairman.

Mr. THORNBERRY. Mr. Myers, it has been brought up several times, the budget ups and downs with your organization. I want to understand what—there was a substantial increase in the request last year. This committee authorized that. It has not been appropriated. What would you have done or would you do with that extra money that you are not doing now with a flatline 2010 level?

Mr. MYERS. A number of things.

First of all, during the preceding decade, as Mr. Handelman explained, we faced a flatline budget. We took on a number of different additional mission areas, and we went ahead and funded that from within, so we did not receive additional funds to take on those new mission areas. And, as a result, we had to make some very, very difficult decisions. Some of that is in terms of our infrastructure, information technology capabilities, and the like. So the fiscal year '11 request helps us fix some of those problems that we incurred.

In addition to that, the fiscal year '11 request gave us some specific capabilities to move out with strong support for the combat and the commanders, specifically, our ability to help detect nuclear radiological threats.

In addition, specific efforts, we have talked a lot about the lines of defense, moving them as far forward as possible. The fiscal year '11 budget request included specific increases in our engagement and biological threats in Africa and Asia and elsewhere, as well as the Nunn-Lugar program's role in the global nuclear lock-down effort, our efforts to eliminate potential threats by securing and making them more safe.

I would say, on a macro level, that 17½ percent, in terms of making sure that we have the tools to serve the warfighter, what it really did was it looked at each line of defense that we have erected between the threat and the American people and made substantial improvements to each one. I would be happy to share some of the details of that with the subcommittee, but just in terms of the overall view, at the source was a large part of it.

Detection was another large part of it. Interdiction, it significantly increased the special relationship we have with Special Operations Command and the tools that we work with them on.

And also, quite frankly, it helped us develop the consequence management, the forensic tools. If we are able, as Mr. Weber said, in terms of identifying the threat before it happens—unfortunately, if an event were to occur, the quicker we are able to identify where that threat came from and who was responsible, the quicker we are able to respond. And if we are able to do that with a high level of effectiveness, we will be able to deter perhaps some of those who would otherwise attack.

So, again, that request was across the board, sir.

Mr. THORNBERRY. Okay. Well, I think we will obviously need to be in touch once we see what happens finally with fiscal year '11, to analyze then your request for fiscal year '12 to see how it is changed. And it is a very difficult situation for everybody to be in, there is no question. And so we want to look at that again.

Let me ask you one other thing. You talked earlier about your R&D efforts. Talk to me just a little bit, if you would, about how you coordinate that with lots of other R&D efforts. We had a whole

hearing with all the services S&T folks and DARPA recently where that was a major thing we talked about, is how do you coordinate all of this, and so you are another player in that R&D arena.

Mr. MYERS. Yes, sir. Thank you.

The participants in the hearing you referenced we work very closely with, Assistant Secretary Lemnios, research and engineering, as well as Regina Dugan, the director of DARPA. They are very close relationships.

Mr. Lemnios provides us with the guidance in terms of apportioning our resources in terms of basic research, where to really focus a lot of our efforts. We coordinate very closely with DARPA to ensure that we are working in similar lanes, if you will, in terms of towards common goals, but that we each have a role to play. I work with her quite a bit, and it is a good working relationship.

In addition to that, our research and development is guided in great part by the requirements that we receive from the services, from the Secretary, from the joint staff, and the like; and we utilize those as the basis for our commitment of funding in various areas.

Mr. THORNBERRY. It seems to me I am sure there is some coordination with the national laboratories. When you start just thinking through the different organizations in the government who do some of this, it is a lot.

Mr. MYERS. Sir, let me give you an example. One of them would be specifically increasing our capabilities in terms of verification technologies, the technologies that we would have to verify compliance with arms control treaties. In that case, you have the Department of State, the Bureau of Verification, Assistant Secretary Gottemoeller. You also have NNSA in conjunction with the national labs, and you also have an effort at the Defense Threat Reduction Agency. And so you have these three parties, plus the labs.

And we meet regularly. In fact, Assistant Secretary Gottemoeller hosted a large roundtable for all the partners to really come in and identify goals, identify paths to those goals. What are the limitations? What are the conditions that, A, they might be used in, B, they might be transported or, C, what kind of technologies are we talking about? So, A, we have a common set of goals that we are all working towards but that we all understand the paths and ensure that they are complementary of each other of.

And obviously, our friends at the NNSA have a tremendous relationship and resource with the national labs, but DTRA is also very pleased. We do an awful lot of contracting work with the laboratories. And, again, we work very hard to deconflict those contracts and those efforts with our other government partners.

Mr. THORNBERRY. General, you talked in your statement and in your oral summary about nontraditional agents. Can you give me an example of the sorts of things—because, again, it seems to me that it could be a wide universe that you would research. And so what sorts of things are you working on?

General SCARBROUGH. Sir, nontraditional agents are, as I explained in my oral, are things outside of the chemical warfare, biological warfare convention. I really can't go in open session here and elaborate, because I would breach security rather quickly to talk about specific areas, but I am more than happy to——

Mr. THORNBERRY. And I appreciate that. I presume that the areas you work on would be informed by the Intelligence Community on what to pursue.

General SCARBROUGH. Yes, very much so, sir; and we try to develop capabilities quickly around those.

If I could, if I may, sir, one other thing. I just want to take this opportunity to correct the record. Earlier, I indicated in my response to Mr. Gibson that the Strategic National Stockpile is managed by DHS, Department of Homeland Security. It is managed by the Department of Health and Human Services, not DHS.

Mr. THORNBERRY. Thank you. If I could switch a little bit into the broader-strategy-like questions, particularly cooperative threat reduction, we are still spending money to do things in Russia that a lot of folks might say they ought to be doing for themselves at this stage. One of the first trips I took when I got to Congress was to Ukraine and Russia looking at some of those efforts, which at that time was absolutely critical, it seems to me, and very important work. But why are we still doing that?

Mr. HANDELMAN. Mr. Chairman, it is an excellent question.

Let me explain a couple of things about the process.

First of all, in general, they ask; we don't offer. We don't always say yes. This is very much a process of looking at what they have that needs to be secured or eliminated and what matters most to us. One of the problems we have in evaluating these requests is that, you know, Russia is back on its feet economically. The way in which the country handles all of its affairs in its different regions is not quite as consistent as certainly we do here in the United States.

So just for example, if we want to have 100-percent confidence that a mobile missile launcher has in fact been completely eliminated, whether it is pursuant to a treaty or, you know, some other reason that it is being taken out of service, one of the things we think about is that if we can be part of the process of eliminating it, that gives us that 100-percent confidence.

The other thing that I would say about nonproliferation with the cooperation with the Russians is that it has been one of the few areas in a relationship that certainly has its peaks and valleys that has been consistent. Cooperation that we have from the Russian ministry of defense continues to be very straightforward. The same with the atomic energy ministry, Rosatom.

Russia has played an important role I think in sort of the coalition of the willing on nuclear security initiatives that were started under the Bush administration and continued now. I am not saying that the Nunn-Lugar program somehow purchases that goodwill, but it is the foundation of a nonproliferation relationship we have with the Russians that has endured.

Mr. THORNBERRY. Well, I realize that the dollars we are talking about now are not enormous like—compared with the money we have spent before, and I appreciate that. But I still get the sense maybe we are being asked to pay for things that they could and should be doing for themselves. But that is, you know——

But let me expand. I was very interested in y'all's trip with Senator Lugar to Africa and where all that is leading. Can you give me some idea of what you see the role of the Department of De-

fense is in that greater security over potential biological pathogens, whether it was in the countries you mentioned or beyond that? Can you flesh that out a little bit? Again, DOD's role versus others. And give me kind of a vision of where that is heading.

Mr. HANDELMAN. Sure. Let me start. Of course, my colleagues can amplify.

I mentioned in my opening remarks the point that the Department of Defense and, to some extent, the Department of State are the only two departments in a position to look at biosecurity internationally from a national security perspective. So you are familiar, I think, with the biosecurity work that was done in the former Soviet states. The model there, or at least the point of departure, was that there had been a very complex and significant bioweapons program complex, and the foundation of the work there was eliminating infrastructure and other things that existed.

So looking out in a place like Africa or other regions, obviously, you know, they are not bioweapons programs. There are endemic diseases. There is some science capacity. They are not necessarily evidence of terrorist organizations in any particular place at any particular time. But, frankly, our goal is to get ahead of the potential presence of terrorist organizations, and we think a lot about regions that have trouble with securing their own borders. So that is sort of the strategic framework.

Why Africa? Well, to tell you the truth, one reason was that there already is a significant international and U.S. public health presence there, and our view was this is a place to partner with other U.S. agencies. I am thinking of the CDC that has been in Africa for years, a little more recently the PEPFAR [President's Emergency Plan For AIDS Relief] program.

So the point is not that the Department of Defense is coming in and, you know, parachuting in and taking over. Far from it. In fact, depending on what the particular type of activity may be, whether it is just providing basic physical security for a laboratory or helping foreign scientists and laboratory workers improve their laboratory security practices or working on disease surveillance, it could be that we actually work through the CDC or other agencies. And it is not that they are our subcontractors. It is that they are on the ground and we don't need to duplicate what they are doing.

So that is an example of sort of the nuts and bolts.

Mr. THORNBERRY. I would appreciate any comments. But, also, is there any money in this budget request in this effort—and, if so, to do what—for fiscal year '12?

Mr. HANDELMAN. For fiscal year '12, yeah. Indeed. Off the top of my head, I am not sure what it is, but it would be to establish some of these laboratory relationships. It goes in the broader rubric of biosurveillance.

Mr. MYERS. Yes, sir. The fiscal year '11 request for the Nunn-Lugar program, overall, was $522 million. That included specific requests for bioengagement, Africa, Asia, Pakistan, Afghanistan, Iraq, places such as that.

And the fiscal year '12 request is a little bit smaller than that at about 508, but, again, reflects a large component of that is biological, the cooperative biological engagement program, amplifying and taking advantage of the relationships we are able to build in

Africa and elsewhere and look to expand those to other areas as well.

Mr. THORNBERRY. Well, I presume that the more you engage, the more you will find to do. I mean, that is what happened with Russia. You find greater gaps, greater vulnerabilities, places that need security, and then we will be asked to help provide that security around various pathogens. I presume that it is going to grow.

Mr. HANDELMAN. Well, Mr. Chairman, let me give you an example.

The bottomless pit for U.S. assistance is certainly not something that we want our nonproliferation programs to become, and I understand the point you are trying to make. But let me give you an example of a situation with Russia where we had lots of requests but we prioritized what we thought would have the biggest bang for the U.S. buck and what addressed the most troubling threat, and it is the chemical weapons elimination facility at Shchuchye. They had chemical weapons depots across Siberia. And I think you are familiar with this one. This one was not blister agent. It was nerve agent. And it was not bulk storage. It was, I think, 2.1 million artillery shells and rockets. So it is the most dangerous stuff in its most proliferable form. And with a minor, I think, two minor exceptions, that really has been the core of our chemical weapons elimination program with the Russians.

So the applicable point I am making to biosecurity in Africa or anywhere else is that I am sure you are right. Once our new partners get familiar with how we work we will get lots of requests. It doesn't mean we are going to say yes to all of them.

Mr. MYERS. Mr. Chairman, I would like to add one quick point, if I may. I think it is also important that we scope the size of some of these challenges we are dealing with. When we are talking about the biological programs and efforts of the former Soviet Union we are talking about an absolutely massive infrastructure, numerous facilities across the country. And those are expensive undertakings.

When we are looking at places like the countries that the three of us visited with Senator Lugar, we are talking about individual facilities that don't quite have that same infrastructure, if you will. I think the scope and the cost of what we are talking about are a completely different scale than those that we were talking about in the FSU [former Soviet Union], and I think a fraction of the money we spent on the threats we dealt with in the former Soviet Union will have tremendous impacts on these facilities.

And, as Mr. Handelman said, we get requests from these governments on a number of different levels. And the three entities—Policy, NCB, as well as the Defense Threat Reduction Agency—work very closely together to prioritize and identify where we are going to make the biggest impact to benefit U.S. national security.

Mr. HANDELMAN. I might add the State Department is also part of that dialogue.

Mr. THORNBERRY. Well, I think this is very important work, and I am very supportive of expanding it. I think, as you heard from some of my colleagues earlier today, we are always going to be interested in how government agencies coordinate together, and you have just highlighted the importance of that in this particular instance. But I am very sympathetic with the idea that some better

security around some of these pathogens is a very important goal for our security as well as for many others. I just want us, as far as DOD is involved, to understand what is involved and as well as the dollars that are being asked.

I think we have worn everybody else out. Again, I appreciate y'all's patience in being here, waiting on votes and so forth, and answering our questions.

And, with that, the hearing stands adjourned.

[Whereupon, at 2:38 p.m., the subcommittee was adjourned.]

# A P P E N D I X

MARCH 11, 2011

**PREPARED STATEMENTS SUBMITTED FOR THE RECORD**

MARCH 11, 2011

**Statement of Chairman Mac Thornberry (R-Texas)**

**House Subcommittee on Emerging Threats and Capabilities**

**Hearing on**

**Counterproliferation Strategy and the Fiscal Year 2012 National Defense Authorization Budget Request for the Defense Threat Reduction Agency and Chemical Biological Defense Program**

**March 11, 2011**

I appreciate everybody being with us today on this hearing related to counterproliferation strategy, as well as the 2012 budget request for the Defense Threat Reduction Agency (DTRA) and the chemical biological defense programs.

I think that there's been widespread agreement among those that have run for president and among others that the greatest single danger to this country's national security is a weapon of mass destruction which could be detonated here on our shores. As a matter of fact, I noticed that in yesterday's *Washington Times* is a press report quoting a study to Congress that says, "While counterterrorism actions have disrupted Al Qaeda's near-term effort to develop a sophisticated WMD attack capability, we judge the group is still intent on its acquisition." So we, all of us, ought to remember their intention and what they can do if they are able to get their hands on such a weapon.

I noticed that the 2010 QDR says that as the ability to create and employ weapons of mass destruction spreads globally, so must our combined efforts to detect, interdict, and contain the effect of those weapons. And that's what this hearing is about.

Since 2002, the government has basically had a three-pronged strategy: nonproliferation, counterproliferation, and consequence management. This hearing focuses primarily on counterproliferation, but it's important, I think, for us, to look at the whole strategy.

And I appreciate the witnesses' statements that have helped us do that. I do notice that as far as the budget goes for 2012 for DTRA, the request is about 76 million less than the 2011

request and the amount that this committee authorized. And for the chemical and biological defense program, it's about 52 million less than the 2011 request. So it does lead one to wonder, "Why are these accounts going down?", although we all are, of course, aware of the budget situation that this country faces.

So, again, I appreciate our witnesses' being here.

**Opening Statement of Ranking Member James R. Langevin (D–Rhode Island)**
**House Armed Services Subcommittee on Emerging Threats and Capabilities**
**Hearing on**
**Budget Request for the Defense Threat Reduction Agency and the Chemical Biological Defense Program and Counter-proliferation Initiatives**
**March 11, 2011**

Thank you, Mr. Chairman. This is a very important hearing, and I thank you for calling it today. The report of the 2010 Quadrennial Defense Review recognized that the proliferation of weapons of mass destruction remains one of the gravest threats that face the United States. The organizations represented by the witnesses before us play critical roles in ensuring that our nation remains vigilant in facing these threats, and I thank them for the tireless work they carry out.

Conventional strategic deterrence remains an important part of how we approach our national defense, and the nuclear surety program is a key component of that, but denying nuclear, biological, and chemical weapons capabilities to terrorists must be our number one priority. In an increasingly connected world, the potential for these technologies to spread and evolve is real and considerable. If they were ever to fall into the hands of terrorists, the results would be unthinkable. Because, these actors are not always deterrable, we must continue to pursue detection and counter-proliferation technologies, techniques, and procedures.

Therefore, while I agree with the Committee's Ranking Member, Adam Smith, that spending more on defense does not automatically make us safer, I was concerned to see that the budget request for both the Defense Threat Reduction Agency and the Chemical Biological Defense Program decreased from last year—including your Research and Development efforts. This seems counter-intuitive in a time when we face increasing "traditional" threats as well as the possibility of the introduction of unknown pathogens or non-traditional chemical agents. I hope our witnesses take some time today to fully explain their budget proposal and how it meets their requirements, even as it decreases.

Given the crush of the day-to-day news that demands our attention—whether it is ongoing operations in Afghanistan, or the latest news from the Middle East—one could easily lose focus on this sort of threat. That would be a grave mistake, and I look forward to hearing from our witnesses how the Administration is prioritizing the WMD threat among the myriad other pressures it faces.

As you all know, it is not enough to pursue individual lines of development or defense. We must also ensure that our efforts are synchronized into a coherent policy approach so that resources are not wasted and that we don't unknowingly create gaps or seams in our defense architecture. I expect that we will spend some time discussing that policy today, and I look forward to our discussion.

Thank you all for being here today, and thank you again, Mr. Chairman, for calling this hearing.

NOT FOR DISTRIBUTION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

MR. KENNETH HANDELMAN
ACTING ASSISTANT SECRETARY OF DEFENSE
FOR GLOBAL STRATEGIC AFFAIRS

BEFORE THE HOUSE COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES

MARCH 11, 2011

NOT FOR DISTRIBUTION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE

Mr. Chairman, Ranking Member Langevin, members of the subcommittee, it is an honor to appear before you to discuss the Department of Defense's countering weapons of mass destruction (CWMD) efforts. The Department is working hard to build upon our legacy of counterproliferation and threat reduction work, and to adjust our programs to meet today's proliferation challenges and emerging threats.

It is a special honor to appear before you with three colleagues with whom I work very closely. The Defense Threat Reduction Agency (DTRA), the Office of the Assistant Secretary for Nuclear, Chemical, and Biological Defense (NCB), the Joint Program Executive Office for Chemical and Biological Defense (JPEO) and the office I am currently privileged to be heading – Global Strategic Affairs – serve complementary roles in the development, execution, and oversight of the Department's CWMD mission. In general terms, my organization provides policy guidance, develops strategies, manages bilateral and multilateral relationships, and sets Department CWMD priorities. NCB is responsible for translating that guidance into programs and overseeing implementation. DTRA is the implementing agent responsible for all the work done on the ground and the JPEO manages oversight and execution of the Chem-Bio Defense Program. As a practical matter, we execute all of these responsibilities in close coordination with each other. This is a team effort.

**Global Environment and DoD's Strategy**

The threat posed by proliferation of weapons of mass destruction (WMD) remains complex, and affects our counterproliferation and nonproliferation-related thinking. The intent of both state and non-state actors to acquire WMD, combined with cross-cutting global trends of the 21st century – create conditions for development of dual-use technology, sensitive materials, and personnel with scientific expertise to become increasingly accessible to potential state and non-state adversaries.

President Obama made clear in his April 2009 speech in Prague that overcoming the twin dangers of WMD proliferation and WMD terrorism requires a comprehensive approach. Recent diplomatic initiatives and policy reviews have increased broad

awareness and expectations for the United States, the Department of Defense, and our international partners to work collaboratively to reduce and counter WMD threats. These include:

- , The 2010 National Security Strategy, which outlines a comprehensive nonproliferation and security agenda, including reducing the U.S. nuclear arsenal and reliance on nuclear weapons, promoting regional stability, and ensuring the effectiveness of our deterrent and defensive capabilities.
- The National Strategy for Countering Biological Threats is a comprehensive approach to prevent or respond to the proliferation and use of biological weapons by states or non-state actors. A signature element of this strategy is a broad effort to increase capability worldwide to conduct effective and timely disease surveillance and to improve capacity to counter both naturally occurring and deliberately-caused disease outbreaks through the application of targeted and proven tools for biological risk management.
- The 2010 Quadrennial Defense Review, which devotes more attention to this challenge than any prior defense review, establishes "Preventing Proliferation and Countering WMD" and "Defending the United States and Supporting Civil Authorities at Home" among the top six priority mission areas.
- And the Nuclear Posture Review, which seeks to better align our nuclear policies and posture to our most urgent priorities –preventing nuclear terrorism and proliferation while ensuring the maintenance of a safe, secure, and effective nuclear deterrent for as long as nuclear weapons exist.

In support of these efforts, the Department of Defense is aligning programs to become more flexible, agile, and responsive. Here our approach is three-fold: First, we aim to help rejuvenate multilateral nonproliferation initiatives and treaties. Second, we seek to reduce and eliminate WMD dangers at their source and in transit. Third, we seek to enhance our ability to detect and respond to emerging threats. Finally, we continue our

work to ensure our troops can fight and win, along with coalition partners, in an environment containing chemical, biological, and other hazards.

**Strengthening the Nonproliferation Regimes**

For years we have worked with our allies and partners to develop a global nonproliferation infrastructure that can reduce our collective vulnerability to these weapons. The current network of initiatives, regimes, and treaties offers some important tools for advancing this critical agenda – but much more remains to be done. Today, we are accelerating efforts to work with other government agencies, and with our allies and partners to rejuvenate the nonproliferation regime, starting with a renewed commitment to strengthen the international legal frameworks that serve as the foundation for our efforts. The administration's efforts to strengthen the global non-proliferation regime through the Nonproliferation Treaty (NPT), Comprehensive Test Ban Treaty (CTBT) and Fissile Material Cutoff Treaty (FMCT) are instrumental to increasing the barriers to proliferation of WMD.

We are actively working to strengthen the Nonproliferation Treaty (NPT) – the cornerstone of the nuclear nonproliferation regime. Last May's NPT Review Conference reaffirmed parties' commitment to the Treaty and significantly achieved consensus on an Action Plan for future progress. This Action Plan endorsed a balanced approach to advance the three pillars of the regime: nonproliferation, peaceful uses of nuclear energy, and nuclear disarmament. DoD will continue to actively participate with State and our interagency colleagues in international activities to implement this Plan.

In addition, President Obama has committed his Administration to pursue the ratification of the Comprehensive Test Ban Treaty (CTBT). The CTBT is important to the nonproliferation effort because it would limit the ability of countries without nuclear weapons from confidently deploying or using such weapons, and it hinders the ability of nuclear powers to develop new types of nuclear warheads. As a sign of our commitment to the CTBT regime, we will continue to maintain our unilateral moratorium on nuclear weapons-testing, and will remain fully engaged in the development of the Treaty's

verification regime. At the same time, we remain committed to maintaining a safe, secure, and effective nuclear deterrent for our security and that of our allies.

We will also seek a Fissile Material Cutoff Treaty (FMCT) that would ban the production of fissile material for use in nuclear weapons. DoD will continue to support discussions by technical experts regarding this Treaty in the Conference on Disarmament These discussions are not a substitute for actual negotiations, but hopefully they will allow participants a greater understanding of the technical issues involved.

Despite these efforts, we recognize that this nuclear nonproliferation regime is under serious strain, in large part because of countries that choose to violate both the letter and the spirit of their commitments and because some countries choose to live outside this regime altogether. North Korea's recent revelation of a uranium enrichment facility and Iran's continued obfuscation about its nuclear activities directly challenge international norms and UN Security Council mandates. The Administration has led international efforts to respond to these challenges, resulting in unprecedented international agreement and support for strict sanctions regimes. In addition, our "negative security assurance" as stated by our Nuclear Posture Review is clear: the U.S. will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty and in compliance with their nuclear non-proliferation obligations. This assurance is intended to underscore the security benefits of adhering to and fully complying with the Non-Proliferation Treaty.

Finally, we are actively engaged in efforts to ensure that the upcoming Biological and Toxin Weapons Convention Review Conference strengthens the global norm against possession and use of biological weapons, including by expanding membership in the Convention and strengthening its implementation to meet the bioweapons challenges of the 21st century. As part of this effort, DoD has taken steps to increase the transparency of our biological defense activities; the United States is encouraging other treaty parties to do the same.

**Reducing and Eliminating Threats**

The second element of the Department's approach involves engaging in active international partnerships to reduce and eliminate WMD dangers both at their source and in transit, so that vulnerable materials cannot be exploited by terrorists or other hostile actors against the homeland, our allies or our forces.

As this committee is aware, since its inception in 1992 the Nunn-Lugar Cooperative Threat Reduction (CTR) Program has worked in the former Soviet Union to reduce nuclear, biological, and chemical threats. We are evolving the CTR Program to match a changing global security environment. In December 2010, the Secretary of Defense – with the concurrence of the Secretary of State – determined that CTR partnerships with Iraq, India, China, and the countries of Africa will assist the United States in achieving long-standing nonproliferation goals, as well as sustain long-term partnerships that enhance security. This step builds on a 2009 decision to pursue cooperation with Afghanistan and Pakistan. We are moving forward to build those partnerships and to identify collaborative activities that support our shared security objectives. With the U.S. missions in Iraq and Afghanistan, this expansion of CTR program can help support security of U.S. military and interagency personnel.

My colleagues will go into further details of the President's $508.2 million budget request for CTR in fiscal year 2012, but I'd like to highlight some key areas in which the Program will be supporting Administration and international nonproliferation and threat reduction priorities in FY12 and beyond.

It has been almost two decades since Congress passed the Soviet Nuclear Threat Reduction Act of 1991, the hallmark legislation that established the Nunn-Lugar Program. Although elimination work has largely been concluded in the other states of the former Soviet Union, it goes on to this day in Russia as ballistic missiles, launchers, and ballistic missile submarines continue to be dismantled. Now, with the entry into force of the New START Treaty, CTR anticipates that the Russian Federation will continue to partner with the US to ensure strategic systems are properly disposed and no

residual proliferation-sensitive components remain. This site-specific threat reduction work will continue to be a prominent element of the CTR program. CTR is also working with the Department of Energy to transition to the Russian government responsibility for sustaining U.S.-provided physical protection systems at nuclear weapons storage sites. The Department continues to assist Russia in transporting nuclear warheads from operational locations to dismantlement facilities or more secure, consolidated storage sites. Furthermore, we are assisting Russia with the secure transport of spent naval fuel, which is a potentially vulnerable nuclear hazard. I'm pleased to report that CTR cooperation with Russia continues to be a steady component of the US-Russian relationship that has remained largely insulated from the broader peaks and troughs.

We are also leveraging our nuclear security experience in the former Soviet Union with CTR's new international partners. Alongside Department of Energy and other Interagency stakeholders, CTR is supporting Centers of Excellence for Nuclear Security with key partner countries, through which we will be able to exchange nuclear security best practices, demonstrate equipment, contribute towards national and regional training programs, and collaborate on the research and development of nuclear security technologies. As these efforts mature, we will have a real opportunity with both countries to improve the overall culture of security and material responsibility.

The Department is similarly expanding our biological threat reduction programs to meet our new global health security requirements in support of the President's National Strategy for Countering Biological Threats. Today, the Nunn-Lugar CTR Cooperative Biological Engagement Program (CBEP) focuses on four areas of partnership with host governments: consolidating and securing collections of especially dangerous pathogens; preventing release of especially dangerous pathogens, technology, and expertise by improving safety and security standards; strengthening detection, diagnosis and reporting systems in order to recognize and respond to outbreaks; and, promoting collaborative research projects to increase our collective ability to understand and recognize the most dangerous pathogens.

CTR continues to partner with former Soviet countries on biosecurity, and in coordination with our DoD and U.S. interagency colleagues, we are beginning to build relationships with new partner countries. Earlier I mentioned the Secretary's approval of CTR expansion to Africa, and I'd like to say a bit more about why DoD views Africa as a priority for this kind of engagement. Africa is a continent that is rich in indigenous, naturally-occurring especially dangerous pathogens, which indigenous scientists and health professionals must work with on a routine basis. Limited funding for training, infrastructure and other needs means that this work is all too often performed with less than ideal safety and security standards in place. These factors make Africa a tempting destination for both state and non-state organizations that seek to acquire biological weapons and might wish capitalize on Africa's pathogenic diversity. Working with partners in the region provides the US the opportunity to strengthen biosafety and security and to promote stronger oversight, furthering long-standing objectives codified in the Biological and Toxin Weapons Convention, United Nations Security Council Resolution 1540, and the G8 Global Partnership.

The United States and its allies have had a long-standing public-health presence in Africa, a base of experience and familiarity that facilitates CTR's activities on the continent. Potential African partner governments are both enthusiastic and creative about the opportunities for Nunn-Lugar CTR program activities, and we are working with them to pursue a regional approach for our cooperative engagement program that would have a lasting impact beyond traditional bilateral relationships. The U.S. military has important relationships in the Horn of Africa and elsewhere, so we view our activities as directly supporting U.S. troops' security, in addition to furthering larger non-proliferation goals.

While securing WMD materials at the source is an important component of the CTR program, our strategy requires a layered defense against WMD proliferation threats. The WMD Proliferation Prevention Program (PPP) is CTR's means to enhance our partners' ability to detect and interdict WMD "on the move" through the provision of detection, surveillance, and interdiction capabilities. Although not an element of CTR,

DTRA's International Counterproliferation Program (ICP) complements the capital-intensive investments of the WMD-PPP program through its modest yet effective "train and equip" efforts. The ICP is unique in its legislative authority to partner explicitly with the Federal Bureau of Investigation (FBI) and U.S. Customs in furtherance of deterring the proliferation of WMD across the FSU, the Baltic states, and in Eastern Europe. We are currently working to determine how best to expand both border security programs to new partners.

**Detecting and Responding to Emerging Threats**

The third element of the Department's approach involves improving our ability to deter, detect, defeat, and respond to emerging WMD dangers. Here the Department has a particular responsibility to our nation, as well as to our allies and partners. For instance, instability resulting from the collapse of a nuclear-armed state would risk the global proliferation of nuclear material, weapons, or technology, posing a threat to our homeland and the homelands of our allies. We must be prepared to detect threats and defend ourselves against WMD dangers. This includes enhancements to interdiction and elimination capabilities as well as preparations to respond quickly to an attack should our preventive and deterrence efforts fail.

As President Obama said in his Prague speech, "the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up. More nations have acquired these weapons.... Black market trade in nuclear secrets and nuclear materials abound. Terrorists are determined to buy, build or steal" a nuclear weapon. With this threat in mind, DoD is working with other government agencies on an expanded whole-of-government response should we suspect a terrorist organization has obtained one or more nuclear devices. Faced with such a threat, we will potentially need a globally synchronized response to detect, interdict, and contain the effects of nuclear weapons. This would include activities such as securing material at the source, intercepting material on the move and increasing defenses to protect against an attack on the homeland.

The threat of nuclear terrorism is also closely intertwined with state challenges. For instance, the instability or collapse of a nuclear-armed state could quickly lead to proliferation of nuclear weapons or materials well beyond the country of origin and involving multiple state and non-state actors as it moves across the globe.

Within DoD, we seek to build and maintain a layered defense against these threats, including: enhancing the protective posture of the homeland; working with the Intelligence Community to analyze and track terrorist networks and identify likely paths to proliferation; and, characterizing the source and nature of the threat. We can be certain that in a nuclear or other WMD crisis, all these activities would be occurring simultaneously – our work at DoD has focused on how departmental actions would be coordinated and synchronized globally.

We must additionally enhance our ability to respond quickly to an attack should these efforts fail. Notably, the President's budget request includes additional resources to improve capabilities for technical nuclear forensics technologies and the fielding of new capabilities, including funding for ground and air collection, in order to more quickly attribute the source of a terrorist attack.

Although a nuclear armed terrorist may be the gravest threat we face, we are also concerned with novel or emerging threats. Biological threats pose a unique problem from a countering WMD perspective, because these threats span public health concerns and force protection. The President's National Strategy for Countering Biological Threats outlines many of these challenges and articulates a framework for addressing the risks from states or non-state actors who seek to deliberately misuse biological materials for harm while at the same time, working to meet global health requirements.

A signature element of the National Strategy is a broad effort to increase capability worldwide to conduct effective and timely disease surveillance, setting the foundation for successfully responding to both naturally occurring and deliberate disease outbreaks. A 2009 National Research Council report noted that countries which lack the public health infrastructure necessary to detect, diagnose, and report naturally occurring

disease outbreaks are substantially less able to effectively deal with a bio-terror attack. To that end, we have dedicated funding beginning in FY12 to support our overseas laboratories, which are DoD's primary means to discover novel pathogens or characterize pathogens that are not generally found in the United States. The DoD overseas labs' work continues to expand DoD support to basic and applied research for both emerging infectious disease surveillance and detection of biological threats. We are additionally working with partners and allies to establish protocols and procedures to facilitate cooperation between governments and private industry so that in a crisis, disaster can be averted or at least mitigated to save as many lives as possible. In addition, these programs enhance national security by precluding the potential utility of biological weapons through the provision of public health and medical interventions, and may help deter their use through the enhancement of our forensics capabilities.

The Medical Countermeasures Initiative (MCMI) is a new endeavor to address the threats posed by biological agents. The goal of MCMI is to enhance advanced pharmaceutical development, manufacturing, and regulatory science to enable the rapid delivery of new medical countermeasures. This will fill a capability gap underscored by the inability to rapidly produce vaccine for the 2009 H1N1pandemic influenza in a timely manner. The U.S. government is working with private industry to build agreements to increase manufacturing capacity, conduct research to develop new manufacturing platforms, and to advance regulatory approval.

Although this initiative may seem like a public health issue, military populations are especially at risk for disease outbreaks that are uncommon among the general population of the United States. Examples include adenovirus infections among basic trainees, and tropical diseases such as dengue during overseas deployments. The civilian market demand for medical countermeasures for these diseases is limited as there are inadequate commercial incentives for private industry to develop, mass produce, and obtain regulatory approval for these relatively low-market demand products.

Consequently, medical countermeasures for these diseases are unavailable in the commercial marketplace.

Similar challenges have been encountered in efforts to provide countermeasures for biological warfare threats. The infrequent, naturally-occurring cases of especially dangerous pathogens are poor "market drivers" for development of remedies, but these same pathogens could devastate military operations if used as biological weapons by adversaries on the battlefield. DoD has an equity in the rapid development of countermeasures for select emerging diseases that may severely impact both the general population and military readiness and operations (e.g., pandemic influenza). The DoD has a major stake in MCMI, because military force health protection remains a DoD responsibility in addition to the general public health responsibilities of Department of Health and Human Services (DHHS).

The revolution in biotechnology – as well as advances in the chemical industry – challenges our ability to anticipate and prepare for future threats. As the commercial pharmaceutical and chemical fields continue to expand throughout the world, they may provide nefarious actors – either state or non-state – with easier access to the dual use equipment and precursor materials needed to produce chemical or biological weapons. However, it is not only the proliferation of conventional chemical and biological capabilities that is troublesome. The growth of these industries could further lead to the development of new or novel agents, which could potentially defeat our current defenses. This is one reason we have advocated in both our FY11 and FY12 President's Budget Requests to include more RDT&E funding to develop more effective countermeasures and reliable personal protection to operate in the midst of an attack and research new decontamination techniques to more quickly mitigate the effects of new or novel chemical and biological agents.

To further enhance our ability to contain nuclear, chemical and biological threats emanating from failed or fragile states, the 2010 QDR called for the establishment of a standing Joint Force Headquarters for Elimination. The Secretary designated U.S.

Strategic Command (STRATCOM) as the lead, and the command is currently completing its mission analysis. The standing headquarters will greatly increase the capability of the Department to plan, train, and execute WMD elimination operations, which include the ability to locate, characterize, secure, disable or destroy hostile WMD programs or capabilities in a non-permissive or semi-permissive environment. The Headquarters will have the ability to deploy rapidly to the affected Combatant Command in order to address a variety of WMD scenarios, especially during peacetime or early in a crisis.

In addition to elimination, we are strengthening the capabilities of our warfighters to address a range of proliferation threats. My office is working with AT&L, DTRA and the Services to develop a long-term science and technology strategy that will prioritize our investment in CWMD capabilities. We also work closely with Joint Staff to ensure the chem-bio defense program has the resources it needs to develop the equipment required by warfighters to fight in and through a WMD environment. We are also working with U.S. Strategic Command as the advocate for WMD capabilities, to address the Department's needs to effectively counter nuclear threats of all shapes and sizes.

Additionally, given the global implications of a WMD attack, we must engage partner nations, allies, and the broader international community to improve our ability to detect and respond to such dangers and reduce the risk of WMD terrorism. In this fiscally constrained environment, we must strengthen ties with allies and partners to shoulder part of this burden and engage collectively to meet these challenges. This includes promotion of efforts to increase the capacity of our partners and allies to defend themselves and operate alongside U.S. forces in the event of a WMD attack. For FY12, my office has requested dedicated funding for "counter-WMD Cooperative Defense Initiatives" for each Geographic Combatant Command that would increase their resources for interoperability among U.S. forces and regional partners, and ensure partner nations can survive an attack, eliminate further threats, and manage the humanitarian consequences of a WMD attack. Within NATO, the Strategic Concept adopted by Heads of State and Government at the Lisbon Summit in November 2010 reaffirmed the

Alliance's commitment to further develop NATO's capacity to defend against the threat of chemical, biological, radiological, and nuclear weapons. To that end, my office is working to support NATO's efforts to assess how it can better counter the proliferation of WMD and their means of delivery.

**Conclusion**

Congress has provided authorities and resources which allow DoD to address the WMD threat to our troops and our people. It is a threat which spans traditional counter-proliferation and non-proliferation responses, and it is a threat which is evolving. Our mission is to ensure that DoD's responses evolve at an equal pace in order that our troops and those of our coalition partners can fight and win in a WMD environment, and that our people are protected from WMD threats. We are committed to working closely with our interagency and international partners, and with the Congress in this endeavor.

## Kenneth B. Handelman

## Principal Deputy Assistant Secretary for Global Strategic Affairs (GSA)

CURRENT ASSIGNMENTS: Ken Handelman was assigned as Principal Deputy Assistant Secretary for Global Strategic Affairs (GSA) in April 2009. In this capacity he supports the Assistant Secretary for GSA in overseeing policy development and execution in the areas of combating Weapons of Mass Destruction (WMD), U.S. nuclear weapons, missile defense, and DoD space and cyber activities.

PAST EXPERIENCE: From December 2006 – April 2009, Ken Handelman served as Principal Director for Counternarcotics, Counterproliferation and Global Threats, supervising policy development for DoD's counternarcotics and counterproliferation policy efforts. From March 2007 – April 2009 Mr. Handelman served concurrently as Chief of Staff for the Assistant Secretary of Defense for Global Security Affairs where he helped manage the workflow of over 700 personnel on issues including partnership strategy, detainee affairs, security assistance, and technology security. From September 2005 – December 2006, Ken Handelman served as Principal Director for the Office of Combating Weapons of Mass Destruction and Negotiations Policy where he oversaw policy development on threat reduction, chemical-biological defense, WMD interdiction and non-proliferation. From August 2001 – August 2005, Mr. Handelman served as Principal Director for Technology Security Policy and Counterproliferation, helping to oversee some 230 personnel, with responsibility for over $400 million in annual appropriations and nearly $20 million in operating funds. From January 2000 – December 2001, Mr. Handelman served as Deputy Director for Plans in the Office of Requirements and Plans where he helped direct civilian oversight of Combatant Commanders' war plans, as well as development of the Contingency Planning Guidance, Unified Command Plan and Forces For Unified Commands guidance documents. From February 1997 – January 2000 Mr. Handelman was Special Assistant for Programs and Legislation to the Under Secretary for Policy where he coordinated the legislative, fiscal and program activities of the Policy organization and handled a range of sensitive organization matters including implementation of the 1997 OSD reorganization. From May 1995 – January 1997 Mr. Handelman was a Foreign Affairs Specialist in the OUSD(P) Office of Peacekeeping and Humanitarian Assistance, where he was responsible for policy and logistics oversight of Mideast peacekeeping operations, intelligence-sharing with the UN and reform of UN military management. From April 1987 – January 1995, Mr. Handelman was Legislative Assistant and Legislative Director for Senator Howard Metzenbaum of Ohio. Mr. Handelman was awarded the Secretary of Defense Medal for Meritorious Civilian Service, and the DoD Distinguished Civilian Service Award.

EDUCATION: Mr. Handelman holds Bachelor of Arts (1985) and Master of International Affairs (1986) degrees from Columbia University. He also holds a Juris Doctor from the Washington College of Law at American University (1994).

# Statement of Mr. Andrew Weber
# Assistant Secretary of Defense for
# Nuclear, Chemical, and Biological
# Defense Programs

On

# Counterproliferation Strategy and the Fiscal Year 2012 National Defense Authorization Budget Request for the Defense Threat Reduction Agency and Chemical and Biological Defense Program

Before

Emerging Threats and Capabilities
Subcommittee
Committee on Armed Services
U.S. House of Representatives

11 March 2011

**Introduction**

Chairman Thornberry, Ranking Member Langevin, and members of the Subcommittee, thank you for giving me this opportunity to discuss with you several Department of Defense efforts to counter Weapons of Mass Destruction (WMD). 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 for matters concerning Nuclear, Chemical, and Biological Defense Programs.

I oversee the implementation of the Department's Cooperative Threat Reduction program and manage the Department's treaty implementation activities to ensure compliance with nuclear nonproliferation agreements, the Chemical Weapons Convention, and the Biological and Toxin Weapons Convention. I provide programmatic advice and recommendations on the safety, security, and effectiveness of the nuclear stockpile, and am also responsible for oversight, integration, and coordination of the Department's Chemical and Biological Defense Program. This program delivers systems for the detection and identification of chemical and biological agents and provides protection and decontamination capabilities for personnel and equipment. These activities combine requirements, science and technology execution, and acquisition efforts.

In addition, I oversee the Defense Threat Reduction Agency (DTRA), headed by Mr. Ken Myers, who is here with me today. The DTRA mission is to safeguard the U.S. and its allies from WMD by providing capabilities to reduce, eliminate, and counter these threats and mitigate their effects. The agency is the Department of Defense's

Combat Support Agency for the countering-WMD mission that includes nonproliferation, counterproliferation, consequence management, and the development of improved countering-WMD capabilities for the Warfighter.

Also appearing before you is Brigadier General Jess Scarbrough, who supports me as the Joint Program Executive Officer for Chemical and Biological Defense. General Scarbrough is responsible for the advanced development and acquisition of equipment and capabilities for the Warfighter to counter chemical and biological threats.

**Countering WMD Vision and Mission**

The vision for Nuclear, Chemical, and Biological Defense Programs is to ensure the Department of Defense is postured to counter 21st century WMD threats to our Warfighters and citizens here and abroad. Our mission is to lead the Department in the development and integration of defense capabilities to prevent, protect against, and respond to WMD threats. The overarching goal is to prevent our enemies from threatening us, our allies, and our friends with WMDs. It is imperative that we provide the capabilities to enable the Department to accomplish the countering-WMD military strategic objectives to: prevent, dissuade, or deny WMD proliferation or possession; reduce, destroy, or reverse WMD possession; defeat and deter WMD use and subsequent use; and defend, respond, and recover from WMD use.

DTRA's Fiscal Year 2011 (FY11) Strategic Plan, released last November, builds on these objectives. The goals of the plan provide for: a synchronized effort among the Department of Defense, the other executive agencies and departments, and our international

partners; facilitate a swift adaptation to the evolving trends and future security threats; and serve as a foundation for the proposed DTRA funding in the President's FY12 budget request.

The Chemical and Biological Defense Program is a key part of a comprehensive national strategy to prevent, protect against, and respond to the constantly evolving spectrum of chemical and biological threats. The President's FY12 budget request for this program includes $254 million for procurement, $771 million for advanced development, and $502 million for science and technology efforts, for a total of $1.526 billion.

This year's efforts have been hindered due to the constraints of operating under a Continuing Resolution. As Under Secretary of Defense Ashton Carter noted, "Each and every program manager in the Department is having to upset carefully calibrated plans, stop or slow activities only to restart them later, defer the commencement of important new programs, and so on... It is not only inefficient, it is anti-efficient."

In light of these current restraints, I ask that you strongly support a responsible FY11 appropriations bill and the President's FY12 budget request so that we can move forward with these programs to provide the Warfighters and the nation with the capabilities we need to counter WMD.

**Chemical and Biological Defense Program**

As stated in the National Strategy for Countering Biological Threats, "...fanatics have expressed interest in developing and using biological

weapons against us and our allies." Rapid advancements in biotechnology and manufacturing capabilities are making it easier for an adversary, whether state or non-state, to develop biological or chemical weapons. The challenge posed by biological threats is the hardest to address and the most daunting.

There are no simple solutions to countering biological threats. One of the complicating factors is that they lie at the nexus of security and health, and regardless of man-made or natural origin, threaten our Warfighters and citizens. The 2009 H1N1 influenza pandemic showed us that our efforts must account for the full spectrum of biological threats, including emerging infectious diseases.

The Chemical and Biological Defense Program provides the capabilities needed for a layered set of defensive measures against chemical, biological, radiological, and nuclear attacks. It also aids rapid restoration of affected areas with less impact on essential operations. These integrated capabilities improve our ability to sense chemical and biological warfare agents, shield our service members, shape our operations, and sustain our forces. Our programs enable the Warfighter to identify threats and continue operations in a WMD environment.

One capability that is fielded now with our forces in over 300 locations worldwide is the Joint Biological Agent Identification and Diagnostic System (JBAIDS). This is a portable instrument capable of identifying multiple biological agents. Currently, Anthrax, Plague, Tularemia, and Avian Influenza tests are cleared by the Food and Drug Administration (FDA) for use on the JBAIDS. Furthermore, the Department has

submitted to FDA over 70 requests for consideration of emergency use authorizations for assays to be used with the instrument.

This system is part of a unified set of capabilities built to respond swiftly and effectively to the threats facing the Warfighter. Our primary goal is to prevent a biological or chemical attack. Should a crisis occur, we must be prepared to protect and respond.

Our ability to obtain early warning about the emergence and progression of new and particularly dangerous biological agents hinges upon the development of a global biosurveillance network and next generation detection and diagnostics systems. These enablers will provide the capability for quick and reliable early warning, identification, and notification. To achieve these goals, we have increased the focus on science and technology; an emphasis reflected within the FY12 Chemical and Biological Defense Program budget.

Biosurveillance is critically important to the Department. We need an early warning capability to identify a biological attack within hours, not days, by using simple, affordable diagnostic devices linked up with a comprehensive global surveillance network.

The Department of Defense has been coordinating with the Departments of Homeland Security and Health and Human Services to improve our biological threat detection capability as well as strengthening our international ties by integrating reporting laboratories and other networks.

We are also investing in a detection and diagnostics program that is a critical component to protect our Warfighters and nation against a biological attack or outbreak. We are working with our partners at Health and Human Services, in particular the FDA, to develop a clear, efficient, and safe regulatory pathway to clearance or approval. Again, the overarching goal of our efforts is the reliable and timely fielding of affordable medical diagnostic and agent detection equipment capable of supporting military operations in a WMD environment.

In the 2010 State of the Union address, President Obama directed the enhancement of the nation's capability to develop, license, and procure countermeasures against both bioterrorist attacks and naturally-occurring infectious disease. In response, we are preparing to execute a Medical Countermeasures Initiative that will provide agile and flexible advanced development and manufacturing capabilities. This will enhance the Department's ability to protect against known agents and emerging threats for which countermeasures do not yet exist.

The 2009 H1N1 pandemic, along with the ongoing challenges with development of WMD medical countermeasures, revealed major gaps in advanced development and domestic manufacturing capacity. One gap was particularly evident; the lack of partnership between the United States Government and large pharmaceutical companies. This initiative will work to strengthen the government's relationship with those companies, who are the foremost leaders in advanced development of medical countermeasures.

We are leveraging work from several sources, including the Defense Advanced Research Projects Agency and the Transformational Medical Technologies program, which focuses on the rapid discovery and refinement of medical countermeasures. In 2009 these efforts culminated in a successful test in which a hemorrhagic fever virus therapeutic platform showed flexibility when it was adapted for the H1N1 virus.

The ability to scale-up production when needed or switch manufacturing from one product to another is critical. To achieve this ability and to evaluate new manufacturing methods, a strong partnership with the FDA is essential. The ongoing efforts to reach our goals include the FDA and other interagency partners.

**Countering Nuclear Threats**

President Obama has made it clear that one of today's greatest dangers is nuclear terrorism. We believe Al-Qaeda and their associated forces are seeking nuclear weapons. They would have no compunction at using such weapons if they managed to obtain them.

In 2009, the President gave a speech in Prague where he presented his vision of a world without nuclear weapons. This is, of course, a long-term goal, and one that he has said may not be achieved in his lifetime. The President also stated that unilateral disarmament will not result in improved security and that we must maintain a safe, secure, and effective nuclear deterrent for as long as nuclear weapons exist.

Just last month, I visited the 341st Missile Wing at Malmstrom Air Force Base in Montana. I witnessed first-hand the execution of this

critical deterrence mission and thanked the extraordinary men and women responsible for providing the United States with this essential capability.

My office is a focal point within the Department of Defense for maintaining the nuclear deterrent and countering nuclear threats. The expertise needed to maintain the nuclear stockpile is also relevant and necessary to address nuclear threats to the nation. As such, the mission to counter threats may be affected by any reduction in support or funding for stockpile-related work.

In order to reduce the risk of emerging nuclear-armed adversaries, the Department of Defense is working with the Departments of Energy and State to implement the President's Global Nuclear Lockdown initiative to secure vulnerable fissile material worldwide. This effort is supported by the DTRA-executed Nunn-Lugar Cooperative Threat Reduction (CTR) program, which has recently expanded in scope and geographical reach.

We are also working to improve the nation's capabilities in nuclear forensics, which is the thorough analysis and characterization of pre- and post-detonation radiological or nuclear materials, devices, and debris, as well as effects from a nuclear detonation. In an interception or post-detonation event, nuclear forensics will help determine material type and origin, potential pathways, and design information. It is an integral component of the broader goal of attribution, which merges forensics results with traditional law enforcement and intelligence information to identify those responsible for the planned or actual attack.

To keep Congress fully informed on the development and fielding of countering-WMD capabilities, the Counterproliferation Program Review Committee (CPRC) will provide an updated report to Congress in May 2011. On Sept. 28, 2010, the Government Accountability Office recommended that the CPRC include additional financial information besides the President's Budget. One of the findings was that information on the programs detailed in the CPRC report should include appropriations and expenditures. We have requested this information for the upcoming report. Another recommendation was to more clearly relate prioritized capability gaps to programs and resources. We are gathering information to be able to address this in the May 2011 CPRC report as well.

**Conclusion**

The threat of a nuclear, chemical, or biological attack on our troops or the homeland is very real and constantly evolving. This means the Department of Defense must develop nimble, agile programs to respond. In support of the vision of President Obama and Secretary Gates, the Department is working to strengthen our capabilities to effectively prevent, deter, defeat, and respond to these threats. I ask for your support of a responsible FY11 appropriations bill and the President's FY12 budget request so that we can achieve these goals. I appreciate the opportunity you have given me to testify today and would be pleased to answer your questions.

**Andrew C. Weber**

**Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs**

The Honorable Andrew C. Weber is the principal advisor to the Secretary of Defense, the Deputy Secretary of Defense, and the Under Secretary of Defense for Acquisition, Technology and Logistics for matters concerning nuclear, chemical, and biological defense programs. As the ASD(NCB), his mission is to prevent, protect against, and respond to these global threats. Mr. Weber is the Staff Director of the Nuclear Weapons Council, which manages the nuclear weapons stockpile, and he oversees the Defense Threat Reduction Agency and the Nunn-Lugar Cooperative Threat Reduction Program.

Since taking office, Mr. Weber has overseen an expansion of Nunn-Lugar programs into new regions, including Africa and South Asia. He has also been a key player in reforming the nation's medical countermeasures enterprise. His nuclear duties include executing President Obama's direction that as the U.S. reduces the number of deployed weapons, we are assured that the remaining stockpile is safe, secure, and effective.

Prior to his appointment by President Obama, Mr. Weber served for 13 years as an Adviser for Threat Reduction Policy in the Office of the Secretary of Defense. He played a key role in Nunn-Lugar operations to remove weapons grade uranium from Kazakhstan and Georgia, and nuclear capable MiG-29 aircraft from Moldova. Mr. Weber also developed and oversaw the Department of Defense Biological Threat Reduction Program. For his work at the Department of Defense, Mr. Weber has twice been awarded the Exceptional Civilian Service Medal.

Most of Mr. Weber's 26 years of public service have been dedicated to reducing the threat of weapons of mass destruction. He served previously as a United States Foreign Service Officer, with diplomatic assignments in Saudi Arabia, Germany, Kazakhstan, and Hong Kong.

From 2002 through 2008 Mr. Weber taught a course on Force & Diplomacy at the Edmund A. Walsh Graduate School of Foreign Service at Georgetown University. He has a Master of Science in Foreign Service degree from Georgetown and is a graduate of Cornell University. Mr. Weber speaks Russian and is a member of the Council on Foreign Relations.

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

on

Fiscal Year 2012 Budget Request for the
Counterproliferation and Consequence
Management Programs of the Defense Threat
Reduction Agency

before

Emerging Threats and Capabilities
Subcommittee
Committee on Armed Services
U.S. House of Representatives

11 March 2011

Not for Public Release until Approved by the
House Armed Services Committee

**Introduction**

Mr. Chairman, Ranking Member Langevin, and Members of the Subcommittee, it is an honor to be here today to address the counterproliferation and consequence management programs performed by the Defense Threat Reduction Agency (DTRA). I will summarize my remarks and request that my complete statement be made part of the record.

The threat posed by nuclear, radiological, biological, and chemical Weapons of Mass Destruction (WMD) is immediate, growing in scope, and evolving in its potential applications. Those who wish to harm us understand that the use of such weapons could result in immense loss of life and enduring economic, political, and social damage on a global scale. They are determined to acquire WMD and, if successful, will use them. For example, the Fall 2010 issue of "Inspire...and Inspire the Believers," published by al-Qaeda, contains the following passage: "For those mujahid brothers with degrees in microbiology or chemistry lays the greatest opportunity and responsibility. For such brothers we encourage them to develop a weapon of mass destruction, i.e., an effective poison with the proper method of delivery... Due to the extreme importance of moving the war with America over to the next stage, the state of weapons of mass destruction, we shall In Shā´Allāh cover such topics in more detail in our upcoming issues."

The United States has a national strategy that harnesses the Counter WMD (CWMD) expertise and capabilities across the U.S. Government (USG) and the international community. The President has challenged us to secure vulnerable nuclear materials across the globe and reduce the likelihood and consequences of biological attacks. In addition,

focused efforts by the USG and other parties to the Chemical Weapons Convention (CWC) are destroying their declared chemical weapons. DoD in recent years has better organized itself to perform the CWMD mission to include more streamlined policy development, mission oversight, requirements identification, WMD intelligence fusion, investment prioritization, planning and exercising, and CWMD mission execution. Additionally, the Department of Defense (DoD) is working more closely than ever with partners across the U.S. Government and the international community to counter WMD threats.

DTRA is the DoD's center of expertise for countering WMD (CWMD) and is a national asset in terms of its unique CWMD knowledge and capabilities. Our programs and activities span nonproliferation – reduction of WMD threats at their source; counterproliferation – the deterrence, interdiction, and defeat of WMD threats; and consequence management – the minimization of the effects of WMD attacks and the mitigation of their consequences. Our contributions range from the global and regional levels to the battlefield. Guided by a new Strategic Plan, DTRA has a defined role and clear path ahead. Today, more than ever, we are working closely with our DoD, interagency, and international partners in building new and more effective barriers between WMD threats and the American people and our allies.

DTRA has an impressive record of reducing, deterring, defeating and countering the effects of WMD. As the DoD CWMD Combat Support Agency, we have solid relationships with the Combatant Commanders and assist them in the areas of CWMD research, planning, training, exercises, and mission execution. Whether we are performing on-site inspections as part of the U.S. arms control treaty obligations;

overseeing the destruction of former Soviet Union (FSU) WMD weaponry; conducting imaginative and unprecedented threat reduction activities; developing new capabilities for defeating WMD in place or on the move; protecting people, systems, and infrastructure; or supporting the U.S nuclear deterrent, DTRA has made and continues to make the world safer.

I will highlight just three of our many recent accomplishments in WMD threat reduction:

- We successfully transitioned the Massive Ordnance Penetrator (MOP) to the United States Air Force. The MOP is a 30,000-pound conventional penetrating weapon designed to provide substantial improvements in accuracy and lethality over current weapons in the inventory to defeat hardened, deeply buried targets.
- DTRA responded this past year to nearly 1,500 "reach back" requests for CWMD expertise and analysis from the Office of the Secretary of Defense (OSD), Joint Staff, Combatant Commanders, National Guard WMD Civil Support Teams, and other DoD and interagency customers. Our reach back teams have been asked to provide expertise and support events ranging from the wars in Iraq and Afghanistan to the Gulf oil spill to the Super Bowl and the State of the Union Address.
- We are also supporting the U.S. Strategic Command (USSTRATCOM) with its revision of the DoD CWMD Campaign Plan, to expand it from a framework to a detailed operational plan with milestones, tasks, and assessments that will help measure progress being made in the CWMD mission.

**Mission and Background Information**

The mission of DTRA is to safeguard America and its allies from WMD (chemical, biological, radiological, nuclear weapons) and from high-yield explosives by providing capabilities to reduce, eliminate, and counter these threats and mitigate their effects.

DTRA is the DoD focal point and center of expertise for countering threats posed by WMD. Our programs and activities span the scipe of the full national response: nonproliferation, counterproliferation, and consequence management. We provide CWMD subject matter expertise at global, national, regional, local, and battlefield levels; perform CWMD related technology development and integrate that technology with operational needs; provide planning assistance for the warfighters; and help maintain a safe, secure, and effective U.S. nuclear deterrent

The agency has approximately 2,000 military and civilian personnel located primarily in Virginia, New Mexico, and Florida, but also at 17 more locations across the globe. Our budget request for Fiscal Year 2012 (FY12) is $1.487 billion and comprises Defense-wide Research, Development, Test and Evaluation, Operations and Maintenance, Procurement, and Nunn-Lugar Cooperative Threat Reduction (CTR) appropriation accounts. In addition, DTRA executes the $504.747 million Science and Technology (S&T) portion of the DoD Chemical and Biological Defense Program (CBDP) and serves as the financial manager for the remainder of that program's funding, $1.021 billion. Therefore, the total DTRA resource portfolio is approximately $3 billion.

DTRA performs its programs in response to direction provided by OSD. As the Director of DTRA, I report through Mr. Andrew Weber, the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, to the Under Secretary of Defense for Acquisition, Technology and Logistics. Because DTRA conducts CWMD-related S&T development, we also work in partnership with the Assistant Secretary of Defense for Research and Engineering. In addition, as we are executing programs that implement DoD and national security policy, DTRA has a close partnership with the Assistant Secretary of Defense for Global Strategic Affairs in the Office of the Under Secretary of Defense for Policy.

DTRA is also the DoD Combat Support Agency charged with providing CWMD expertise and support to the Joint Chiefs of Staff, the Military Services, and the Combatant Commanders. While we serve all Combatant Commanders, we work most closely with the six Geographic Combatant Commanders, the U.S. Special Operations Command (USSOCOM), and USSTRATCOM.

**U.S. Strategic Command Center for Combating WMD**

DTRA's roots reach to the early days of the Cold War when it provided technical and operational nuclear weapons effects expertise to the Military Services. Similar assistance was and continues to be provided to USSTRATCOM.

In late 2005, the Secretary of Defense assigned the Commander, USSTRATCOM, the responsibilities for synchronizing the CWMD planning activities of the Combatant Commanders and advocating for related capabilities. The Commander, USSTRATCOM turned to DTRA

for its CWMD expertise and established the U.S. Strategic Command Center for Combating WMD (SCC-WMD) at DTRA. On 31 January 2006, the Secretary of Defense assigned the DTRA Director to serve in the additional capacity as the Director, SCC-WMD under the authority, direction, and control of the Commander, USSTRATCOM.

I am particularly pleased to report to you that DTRA and the SCC-WMD work together as a fully integrated team. As a team we have assisted the development of more efficient and effective DoD and Combatant Commander CWMD plans; advanced the means for assessing and exercising CWMD capabilities; shaped and advocated for CWMD requirements; and provided improved planning support for the Proliferation Security Initiative – a global partnership of nations that aims to stop trafficking of WMD, their delivery systems, and related materials.

**DTRA's New Strategic Plan**

Many organizations within DoD and across the USG contribute in some way to countering WMD threats. With a fulltime focus on CWMD, DTRA provides the core of the DoD expertise for countering WMD threats. Rather than duplicating capabilities and expertise that exist elsewhere inside and outside the department, DTRA partners with these organizations, leveraging their expertise and efforts and making the full scope of our knowledge and capabilities available to them. As threats evolve and budgets tighten, we must deepen existing relationships and build new partnerships across the department and throughout the USG and with our friends and allies overseas. We also understand that we need to be more effective and efficient in how we perform our mission. One example of this is our ongoing effort with

the Department of Energy's National Nuclear Security Administration (NNSA) on opportunities for joint offices that will reduce required space in U.S. embassies or the need to rent commercial office space. Presuming we will be successful at this, both Departments will benefit.

The new DTRA Strategic Plan, released last November, recognizes today's realities. It will provide for forward movement in concert with our DoD, interagency, and international partners; facilitate more efficient and effective mission execution; and underpins our Fiscal Year 2012 budget request. At the heart of this plan are three goals.

***Goal 1 – Adapt to and shape the dynamic Global Security Environment***

DTRA cultivates interconnected, mutually supportive partnerships to counter WMD threats. We must focus on developing new and expanding existing bilateral and multilateral partnerships to promote broader international cooperation on nonproliferation, counterproliferation, and consequence management; support the cooperative elimination of WMD threats abroad; improve the security and accountability of vulnerable nuclear, biological, and chemical material globally; and improve strategic global situational awareness in order to respond to emerging threats.

As the revolution in the life sciences advances enabling technologies and the ability to exploit these technologies becomes increasingly available, there is the urgent need to provide improved protection against naturally occurring extremely dangerous pathogens or newly created biological materials. As American troops are called upon to

operate around the world, disease surveillance becomes an even more important aspect of force protection.

Guiding these efforts is a strategy built upon our success with the Nunn-Lugar CTR Program which is expanding to include new partnerships beyond the former Soviet Union and greater focus on reducing the threat posed by biological weapons. The Nunn-Lugar Program made possible the de-nuclearization of Belarus, Ukraine, and Kazakhstan following the collapse of the Soviet Union; deactivated 7,599 nuclear warheads and eliminated 3,713 missiles, missile launchers, bombers, and missile submarines; eliminated massive stocks of chemical and biological weapons; enhanced the security of Russian nuclear warheads in storage and in transit; provided improved safety and security of extremely dangerous pathogens in medical facilities across the former Soviet Union; and made it far more difficult for rogue states or terrorists to gain access to WMD knowledge, weapons, delivery systems, and infrastructure.

The Nunn-Lugar Cooperative Biological Engagement (CBE) Program is working with Partner countries to build capacity that improves safe and secure diagnosis of dangerous disease outbreaks and to gain an understanding of their indigenous pathogens. These Nunn-Lugar efforts will directly contribute to improved force protection for our military personnel – a top priority for the Services and the Combatant Commands. This was expressed by the Commander, U.S. Africa Command, in a 4 January 2011 letter to Senator Richard Lugar, who had visited diagnostic and research laboratories in East Africa in November 2010. In several of these laboratories a need for additional safety and security upgrades were identified based on the indigenous

dangerous pathogens they handle while performing their mission. In this letter, General Kip Ward stated: "Your call for the U.S. to work together with African partners and provide financial support to mitigate potential bio-terrorism threats was very timely and highlights a key area for intensified engagement now. I share your concern that bio-security should be enhanced, and quickly, so that al-Qaeda and other terrorist groups in the region are denied access to deadly pathogens that may cause large-scale human suffering, death, and economic chaos."

To accomplish this, we rely on the knowledge, skills, capabilities, and, in some cases, existing relationships with these nations that our partners across the USG – including the Departments of State, Health and Human Services, and Agriculture – already possess. Our efforts simultaneously aid the regional strategic objectives of the Combatant Commands by increasing biosafety for the partner nation populations.

Objectives under this goal include:

- In collaboration with the NNSA, support President Obama's four-year nuclear lockdown goal, both with existing partners in the FSU and with new partners like China and India.
- Initiate and strengthen strategic relationships in conjunction with our interagency partners to explore collaborative efforts to prevent, reduce, and respond to WMD threats.
- Initiate and expand CBE programs and relationships with Kenya, Uganda, Pakistan, and Afghanistan to secure and consolidate collections of extremely dangerous pathogens and their research in the minimum number of secure laboratories and build capacity to

quickly diagnose and report natural occurring or deliberate bio-threats.

- In concert with the CBDP develop and expand biosurveillance technologies that encompass early detection, early information sharing, and the ability to make informed decisions in near-real time.
- Develop bilateral and regional-level capacity to counter WMD proliferation through collaborative workshops, training, equipment enhancements, and regionally integrated counterproliferation efforts to include the International Counterproliferation Program, the Nunn-Lugar WMD Proliferation Prevention Program, and various counter-trafficking programs.
- Support Department of State Office of Weapons Removal and Abatement efforts to assess, reduce, and secure stockpiles of small arms and light weapons (SALW) worldwide. This program helps foreign governments ensure that man-portable air defense systems, other SALW, and related ordnance are properly secured and managed and that excess stockpiles are destroyed. DTRA performs assessments, provides technical advice, and presents best practices through training seminars. Although these weapons and munitions are not WMD, DTRA's on-site weapons inspection and accountability expertise has been applied to reduce the proliferation risks and advice countries on how to avoid accidental explosions in their munitions depots.
- Develop and execute a "whole-of-government" supported program to build consequence management capacity with international partners.

***Goal 2 – Provide Counter WMD Capabilities to Meet Current Threats and Challenges***

DTRA enables warfighters and allies to counter WMD threats swiftly, effectively, and as far from our borders as possible. Counterproliferation and consequence management activities account for the largest part of this second goal. Related objectives include:

- Expansion of near-real time technical "reach back" support to meet the increased number and sophistication of WMD related requests from a growing list of customers including OSD, the Combatant Commanders, and the National Guard WMD Civil Support Teams.
- Priority attention on the safety, security, and accounting of the nation's nuclear weapons under DoD's responsibility.
- Expanded development of WMD active and passive detection technologies and accelerated integration into operational concepts to measurably increase standoff detection capabilities and improve means for interdicting WMD on the move.
- Improved non-nuclear means for defeating underground facilities, particularly those associated with WMD.
- Accelerated development and transition of nuclear forensics and weapons effects capabilities that will increase the understanding of tomorrow's WMD threat environment and ensure the survivability and operability of systems and key infrastructure following WMD attacks.
- Enhanced Combatant Commanders' capability to eliminate and respond to WMD threats and vulnerabilities, including the improvement of the Combatant Commanders' ability to plan and execute CWMD related responsibilities.

- Improved WMD technical analysis efforts with particular emphasis on modeling, simulation, wargaming, and tool development across the WMD spectrum.
- Better integrated intelligence data and WMD technical expertise to provide improved understanding of the characteristics, risks, and vulnerabilities of WMD threats.
- Develop a collaborative approach to CWMD education and training better focused on the needs of the Combatant Commanders, the Military Services, and our interagency partners.
- Improved capabilities to defeat WMD agents with minimal collateral damage.
- Accelerated development and transition of technologies that will improve the protection of the warfighters through passive means and decontamination.
- In cooperation with the CBDP develop medical technologies to protect the warfighter and the populace from emerging and genetically engineered biological threats by linking the identification of pathogens to the development of medical countermeasures and placing higher priority on vaccine development and production to counter disease pandemics.

***Goal 3 – Institutionalize a "whole-of-DTRA" approach to enhance the agency's mission performand***

The third goal calls for the improvement and integration of strategic planning, management, and business processes; improved information technology infrastructure and knowledge management; and the development of increased intellectual capital to meet the future WMD threats and provide the required CWMD expertise.

**FY11 Budget Outcome and Adjustments**

I would like to thank this subcommittee for its strong support of the DTRA FY11 budget request that included 17.5% growth over the FY10 appropriation. This large single year increase was requested by the Department as DTRA's budget had remained relatively flat since the 1998 establishment of the agency. The Joint Explanatory Statement of the Committees on Armed Services of the U.S. Senate and House of Representatives on H.R.6523, Ike Skelton National Defense Authorization Act for Fiscal Year 2011 fully authorized this request. The Senate Appropriations Committee fully supported our request. The House Defense Appropriations Subcommittee recommended appropriation of 99% of this amount, which was also the level included in H.R.1, the House-passed FY11 Appropriations Bill. Thank you for your support.

**FY12 Budget Request**

DTRA is requesting your support for its FY12 budget request of $1.487 billion as follows: $432.133 million in Operations and Maintenance, Defense-wide funding ($31.399 million less than the FY11 estimate); $13.006 million in Procurement, Defense-wide ($0.949 million more than the FY11 estimate); $533.652 million in Research, Development, Test and Evaluation, Defense-wide funding ($28.972 million less than the FY11 estimate); $0 for FY2005 Base Realignment and Closure, Defense-wide (FY11 estimate is $2.097 million); and $508.219 million for Nunn-Lugar CTR Program ($14.293 million less than the FY11 estimate). This budget includes efficiencies implemented as part of developing the President's budget submission. Highlights of the FY12 budget request follow.

***Operations and Maintenance Funding***

Most DTRA Operations and Maintenance (O&M) funding directly supports the warfighters and national missions. The requested $432.133 million would be applied as follows:

- $71.731 million for Nonproliferation Activities including the New Strategic Arms Reduction Treaty, Conventional Armed Forces in Europe, Chemical Weapons Convention, and Open Skies missions; Defense Treaty Inspection Readiness Program; International Counterproliferation Program; and Secretary of Defense Support. This is $4.725 million less than the FY11 estimate.
- $147.113 million for WMD Combat Support and Operations including combat support to the Joint Chiefs of Staff, Combatant Commands, and Services; operational and analytical support for nuclear weapons and WMD matters; direct technical support to the Combatant Commands for planning, exercises, and real world operations; deployable subject matter expertise; targeting support and combat assessments; Balanced Survivability Assessments that provide mission survivability evaluations as previously noted; Joint Staff Integrated Vulnerability Assessments to improve force protection at home and abroad; support to the Global Initiative to Combat Nuclear Terrorism; and support to Combatant Command Theater Security Cooperation planning and activities. The FY12 request is $16.306 million less than the FY11 estimate.
- $25.253 million for DTRA's support to the SCC-WMD including development and maintenance of a WMD common operating picture; integration and synchronization of CWMD planning across DoD and with interagency partners; access and continuity to national WMD expertise; DTRA Operations Center; and 24/7 technical reach back. This is $6.583 less than the FY11 estimate.

- $10.093 million for the Defense Threat Reduction University including unique training for students from all levels of DoD, federal and state agencies, and allied countries in nuclear weapons; nuclear and radiological incident command, control, and response; counterproliferation with emphasis on operational support; and maintenance of the DoD source of information and analysis of CWMD and nuclear knowledge. This is $0.578 million less than the FY11 estimate.
- $177.943 million for Core Mission Sustainment that provides for all agency mission essential functions including resource management, security and asset protection, information and knowledge management, and acquisition and logistics management. Special care was taken in preparing this request to ensure that much needed information technology and knowledge management upgrades essential to DTRA's global mission execution were funded to the fullest extent possible. This is $3.197 million less than the FY11 estimate.

***Research, Development, Test and Evaluation Funding***

DTRA research and development programs respond to the most pressing CWMD challenges including stand-off nuclear detection; modeling and simulation; support to Special Operations Forces; WMD intelligence, surveillance, and reconnaissance; support to the Intelligence Community; hard target defeat; and system survivability against WMD effects.

The requested $533.652 million would be applied as follows:

- $47.737 million for Basic Research to discover and develop CWMD-related fundamental knowledge and understanding by DoD and

other USG laboratories, industry, and academia – to include partnerships with foreign universities. This program manages over 200 active basic research awards on a three-year cycle. Since 2007, DTRA has made 205 basic research awards worth $97.2 million in 36 states, thereby funding the CWMD-related research projects performed by more than 500 students and 100 post-doctoral researchers and resulting in more than 500 publications and 17 patents. This is $0.325 million more than the FY11 estimate.

- $196.954 million for WMD Defeat Technologies Applied Research including systems engineering and innovation; counter-terrorism technologies; detection technology; advanced energetics and CWMD weapons; nuclear survivability; nuclear and radiological effects; WMD battle management; test infrastructure; and CWMD fundamental research. This is $15.788 million less than the FY11 estimate.
- $283.073 million for Counterproliferation Initiatives Advanced Technologies Development including systems engineering and innovation; counter-terrorism technologies; detection technology; advanced energetics and CWMD weapons; nuclear survivability; WMD battle management; and target assessment technologies. This is $12.090 million less than the FY11 estimate.
- $5.888 million for WMD Defeat Capabilities Development and Demonstration on nuclear and radiological effects. This is $1.419 million less than the FY11 estimate.

As previously noted DTRA also manages the S&T portion of the CBDP and integrates it within the broader CWMD research and development

effort. The FY12 budget request for the CBDP is $1,526.485 billion. This is $51.212 million less than the FY11 estimate.

***Procurement Funding***

The DTRA Procurement, Defense-wide request replaces mission essential vehicles; replaces leased equipment; and procures new investment items required to perform agency missions. The FY12 request is for $13.006 million, $0.949 million higher than the FY11 estimate. As with the DTRA O&M account, special care was taken in preparing this request to ensure that critically essential information technology and knowledge management upgrades essential to DTRA's global mission execution were funded to the fullest extent possible.

***Nunn-Lugar Cooperative Threat Reduction Funding***

The Nunn-Lugar program's overarching mission is to partner with willing countries to reduce the threat from WMD and related materials, technologies, and expertise. This program has expanded its activities beyond the FSU as authorized in the FY08 National Defense Authorization Act. For FY12, the Nunn-Lugar program has been restructured to clearly link efforts to established national security strategies, gain efficiencies among related project efforts, and enable and promote the expansion of the program beyond the FSU.

The $508.219 million, a 3-year appropriation, requested for this program in FY12 would be applied for three years as follows:

- $63.221 million for Strategic Offensive Arms Elimination in Russia to include 20 SS-19 Intercontinental Ballistic Missiles (ICBMs), 11 SS-19 silos and launch control centers, 36 SS-25 ICBMs, 27 SS-25 road-mobile launchers, and 20 SS-N-18 Submarine-launched

Ballistic Missiles (SLBMs). In addition the funding would decommission one SS-25 ICBM regiment; complete the dismantlement of nuclear reactor cores and launcher sections of one DELTA III Ballistic Missile Submarine (SSBN) and eliminate 16 SLBM launchers; and complete the dismantlement of the nuclear reactor cores and launcher sections of one TYPHOON SSBN and eliminate 20 SLBM launchers. This request is a $10.311 million less than the FY11 estimate.

- $9.804 million for Chemical Weapons Destruction technical support to the Chemical Weapons Destruction Facility at Shchuch'ye, Russia. This is $6.204 million more than the FY11 estimate. To date, this effort has resulted in the destruction of 1,680.4 metric tons of declared chemical weapon agents.
- $121.143 million for Global Nuclear Security. This program area renames and consolidates all activities related to nuclear warhead and weapons-grade nuclear material security within selected countries. These efforts provide enhanced physical security, including associated inventory management and security training support, for strategic and non-strategic (tactical) nuclear weapons and fissile materials. The program also improves security for nuclear material that meets specific criteria for enrichment and quantity and is judged to be vulnerable. In addition, it assists in the secure transport of nuclear warheads and other qualifying material to dismantlement facilities, consolidated secure storage areas, or processing facilities for disposition. This program also assists with the establishment of Centers of Excellence with partner countries to enhance training capability for nuclear security, material control, and inventory management that is consistent with best international practices, and installs additional security

measures in Kazakhstan. This is $43.136 million less than the FY11 estimate.

- $259.470 million for Cooperative Biological Engagement. This program was formerly titled Biological Threat Reduction (BTR). The CBE program counters the threat posed by pathogens (as delineated in the U.S. Select Agent List); related materials and expertise; and other emerging infectious disease risks. It helps prevent these pathogens from reaching any foreign state or non-state actors who may use them against the United States and its allies. The CBE program focuses on delivering tailored approaches that recognize and build upon partner countries' indigenous capacities. The CBE program builds capacity and advocates best practices for the safe and secure handling of extremely dangerous pathogens. It supports transparent responsible research to understand indigenous dangerous pathogens in partnership with the whole of U.S. Government and international partners. These collaborative partnerships enhance global capacity to detect, diagnose, and mitigate biological risks of concern. These partnerships also facilitate an ability to initiate timely and effective disease control measures to contain trans-border global disease threats. The program is engaged with Ukraine, Georgia, Azerbaijan, Armenia, Kazakhstan, Russia, Pakistan, Afghanistan, Kenya, and Uganda. In FY12, it will partner with Iraq, Tanzania, Djibouti, South Africa, and India. This is $50.436 million more than the FY11 estimate.
- $28.080 million for Proliferation Prevention by building partner capacity in Armenia and Moldova and expanding on-going efforts within the FSU, to include additional land border assistance and bolstered regional training capacities in Ukraine; land border

- $2.5 million for Threat Reduction Engagement opportunities in new geographical areas. This is $2.500 million less than the FY11 estimate.
- $24.001 million for Other Assessments/Administrative Support including audits and examinations of provided assistance, contractor advisory and assistance services, and U.S. Embassy support in partner countries. This is $0.961 million more than the FY11 estimate.

**Conclusion**

Our path ahead builds on our expertise and accomplishments. As we adapt to and shape the Global Security Environment, we will be guided by the institutional foundation and program experience of the Nunn-Lugar program that safely brought us from the Cold War to the present. In the years ahead we will be expanding cooperative threat reduction and engagement on a worldwide scale with new partners. We will enable the warfighters and our allies to more effectively and efficiently counter WMD threats by providing the intellectual, technical, and operational expertise that will permit far more effective decision making and mission execution.

Mr. Chairman, Ranking Member Langevin and members of the subcommittee, I thank you for your interest in and past support of the

DTRA counterproliferation and consequence management programs. I hope that we continue to earn your trust and support in the year ahead. I would be pleased to respond to your questions.


## Kenneth A. Myers

Mr. Myers is the Director for the Defense Threat Reduction Agency (DTRA) and the U.S. Strategic Command Center for Combating Weapons of Mass Destruction (SCC-WMD). Both are co-located on Fort Belvoir, VA. He assumed these responsibilities on July 27, 2009.

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 Combating WMD (CWMD) mission and develops improved CWMD capabilities for the warfighter. The mission of the SCC-WMD is to synchronize the CWMD plans of the warfighters, and identify and advocate for needed CWMD capabilities. Together, these organizations provide CWMD expertise, support, and products at strategic (global and national), operational (theater and regional), and tactical (battlefield) levels to prevent the proliferation of WMD, deter and defeat WMD use, and reduce the effects of WMD that may be used against us.

During his leadership of DTRA and the SCC-WMD, Mr. Myers has further integrated the two organizations into an even more effective team; strengthened coordination and synchronization of CWMD plans, research and development programs, and support to CWMD operations across the Department, the U.S. Government, and among international partners; and directed programs to implement the President's vision for global biological threat reduction and engagement and nuclear security, improved WMD defeat capabilities including the transition of the Massive Ordnance Penetrator for the defeat of underground WMD facilities to the Air Force for final testing.

To better implement the President's nuclear and biological security policy initiatives and the 2010 Quadrennial Defense Review, Mr. Myers developed a new strategy to guide DTRA and the SCC-WMD. Named after the sponsors of the legislation that Cooperative Threat Reduction (CTR) program, Former Senator Sam Nunn (D-GA) and Senator Dick Lugar (R-IN), the Nunn-Lugar Global Cooperation Strategy applies the lessons learned from the execution of the CTR program to the new security environment. The strategy calls for more agile, flexible, anticipatory, and responsive nonproliferation programs and activities to meet emerging WMD threats and maximize opportunities for WMD threat reduction in cooperation with partners around the world. This strategy also increased DTRA/SCC-WMD support to the Combatant Commands' theater security engagement efforts that shape more stable regional security environments.

Prior to arriving at DTRA, Myers served from 2003 to 2009 as a Senior Professional Staff Member on the Committee on Foreign Relations in the U.S. Senate. He also served as the senior advisor to Senator Dick Lugar, the Committee's Ranking Minority Member, on European, Former Soviet Union and

Central Asian Affairs, and the Caucasus, as well as for arms control, arms sales, and CWMD matters. He assisted Senator Lugar on the Nunn-Lugar CTR program, the U.S./Russian relationship, arms control, security and confidence building measures, and NATO and European Union issues. He had a leading role in several critical foreign policy debates including NATO enlargement, the Moscow and Strategic Arms Reduction treaties, U.S. nonproliferation and counterproliferation policies, export controls, the U.S./India Peaceful Atomic Energy Cooperation Act, and the Lugar-Obama Cooperative Proliferation Detection, Interdiction Assistance, and Conventional Threat Reduction Act. In addition, he was a regular advisor on U.S. policy towards the Middle East, South Asia, and North Korea and was also responsible for reviewing nominees for ambassadorial posts in Europe and the Former Soviet Union.

From 1995 to 2002, Myers served as a legislative assistant for National Security and Foreign Affairs for Senator Lugar. He assisted the Senator in his role as a member of the Committee on Foreign Relations, the Select Committee on Intelligence, and the Senate's National Security Working Group and Russia Working Group.

Prior to joining the Senator's staff, Myers was a senior associate at the firm of Robinson Lake Sawyer Miller in Washington, D.C., where he specialized in U.S. public and private sector investments to the successor states to the Former Soviet Union and was responsible for establishing that firm's office in Kyiv, Ukraine.

Myers holds a Masters Degree from the Catholic University of America and a Bachelors Degree from Virginia Polytechnic Institute and State University.

STATEMENT FOR THE RECORD

OF

BRIGADIER GENERAL JESS A. SCARBROUGH, USA

JOINT PROGRAM EXECUTIVE OFFICER FOR

CHEMICAL AND BIOLOGICAL DEFENSE

BEFORE THE

SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES

COMMITTEE ON ARMED SERVICES

U.S. HOUSE OF REPRESENTATIVES

MARCH 11, 2011

NOT FOR PUBLICATION

UNTIL RELEASED BY THE

COMMITTEE ON ARMED SERVICES

## INTRODUCTION

Mr. Chairman, Congressman Langevin, and distinguished members of the subcommittee, I am honored to testify on behalf of the Department of Defense (DoD) 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 my civilian leaders and partners who have articulated the global security environment, strategic priorities, and the mission of countering weapons of mass destruction. I am going to provide an update regarding the Chemical and Biological Defense Program contribution to the latter mission. My update will focus on biosurveillance, diagnostics, the new Medical Countermeasures Initiative, and non-traditional agent defense. I will conclude by briefly highlighting several activities in response to the call by the Secretary of Defense for greater efficiency in DoD program management.

## MISSION AND BACKGROUND

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 Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs has that responsibility and is 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, and acquisition for the Military Services.

Primary components of the Chemical and Biological Defense Program are 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, and the Joint Program Executive

Office for Chemical and Biological Defense for the advanced development, procurement, fielding, and life-cycle management of systems. The Chemical and Biological Defense Program Test and Evaluation Executive establishes test policy and standards while the Program Analysis and Integration Office oversees budget execution. Outside the DoD, the Chemical and Biological Defense Program works closely with other federal stakeholders, such as the Department of Health and Human Services and the Department of Homeland Security. We also maintain a strong international program that includes America's closest allies.

## FISCAL YEAR 2012 DEPARTMENT OF DEFENSE BUDGET REQUEST

The Fiscal Year 2012 Budget Request for the Chemical and Biological Defense Program includes $254 million for procurement, $771 million for advanced development, and $502 million for science and technology efforts for a total of $1.52 billion. The President's budget request represents an executable and integrated medical and non-medical joint program that balances the immediate need to field capabilities and solutions against the long-term research efforts necessary to guard against technological surprise. In addition to a healthy science and technology base program, a promising advanced development component, and continued procurement of essential defense systems, the budget request represents a strategic shift toward a comprehensive response to the threat of bioterrorism and emerging chemical threats. Our focus on biosurveillance, diagnostics, the new Medical Countermeasures Initiative, and non-traditional agent defense supports this shift.

## BIOSURVEILLANCE

Our ability to obtain early warning about the deliberate use or natural emergence of dangerous pathogens hinges upon the development of a global biosurveillance network. The role of the Chemical and Biological Defense Program is to develop and integrate technologies to enable early warning, identification, and continued situational awareness of existing or potential global threats.

Over the past year, the Chemical and Biological Defense Program established the Joint Product Management Office – Biosurveillance and tasked it with the mission of developing and integrating biological defense technologies to enable early warning, identification, and continued situational awareness of potential global health threats. This office serves as the biosurveillance focal point to facilitate portfolio integration across the Joint Program Executive Office for Chemical and Biological Defense as well as integrate with other DoD, interagency, and international efforts. The office also manages key DoD programs enabling biosurveillance such as the Joint Biological Agent Identification and Diagnostics Program, the Next Generation Diagnostic System, and the Critical Reagents Program.

Open lines of communication are critical to meet the challenges of an evolving biological threat. Only when medical, public health, and environmental data and reporting technologies are integrated will our leaders be able to make the quick and accurate decisions that save lives. Internal to the DoD, we continue to build strong working relationships with the policy and healthcare elements within the Office of the Secretary of Defense to include a key partnership on disease surveillance and influenza diagnostics with the Armed Forces Health Surveillance Center and its Global Emerging Infections Surveillance and Response System. We are prototyping an information management tool in the Republic of Korea to enable the U.S. Forces Korea Surgeon to see medical and environmental data in real-time as one common operating picture.

External to the DoD, the Chemical and Biological Defense Program has agreements with the Department of Homeland Security BioWatch Program to share data and concepts of operations and provide biosurveillance assays. Internationally, we maintain partnerships with our closest allies. This internal, external, and international collaboration is aimed at defining roles and responsibilities as a mechanism to leverage funds, reduce duplicative efforts, and accelerate the development of technologies to achieve the objectives outlined in the *National Strategy for Countering Biological Threats*.

As we look to the future, our equipment and systems will need to be adaptable and flexible to detect biological threats, both naturally occurring and intentionally created, early enough to initiate a rapid and effective response. To inform our development efforts, we are

conducting a comprehensive market survey of the hardware technologies enabling biosurveillance. The results of this survey will be shared with our DoD and interagency partners when completed this spring. Additionally, we have directed a study to explore technology needs for achieving biosurveillance within the context of the *National Strategy for Countering Biological Threats*.

**DIAGNOSTICS**

Diagnostics is fundamental to biosurveillance and it is a key area of our expertise in the Chemical and Biological Defense Program. The Joint Product Management Office – Biosurveillance develops and integrates state-of-the-art chemical and biological diagnostic and identification systems to enable both force protection and force health protection. As noted earlier, it leads an integrated portfolio of two diagnostic system acquisition programs, the Joint Biological Agent Identification and Diagnostic System and the Next Generation Diagnostic System, as well as the Critical Reagents Program.

The Joint Biological Agent Identification and Diagnostic System is a reusable, portable, modifiable biological agent identification and diagnostic system capable of rapid, reliable and simultaneous identification of multiple biological agents and other pathogens of operational concern. The system is fielded to over 300 locations worldwide with the National Guard Bureau, Navy, Marine Corps, Army, and Air Force. The system has Food and Drug Administration cleared diagnostics tests for Anthrax, Plague, Tularemia, and Avian Influenza as well as over seventy pre-emergency use authorization data packages ready for deployment upon declaration of a national emergency.

Funded in the fiscal year 2012 budget request, the Next Generation Diagnostic System program will develop a family of systems that provide improved capabilities across all operational echelons (tactical, field confirmatory, and fixed facilities). It will be fielded over several acquisition increments and will include enabling technologies to enhance the screening, collection and transport of clinical samples for analysis.

The Critical Reagents Program houses the most extensive collection of quality-controlled biological defense reagents and test materials used throughout the Federal Government. A national resource for the biological defense community, the Critical Reagents Program serves as the principal resource of high quality, validated, and standardized biological detection assays and reagents that meet the requirements of the warfighter and joint biological defense systems. These assays and reagents also facilitate the transition of new technologies and coordinate their advanced development, efficient production, and timely distribution.

With these three programs in our portfolio, the Chemical and Biological Defense Program is leading the DoD diagnostics effort and remains well positioned to further contribute to emerging DoD biosurveillance requirements.

**MEDICAL COUNTERMEASURES INITIATIVE**

As this subcommittee is aware, the national security threat posed by bioterrorism and infectious disease is real. Our national security is challenged by the complexities associated with rapidly responding to a biological attack with countermeasures that limit impacts and subsequent loss of life. In his 2010 State of the Union Address, President Obama stated, "The United States must have the capacity to respond faster and more effectively to bioterrorism or an infectious disease." In fiscal year 2012, the DoD begins to establish a dedicated medical countermeasure advanced development and flexible manufacturing capability for the purpose of national defense. This new effort is aligned with the DoD mission of protecting our people. Forces are currently deployed where exposure to unfamiliar or indigenous pathogens is likely. Vital to any response is the agile development and manufacturing of medical countermeasures in quantities to treat affected populations rapidly. To this end, we are collaborating with the Department of Health and Human Services to create a national biodefense rapid manufacturing capability. The DoD is looking to address the needs of military personnel while the Department of Health and Human Services is focusing on large scale production to address the needs of the U.S. population.

The DoD Medical Countermeasures Initiative encompasses three major elements: a science and technology component, a test and evaluation component, and an advanced

development and manufacturing component. Both the science and technology and the advanced development and manufacturing components will be managed by the Chemical and Biological Defense Program while the test and evaluation component will be executed by the U.S. Army Medical Research and Materiel Command. Science and technology efforts will be concentrated in three areas: 1) novel platform/expression systems for medical countermeasures, 2) advancement of regulatory science, and 3) advancements in flexible manufacturing technologies. The test and evaluation component will provide a national test and evaluation facility for animal studies to support development of medical countermeasures. The advanced development efforts will be concentrated in two areas: 1) further maturation of novel platform/expression systems and integration into a production process, and 2) establishment of a Technical Center of Excellence comprised of an advanced development and flexible manufacturing capability. Ultimately, the DoD Medical Countermeasures Initiative's three major elements will coalesce to provide a 'one-stop shop' for all future DoD biological medical countermeasure development.

During early fiscal year 2012, the DoD plans to award a long-term contract to establish and commission this advanced development and manufacturing capability. The Chemical and Biological Defense Program's two medical advanced development offices, the Joint Project Manager – Chemical and Biological Medical Systems, and the Joint Project Manager – Transformational Medical Technologies will use this capability for advanced development and manufacturing of their products.

The DoD Medical Countermeasures Initiative was developed not only in response to the President's call to redesign our medical countermeasure enterprise during the 2010 State of the Union but also pursuant to *Executive Order - Medical Countermeasures Following a Biological Attack* (December 30, 2009), *Homeland Security Presidential Directive 18, Medical Countermeasures Against Weapons of Mass Destruction* (January 31, 2007), and *Homeland Security Presidential Directive 10, Biodefense for the 21st Century* (April 28, 2004).

## NON-TRADITIONAL AGENT DEFENSE

A fundamental component of countering advanced threats is addressing non-traditional agents. Non-traditional agents are chemicals and biochemicals reportedly researched or developed with potential application or intent as chemical warfare agents, but which do not fall in the category of traditional chemical warfare agents, toxic industrial chemicals, or toxic industrial materials. The Chemical and Biological Defense Program develops capabilities to counter non-traditional agents through an integrated portfolio process focusing on the enabling science and technology, test and evaluation, and the advanced development of detection, medical countermeasures, decontamination, and individual protection products.

A national level non-traditional agent defense research, development, test, and evaluation strategy has been published to develop a research and development capability through a comprehensive interagency effort. The Chemical and Biological Defense Program's three phase integration into the national strategy is funded across the DoD Future Years Defense Program. In the near-term (fiscal years 2010 – 2011), we are accelerating scientific understanding, rapidly fielding interim defense capabilities, and continuing ongoing non-traditional agent defense efforts. For the mid-term (fiscal years 2012 – 2016), we will complete scientific understanding, continue to field integrated defense capabilities, and expand efforts to emerging non-traditional agent threats. In the far-term (fiscal year 2017 and beyond), we plan to expand non-traditional agent scientific understanding and complete fielding of defensive capabilities for emerging non-traditional agent threats.

## DOD EFFICIENCIES INITIATIVE

Pursuant to Under Secretary of Defense for Acquisition, Technology & Logistics Dr. Ashton B. Carter's September 14, 2010, *Implementation Directive for Better Buying Power*, we are integrating measures to ensure all of our programs are affordable and provide a positive return on investment for the taxpayer. These measures include eliminating low impact but high-cost requirements, increasing competition, and improving cost estimation and management

through every program's life-cycle. Within my command, we are realigning our organizations to be more cost-effective. For example, we recently consolidated three of our subordinate organizations into one, thereby reducing staff by thirty-one full time positions and accruing a cost avoidance estimated at $5 million. Further, we have reduced our contractor support and other overhead saving several millions this year. Finally, I have mandated a workload study to help us further reduce overhead within the Joint Program Executive Office for Chemical and Biological Defense by as much as $100 million over the Future Years Defense Plan. As a whole, the Chemical and Biological Defense Program understands the importance of maximizing efficiency while providing the capabilities necessary to protect both our military and civilian populations.

## CONCLUSION

Today we face a broad array of threats, both natural and manmade. 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. There are multiple needs in the medical and non-medical chemical and biological defense arena that are addressed in the President's budget. The Chemical and Biological Defense Program respects the fiscal limitations our country faces and is rising to this challenge by creating efficiencies. I urge the Congress to fund the development of improved chemical and biological defense capabilities to protect our citizens in this changing and uncertain environment. Mr. Chairman, Congressman Langevin, and members of the subcommittee, on behalf of the men and women of the Chemical and Biological Defense Program, thank you for the opportunity to appear before you. We are grateful for the support and leadership we receive from Congress.

# *BG JESS A. SCARBROUGH*

**Joint Program Executive Officer for Chemical and Biological Defense**

Brigadier General Scarbrough is the new Joint Program Executive Officer for Chemical and Biological Defense. His responsibilities include the research, development and acquisition of all chemical and biological defense equipment and medical countermeasures for the United States Armed Services.

He was commissioned a Second Lieutenant in Air Defense Artillery (AD) after graduating from the University of Arizona with a Bachelor of Arts Degree in Political Science. Upon graduation, he was assigned to the United States Army – Europe (USAREUR) and Seventh Army as a Unit Commander responsible for Nuclear Surety on a NATO Nike-Hercules AD Missile Site.

In 1985, BG Scarbrough was reassigned to III Corps and Fort Hood, Texas where he served in multiple operational assignments as a Battalion S4 and Battery Commander in a Division AD Chaparral/Vulcan Battalion. In 1988, he was reassigned to the 31st Air Defense Artillery Brigade, III Corps and served as the Chief of the Air Defense Element.

In 1989 BG Scarbrough entered into his functional area; research, development and acquisition and has served in numerous acquisition management and staff positions to include; Project Manager for the Army's Tactical Exploitation of National Capabilities Program and Director, Army Space Program Office; Program Executive Office (PEO) for Intelligence, Electronic Warfare and Sensors (IEW&S); and Product Manager for the Army's Information Warfare Program, PM Signals Warfare, PEO IEW&S.

BG Scarbrough's other assignments include Program Director, Special Operations and Conventional Special Programs, Office of the Under Secretary of Defense for Acquisition and Technology; Director, International Cooperative Programs Activity, United States Army Research, Development and Engineering Command; Chief of Staff to the Army Acquisition Executive, and Assistant Deputy, Acquisition and Systems Management, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology.

BG Scarbrough has earned two Masters Degrees in Business Administration from the University of Oklahoma and in Strategic Studies from the United States Army War College. Other professional schooling includes the AD Officer Basic and Advanced Courses, the Army's Command and General Staff College, the Air Force Air Command and Staff College, the Department of Defense Systems Management College, and the National Defense University's CAPSTONE General and Flag Officer Course.

His decorations and awards include the Legion of Merit with one oak leaf cluster, the Defense Meritorious Service Medal, the Army Meritorious Service Medal with six oak leaf clusters, the Army Commendation Medal with one oak leaf cluster and the Army's Achievement Medal with one oak leaf cluster. He is also authorized to wear the Office of the Secretary of Defense Identification Badge, the Army Staff Identification Badge, the Army Air Assault Badge, and the German Air Force Air Defense Badge in Bronze.

**WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING**

MARCH 11, 2011

## RESPONSE TO QUESTION SUBMITTED BY MR. FRANKS

Mr. MYERS. The purpose served by the Shield Act is of interest to the entire American populace considering the potential impact of the phenomenology that it is trying to protect against. As highlighted within the Shield Act, the Act's purpose is "to amend the Federal Power Act to protect the bulk power system and electric infrastructure critical to the defense and well-being of the U.S. against natural and manmade EMP threats and vulnerabilities." As both a practical and authoritative matter, such protection as described within the Act is a collaborative effort with the overall responsibility for protecting the U.S. electric infrastructure residing with the Department of Homeland Security and the Department of Defense (DOD) playing a supporting role. Among other things, and in collaboration with other U.S. Government entities such as the Department of Energy, the Defense Threat Reduction Agency (DTRA) provides technical expertise in relevant phenomenology such as nuclear-driven electromagnetic pulse (EMP) and naturally occurring geomagnetic storms—both of which have a potentially large effect on the bulk-power system and U.S. electric infrastructure. Accordingly, as the DOD lead agency for EMP effects and the associated military standards established to protect against those effects, DTRA conducts research on the magneto hydrodynamic (MHD) E-3 portion of the EMP pulse and its late-time effects on DOD systems and critical infrastructure. This portion of the EMP spectrum is of interest from both a manmade and naturally occurring perspective as the MHD E-3 produces similar frequency content to that of a geomagnetic storm, albeit not quite of the probable level of intensity generated during a nuclear blast. As part of its CWMD capability, DTRA maintains an MHD E-3 testbed that has been used to investigate MHD E-3 phenomology on a representative portion of the U.S. power grid. DTRA is also in the process of conducting research with the Idaho National Laboratory to examine damage to large transformers due to thermal overheating from such effects.

As a matter of institutional responsibility, the Assistant Secretary of Defense (Homeland Defense) oversees the Defense Critical Infrastructure Program (DCIP) and therefore assists DHS as DHS publishes a National Infrastructure Protection Plan (NIPP) to address the 18 sectors of the national infrastructure, e.g., electric power grid, banking, transportation, telecom, water, pipelines, etc. As such, DHS serves as the overall U.S. government lead in collaboration with other agencies such as DOE to modernize the electric grid and enhance its reliability. [See page 15.]

## QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 11, 2011

## QUESTIONS SUBMITTED BY MR. THORNBERRY

Mr. THORNBERRY. As you know, the GAO has reported that our counterproliferation programs need to better align with our strategy. Since you deal with the larger policy and strategy issues associated with WMD and counterproliferation, can you outline how you plan to improve in this area?

Mr. HANDELMAN. We believe that the most recent authoritative strategy statement on Countering WMD, the 2010 Quadrennial Defense Review, which highlighted the need to: increase barriers to WMD proliferation and use; identify and mitigate emergent WMD threats; develop layered and integrated defenses to WMD; and manage WMD Threats that emanate from failing or fragile states. We believe these priorities have been followed quite closely by programmatic changes to enhance 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, defeat the threats themselves.

To further these ends, the FY11 Defense Appropriation provides funding for WMD Elimination ($99.3M), enhanced nuclear forensics ($109.2M), R&D for non-traditional agents ($300M) and biological threat reduction ($300M). We continue to work closely with the Under Secretary of Defense for Acquisitions, Technology & Logistics (AT&L) to ensure these policy and strategy issues align with programming.

Mr. THORNBERRY. The 2002 National Strategy to Combat Weapons of Mass Destruction outlines three pillars for dealing with WMD: nonproliferation, counterproliferation, and consequence management. Are these pillars effective in providing a strategic framework for U.S. Combating WMD activities? Is the current DOD organization effective in responding to the nonproliferation, counterproliferation, and consequence management pillars? Within which of these pillars do our greatest challenges lie?

Mr. HANDELMAN. The three pillars for WMD provide an effective framework for managing DOD's countering WMD activities to prevent proliferation and use of WMD, means of delivery, and related materials, increase force protection, and prepare to respond to the range of WMD threats.

Each pillar of CWMD contains unique challenges. However, our greatest challenge is how we coordinate activities across the CWMD mission space to create a truly layered defense. As stated in the 2010 QDR, an integrated, layered defense is essential to preventing an attack before it occurs, through efforts such as securing material at its source or ensuring robust interdiction capabilities as part of UN Security Council Resolution enforcement, as well as responding to an attack should prevention fail. Therefore, efforts to cut across pillars and examine issues in a holistic manner are of primary importance to the countering WMD mission.

Mr. THORNBERRY. In your written testimony, you discuss the partnership between the U.S. government and large pharmaceutical companies in developing biological countermeasures. Can you provide more detail about this partnership and outline some of the challenges?

Mr. WEBER. DOD will enter into a cooperative partnership with industry, including both experienced pharmaceutical companies and biotechnology innovators, for the advanced development and manufacturing of medical countermeasures (MCMs). This is the Medical Countermeasures Initiative (MCMI).

The events of the 2009 H1N1 pandemic, along with the ongoing development of chemical, biological, radiological, and nuclear (CBRN) MCMs, revealed major challenges remaining in advanced development and domestic manufacturing capacity when facing an emerging disease. These challenges require new approaches to counter anticipated and unanticipated attacks, as well as natural disasters or naturally occurring infectious-disease threats. The most evident challenge was the ability to meet demand for MCMs during an outbreak. Current capabilities would not provide sufficient countermeasures to the armed forces or to the Nation as a whole in an emergency situation.

DOD will address this gap by establishing the MCMI to provide agile and flexible advanced development and manufacturing capabilities to support the development, licensure, and production of MCMs for U.S. military forces and the Nation. The

MCMI will also support science and technology efforts to develop next-generation MCM-platform technologies, manufacturing systems, and regulatory science technologies.

DOD's need for MCMs is variable in quantity, ranging from thousands of doses to several million. The potential spectrum of exposure, from CBRN threats to emerging infectious diseases, is diverse. Although the DOD dose requirements are relatively small, there are still great risks as each MCM candidate navigates product development (e.g., product and manufacturing scale-up, pivotal animal studies, and clinical studies) and regulatory pathways-including compliance uncertainty in the Federal Drug Administration policy on animal testing in the development of medical countermeasures.

By focusing on advanced development and manufacturing technologies, while HHS focuses on manufacturing services on a large scale (tens of millions of doses), DOD will be involved in protecting national security by first protecting the members of the U.S. Armed Forces.

Mr. THORNBERRY. What is currently being done in the way of consequence management planning and preparedness against CBRNE attacks both abroad and within the U.S.?

Mr. WEBER. Within the United States, the Department of Homeland Security (DHS) is the lead Federal agency, and DOD provides support. The Joint Staff and the Office of the Under Secretary of Defense for Policy (OUSD(P)) have responsibility for planning and preparedness for both domestic and foreign consequence-management operations. Overseas, the Department of State (DOS) is the lead Federal agency, and DOD provides support. Each Combatant Command is tasked to develop supporting plans for consequence management activities within their area of responsibility.

USNORTHCOM has the lead for planning for and executing DOD support to consequence management activities within the United States. DOD conducted a comprehensive review of its domestic CBRN Response enterprise following the 2010 Quadrennial Defense Review (QDR). The result is an ongoing two-year effort to increase DOD's lifesaving capability within the existing 18,000-person response enterprise. The overall change is a shift from centralized Chemical, Biological, Radiological, and Nuclear Consequence Management Response Force (CCMRF) #2 and #3 to create ten Homeland Response Forces (HRFs) postured to respond in 6–12 hours. This new structure will be certified and in place by the end of Fiscal Year 2012 (FY12).

Independent of the CCMRF restructuring, my office recognized the need to assist the Combatant Commands with their Foreign Consequence Management (FCM) requirements. To that end DTRA will establish the Consequence Management Assistance Program (CMAP) in FY12. This program will increase the tactical training and operational capabilities of targeted partner nations to respond to CBRNE incidents effectively, and it will support Combatant Commanders' requirements to assist partner nations by building capacity to respond effectively to the use of WMD. DTRA is currently coordinating with the Combatant Commanders to identify and prioritize partner nations to be assisted. It is also working with DOS and the Embassy Country Teams to develop engagement plans tailored specifically for these key partner countries. DTRA will also partner with industry and subject matter expert organizations to develop training modules, procure response equipment through the Foreign Military Sales (FMS) program, and conduct hands-on training in support of the Combatant Commands' objectives and country-engagement plans. The desired end state is a cadre of regionally based leader nations, which have effective consequence-management-response capabilities, and which are able to respond to assist themselves and regional partners during the critical first 96 hours following a CBRN incident.

DTRA is also supporting the DOD-wide effort to assist Japan in its response to the ongoing crises associated with the earthquake, tsunami, and nuclear facilities.

Mr. THORNBERRY. How concerned are we with the proliferation of dual-use technologies that could potentially be used for WMD development activities? Do we have good tracking mechanisms in place, and what are some of your programmatic and policy challenges in this area?

Mr. WEBER. With rapid technological advances around the world, the task of discerning illicit activities from legitimate dual-use activities grows more complex. Our key programmatic challenge in monitoring and controlling proliferation is the development of technology to distinguish dual-use technologies for civilian use from those intended for weapons development.

New technology advances are critical to our ability to detect and assess potential WMD proliferation. For nuclear weapons, this involves assessing uranium-enrichment facilities to verify that the degree of enrichment is consistent with power and

medical-isotope reactor operation and not with nuclear-weapons production. We must also have appropriate technology to monitor and control the nuclear-fuel cycle, limiting the ability of potential proliferant nations to separate plutonium for weapons from reactor fuel.

The revolution in synthetic biology and bioengineering requires new monitoring techniques to discriminate precursors for dual-use biological materials (e.g., vaccines) from bioagents. Emerging chemical threats also place great emphasis on the ability to identify and detect possible proliferant material. Developing analytic technology for life-cycle monitoring of nuclear, biological, and chemical weapons supports the President's non-proliferation agenda and is consistent with the purposes of applicable international agreements, including the Fissile Material Cut-off Treaty, the Biological Weapons Convention, and the Chemical Weapons Convention.

Mr. THORNBERRY. In your written testimony you discuss the threat posed by Al Qaeda and their determination to acquire weapons of mass destruction. In terms of our ability to plan and prepare for such a threat, do we have a clear understanding of Al Qaeda's technical abilities, or relationships with state actors that may transfer technology? What are you most concerned with? Please respond via classified channels if needed.

Mr. MYERS. [The information referred to is classified and retained in the committee files.]

Mr. THORNBERRY. Can you discuss how recent changes in the Middle East are impacting DTRA's operations and planning? Have you received additional requests for support from CENTCOM? What are some of your largest concerns?

Mr. MYERS. The Defense Threat Reduction Agency's (DTRA) operations and plans have been affected by recent events in the Middle East. We've had to curtail one mission support element's travel to Bahrain and we have increased our travel coordination with USCENTCOM to ensure the safety of personnel traveling to the region. To date, we have not changed any of our plans to engage and work with partner nations in the Middle East, and we will coordinate with our interagency partners before changing any program plans.

In the last month, DTRA and the USSTRATCOM Center for Combating Weapons of Mass Destruction (WMD) surged their capabilities to support Operation ODYSSEY DAWN. We have been providing USAFRICOM and its subordinate commands with advice and assistance in its planning and conduct of the operation. DTRA's liaison to the USCENTCOM headquarters participates in all coordination meetings to ensure USCENTCOM's operational requirements are considered and met.

We have not received any additional requests for support from USCENTCOM, but remain acutely interested in what is going on in the region. We are closely observing the evolving social and political dynamics in the region, and are maintaining our effective working relationship with USCENTCOM in order to assist should the need arise.

DTRA's concerns extend to all aspects of chemical, biological, radiological, nuclear, or high-yield explosive impacts, including mitigation of toxic industrial chemicals or hazardous materials, which might affect U.S. personnel or interests. Our primary concern is the acquisition by terrorist groups of weapons, materials, and know-how.

Mr. THORNBERRY. What are some of your unfunded requirements? Where are your largest gaps in funding?

Mr. MYERS. We fully support the Fiscal Year (FY) 2012 budget request, and DTRA has no unfunded requirements.

If additional funding was to be provided, I would recommend applying it to improved technical reachback support for the Combatant Commanders, the Office of the Secretary of Defense (OSD), National Guard WMD Civil Support teams, and others; accelerated development of WMD detection and interdiction technologies and their integration into operational concepts; and accelerated development of hardened-target and WMD-defeat capabilities.

Mr. THORNBERRY. Since our forces have been so focused on counterinsurgency in Iraq and Afghanistan, are you concerned that some of the specialized and highly technical counterproliferations skills and capabilities have eroded in the U.S. government?

Mr. MYERS. Yes. There are continuing concerns about the future availability of a cadre of technical experts in the area of nuclear weapons. These were identified in the "Report of the Commission on Maintaining United States Nuclear Weapons Expertise" to the Congress and Secretary of Energy Pursuant to the National Defense Authorization Acts of 1997 and 1998 published March 1, 1999 for the Department of Energy (DOE), and in the "Report of the Defense Science Board Task Force on Nuclear Deterrence Skills," published in September 2008 by the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics for DOD.

The demands of ongoing contingency operations in Afghanistan and Iraq have resulted in particularly officers spending large portions of their career performing functions that are not combating weapons of mass destruction (CWMD). Although they are providing critical leadership on the battlefield conducting combat patrols or planning counter-insurgency operations, they are not honing technical skills essential to this mission space. Since most officers entering the military today do not possess technical degrees in sciences such as chemistry and biology, the need for self-study or formal education provided by the military departments is essential. When officers are afforded the opportunity to attend schools, general Professional Military Education training does not include CWMD-specific coursework. The technical CWMD training that is offered at institutions such as the Naval Post Graduate School and the Defense Nuclear Weapons School are often difficult to fill because officers are simply not available to attend due to ongoing deployments.

Mr. THORNBERRY. By which mechanisms is the intelligence community coordinating and sharing information pertaining to CBRNE threats with the appropriate officials in the Department of Defense and other key U.S. agencies?

Mr. MYERS. [The information referred to is classified and retained in the committee files.]

Mr. THORNBERRY. In your written testimony you talk about the threat of non-traditional agents (NTAs) and how your program is working to mitigate this threat. Can you outline for us some of your concerns in this area? Can NTAs be exploited by non-state actors or transnational threats such as Al Qaeda? Please respond via classified channels if necessary.

General SCARBROUGH. [The information referred to is classified and retained in the committee files.]

Mr. THORNBERRY. In your written testimony you outline several DOD Efficiencies that you have implemented including the reduction of thirty-one full-time positions and the reduction of contractor support. Do you expect any gaps or limitations as a result of these drawdowns?

General SCARBROUGH. The Joint Program for Chemical and Biological Defense (JPEO-CBD) does not anticipate any gaps or limitations as a result of the actions described in the written testimony. The JPEO-CBD views the consolidation of acquisition programs and reduction to contractor support as described in the prepared statement as commonsense efforts to operate more efficiently and cost-effectively.

Mr. THORNBERRY. What are some of your unfunded requirements? Where are your largest gaps in funding?

General SCARBROUGH. We fully support the Fiscal Year (FY) 2012 budget request. If provided with additional funds, the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD) would apply them (in order of priority) to:

1. Accelerating progress in our current priority areas:
- Medical Countermeasures;
- Biosurveillance, including improvements to information technology and diagnostics capabilities; and
- Defense against Nontraditional Agents (NTA).

2. Medical countermeasures for radiological threats.

3. Hazard mitigation for chemical, biological, radiological, and nuclear (CBRN) threats.

4. Standoff detection capabilities.

---

## QUESTIONS SUBMITTED BY MR. RUPPERSBERGER

Mr. RUPPERSBERGER. Aberdeen Proving Ground in my district is home to the Army Research Lab, Army Chemical Material Agency and the Medical Research Institute of Chemical Defense. There is tremendous growth at APG because of the 2005 BRAC. Buildings are going up all over APG, but there are old, dated buildings which must be heated and cooled because of the chemicals within them. The Army does a good job of putting up building, but I haven't seen any progress on demolition of buildings. Is demolition of building adequately funded in the Army FY12 budget and the Future Year Defense Plan?

General SCARBROUGH. I referred your question to the office with appropriate jurisdiction, the Aberdeen Proving Ground (APG) Garrison Commander, who provides the following response:

> With fiscal year 2008 and fiscal year 2009 demolition funding, APG has demolished 53 facilities, with 24 more to be demolished using fiscal year 2009 funding. There was no fiscal year 2010 demolition funding provided to APG. For fiscal year 2011, there is tentatively $1.03M for the demolition of 25 facilities

designated for APG. This money has not yet been allocated. For fiscal years 2011-2017, APG has a $85.8M plan to demolish 188 additional facilities. This funding has not yet been programmed.

Mr. RUPPERSBERGER. Our National Guard is no longer supplemental. They are an integral part of today's fighting force. It is important to provide the National Guard with the equipment they need, just as the regular Army. What is the funding and fielding plan for the National Guard's Chemical Biological Protective Shelter which is currently on the Top 25 Unfunded List?

General SCARBROUGH.

Funding

The Fiscal Year (FY) 2012 DOD Budget Request outlines current and planned procurement of Chemical and Biological Protective Shelters (CBPS) systems (FY10 through FY16). Current plans indicate Procurement, Defense-Wide funds would buy CBPS systems for both the Army National Guard (ARNG) and the Army Active Component while Other Procurement, Army funds would buy CBPS systems for the Army National Guard (ARNG).

Procurement, Defense Wide

FY 2010—$10.6M for 7 systems
FY 2011—$19.7M for 12 systems
FY 2012—$6.0M for 2 systems
FY 2013—$6.0M for 2 systems
FY 2014—$19.7M for 21 systems
FY 2015—$22.6M for 26 systems
FY 2016—$23.8M for 25 systems

Other Procurement, Army

FY 2016—$50.3M

It is important to note that the ARNG can also receive equipment through the National Guard and Reserve Equipment Account (NGREA).

Fielding

ARNG and Army Active Component units are fielded CBPS systems depending upon the Headquarters, Department of the Army Master Priority List and Basis of Issue Plan. The List and Plan are not complete, so numbers may change. The draft Headquarters Department of the Army Master Priority List currently identifies approximately 439 CBPS systems for the ARNG. However, achieving that total depends on the availability of funds, Army priorities, and DoD priorities.

Program Status

The CBPS program has been transitioning from a High Mobility Multipurpose Wheeled Vehicle (HMMWV) platform to a Medium Tactical Vehicle (MTV) platform. With the inability to add the required armor protection due to weight limitations, the Army decided to integrate the CBPS mission module onto the MTV platform. The Chemical and Biological Defense Program recently completed first-article testing, and production of the integrated system is scheduled to begin in FY12. The ARNG is currently planning to procure additional systems using NGREA funding once production begins.

Mr. RUPPERSBERGER. The Army Medical Research Institute of Chemical Defense at Aberdeen Proving Ground uses live monkeys to show the effects of patients that have been exposed to chemical or nerve agents and medical trainees observe these effects. It is my understanding that the monkeys are an ineffective way to treat patients as they do not show the same symptoms as humans and that the human simulators that are used in addition to this would provide accurate training if only those were used. In addition, over the next ten years, the use of only human simulators would provide a cost savings for the Army. Is there a reason why the monkeys are still used for this purpose if human simulators can provide more accurate training?

General SCARBROUGH. I have referred this question to the office with appropriate jurisdiction, the U.S. Army Medical Department (AMEDD), which provides the following response:

"The U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) is dedicated to employing the best possible training techniques to prepare medical-care providers to treat battlefield injuries while minimizing the use of live animals. The Field—and Medical—Management of Chemical and Biological Casualties courses make extensive use of manikins, computer-based training, and other training aids to maximize training effectiveness.

The anesthetized African green nonhuman primate (NHP) model is currently the best model for simulating a cholinergic crisis in humans. In the live-animal exercise, physostigmine, a short-acting, FDA-approved medication for humans, is used to simulate effects of a nerve-agent exposure in fully anesthetized animals; actual nerve agent is not administered. The use of physostigmine in this species produces effects that are identical to the effects that occur in humans after exposure to nerve agents. After administering physostigmine, students observe changes that occur in the animal's muscle tone, respirations, mucous membrane color, salivation, heart rate, and body temperature. Students provide supportive care and administer antidotes. Following treatment, they observe the animal's recovery from a cholinergic crisis. The animals recover without incident and are treated humanely at all times.

USAMRICD is committed to continually evaluating and actively seeking non-animal alternatives that may provide equivalent or superior training experiences. USAMRICD uses a variety of different manikins and continually collaborates with the manufacturer to improve the realism of these simulators. However, even the most advanced of the currently available manikins are incapable of adequately modeling the range of clinical signs or the individually variable response to nerve-agent exposure and treatment seen in live patients, both human and animal."