

# PREVENTIVE DEFENSE PROJECT

A RESEARCH COLLABORATION OF STANFORD & HARVARD UNIVERSITIES  
WILLIAM J. PERRY & ASHTON B. CARTER, CO-DIRECTORS

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June 27, 2005

Dear Colleague:

Today I testified before the 9/11 Public Discourse Project, which is the privately-funded continuation of the 9/11 Commission.

Commissioner Tim Roemer asked me to grade the progress made in implementing the 9/11 Commission's recommendations. My statement is attached.

Regarding the Homeland Security program and the new Director of National Intelligence, I testified that it was too early to give a grade. Regarding WMD terrorism, I could also not give a grade to the U.S. government, but for a different reason: "the student has dropped the course."

All the best,



Ashton B. Carter

## **Worst People and Worst Weapons**

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**Statement before  
The 9/11 Public Discourse Project's  
Hearings on  
"The 9/11 Commission Report: The Unfinished Agenda"**

**June 27, 2005**

Members of the 9/11 Commission, thank you for inviting me to appear before you, and for your service to American and global security as reflected in your initial report. I also salute you for monitoring the implementation of your recommendations.

Your report recommended an overhaul of intelligence management, improvements to the counterterrorism and homeland security structures of the U.S. government, and actions to prevent terrorism with weapons of mass destruction (WMD).

### **Grading the Response to 9/11**

It is too early to tell whether the management of the intelligence function will be improved or not by the appointment of a Director of National Intelligence (DNI), since it has only been two months that John Negroponte has been in the job. Many have wondered why the 9/11 Commission, which was appointed to deal with terrorism, ended up focusing on intelligence. But for me it was easy to understand. I have sat on many panels trying to improve one aspect or another of intelligence, and these panels have made many fine recommendations. But few recommendations were implemented, not because they were flawed or even resisted by the intelligence community, but because there was no manager in the Intelligence Community who could implement them. As I stated before the Robb-Silberman Commission, which wrestled with WMD intelligence the way you wrestled with counterterrorism intelligence, the

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U.S. intelligence community is not so much *mismanaged* as it is *unmanaged*: nowhere do authority, accountability, and resources come together in sharp managerial focus. The DNI might at last provide that focus. But it's too early to tell.

It's been two years, not two months, since the Department of Homeland Security (DHS) was created as the centerpiece of the federal government's response to the danger of terrorism. Here it is too early to give a final grade either, since DHS has been so slow to take shape. The whole Department is still not much more than the sum of its constituent parts, and what is new at DHS – the intelligence, infrastructure protection, and innovation branches – has not won the confidence of other agencies or the industrial and technology communities.

While it might be too early to give grades to our nation's action on intelligence reform and homeland security, it is not too early to give a grade to our response to the threat of WMD terrorism because there has been almost none. Here, the student has dropped the course.

Both President Bush and candidate Kerry declared nuclear terrorism to be their highest priority. President Bush stated that keeping the worst weapons out of the hands of the worst people was an American president's highest priority. But so far all the effort has been on the worst people and far too little on the worst weapons. I fear that America is as asleep at the WMD switch now as it was at the terrorism switch before 9/11.

### **Grading the Effort to Eradicate Nuclear Terrorism**

Mr. Chairman, I would like to explain my assessment by focusing on nuclear terrorism. Nuclear and biological weapons are by far the most important WMD, with chemical and radiological (“dirty bombs”) far behind in terms of their destructive potential. What is ironic about the threat of nuclear terrorism is that it is possible to envision its complete eradication. We don't know how to eradicate terrorism in general, since its wellsprings are in such a variety of aberrant human emotions, motives, groups, and movements. We don't know how to eradicate bioterrorism, since infectious pathogens and the technology to spread them are ubiquitous and needed everywhere for public health. But we can envision the eradication of nuclear terrorism. Here's why: Making nuclear weapons requires highly enriched uranium (HEU) or plutonium. Neither of these metals occurs in nature. They must be manmade. And, it turns out, it is not easy to make either one of them. So far in human history, it has taken the organization, resources, and durability of a national government to make these materials. For now and the foreseeable future, doing so is beyond the reach of even well organized and financed terrorist groups like al Qaeda and Aum Shinrikyo.

So the recipe for eradicating nuclear terrorism is simple: Make sure that all HEU and plutonium made so far is safeguarded, and stop more from being made where it cannot be safeguarded. I would suggest that the 9/11 Commission can grade our progress in stopping nuclear terrorism since 9/11 by this metric. How are we doing?

## The Record of Inaction Against Nuclear Terrorism

Three observations suggest that we are not doing as much as we should be, as fast as we should be, to secure HEU and plutonium:

1. The cluster of U.S. and international programs to safeguard the existing stores of fissile materials worldwide (in the former Soviet Union, in the many countries where HEU is used in research reactors, in unstable locations like Pakistan) that go under the general heading “Nunn-Lugar” is almost unchanged since before 9/11, as study after study has detailed. These programs are managed on a level-of-effort basis, not a results-oriented basis. At the time, the United States was putting together a coalition against global terrorism; and then a coalition against Saddam Hussein; Senators Sam Nunn and Richard Lugar – farsighted as always – suggested that the United States form a parallel global coalition to combat nuclear terrorism, but unfortunately this was not done.
2. No international arrangement has been devised to prevent the expansion of nuclear power for electricity generation – which is necessary on both economic and environmental grounds – from resulting in the proliferation of uranium enrichment and plutonium reprocessing capacity. This critical “loophole” in the way the Nuclear Nonproliferation Treaty has been interpreted must be closed. President Bush gave a speech in February 2004 stating his intention to work to close this loophole. But the vigorous diplomatic effort needed to implement this speech is nowhere in sight. I should note that Senator Richard Lugar, Chairman of the Senate Foreign Relations Committee, has recognized the importance of this issue for countering nuclear terrorism and has appointed a Policy Advisory Group to advise him on how the U.S. government can implement President Bush’s speech. I am privileged to serve as co-chair of that Policy Advisory Group.
3. Above all, the United States has devised no discernable strategy for stopping the North Korean and Iranian nuclear weapons programs. These two situations are very different, but they have this in common: each provides the world with new paths to nuclear terrorism. They do this in two ways. First, each of these countries has a history of involvement with terrorism (Iran especially) or sale of dangerous weapons (North Korea especially), and each might become politically unstable or undergo regime collapse or replacement. Second, if either North Korea or Iran goes nuclear, others in their region are likely to follow. The more sources of fissile material and assembled bombs in more places, the more chance of theft, diversion, or sale to terrorists. After 9/11 and the A.Q. Khan network’s discovery, it should be clear that nuclear proliferation and nuclear terrorism are not different problems, they are different parts of the same problem.

Mr. Chairman, it is inaction in these three areas – and above all the third – that suggests to me that the lessons of 9/11 have not been learned when it comes to WMD.

This is not to say that some of the actions to stop nuclear terrorism that have been taken by the U.S. government since 9/11 are not important, especially dismantling Libya's WMD projects and interrupting the A.Q. Khan network. But others, while useful, are not substitutes for securing fissile materials, for going to the essential source of nuclear terrorism. The concept of a "multilayered defense" against WMD terrorism is sound, but in fact for nuclear terrorism only the first layer, which surrounds the locations where fissile material is made or stored, has any strength. The Proliferation Security Initiative, for example, stands little chance of detecting and interdicting a grapefruit-sized piece of plutonium being exported from North Korea in one of the many aircraft that fly from Pyongyang to the Middle East, or on the back of one of the many refugees who cross the border from North Korea to China. The Domestic Nuclear Detection Office (DNDO) established to find nuclear weapons in transit to U.S. targets will be hard pressed to find bombs, since HEU and plutonium are not highly radioactive and look mostly like heavy metal objects to most sensors. U.N. Security Council Resolution 1540 asks each country possessing fissile materials to safeguard them, but this will have little effect against regimes that sell weapons, or that collapse.

The fundamental fact underlying nuclear terrorism is that neither HEU nor plutonium is easy to make, and thus stopping them at the source is critical. Once made, these materials pose a danger for many turns of the wheel of human history – the half-life of Pu-239 is 24,400 years, and the half-life of HEU is 713 million years! Once a bomb intended for us is made, we can have little confidence in finding it crossing our borders. Once we know it is here, there is no way our government can assure its people that it can protect them from terrible destruction. The threat – just the credible, immediate threat – that a bomb was in the United States and could go off any minute would be the worst failure those charged with national security could visit upon the population it is obligated to protect. Yet inaction will lead us inevitably down that road.

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9/11 should have occasioned a far-reaching overhaul of our counterproliferation policies and capabilities. But while we have overhauled counterterrorism, we have not overhauled counterproliferation. We have a war on terrorism, but we are not yet at war on WMD. Americans, and above all the 9/11 families here at this hearing, regret that their government did not overhaul its counterterrorism capabilities years before the 9/11 attacks, neglecting actions that seemed tragically obvious after the World Trade Center was destroyed. It will be unforgivable if counterproliferation's overhaul has to wait until after a WMD catastrophe in which an entire city disappears.

## THE HONORABLE ASHTON B. CARTER

**Dr. Ashton Carter is Co-Director (with former Secretary of Defense William J. Perry) of the Preventive Defense Project, a research collaboration of Harvard's Kennedy School of Government and Stanford University, and he teaches national security policy at the Kennedy School** where he is Ford Foundation Professor of Science and International Affairs.

**Dr. Carter served as Assistant Secretary of Defense for International Security Policy during President Clinton's first term. His Pentagon responsibilities encompassed: countering weapons of mass destruction worldwide, oversight of the U.S. nuclear arsenal and missile defense programs, arms control, controls of sensitive U.S. exports, policy regarding the collapse of the former Soviet Union (including its nuclear weapons and other weapons of mass destruction), and chairmanship of NATO's High Level Group.** He oversaw military planning during the 1994 crisis over North Korea's nuclear weapons program; was instrumental in removing all nuclear weapons from the territories of Ukraine, Kazakhstan, and Belarus; directed the establishment of defense and intelligence relationships with the countries of the former Soviet Union when the Cold War ended; and participated in the negotiations that led to the deployment of Russian troops as part of the Bosnia Peace Plan Implementation Force. Dr. Carter oversaw the multi-billion dollar Cooperative Threat Reduction (Nunn-Lugar) program to support elimination of nuclear, chemical, and biological weapons of the former Soviet Union, including the secret removal of 600 kilograms of highly enriched uranium from Kazakhstan in the operation code-named Project Sapphire. Dr. Carter also directed the Nuclear Posture Review and oversaw the Department of Defense's (DOD's) Counterproliferation Initiative. He directed the reform of DOD's national security export controls. His arms control responsibilities included the agreement freezing North Korea's nuclear weapons program, the extension of the Nuclear Nonproliferation Treaty, the negotiation of the Comprehensive Test Ban Treaty, and matters involving the START II, ABM, CFE, and other arms control treaties.

**Dr. Carter was twice awarded the Department of Defense Distinguished Service Medal, the highest award given by the Department. For his contributions to intelligence, he was awarded the Defense Intelligence Medal.** In 1987 Carter was named one of Ten Outstanding Young Americans by the United States Jaycees. He received the American Physical Society's Forum Award for his contributions to physics and public policy.

**A longtime member of the Defense Science Board and the Defense Policy Board, the principal advisory bodies to the Secretary of Defense, Dr. Carter continues to serve DOD as an adviser to the Secretary of Defense, a consultant to the Defense Science Board, and a member of the National Missile Defense White Team. In 1997 Dr. Carter co-chaired the Catastrophic Terrorism Study Group with former CIA Director John M. Deutch, which urged greater attention to terrorism. From 1998 to 2000, he was deputy to former Secretary of Defense William J. Perry in the North Korea Policy Review and traveled with him to Pyongyang. In 2001-2002, he served on the National Academy of Sciences Committee on Science and Technology for Countering Terrorism and advised on the creation of the Department of Homeland Security. In 2003 he was a member of the National Security Advisory Group to the U.S. Senate Democratic Leadership,** with William Perry, Gen. Wesley K. Clark, Madeleine Albright, and others.

**In addition to his public service, Dr. Carter is currently a Senior Partner of Global Technology Partners, Chairman of the Advisory Board of MIT's Lincoln Laboratories, a member of the Draper Laboratory Corporation, and a member of the Board of Directors of Mitretek Systems. He is a consultant to Goldman, Sachs and the MITRE Corporation on international affairs and technology matters, and speaks frequently to business and policy audiences. Dr. Carter is also a member of the Aspen Strategy Group, the Council on Foreign Relations, the American Physical Society, the International Institute of Strategic Studies, and the National Committee on U.S.-China Relations. Dr. Carter was elected a Fellow of the American Academy of Arts and Sciences.**

Carter's research focuses on the Preventive Defense Project, which designs and promotes security policies aimed at preventing the emergence of major new threats to the United States. Carter and former Secretary of Defense William J. Perry co-authored *Preventive Defense: A New Security Strategy for America*, which identified and prioritized the threats to U.S. national security in the 21<sup>st</sup> century.

Before his latest government service, Dr. Carter was Director of the Center for Science and International Affairs at Harvard University's John F. Kennedy School of Government, and Chairman of the Editorial Board of *International Security*. Previously, he has held positions at the Massachusetts Institute of Technology, the Congressional Office of Technology Assessment, and Rockefeller University.

**Dr. Carter received bachelor's degrees in physics and in medieval history from Yale University, summa cum laude, Phi Beta Kappa. He received his doctorate in theoretical physics from Oxford University, where he was a Rhodes Scholar.**

**In addition to authoring numerous articles, scientific publications, government studies, and Congressional testimonies, Dr. Carter co-edited and co-authored eleven books, including *Keeping the Edge: Managing Defense for the Future* (2001), *Preventive Defense* (1997), *Cooperative Denuclearization: From Pledges to Deeds* (1993), *A New Concept of Cooperative Security* (1992), *Beyond Spinoff: Military and Commercial Technologies in a Changing World* (1992), *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union* (1991), *Managing Nuclear Operations* (1987), *Ballistic Missile Defense* (1984), and *Directed Energy Missile Defense in Space* (1984).**