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STATEMENT OF

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AND

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BEFORE THE

SUBCOMMITTEE ON TERRORISM, UNCONVENTIONAL THREATS

AND CAPABILITIES

HOUSE ARMED SERVICES COMMITTEE

CONCERNING THE IMPLEMENTATION OF

QUADRENNIAL DEFENSE REVIEW RECOMMENDATIONS REGARDING

COMBATING WEAPONS OF MASS DESTRUCTION

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Dr. James A. Tegnelia is the Director of the Defense Threat Reduction Agency (DTRA), Fort Belvoir, VA. DTRA safeguards America and its allies from weapons of mass destruction (chemical, biological, radiological, nuclear, and high yield explosives) by providing capabilities to reduce, eliminate and counter the threat, and mitigate its effects.

Tegnelia is also dual-hatted as director of the U.S. Strategic Command Center for Combating Weapons of Mass Destruction (SCC-WMD). The Center integrates and synchronizes Department of Defense-wide efforts in support of the combating WMD mission.

Prior to his selection to lead DTRA, Dr. Tegnelia was the Vice President, Department of Defense Programs, Sandia National Laboratories. Dr. Tegnelia had been at Sandia since August 1998.

A native of Monessen, PA, Dr. Tegnelia's career began in the United States Army, serving from 1968 to 1971, including a one-year tour in Vietnam. From 1971 to 1976, Dr. Tegnelia worked for the U.S. Army Night Vision Laboratory in various positions progressing from supervisory research physicist to manager. His organization laid the engineering foundation for night vision devices deployed in Operation Desert Storm/Desert Shield. In 1976, he transferred to the Defense Advanced Research Projects Agency (DARPA), serving as a program manager and office director, responsible for programs in smart weapons, radar sensors and stealth technology.

From 1982 to 1985, he served as the Assistant Undersecretary of Defense and Acting Deputy Undersecretary of Defense in the Office of the Undersecretary of Defense for Research and Engineering, where he oversaw program manager activity on the JSTARS radar and ATACMS missile. In 1985, he became the Deputy Director and later Acting Director of DARPA.

In 1987, he joined the Martin Marietta Corporation, serving as Vice President of Engineering, and later as the Vice President of Business Development, Electronics Group. In 1993, Dr. Tegnelia became the Executive Vice President and Deputy Director of Sandia National Laboratories. He became the Vice President, Business Development, for the Energy and Environment Sector of Lockheed Martin Corporation in 1995, and later served as the President of Lockheed Martin Advanced Environmental Systems, Inc., from 1996 to 1998.

Dr. Tegnelia earned a Bachelor's Degree in Physics from Georgetown University , a Master's Degree in Engineering from George Washington University, and a Ph.D. in Physics from The Catholic University of America.

His awards and decorations include the Bronze Star Medal, the Civilian Meritorious Service Medal, and the Senior Executive Service Meritorious Service Award. Dr. Tegnelia is a former member of the Executive Council and Board of Directors of the Albuquerque Chamber of Commerce (1994/1995); former member of the Board of Directors of the Anderson School of the University of New Mexico; and the 1996 Campaign Chairman for the United Way of Central New Mexico. Dr. Tegnelia also served as the Chairman for the Greater Albuquerque U.S. Savings Bond Campaign in 1995, and the State of New Mexico Chairman for the U.S. Savings Bond Campaign in 1996.

He has served as Chair of the Army Science Board, a Co-Chair of the Sandia National Laboratories National Security Advisory Panel, and a member of the Society of Sigma Xi. He was also on the Board of Advisors of George Washington University, School of Engineering. Dr. Tegnelia was a member of the Board of Directors for Sandia Science and Technology Park, the Technology Ventures Corporation, and Laguna Industries, Inc.

Introduction

Mr. Chairman and members of the Subcommittee, it is an honor to be here today to address the recommendations of the Quadrennial Defense Review (QDR) regarding the mission of combating weapons of mass destruction or "WMD."

I am appearing here today in my dual capacities as the Director of the United States Strategic Command's Center for Combating WMD, and as the Director of the Defense Threat Reduction Agency (DTRA).

As you know from my earlier appearances before this subcommittee, DTRA is the lead DoD agency for reducing the threat posed by WMD. Since its establishment in 1998, the agency has been integrating the execution of the Department's nonproliferation, counterproliferation, and consequence management programs. The agency's mission spans the complete WMD threat spectrum - chemical, biological, radiological, nuclear, and high yield explosives; supports all eight Defense Department combating WMD mission areas; and facilitates closer partnerships across the department, the U.S. Government, the private sector, academia, and with our allies and friendly nations.

DTRA is also designated as a "Combat Support Agency" and charged with providing WMD-related technical and operational support to the combatant commanders.

Accordingly, my remarks today will address how the QDR guides and directs WMD-related support to the combatant commanders. First, I will explain the recent change in the Unified Command Plan that has led to this closer relationship between the U.S. Strategic Command (USSTRATCOM) and DTRA. Second, I will discuss the implementation of the QDR recommendations from the perspective of General James E. Cartwright, the Commander, U.S. Strategic Command.

Combating WMD and the Unified Command Plan

The Quadrennial Defense Review provides strategic specificity for combating WMD. It defines two fundamental imperatives for the Department:

- Continued reorientation of capabilities and forces to be more agile in this time of war, to prepare for wider asymmetric challenges, and to hedge against uncertainty over the next 20 years.
- Implementation of enterprise-wide changes to ensure that organizational structures, processes, and procedures effectively support our strategic direction.

These imperatives strongly influence the organization, planning, readiness, investments, and operations of the combating WMD mission.

On January 6, 2005, the Secretary of Defense modified the Unified Command Plan by designating the Commander, U.S. Strategic Command, as the lead combatant commander for integrating and synchronizing efforts to combat WMD. This decision established a single focal point charged with integrating the Department's efforts for combating WMD in support of the geographic combatant commanders' operational requirements. In this role, USSTRATCOM supports other combatant commanders as they execute combating WMD missions. General Cartwright is now the key military advocate for developing combating WMD mission requirements and shepherding them through the budget process. His initial assignment is to develop further and energize the WMD elimination and interdiction missions.

Last fall, as part of the Committee Defense Review undertaken by this committee, I was invited as the DTRA director to brief several of the gap panels. At that time, I informed the Committee that General Cartwright had turned to DTRA for its combating WMD expertise. I also informed the Committee that DTRA had been directed to establish and host the USSTRATCOM's Center for Combating WMD or "SCC-WMD."

Since that time, the center has been formally established. I have been designated by the Secretary of Defense as the Director for that Center, while continuing my responsibilities as the Director of DTRA. The SCC-WMD is the equivalent of the other Joint Functional Component

Commands that support USSTRATCOM in Integrated Missile Defense; Intelligence, Surveillance and Reconnaissance; Space and Global Strike; and Network Warfare.

The Combating WMD Center will support USSTRATCOM by:

- Anticipating potential WMD-related events that may necessitate a DoD, interagency, and/or international coordinated response;
- Developing potential courses of action through a knowledgeable Joint Interagency Group to reduce reaction time to threats; and
- Providing an understanding of DoD, interagency, and international capabilities; identifying needs and requirements; and recommending solutions for synchronizing and integrating combating WMD capabilities.

It is important to note that, although USSTRATCOM has overall responsibility for integrating and synchronizing the mission, responsibility for individual program execution remains with the cognizant DoD components, including DTRA, the Military Departments and Services, and other DoD organizations.

Implementation of QDR Recommendations

I will now turn to the implementation of QDR recommendations regarding the combating WMD mission.

In addition to providing guidance on how the combating WMD mission fits within the Department's total responsibilities, the QDR made five specific decisions to achieve the future joint force and build on progress to date.

1. *Designate the Defense Threat Reduction Agency as the primary Combat Support Agency for U.S. Strategic Command in its role as the lead Combatant Commander for integrating and synchronizing combating WMD effort*s.

DTRA has been formally assigned this responsibility and the agency is working closely with USSTRATCOM in developing the center's concept of operations; establishing a common operating picture and formalized information sharing process with our partners; and supporting

combatant commander course of action development. Our goal is to achieve Full Operational Capability by the end of this calendar year.

2. Expand the Army's 20th Support Command (CBRNE) capabilities to enable it to serve as a Joint Task Force capable of rapid deployment to command and control WMD elimination and site exploitation missions by 2007.

DTRA has provided assistance on the design and structure of the headquarters of the 20th Support Command so that it may provide enhanced command and control for WMD elimination and site exploitation. In addition, DTRA will provide operational and technical support for training, exercises, and operational missions. The Joint Staff is expected to provide more guidance on requirements for this capability, and the geographic combatant commanders will also update their respective plans to meet these requirements.

3. Expand the number of U.S. forces with advanced technical render-safe skills and increase their speed of response. The Department will develop further recommendations to improve render-safe capabilities for the Fiscal Year 2008 budget.

The Joint Chiefs of Staff, the combatant commanders including Commander, U.S. Strategic Command, the Services, DTRA, and the Department of Energy are assessing render-safe requirements, current and needed capabilities, and the path ahead in a coordinated, comprehensive effort. We are making progress that is best addressed in a classified forum. As we continue this effort, we appreciate that each of the geographic combatant commanders may have unique requirements that must be considered in our planning. In Fiscal Year 2007 (FY07), we intend to increase overall DoD Explosive Ordnance Disposal capabilities and airlift priority for movement of assets to counter WMD threats. For Fiscal Year 2008 (FY08), our intention is to expand DoD technical capabilities to locate WMD threats, particularly nuclear and radiological threats.

4. Improve and expand U.S. forces' capabilities to locate, track, and tag shipments of WMD, missiles, and related materials, including the transportation means used to move such items.

DTRA has several efforts currently planned in this area. We have proposed a Smart Threads Integrated Radiation Sensors Joint Capabilities Technology Demonstration of a modular radiation detection system in FY07. This system is intended to operate in man-portable ground, aerial, and maritime vehicle versions that can be seamlessly integrated into a sensor network. DTRA has requested a $15M core radiological/nuclear detection RDT&E budget for FY07. Efforts have begun on a scanning system to detect hidden and shielded nuclear material from an extended distance and we anticipate a prototype test in FY08.

The nuclear detection development efforts being executed by DTRA are fully coordinated with the Departments of Energy and Homeland Security. These DTRA programs leverage the expertise of these and others, but are focused on unique DoD applications.

DTRA, as the executive agent for the Science and Technology portion of the Department's Chemical/Biological Defense Program, is also assisting that program's Joint Program Execution Office for Chemical and Biological Defense in rapidly transitioning systems to the Joint Warfighter.

In addition, DTRA is also supporting the combatant commanders by identifying critical nodes within the counter-proliferation terrorist pathway. We intend to integrate existing/emerging tagging, tracking, locating techniques and sensor network systems to conduct operations against chemical, biological, and nuclear production, storage, and weaponization facilities.

Lastly, DTRA is leveraging a sensor product developed and demonstrated under the Counterproliferation 2 Advanced Concept Technology Demonstration, to provide integrated chemical, biological, and radiological combat assessment capabilities on unmanned air vehicle (UAV) and expendable mini-UAV platforms. We intend to demonstrate this capability for airborne biological sample collection starting in FY07 for the United States Pacific Command.

5. Reallocate funding within the CBDP to invest more than $1.5 billion over the next five years to develop broad-spectrum medical countermeasures against advanced bio-terror threats, including genetically engineered intracellular bacterial pathogens and hemorrhagic fevers.

The Chemical and Biological Defense program, for which DTRA serves as the Science and Technology executive agent, has the responsibility for managing and executing this critical research program. The pace of current approaches for specific known bio-threats could leave us

vulnerable and may not protect against genetically engineered threats. Recent advances in science have led to a revolution in our understanding of the molecular mechanisms of disease and the complex interplay of host/pathogen interactions. Progress in genomics, proteomics, immunology, high throughput screening, and computational chemistry has revealed new cellular mechanisms, produced new biological targets, and identified new candidate countermeasures.

Although the initiative entails risk, the Department has determined that the best approach to achieving the revolutionary advances necessary to treat advanced bioterror threats is to reap the synergy from combining these component achievements into a systems approach. The underlying concept is to leverage and accelerate highly promising technologies and approaches already in the developmental pipeline by infusing a major investment. The initiative has begun by an aggressive solicitation and evaluation of the best ideas from private and governmental research and development organizations.

Consistent with QDR direction to assume greater risk in traditional threat areas, funding for this initiative was taken from efforts that would have produced helpful, but only evolutionary improvements in capabilities.

Conclusion

The Department has focused on the WMD challenge for many years now. We have been making steady progress in expanding our capabilities to combat WMD and in strengthening essential interagency partnerships. The QDR continues this momentum by providing specific near-term direction and longer-term guidance on capabilities and the required investments. We appreciate the assistance that this Subcommittee has provided to this critical mission, and we ask for your continued support.

Mr. Chairman, this concludes my remarks. I would be pleased to respond to your questions.