

S. HRG. 107-806

**THE NATIONAL SECURITY IMPLICATIONS OF THE
STRATEGIC OFFENSIVE REDUCTIONS TREATY**

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

—————
JULY 25 AND AUGUST 1, 2002
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**THE NATIONAL SECURITY IMPLICATIONS OF
THE STRATEGIC OFFENSIVE REDUCTIONS
TREATY**

THURSDAY, JULY 25, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee met, pursuant to notice, at 9:35 a.m. in room SD-106, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Akaka, Bill Nelson, E. Benjamin Nelson, Warner, Inhofe, Allard, and Sessions.

Committee staff members present: David S. Lyles, staff director; and Christine E. Cowart, chief clerk.

Majority staff members present: Madelyn R. Creedon, counsel; Kenneth M. Crosswait, professional staff member; Evelyn N. Farkas, professional staff member; Richard W. Fieldhouse, professional staff member; Maren Leed, professional staff member; Michael J. McCord, professional staff member; and Arun A. Seraphin, professional staff member.

Minority staff members present: Judith A. Ansley, Republican staff director; L. David Cherington, minority counsel; Brian R. Green, professional staff member; Mary Alice A. Hayward, professional staff member; Ambrose R. Hock, professional staff member; George W. Lauffer, professional staff member; Patricia L. Lewis, professional staff member; Thomas L. MacKenzie, professional staff member; and Scott W. Stucky, minority counsel.

Staff assistants present: Dara R. Alpert, Daniel K. Goldsmith, Andrew Kent, Thomas C. Moore, and Nicholas W. West.

Committee members' assistants present: Brady King, assistant to Senator Kennedy; B.G. Wright, assistant to Senator Byrd; Andrew Vanlandingham, assistant to Senator Cleland; Elizabeth King, assistant to Senator Reed; Davelyn Noelani Kalipi and Richard Kessler, assistants to Senator Akaka; Peter A. Contostavlos and Dan Shapiro, assistants to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Benjamin L. Cassidy, assistant to Senator Warner; John A. Bonsell, assistant to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry, assistant to Senator Roberts; Douglas Flanders, assistant to Senator Allard; Michele A. Traficante, assistant to Senator Hutchinson; Arch Galloway II, assistant to Senator Sessions; and Kristine Fauser, assistant to Senator Collins.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The Armed Services Committee meets this morning to consider the national security implications of the Strategic Offensive Reductions Treaty which was signed between the United States and Russia on May 24. The President sent the treaty to the Senate for its consideration on June 20 and is seeking the Senate's advice and consent to ratification of the treaty.

We are pleased today to have with us Secretary of Defense Donald Rumsfeld and General Richard Myers, the Chairman of the Joint Chiefs of Staff. They have both been involved in the formulation of this treaty and in the thinking on U.S. nuclear force structure that led to the level of nuclear forces that are specified in the treaty.

I want to welcome you both back to our committee. I see you are making really good progress in terms of your operation, Mr. Secretary. We are delighted to see that. You have a new cast—not a new cast of characters; it looks like the old cast of characters here—but at least a new cast on your arm, and we hope things are going well for you.

Secretary RUMSFELD. Thank you very much.

Chairman LEVIN. The Armed Services Committee has traditionally held hearings on the military implications of arms control treaties over the last few decades and provided its views and recommendations to the Foreign Relations Committee before that committee marks up a resolution of ratification and reports to the full Senate.

While this committee does not have the leading role in treaty consideration, we do have an important supporting role to fulfill. This committee has held over 50 hearings on nine arms control treaties since the early 1970s, focusing particularly on the military or national security implications of proposed treaties, matters that fall within this committee's jurisdiction.

Our committee plans to hold two hearings on this treaty. In addition to today's hearing, we will hold a second hearing on August 1st to hear from the Commander in Chief of U.S. Strategic Command and from the National Nuclear Security Administration, and we will also hear from some outside experts.

I believe that the Strategic Offensive Reductions Treaty, or "SORT" for short, is a positive step forward in U.S.-Russian relations. I think it is particularly important to have a treaty that is legally binding rather than a unilateral step that is not binding on future administrations or, of course, on the other party to the treaty. That also ensures that the Senate fulfills its constitutional role in giving due consideration of any treaty and providing advice and consent before ratification.

I see this treaty as another positive step toward further arms control and an important boost to our new relationship with Russia. But there is much more work to be done to continue improving mutual security with Russia, work that includes further reducing our reliance on nuclear weapons, reducing nuclear proliferation dangers, and improving confidence, transparency, and cooperation with Russia.

I hope today's hearing will help us understand: what this treaty is and what it is not; how the administration plans to implement the treaty; how the treaty fits into our overall security context; how the administration is thinking about our nuclear forces; and what additional steps we can and should take to further improve our security.

The treaty is certainly somewhat unusual. Its central obligation is that both nations will reduce their operationally deployed strategic nuclear warheads to a level between 1,700 and 2,200 some 10 years from now, apparently just for the 1 day at that moment when the treaty then expires. Contrary to numerous media reports, the treaty does not require reductions in nuclear warheads stockpiles. It does not require elimination of warheads. Under this treaty both sides must simply remove warheads from land-based or submarine-based missiles and from bombers.

Both sides are then free to keep every warhead so removed and to store these warheads for possible redeployment. The only limitations that will bind the United States and Russia are the limitations on delivery systems under START I, at least until 2009. After 2009, when the START I treaty expires, it is not clear what will happen.

The importance of this treaty is not so much what it does or does not do, but rather the possibilities that it may hold for the future. It is one step in a continual process of improving the U.S.-Russia relationship and improving U.S. security.

My focus is going to be on what it leads to for U.S. and Russian nuclear weapons policy. Can this treaty provide an opportunity for the United States to make real reductions in nuclear weapons, not just the number of weapons deployed but the total number of nuclear weapons? Can this treaty provide an opportunity for the United States to rethink its nuclear weapons employment policy so that nuclear weapons are seen as weapons of last resort?

Can this treaty provide an opportunity to establish new multilateral approaches to dealing with and reducing weapons of mass destruction? Can this treaty be monitored or verified effectively by either party, or is that not as important as it used to be? Can this treaty provide an opportunity to improve the lagging efforts to secure and destroy Russian chemical weapons, biological materials, and excess strategic nuclear weapons materials and delivery systems?

Can this treaty provide an opportunity to help Russia account for and destroy in the near future its large number of excess tactical nuclear weapons?

Let me now turn to Senator Warner for any opening statement that he may have.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you, Mr. Chairman. Again I commend you for calling this hearing because, as you said, our committee has had a long history and played an important role in those treaties of our Nation which directly affect our national security. We look forward to the testimony from the distinguished Secretary and Chairman.

Throughout its history, our committee has played a critical role in assessing the national security impact and military implications of arms control agreements negotiated by the Executive Branch. It is right and proper for our committee to once again be a key player as the Senate carries out its constitutional responsibility of advice and consent to the Moscow Treaty.

The Moscow Treaty in my judgment is the right agreement at the right time, and I commend the President and all those who worked with him to achieve this goal. It is a remarkable document, both in the strength of its content and in its departure—and I underline the word “departure”—from the commonly accepted strategic thinking and arms control wisdom that prevailed during the Cold War era. This breakthrough treaty, negotiated in a period of just several months, will reduce nuclear arsenals from the present levels of about 6,000 strategic warheads to 1,700 to 2,200 operational strategic warheads over the next decade.

This reduction, which amounts to about two-thirds of the warheads in the Russian and U.S. arsenals, is the most dramatic in strategic weapons history and in the history of arms control agreements.

This treaty is also important in that it is the embodiment of a new relationship between the United States of America and Russia. President Bush and his administration again are to be commended for these outstanding achievements.

This treaty is fully consistent with the policy goals that President Bush laid out after he took office. In a landmark speech at the National Defense University in May 2001, President Bush called for a new strategic relationship with Russia. I quote:

“Today’s Russia is not yesterday’s Soviet Union. This new cooperative relationship should look to the future, not to the past. It should be reassuring, rather than threatening. It should be premised on openness and mutual confidence and real opportunities for cooperation. I want to complete the work of changing our relationship from one based on a nuclear balance of terror to one based on common responsibilities and common interests.”

President Bush has engaged President Putin on a regular and intensive basis to move the Russian-American relationship beyond the Cold War hostility to a relationship built on openness, shared goals, and shared responsibility. I find that prevalent throughout this treaty. The treaty we consider today, therefore, is one measure of President Bush’s extraordinary success in building this new relationship.

Last December President Bush announced the intent to withdraw from the 1972 Anti-Ballistic Missile (ABM) Treaty and restated his determination to dramatically reduce the U.S. nuclear arsenal. The ABM Treaty in many technical ways limited the options by which we could achieve our defenses, as well as in the minds of many placed a limitation on this country to in effect defend itself against incoming ballistic missiles. It did serve a constructive role during the Cold War period, but its mission has ended. It really had to be a part of the demise of the Soviet Union and the end of the Cold War.

I commend the President for his initiatives, for many critics at the time believed that renewed hostility and a renewed arms race

with Russia could ensue if the U.S. exercised its right, a right set forth clearly in that treaty, to withdraw. Yet the opposite has happened. On December 13, 2001, the same day that President Bush notified the Russian Government of his intention to withdraw from the ABM Treaty and dramatically reduce U.S. strategic nuclear forces, Russian President Putin reciprocated by stating his intent to similarly reduce Russian strategic nuclear arsenals.

President Putin urged that the U.S. and Russian strategic reductions be formalized in a legally binding agreement. This year on May 24, at the summit in Moscow, President Bush and President Putin signed this landmark agreement that is the subject of our hearing today and the subject before the Senate for ratification.

I firmly believe that the President chose wisely when he agreed to put these reductions in the form of a legally binding treaty. This assures that the agreement will survive the personal relationship between these two presidents and that it has the weight of law behind it.

Yet this treaty is not like any that we have seen before. It is the first arms control treaty to embody the post-Cold War U.S.-Russian relationship. In negotiating this treaty, both sides consciously rejected the Cold War mentality of distrust and hostility that previously had required lengthy negotiations and extensive legal structure and detailed verification regimes to assure that both sides would abide by their obligations.

How many times, Mr. Chairman, did you and I and other colleagues travel to Geneva and elsewhere in the world to watch the slow progress of previous negotiations on arms control agreements? I remember these trips so well.

Consequently, the Moscow Treaty lacks many of the features of past bilateral arms control agreements, most of which were signed by the United States and the Soviet Union. The treaty does not establish interim warhead reduction goals or a detailed schedule to achieve warhead reductions. It does not define warhead "counting rules," require destruction of strategic nuclear delivery vehicles or launchers, or include limits or sub-limits on strategic nuclear delivery vehicles or launchers.

But there is an important way in which the Moscow Treaty is similar to prior strategic arms control agreements. No arms control treaty has ever required the destruction of nuclear warheads. There are a number of important reasons for this, which I expect we will explore in detail today in this hearing.

Some may argue that the simplicity of the Moscow Treaty is a weakness. I respectfully disagree. I believe that the simplicity of the treaty is its strength. This simplicity puts the focus on the key element of any strategic arms control agreement—deep reductions to strategic nuclear warheads. The simplicity of the treaty allowed Russia and the U.S. to reach an early agreement, avoiding the long, complex, arduous negotiations characteristic of the Cold War era.

This simplicity allows both the U.S. and Russia the flexibility within the numeric limits set by the treaty to structure their forces consistent with each nation's security requirements and to adapt to changes in the international security environment. This flexibility

is an essential feature of U.S. policy in an era when strategic and tactical surprise seem to be the only constant.

Yet I find that the doctrine "Trust, But Verify," authored by Ronald Reagan, our former President, is quietly present in the structures and foundations of this treaty. As unique as the Moscow Treaty is, it also reflects the success and the heritage of past arms control agreements. It is a legally binding document. In order to achieve the required reductions, nuclear warheads must be physically removed from the launch platforms and otherwise rendered so that they cannot be part of the operational structure for any near-term military contingencies.

The treaty provides the mechanisms and atmosphere to assure the compliance with its provisions and resolution of future issues related to treaty implementation. The terms of the Moscow Treaty, which recognize that the START I Treaty verification regime remains in force and which establish a Bilateral Implementation Commission, provide the basis for the predictability, transparency, and confidence needed to assure that both sides achieve the required reductions.

Some colleagues have raised concerns about the treaty, and each of these concerns deserves full consideration. But I remind my colleagues that many of these concerns must be balanced against the reality that we are here after only 5 months of negotiations considering a treaty that reduces the U.S. and Russian strategic arsenals by approximately two-thirds—a major accomplishment.

Following a full examination of the treaty, I believe that the Senate will promptly render its advice and consent to the Moscow Treaty. This treaty in my view clearly advances the national security interests of the United States, indeed the interests of the world, and deserves the strongest of support by the United States Senate. I ask that the statements of Senators Thurmond and Santorum be placed in the record at this time.

Thank you, Mr. Chairman.

[The prepared statements of Senator Thurmond and Senator Santorum follow:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Mr. Chairman, the Legislative Reorganization Act of 1946 established the Committee on Armed Services and directed among other issues that "such committee shall also study and review, on a comprehensive basis, matters relating to the common defense policy of the United States. . ." Today's hearing on the Strategic Offensive Reduction Treaty, commonly known as the Moscow Treaty, is a reflection of the mandate to review matters relating to the common defense policy. I congratulate you and Senator Warner, our ranking member, for scheduling this and the subsequent hearing on this important and revolutionary treaty. I expect that the committee's report on the treaty and its implications will be an important factor as the Senate considers the ratification of the treaty.

Mr. Chairman, in his opening statement before the Senate Foreign Relations Committee, Secretary of State Colin Powell stated: "The Moscow Treaty marks a new era in the relationship between the United States and Russia. It codifies both countries' commitment to make deep strategic offensive reductions in a flexible and legally binding manner. It facilitates the transition from strategic rivalry to a genuine strategic partnership based on the principles of mutual security, trust, openness, cooperation, and predictability." For those of us who lived through the Cold War, the words "strategic partnership based on the principles of mutual security, trust, openness, cooperation, and predictability" automatically cause concern. However, they represent the new world we live in. Russia is no longer our archenemy; it is a partner in our efforts to achieve peace throughout the globe and rid the world of

the treat of terrorism. This partnership is based on trust, openness, cooperation, and predictability.

I applaud President Bush for his aggressive approach toward fostering this new relationship with Russia. The Moscow Treaty is a prime example of this new philosophy. Not only does it call for the reduction in strategic nuclear warheads from more than 6,000 to approximately 2,000, but it also takes the approach that these reductions will be made based on trust and cooperation rather than the historic frameworks of prior treaties. In my judgement, this treaty is consistent with our national security interests as outlined in the 2002 Nuclear Posture Review. It also ensures that the United States maintains its flexibility to retain warheads in storage for future use to upgrade and maintain the operational stockpile. While some criticize the lack of a requirement to destroy warheads, I believe it is a sensible step to protect our strategic nuclear capability. Unlike Russia, the United States is not able to build new warheads and must rely on existing warheads to replace aging and unusable weapons.

Mr. Chairman, I look forward to the testimony of our distinguished panel. Secretary Rumsfeld and General Myers have never shirked from telling it as it is. I expect that their testimony today will be forthright and based on their best professional judgement.

PREPARED STATEMENT BY SENATOR RICK SANTORUM

Chairman Levin and Senator Warner, thank you for scheduling this important hearing. Secretary Rumsfeld and General Myers, thank you both for making yourselves available to offer testimony at this morning's hearing.

The Strategic Offensive Reductions Treaty will reduce U.S. and Russian strategic nuclear weapons from approximately 6,000 weapons to 1,700–2,200 weapons by 2012. This agreement represents the largest strategic nuclear arms reduction ever negotiated between the U.S. and Russia.

It is difficult to imagine a better representative example of how relations have changed between the United States and Russia than this treaty. The Strategic Offensive Reductions Treaty—also known as the Moscow Treaty—reflects the historic shift that has taken place following the end of the Cold War, and it highlights the strong relationship and trust that exists between Presidents Bush and Putin.

Missing from the Moscow Treaty is the distrust underlying previous U.S.-Soviet Union arms control agreements. This new level of trust between the U.S. and Russia allowed the treaty to be negotiated in a period of months—not years—and, at the same time, achieve historic reductions in strategic nuclear weapons. Because this treaty was negotiated under a new U.S.-Russian paradigm of cooperation and trust, missing are the long and detailed verification and accounting rules that have been part of previous arms control treaties.

The reductions specified in the treaty, roughly a two-thirds reduction in the level of strategic nuclear weapons, are indeed historic. While some on the other side will express dissatisfaction that nuclear warheads will not be destroyed under the Moscow Treaty, it is worth noting that no strategic arms control treaty has ever required dismantlement of nuclear warheads. The warheads that the U.S. will retain in storage are a strategic hedge against the rise of a hostile nuclear power and they will provide a strategic reserve for our aging nuclear weapons stockpile.

As for the issue of tactical nuclear weapons, while the treaty does not address these weapons, U.S. negotiators did raise this issue with their Russian counterparts during Moscow Treaty negotiations. Interestingly enough, the Russian delegation would not address limits on tactical nuclear weapons during the negotiations.

Mr. Chairman, I believe the Moscow Treaty is a sound treaty that reflects the progress, cooperation and trust that exists between the U.S. and Russia. This is a treaty that is consistent with U.S. nuclear doctrine contained in the recent Nuclear Posture Review, and it provides a legal framework for substantial strategic nuclear arms reductions.

Chairman LEVIN. Thank you very much, Senator Warner.
Secretary Rumsfeld.

STATEMENT OF HON. DONALD H. RUMSFELD, SECRETARY OF DEFENSE

Secretary RUMSFELD. Thank you very much, Mr. Chairman, members of the committee. I am pleased to be here with the Chair-

man of the Joint Chiefs, General Dick Myers, and we thank you for this opportunity to discuss the Moscow Treaty.

Senator Warner, as you indicated, President Bush has been determined from the outset of his administration to place the U.S.-Russia relationship on a new footing. Certainly Secretary Powell, Under Secretary of State John Bolton, and Under Secretary of Defense Doug Feith have all worked closely to help achieve this treaty.

I would like to abbreviate my prepared remarks, Mr. Chairman, to cover some of the questions that have been posed and have the entire statement included in the record.

Chairman LEVIN. It will be made part of the record.

Secretary RUMSFELD. I also would point out that there have been naysayers that have insisted that establishing this new relationship between the United States and Russia would be not possible or at least extremely difficult. They looked at the agenda of the President's promise to withdraw from the ABM Treaty, his desire to build defenses to protect the U.S., our friends and allies from ballistic missile attack, his determination to strengthen the NATO alliance by making new allies of old adversaries, and predicted that the U.S. and Russia were on a bumpy, if not collision, course.

What a difference a year makes. Today the U.S.-Russian relationship is stronger than perhaps at any time in the history of our two countries. In a little over a year, the President has defied the critics and set in motion a transformation of the U.S.-Russian relationship, one that we believe is designed to benefit the people of both our nations and indeed the entire world.

The United States and Russia are working together to develop new avenues of trade and economic cooperation. We are working together to fight terrorism and to reduce the number of deployed offensive nuclear weapons, weapons that are a legacy of the past and which are no longer needed at a time when Russia and the United States are basing our relationship on cooperation rather than fear of mutual annihilation.

Of course, there is still a good deal of work ahead and challenges to overcome. But we do have an opportunity to build a new relationship for our peoples, a relationship that can contribute to peace, stability, and prosperity for generations of Russians and Americans.

But let there be no doubt. It will require a change in our thinking, thinking in our bureaucracies, in the Duma, in Congress, in the press, and in academic institutions. We seem to have decades of momentum going in the opposite direction. Habits built up over so many decades become ingrained and are hard to break.

Here in the U.S., there are those who would have preferred to see us continue the adversarial arms control negotiations of the Soviet era, where teams of lawyers drafted hundreds of pages of treaty text and each side worked to gain the upper hand, while focusing on ways to preserve a balance of nuclear terror.

Similarly, in Russia today there are those who are stuck in the past, who look warily at the U.S. offers of greater friendship and cooperation, preferring to keep us at arm's length while continuing to associate with the old allies of the former Soviet Union.

Russia and the United States entered this new century saddled with two legacies of the Cold War, the adversarial relationship to which we had both grown accustomed and the physical manifestation of that adversarial relationship, the massive arsenals of weapons that we built up. In the past year we have made progress in dealing with both.

Last November at the Crawford Summit, President Bush announced his intention to reduce the United States' operationally deployed strategic nuclear warheads by some two-thirds, to between 1,700 and 2,200 weapons. Soon thereafter, President Putin made a similar commitment. These announced reductions are a reflection of that new relationship.

But what is remarkable is not simply the fact of these planned reductions, but how they have happened. After a careful review, President Bush simply announced his intention to cut our operationally deployed nuclear warheads. President Putin did the same. When they met in Moscow, they recorded these unilaterally, announced changes in a treaty that will survive their two presidencies, the Moscow Treaty which the Senate and the Duma are now considering.

But it is significant that, while we consulted closely and engaged in a process that had been open and transparent, we did not engage in lengthy, adversarial negotiations in which the U.S. and Russia would keep thousands of weapons we did not need as bargaining chips. We did not establish standing negotiating teams in Geneva, with armies of arms control aficionados ready to do battle over every colon and every comma.

If we had done so, we would still be negotiating today. Instead, we are moving directly toward dramatic reductions in the ready nuclear weapons of our two countries and clearing the way for a new relationship between our countries.

An illustration of how far we have come is this. This [indicating] is the START Treaty. It is enormous. It was signed in 1991 by the first President Bush and Soviet President Mikhail Gorbachev. It is 700 pages long and it took 9 years to negotiate. This [indicating] is the Moscow Treaty as concluded by President Bush and President Putin. It is three pages long and it took 5 or 6 months to negotiate.

Mr. Chairman, we are working toward the day when the relationship between our two countries is such that no arms control treaties will be necessary. That is how normal countries deal with each other. The United States and Britain both have nuclear weapons, yet we do not spend hundreds of hours negotiating the fine details of mutual reductions in our offensive weapons. We do not feel the need to preserve any balance of terror between us. It would be a worthy goal for our relationship with Russia to evolve along that path.

We would have made these cuts regardless of what Russia did with its arsenal. We are making them not because we signed the treaty, but because the transformation in our relationship with Russia means that we do not need as many deployed weapons as we once needed. Russia has made a similar calculation, and the agreement we reached in Moscow is the result of those determinations, not the cause of them.

That is also one reason why we saw no need to include detailed verification measures in the treaty. There simply is not any way on Earth to verify what Russia is doing with all of those warheads. Neither side should have an interest in evading the terms of the treaty since it codifies unilaterally-announced reductions and gives both sides broad flexibility in implementing those reductions.

Similarly flawed is the complaint that, because the Moscow Treaty does not contain a requirement to destroy warheads removed from missiles or bombers, that the cuts are somehow reversible and therefore not real. Put aside for the moment that no previous arms control treaty, not SALT, not START, not the INF, ever required the destruction of warheads, and no one offered objections to them on that basis.

This charge is based, I believe, on a flawed premise, that irreversible reductions in nuclear weapons are possible. In point of fact, I do not believe there is any such thing as irreversible reduction in nuclear weapons. The knowledge of how to build nuclear weapons exists in the world. There is no possibility at all that that knowledge will be lost. Every reduction is therefore reversible, given time and given money.

Indeed, when it comes to building nuclear weapons, Russia has a distinct advantage over the United States. Today Russia can and does produce both nuclear weapons and strategic nuclear delivery vehicles. They have an open, warm production line for each. The U.S. does not currently produce nuclear warheads. The reason to keep rather than destroy some of those nuclear warheads is to have them available in the event there is a problem with the safety or reliability of some element of our arsenal.

If we had pursued the path of traditional arms control as some have suggested, we would not be proceeding with the reductions outlined in this treaty. Rather, we would still be at the negotiating table arguing over how to reconcile these and other asymmetries between the United States and Russia. Russia might, for example, have insisted that any agreement take into account the size of the U.S. economy and our ability to mobilize resources to develop new production facilities.

We might have argued, conversely, that Russia's proximity to rogue nations allows them to deter these regimes with tactical systems, whereas, because they are many thousands of miles away from us, the U.S. distance from them requires more intercontinental systems than Russia needs. This could have resulted in a mind-numbing debate over how many non-strategic systems should equal an intercontinental system or open the door to a discussion of whether an agreement must include all nuclear warheads, including tactical nuclear warheads, and so on and so forth ad infinitum.

The approach we have taken is to treat Russia not as an adversary, but as a friendly power. With the recently completed nuclear posture review, the U.S. has declared that we are not interested in preserving a balance of terror with Russia. As our adversaries change, our deterrence calculus can and should change as well.

That is why we are working to transform our nuclear posture from one that was aimed at deterring the Soviet Union that no longer exists to one designed to deter new adversaries, adversaries

that may not be discouraged from attacking us by the threat of nuclear retaliation, just as the terrorists who struck us on September 11 were certainly not deterred by the massive U.S. nuclear arsenal.

Some have asked why in the post-Cold War world we need to maintain as many as 1,700 to 2,200 operationally deployed warheads. The U.S. nuclear arsenal remains an important part of our strategy and it helps to dissuade the emergence of potential or would-be peer competitors by underscoring the futility of trying to sprint toward parity with us or, indeed, superiority. I would add that it also assures our friends and allies that our capability is sufficient, and in some instances nations that have the ability to develop nuclear weapons, because they are our friends and allies, recognize they have no need to do so.

Indeed, Mr. Chairman, our decision to proceed with reductions as deep as the ones outlined in the Moscow Treaty is premised on decisions to invest in a number of other critical areas, programs that are funded and recommended in our 2003 budget. These include investments to improve U.S. intelligence collection, analysis, processing, and dissemination, to protect the U.S. homeland, including a refocused, revitalized missile defense research and testing program, and capabilities to detect and respond to biological attack, accelerate development of unmanned aerial vehicles (UAVs) with new combat capabilities, and produce fast, precision conventional strike capabilities, convert four Trident nuclear submarines into stealthy SSGN strike submarines that can carry cruise missiles and special operations forces in denied areas, leverage information technology to seamlessly connect U.S. forces in the air, at sea, and on the ground, protect our information networks, improve the survivability of U.S. space systems, and develop a space infrastructure that assures persistent surveillance and access.

Investments in these and many other transformational capabilities in the 2003 budget should allow the U.S. over time to reduce our reliance on nuclear weapons and enact the deep nuclear reductions contained in the treaty.

Others have asked why there is no reduction schedule in the treaty. The answer quite simply is flexibility. Our approach in the Nuclear Posture Review was to recognize that we are entering a period of surprise and uncertainty, when the sudden emergence of unexpected threats will be an increasingly common feature of our security environment.

We were surprised on September 11, and let there be no doubt we will have surprises in the future. Intelligence, despite the efforts and despite how good we are at it, has repeatedly underestimated the capabilities of different countries of concern to us. We have historically had gaps in our knowledge of as much as 4, 6, 8, 10, 12, in one case 13 years where something occurred in a major country with respect to weapons of mass destruction that we did not know about until many years later.

The only surprise is that so many among us are still surprised. The problem is more acute in an age when the spread of weapons of mass destruction into the hands of terrorist states and potentially terrorist networks means that our margin for error is significantly less than it has been. The cost of a mistake could be not

thousands of our innocent men, women, and children, but hundreds of thousands of lives or even millions.

Because of our smaller margin for error and the uncertainty of the future security environment, the U.S. will need flexibility. This new approach to deterrence will help us to better contribute to peace and stability and address the new threats and challenges that we will face in the 21st century.

We have entered a period when cooperation between our countries will be increasingly important to the security and prosperity of both our peoples. We can work together to stop the spread of weapons of mass destruction into the hands of terrorist movements and terrorist states. We can work together to try to support Russia's economic transformation and deeper integration into the Euro-Atlantic community. This treaty is merely one element of a growing multi-faceted relationship between our two countries that involves not just security, but also increasing political, economic, diplomatic, cultural, and other forms of cooperation.

The reductions characterized in this treaty will help eliminate the debris of past hostility that has been blocking our way as we build a new relationship. The treaty President Bush has fashioned and the process by which he fashioned it, I believe, are both models for future cooperation between our two countries. We have achieved deep reductions and enhanced the security of both our countries without perpetuating Cold War ways of thinking that hinder a desire for better relations.

Mr. Chairman, I urge that the Senate advise and consent to this treaty and approve a clean resolution of ratification. Thank you very much.

[The prepared statement of Secretary Rumsfeld and the U.S.-Russia Strategic Offensive Reductions Treaty (The Moscow Treaty) follow:]

PREPARED STATEMENT BY HON. DONALD H. RUMSFELD

Mr. Chairman and members of the committee:

First, let me thank you for this opportunity to discuss the Moscow Treaty. President Bush, Secretary Powell, Under Secretary of State John Bolton, and Under Secretary of Defense Doug Feith, have worked closely to achieve the treaty.

When President Bush took office last year, he made clear his determination to transform the Russian-American relationship—to put the hostility built up over so many decades behind us, and set our two nations on a course toward greater cooperation.

Some naysayers insisted it could not be done. They looked at his agenda—his promise to withdraw from the ABM Treaty; his desire to build defenses to protect the U.S., its friends, and allies from ballistic missile attack; his determination to strengthen the NATO Alliance by making new allies of old adversaries—and predicted that the U.S. and Russia were on a collision course.

Various commentators warned of an impending “deep chill” in U.S.-Russian relations that would make it impossible to negotiate further nuclear reductions with Russia. More than one foreign official predicted that the President’s approach would “re-launch the arms race.” *The Washington Post* cautioned that the President’s strategy risked “making the world less rather than more secure, and . . . increasing rather than assuaging tension among the United States, its allies and potential adversaries such as Russia.” *The New York Times* warned his approach “may alienate the Kremlin and give rise to a dangerous new arms race with Russia . . .”

What a difference a year makes.

None of the dire predictions came to pass. To the contrary, the U.S.-Russian relationship is stronger than perhaps at any time in the history of our two nations.

Far from a clash over NATO expansion, we have cemented a new NATO-Russia relationship that will permit increasing cooperation between Russia and the members of the Atlantic Alliance.

Far from causing a “deep chill” in relations, the U.S. withdrawal from the ABM Treaty was greeted in Russia with something approximating a yawn. Indeed, President Putin declared the decision “does not pose a threat” to Russia.

Far from launching a new arms race, the U.S. and Russia have both decided to move toward historic reductions in their deployed offensive nuclear arsenals—reductions to be codified in the Moscow Treaty. Indeed, President Putin chose to announce the Russian reductions on the same day President Bush announced the U.S. intention to withdraw from the ABM Treaty.

In little over a year, the President has defied the critics and set in motion a transformation in U.S.-Russian relationship—one that is designed to benefit the people of both our nations, and indeed the entire world.

The record shows that it is a transformation that began before the terrible events of September 11.

President Bush laid out his vision for a new relationship in a speech at the National Defense University on May 1 of last year. When he met President Putin for the first time a month later in Slovenia, instead of the predicted fireworks, the two presidents emerged from their discussions expressing confidence that our countries could put past animosities behind them.

Not only had the meeting far exceeded his expectations, President Putin declared, but he believed that “Russia and the United States are not enemies, do not threaten each other, and could be fully good allies.” President Bush announced they had both agreed that the time had come “to move beyond suspicion and towards straight talk; beyond mutually assured destruction and toward mutually earned respect . . . to address the world as it is, not as it used to be.”

Over the course of the past year, they put those words into action.

In the last 12 months, the Presidents of the United States and Russia had more interaction and forged more areas of cooperation across a broader range of political, economic, and security issues than at any time in the history of our two Nations.

Today, the United States and Russia are working together to develop new avenues of trade and economic cooperation. We are working together to fight terrorism and deal with the new and emerging threats we will both face in this dangerous new century. We are working together to reduce the number of deployed offensive nuclear weapons—weapons that are a legacy of the past, and which are no longer needed at a time when Russia and the U.S. are basing our relations on cooperation, not fear of mutual annihilation.

These are historic changes—changes of a breadth and scale that few imagined, and many openly doubted, could be achieved in so short a period time.

Of course, there is still a great deal of work ahead—and challenges to overcome. Our success is by no means assured. But we have an opportunity to build a new relationship for our peoples—a relationship that can contribute to peace, stability, and prosperity for generations of Russians and Americans. It is ours to grasp, or to let slip away. But let there be no doubt—it will require a change in our thinking in our bureaucracies, in the Duma and Congress, and in the press and in academic institutions. We have decades of momentum going in the opposite direction. We need to recalibrate our thinking and our approaches.

In both our countries, there are those who are still struggling with the transition. Tolstoy said, “everyone thinks of changing the world, but no one thinks of changing himself.” There is a reason for that. Change is not easy—none of us wakes up in the morning wanting to change.

Habits built up over many decades become ingrained and are hard to break. Here in the U.S., there are some who would have preferred to see us continue the adversarial arms control negotiations of the Soviet era—where teams of lawyers drafted hundreds of pages of treaty text, and each side worked to gain the upper hand, while focusing on ways to preserve a balance of nuclear terror. This is an approach that President Bush rejected, insisting instead that we deal with Russia as we deal with all normal countries—in a spirit of friendship, trust, and cooperation.

Similarly, in Russia today there are those who are stuck in the past—who look warily at American offers of greater friendship and cooperation, preferring to keep us at arms length, while continuing to associate with the old allies of the former Soviet Union—dictatorial regimes characterized by political, religious, and economic repression—the world’s walking wounded.

But there are others in Russia who want to see her embrace the future and take her rightful place in Europe—through increased integration with the western industrialized democracies, and by embracing political and economic freedom, and the higher standard of living, domestic peace, and thriving culture that are the product

of free societies. Sometimes these divergent impulses can be found in the same people.

Both of our nations have a choice to make—a choice between the past and the future. Neither of us can make that choice for the other. But each of us has an interest in the choice the other makes.

The question for us is: what can we, who choose the future, do to support each other?

For those of us in the business of national defense, our task is an important one: to clear away the debris of past hostility that has been blocking our path into the 21st century.

Russia and the United States entered this new century saddled with two legacies of the Cold War: the adversarial relationship to which we had both grown accustomed and the physical manifestation of that adversarial relationship—the massive arsenals of weapons we built up.

In the past year, we have made progress in dealing with both. Last November, at the Crawford Summit, President Bush announced his intention to reduce the United States' operationally deployed strategic nuclear warheads by some two-thirds—to between 1,700 and 2,200 weapons. Soon after, President Putin made a similar commitment.

These announced reductions are a reflection of our new relationship. When President Reagan spoke to the students at Moscow State University in 1988, he told them, “nations do not distrust each other because they are armed; they are armed because they distrust each other.” Clearly, we do not distrust each other the way the U.S. and Soviet Union once did.

But what is remarkable is not simply the fact of these planned reductions, but how they have happened. After a careful review, President Bush simply announced his intention to cut our operationally-deployed nuclear warheads. President Putin did the same. When they met in Moscow, they recorded these unilaterally announced changes in a treaty that will survive their two presidencies—the Moscow Treaty which the Senate and the Duma will now consider.

But it is significant that while we consulted closely, and engaged in a process that has been open and transparent, we did not engage in lengthy, adversarial negotiations in which the U.S. and Russia kept thousands of weapons they did not need as bargaining chips. We did not establish standing negotiating teams in Geneva, with armies of arms control aficionados ready to do battle over every colon and comma.

If we had done so, we would still be negotiating today. Instead, we are moving toward dramatic reductions in the ready nuclear weapons of our two countries and clearing the way for a new relationship between our countries.

An illustration of how far we have come in that regard is this:

[HOLDS UP START TREATY] This is the START I Treaty, signed in 1991 by the first President Bush and Soviet President Mikhail Gorbachev. It is 700 pages long, and took 9 years to negotiate.

[HOLDS UP MOSCOW TREATY]. This is the Moscow Treaty, concluded this summer by President Bush and President Putin. It is 3 pages long, and took 6 months to negotiate.

Mr. Chairman, we are working toward the day when the relationship between our two countries is such that no arms control treaties will be necessary.

That is how normal countries deal with each other. The United States and Britain both have nuclear weapons, yet we do not spend hundreds of hours negotiating the fine details of mutual reductions in our offensive systems. We do not feel the need to preserve a balance of terror between us.

It would be a worthy goal for our relationship with Russia to be the same.

There are those who do not see the difference in the size of these treaties as a sign of progress. To the contrary, they would have preferred a voluminous, legalistic arms control agreement, with hundreds of pages of carefully crafted provisions and intrusive verification measures.

These critics operate from a flawed premise: that, absent such an agreement, our two countries would both try to break out of the constraints of this treaty and *increase* our deployed nuclear forces. Nothing could be further from the truth.

During the Cold War, the stated rationale for arms control was to constrain an arms race. But the idea of an arms race between the United States and Russia today is ludicrous. The relationship between our two countries today is such that the U.S. determined—unilaterally—that deep *reductions* in our deployed nuclear forces are in the U.S. interest.

We would have made these cuts regardless of what Russia did with its arsenal. We are making them not because we signed a treaty in Moscow, but because the transformation in our relationship with Russia means we do not need so many de-

ployed weapons. Russia has made a similar calculation. The agreement we reached in Moscow is the result of those determinations—not the cause of them.

That is also one reason we saw no need for including detailed verification measures in the treaty. There simply isn't any way on earth to verify what Russia is doing with all those warheads. Neither side should have an interest in evading the terms of the treaty, since it codifies unilaterally-announced reductions and gives both sides broad flexibility in implementing them. Further, we saw no benefit in creating a new forum for bitter debates over compliance and enforcement. Today, the last place in the world where U.S. and Russian officials still sit across a table arguing with each other is in Geneva. Our goal is to move beyond that kind of Cold War animosity—not to find new ways to extend it into the 21st century.

Similarly flawed is the complaint that, because the Moscow Treaty does not contain a requirement to destroy warheads removed from missiles or bombers, the cuts are reversible and therefore not “real.” Put aside for a moment the fact that no previous arms control treaty—not SALT, START, or INF—has required the destruction of warheads, and no one offered objections to them on that basis. This charge is based on a flawed premise—that irreversible reductions in nuclear weapons are possible. In point of fact, there is no such thing as an irreversible reduction in nuclear weapons. The knowledge of how to build nuclear weapons exists—and there is no possibility that knowledge will be lost. Every reduction is therefore reversible, given time and money.

Indeed, when it comes to building nuclear weapons, Russia has a distinct advantage over the U.S. Today, Russia can and does produce both nuclear weapons and strategic nuclear delivery vehicles—they have open warm production lines. The U.S. does not currently produce either ICBMs or nuclear warheads. It has been a decade since we produced a new nuclear weapon, and it would take us a number of years to begin producing them again. In the time it would take us to re-deploy decommissioned nuclear warheads, Russia could very likely produce a larger number of new ones.

But the question is: why would we want to do so? Barring some unforeseen and dramatic change in the global security environment—like the sudden emergence of a hostile peer competitor on par with the old Soviet Union—there is no reason why we would re-deploy the warheads we are reducing.

The reason to keep, rather than destroy, some of those decommissioned warheads is to have them available in the event there is a problem with the safety or reliability of some element of our arsenal. Since we do not have a warm production line, it would be mindless for us to destroy all those non-deployed warheads, and then have nothing for back up in the event we run into safety and reliability problems—or a sudden, unexpected change in the global security environment. Russia, by contrast, has little or no need to maintain a reserve of warheads, since it has an active production capability.

Mr. Chairman, if we had pursued the path of traditional arms control, as some suggested, we would not be proceeding with the reductions outlined in this treaty. Rather, we would still be at the negotiating table, arguing over how to reconcile these and other asymmetries between Russia and the United States.

- We would have had to try to balance Russia's active production capacity against the United States' lack of one.
- Russia might have insisted that any agreement take into account the size of the U.S. economy and our ability to mobilize resources relatively quickly to develop new production facilities.
- We might have argued that Russia's proximity to rogue nations allows them to deter these regimes with tactical systems, whereas, because they are many thousands of miles away from us, the United States' distance from them requires more intercontinental delivery systems than Russia needs.
- This could have resulted in a mind-numbing debate over how many non-strategic systems should equal an intercontinental system, or opened the door to a discussion of whether an agreement must include all nuclear warheads—including tactical warheads.
- Russian negotiators might have countered that a U.S. advantage in advanced, high-tech conventional weapons must be taken into account.

So on and so forth, *ad infinitum*.

But the point is this: We don't need to “reconcile” all these asymmetries, because neither Russia nor the U.S. has an interest in taking advantage of the other by increasing its respective deployed nuclear forces.

The approach we have taken is to treat Russia not as an adversary, but as a friendly power. In so doing, we have been able to preserve the benefits attributed

to arms control—the dialogue, consultations, lower force levels, predictability, stability, and transparency. But we have done so without all the drawbacks: the protracted negotiations; the withholding of bargaining chips; the legalistic and adversarial process that, more often than not, becomes a source of bitterness between the participants; and the extended, embittered debates over compliance and enforcement of agreements.

The U.S. and Russia are moving beyond all that. We are working to put that kind of acrimony and hostility behind us—and the adversarial process that was both a cause and effect of that hostility.

Because Russia and the United States are no longer adversaries, our interests have changed. As enemies, we had an interest in each other's failure; as friends we have an interest in each other's success. As enemies we had an interest in keeping each other off balance; as friends we have an interest in promoting stability.

When Russia and the U.S. were adversaries, our principal focus was trying to maintain and freeze into place the balance of nuclear terror. With the recently completed Nuclear Posture Review, the United States has declared that we are not interested in preserving a balance of terror with Russia. Today, the threats we both face are no longer from each other—they come from new sources. As our adversaries change, our deterrence calculus can and should change as well.

That is why we are working to transform our nuclear posture from one aimed at deterring a Soviet Union that no longer exists to one designed to deter new adversaries—adversaries that may not be discouraged from attacking us by the threat of U.S. nuclear retaliation, just as the terrorists who struck us on September 11 were not deterred by the United States' massive nuclear arsenal.

With the Nuclear Posture Review, President Bush is taking a new approach to strategic deterrence—one that combines deep reductions in offensive nuclear forces with new conventional offensive and defensive systems more appropriate for deterring the potential adversaries we face.

Taken together, this “New Triad” of offensive nuclear forces, advanced conventional capabilities, and a range of new defenses (ballistic missile defense, cruise missile defense, space defense, cyber defense) supported by a revitalized defense infrastructure, are all part of a new approach to deterrence and defense—an approach designed to increase our security, while reducing our reliance on nuclear weapons.

Some have asked why, in the post-Cold War world, we need to maintain as many as 1,700–2,200 operationally-deployed warheads. The end of the Soviet threat does not mean we no longer need nuclear weapons. To the contrary, the U.S. nuclear arsenal remains an important part of our deterrence strategy, and helps to dissuade the emergence of potential or would-be peer competitors, by underscoring the futility of trying to sprint toward parity with us or superiority.

Indeed, Mr. Chairman, our decision to proceed with reductions as deep as the ones outlined in the Moscow Treaty is premised on decisions to invest in a number of other critical areas—programs that are funded in our 2003 budget request.

These include investments to:

- Improve U.S. intelligence collection, analysis, processing, and dissemination;
- Protect the U.S. homeland, including a refocused and revitalized missile defense research and testing program, and capabilities to detect and respond to biological attack;
- Accelerate development of UAVs with new combat capabilities and produce fast, precision conventional strike capabilities;
- Convert four Trident nuclear submarines into stealthy SSGN Strike Submarines that can carry cruise missiles and Special Operations Forces into denied areas;
- Leverage information technology to seamlessly connect U.S. forces—in the air, at sea and on the ground;
- Protect our information networks;
- Improve the survivability of U.S. space systems, and develop a space infrastructure that assures persistent surveillance and access.

Investments in these, and many other transformational capabilities in the 2003 budget, will allow the U.S., over time, to reduce our reliance on nuclear weapons and enact the deep nuclear reductions contained in the Moscow Treaty. I urge the Senate to approve the 2003 defense budget as soon as possible.

Others have asked why there is no reduction schedule in the treaty. The answer, quite simply, is flexibility. Our approach in the Nuclear Posture Review was to recognize that we are entering a period of surprise and uncertainty, when the sudden emergence of unexpected threats will be increasingly common feature of our security

environment. We were surprised on September 11—and let there be no doubt, we will be surprised again.

When Bob McNamara appeared before the Senate for his confirmation hearings as Secretary of Defense, no one mentioned the word Vietnam. When Vice President Cheney appeared before the Senate for his Senate confirmation as Secretary of Defense, he did not, nor did any member of the committee, mention the word Iraq. When I appeared before the Senate Armed Services Committee for my confirmation hearings last year, no one—including me—mentioned the word Afghanistan.

Intelligence has repeatedly underestimated the capabilities of different countries of concern to us. We have historically have had gaps in our knowledge of 4, 6, 8, and in at least one case 12 or so years. It is simply not possible for intelligence to know everything taking place in our world. The only surprise is that so many among us are still surprised. This problem is more acute in an age when the spread of weapons of mass destruction into the hands of terrorist states—and potentially terrorist networks—means that our margin of error is significantly less than it has been. The cost of a mistake could be not thousands, but hundreds of thousands of lives—or even millions.

Because of our smaller margin for error and the uncertainty of the future security environment, the U.S. will need flexibility. Through the Nuclear Posture Review, we determined the force levels and the flexibility we will need to deal with that new world and then negotiated a treaty that allows both deep reduction in offensive weapons and the flexibility to respond to sudden changes in the strategic environment.

We are working to develop the right mix of offensive and defensive capabilities. If we do so, we believe the result will be that nations are less likely to acquire or use nuclear weapons.

None of these changes is in any way a threat to Russia. Far from it, this new approach to deterrence will help us to better contribute to peace and stability, and address the new threats and challenges the United States will face in the 21st century.

In many ways, Russia now faces the most benign security environment it has enjoyed in more than 700 years. From the 13th century up till the dawn of the 16th century, Russia was subjected to Mongol rule; in the 17th century she was invaded by Poland; in the 18th century by Sweden; in the 19th century by France; and in the 20th century by Germany. Today, for the first time in modern history, Russia is not faced with a foreign invader with its eye set on Moscow.

In the 21st century, Russia and the United States both face new and different security challenges—the threats of terrorism and fundamentalism and the spread of weapons of mass destruction to rogue states. The difference is that these are threats our two nations have in common—threats that we can face together.

This means that we have entered a period when cooperation between our two countries will be increasingly important to the security and prosperity of both our peoples. We can work together to stop the spread of weapons of mass destruction into the hands of terrorist movements and terrorist states. We can work together to support Russia's economic transformation and deeper integration into the Euro-Atlantic community—because a prosperous Russia would not face the same pressures to sell rogue states the tools of mass destruction.

If one were to look down from Mars on Earth, one would see that the world divides pretty neatly into countries that are doing well and countries that are not doing well. The countries that are doing well are the ones that have free political systems, free economic systems, rule of law, transparency and predictability, and are integrated into the world economy. They are the nations where there is growth and opportunity.

If Russia hopes to attract foreign capital, or retain her most gifted, best educated citizens, she must provide them with a climate of economic opportunity and political freedom—a climate that is the critical foundation on which prosperity, creativity and opportunity are built.

We in the United States can encourage Russia—by working together to put the past behind us, establish bonds of friendship between our peoples. But, in the end, the choice, and the struggle, belong to the Russian people.

This treaty is by no means the foundation of that new relationship. It is merely one element of a growing, multifaceted relationship between our two countries that involves not just security, but also increasing political, economic, diplomatic, cultural and other forms of cooperation.

These reductions in the nuclear arsenals of our two countries are a step in that process. The reductions characterized in the Moscow Treaty will help eliminate the debris of past hostility that has been blocking our way as we build a new relationship. The Treaty President Bush has fashioned—and the process by which he fash-

ioned it—are both models for future cooperation between our two countries. We have achieved deep reductions, and enhanced the security of both our countries, without perpetuating Cold War ways of thinking that hinder a desire for better relations.

I urge the Senate to advise and consent to this treaty and to approve a clean resolution of ratification.

I'd be pleased to respond to your questions. Any questions that cannot be fully answered here, we will be pleased to answer in classified session or later for the record.



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U.S.-Russia Strategic Offensive Reductions Treaty (The Moscow Treaty)

*Released by the White House
Office of the Press Secretary*



The United States of America and the Russian Federation, hereinafter referred to as the Parties,

Embarking upon the path of new relations for a new century and committed to the goal of strengthening their relationship through cooperation and friendship,

Believing that new global challenges and threats require the building of a qualitatively new foundation for strategic relations between the Parties,

Desiring to establish a genuine partnership based on the principles of mutual security, cooperation, trust, openness, and predictability,

Committed to implementing significant reductions in strategic offensive arms,

Proceeding from the Joint Statements by the President of the United States of America and the President of the Russian Federation on Strategic Issues of July 22, 2001 in Genoa and on a New Relationship between the United States and Russia of November 13, 2001 in Washington,

Mindful of their obligations under the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms of July 31, 1991, hereinafter referred to as the START Treaty,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968, and

Convinced that this Treaty will help to establish more favorable conditions for actively promoting security and cooperation, and enhancing international stability,

Have agreed as follows:

Article I

Each Party shall reduce and limit strategic nuclear warheads, as stated by the President of the United States of America on November 13, 2001 and as stated by the President of the Russian Federation on November 13, 2001 and December 13, 2001 respectively, so that by December 31, 2012 the aggregate number of such warheads does not exceed 1700-2200 for each Party. Each Party shall determine for itself the composition and structure of its strategic offensive arms, based on the established aggregate limit for the number of such warheads.

Article II

The Parties agree that the START Treaty remains in force in accordance with its terms.

Article III

For purposes of implementing this Treaty, the Parties shall hold meetings at least twice a year of a Bilateral Implementation Commission.

Article IV

1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. This Treaty shall enter into force on the date of the exchange of instruments of ratification.

2. This Treaty shall remain in force until December 31, 2012 and may be extended by agreement of the Parties or superseded earlier by a subsequent agreement.

3. Each Party, in exercising its national sovereignty, may withdraw from this Treaty upon three months written notice to the other Party.

Article V

This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

Done at Moscow on May 24, 2002, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA: FOR THE RUSSIAN FEDERATION:

Released May 24, 2002

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Chairman LEVIN. Thank you very much, Secretary Rumsfeld, General Myers.

STATEMENT OF GEN. RICHARD B. MYERS, USAF, CHAIRMAN, JOINT CHIEFS OF STAFF

General MYERS. Chairman Levin and Senator Warner and distinguished members of the committee: Thank you for the invitation to appear before you today. Before I begin my remarks on the Moscow Treaty, I would like to thank you for taking time to conduct the confirmation hearings for our combatant commanders. I think you have one scheduled tomorrow. We realize how busy you are, and we very much appreciate the timely manner in which this committee always responds to our requirements. Thank you.

It is an honor to appear before you today to discuss the Moscow Treaty. Mr. Chairman, I would first request that my prepared statement be submitted for the record.

Chairman LEVIN. It will be made part of the record.

General MYERS. I will make some short introductory remarks and then answer any questions that you and the committee might have.

Mr. Chairman, the members of the Joint Chiefs of Staff and I all support the Moscow Treaty. We believe it provides for the long-term security interests of our Nation and we also believe that it preserves our flexibility in an uncertain strategic environment. Moreover, the treaty allows us to implement the recommendations that came out of our Nuclear Posture Review.

As you consider the treaty's protocols, there are three key aspects that I would like to briefly comment on. First, we welcome the fact that with this treaty we will focus on operationally deployed war-

heads. This enables us to preserve critical conventional capabilities while we manage the reduction in strategic nuclear warheads.

Second, the 10-year implementation schedule gives us flexibility in terms of drawing down our forces. Security imperatives over the next decade may change radically from what we anticipate today.

Third, the treaty's provision that allows the U.S. to withdraw with a 90-day notification requirement provides a hedge against sudden changes in the global strategic environment. We believe together these provisions enable us to adjust our strategy, if necessary, both in the short and long term to meet the Nation's security needs. These provisions also allow us to make significant reductions in nuclear warheads and continue a reduction process that has been ongoing for the past 3 decades.

Perhaps most important of all, this treaty forms the basis for a new relationship with our Russian counterparts, putting to rest the Cold War at last.

Mr. Chairman, the Secretary and I look forward to your questions.

[The prepared statement of General Myers follows:]

PREPARED STATEMENT BY GEN. RICHARD B. MYERS, USAF

It is an honor to appear before this committee and share with you the implications of the Moscow Treaty on our Nation's defense. The Joint Chiefs of Staff maintain that this treaty enhances the security of our country, and that of the world, by making a dramatic reduction in the number of deployed strategic nuclear warheads while allowing the U.S. to retain the flexibility to hedge against future uncertainty. While the requirements of this treaty are fewer and more direct than previous arms control agreements, there are a number of key provisions to highlight.

The treaty requires the U.S. to reduce its strategic nuclear warheads to between 1,700 and 2,200 warheads. From current levels, this number reflects almost a two-thirds cut in our strategic arsenal. This reduction is consistent with our conclusions in the recent Nuclear Posture Review.

Furthermore, as we implement the treaty, the U.S. will include only those warheads that are "operationally deployed." As such, we will derive the total number of warheads from the number of warheads on Intercontinental Ballistic Missiles (ICBM) deployed in their launchers, the number of warheads on Submarine Launched Ballistic Missiles (SLBM) in their launch tubes onboard submarines, and nuclear weapons loaded on heavy bombers or stored in weapons storage areas at heavy bomber bases. We will not include the small number of spare strategic nuclear warheads located at heavy bomber bases. We also will not include the warheads associated with strategic systems that are non-operational for maintenance actions, those warheads downloaded from SLBMs or ICBMs, or those warheads nominally associated with the deactivated Peacekeeper ICBMs. As a result, under the Moscow Treaty, we can reduce the operationally deployed warheads, rather than weapon systems, allowing us to make deep reductions in our strategic warheads while maintaining conventional capabilities.

The U.S. also benefits from the Moscow Treaty's flexibility because it allows the U.S. to store spare warheads rather than destroy them. There are key benefits the U.S. gains from storing the removed nuclear warheads. The U.S. cannot replace nuclear warheads in the near- or mid-term as we are currently not manufacturing new nuclear warheads. As a result, the storage of warheads will provide the U.S. a hedge against future strategic changes. In addition, storing nuclear warheads provides a hedge in case warhead safety or reliability becomes a concern.

It is also important to note that the Moscow Treaty recognizes that the START Treaty remains in effect. The START Treaty methodology attributes a specific number of warheads to each type of delivery system. The START methodology "counts" warheads even if the delivery platform is in maintenance. The START methodology also counts warheads even if there is not a warhead deployed in the delivery platform. Under the Moscow Treaty, the U.S. will only count operationally deployed warheads. The U.S. may remove a warhead to comply with the Moscow Treaty but a "notional" warhead may still be counted under the START Treaty as we fulfill our obligations under both treaties.

The Moscow Treaty also requires that the U.S. and Russia meet the lowered force levels by December 31, 2012. This 10-year implementation deadline maximizes flexibility for both parties and provides a mid-term hedge against unforeseen events. If the strategic environment dictated, we could temporarily raise the number of deployed warheads to address an immediate concern while later still meeting the December 2012 deadline. Should such a temporary increase be necessary, however, U.S. actions would remain within the START Treaty obligations.

Finally, the Moscow Treaty allows the U.S. to withdraw with 3 months notification. This provision allows the U.S. to exercise its national sovereignty and respond to a more dramatic change in the strategic environment.

The Moscow Treaty does not, however, include a number of protocols common to previous arms control agreements. This lack of protocols enhances our flexibility in implementing this accord. For example, the Moscow Treaty will not limit delivery platforms nor does it require delivery platforms to be destroyed. As a result, the U.S. will maintain a significant flexibility to adjust future force structure. This approach will allow us to remove all 50 Peacekeeper missiles. Likewise, we may modify some Trident submarines from their strategic missions and assign them to transformational missions that are more relevant to the asymmetric threats we now face. Finally, this approach will allow the U.S. to retain heavy bombers for their conventional role. Our operations in Afghanistan demonstrated the vital capability that conventional bombers provide our Combatant Commanders.

The Moscow Treaty has no requirement for an additional inspection regime. START's comprehensive verification regime will provide the foundation for confidence, transparency, and predictability in further strategic offensive reduction. The Moscow Treaty will not subject the U.S. to intrusive inspections in some of our most sensitive military areas.

The Moscow Treaty allows the U.S. to make deep reductions in strategic nuclear warheads while preserving our flexibility to meet unpredictable strategic changes. The treaty finally puts to rest the Cold War legacy of superpower suspicion. It reflects the new relationship of trust, cooperation, and friendship with an important U.S. partner.

Chairman LEVIN. Thank you very much, General Myers.

Secretary Rumsfeld, the treaty does not define the term "operationally deployed," but that is the key to the treaty, that it limits the number of operationally deployed warheads. General Myers' printed testimony apparently gave us the decision as to what we are going to do relative to that number. On page 1 of his testimony he says that the number of warheads will be counted if they are in launch tubes on submarines, loaded on heavy bombers, or stored in weapons storage areas at heavy bomber bases. I will just stop right there.

Have the Russians adopted a similar definition of "operationally deployed" since that is what we are looking at here? I think you will agree we are not reducing the number of warheads, we are reducing the number of operationally deployed warheads, correct?

Secretary RUMSFELD. The treaty refers to operationally deployed strategic nuclear warheads.

Chairman LEVIN. We have apparently concluded as to what we will interpret that to mean. Do we know what the Russian interpretation is? Is it similar to ours?

Secretary RUMSFELD. As I recall, the negotiations did not insert in the treaty any precise definition. We have indicated what we consider it to be, and there is no question but that the Russians will be using something roughly approximating that.

Chairman LEVIN. Have we had discussions, General Myers, with the Russians as to what their interpretation of that undefined phrase will be?

Secretary RUMSFELD. There were discussions.

General MYERS. I think there were discussions on that.

Chairman LEVIN. Is there any understanding with the Russians as to whether they will have a similar approach to it that we will?

General MYERS. My understanding is they are going to have a very similar approach to how they count their warheads as we do.

Chairman LEVIN. By the way, I did not announce this, but we will have an 8-minute round based on the early bird rule.

In May 2000, when President Bush was a candidate, he talked about removing weapons from high alert hair-trigger status. I am wondering whether or not, Mr. Secretary, the Department is going to implement that objective of removing weapons from high alert status in the near future as part of our effort to reduce the risks of accidental or unauthorized launch and to try to build confidence between ourselves and Russia?

Secretary RUMSFELD. Mr. Chairman, it seems to me that that subject was one that was discussed intermittently ever since the end of the Cold War in the early 1990s and that each side has very different forces. We have our forces arranged differently, they are targeted differently and have been. There are asymmetries in how we are arranged. Each side has made adjustments in how they are arranged over a period of 6, 8, 10, 12 years, I would guess.

If I could characterize our current situation, I think it would be inaccurate to suggest that we are currently arranged on what any rational person could characterize as a hair-trigger arrangement. I am trying to think of precise changes in answer to the question, General Myers, in the last year and a half.

General MYERS. We are in an open hearing here, so I have to be somewhat careful, but one of the changes was to not have the weapons targeted on specific targets or sites. That was one of the changes, and I think that is all I want to say about it.

Chairman LEVIN. Are there any additional changes that were contemplated in terms of alert status, as the President indicated we would attempt to do?

Secretary RUMSFELD. Not as a part of this treaty.

Chairman LEVIN. Or otherwise?

Secretary RUMSFELD. You are asking is there anything prospective that is planned?

Chairman LEVIN. Right.

Secretary RUMSFELD. Not that I know of.

Chairman LEVIN. I want to be very clear as to what the treaty does. The treaty, as I understand it, does not reduce the stockpile from the current level of 6,000 plus warheads, is that correct?

Secretary RUMSFELD. The treaty does exactly what it specifies and it does not address that subject. I can explain about the stockpile.

Chairman LEVIN. No, just in terms of the number in our stockpile, the treaty does not address the number?

Secretary RUMSFELD. It addresses operationally deployed strategic nuclear weapons, as I indicated.

Chairman LEVIN. One of the achievements that we were so anxious to obtain in the START II Treaty was the elimination of Multiple Independently Targeted Reentry Vehicle (MIRVed) missiles, especially the SS-18, because of the potential instability should the relationship change or for whatever other reason. The Joint Chiefs

hailed that achievement as a longstanding goal and a major accomplishment for our security.

The Moscow Treaty does not prohibit MIRVed ICBMs, so Russia can keep its SS-18s and place new MIRVed warheads on other missiles like the SS-27. Is it now our position that we do not care if Russia keeps the SS-18s or places MIRVed warheads on other missiles, Mr. Secretary?

Secretary RUMSFELD. That subject has come up and our view is that our circumstance and Russia's circumstance are notably different in many respects. Our geography is different, our neighbors are different, the way we produce weapons is different, the life of those weapons is different. I am sure the targeting perspectives are quite different.

It had been, when we were engaged in what was characterized as mutual assured destruction, that the subject of MIRVed weapons became extremely important. It is in my view today a subject that is much less important, and it is entirely possible that the Russians may very well make a decision that, given the asymmetries in our circumstance, they may want to MIRV some portion of their force.

We have looked at that, and we are quite comfortable that that does not create an instability in the relationship.

General MYERS. Mr. Chairman, let me chime in on that. To add to what the Secretary said, I think that is absolutely right. When the Joint Chiefs made their comments about the MIRV and START II and so forth, we were still in a different relationship than we have today with Russia. I think the context of our treaty and the geopolitical environment we find ourselves in makes that topic a lot less interesting than it was in the Cold War days, when it was of interest and when we were enemies.

Chairman LEVIN. Thank you.

Previous arms reduction treaties did not require destruction of warheads, but they did require destruction of delivery systems, which was, of course, critically important at that time. The Moscow Treaty does not require the destruction either of warheads or of delivery systems.

Now the question is what will we be doing with the Peacekeeper? Is it our plan to eliminate the Peacekeeper missiles and their silos, even though it is not required to do so by treaty, General?

General MYERS. The current plans, of course, are to eliminate the Peacekeepers. There has not been a decision yet on what to do with the silos, so that is in the future.

The warheads, because they are our most modern—the safest, most secure type warhead we have—will be put on our other land-based missiles, the Minuteman missile.

Chairman LEVIN. My final question. Secretary Rumsfeld, the Cooperative Threat Reduction (CTR) program is coming to a halt because of the inability to make the necessary certifications. The Senate version of the National Defense Authorization Bill that is in conference contains the legislative authority that the administration requested, which is permanent authority for the President to grant an annual waiver of the prerequisites of the Freedom Support Act and the Cooperative Threat Reduction Act. The House bill contains authority to grant waivers for 3 years.

I assume that you support the administration position relative to permanent authority, so I will not ask you that. But if you disagree with it, perhaps in your answer to the question I am going to ask you, you could let me know that, too.

Here is the issue. The permanent authority requested by the administration to grant annual waivers of the prerequisites to implementation of the Cooperative Threat Reduction program does not include an ability to waive the special prerequisites for the Russian chemical weapons destruction program being carried out under the CTR program. President Bush said that not only did he support this important effort to destroy the Russian chemical weapons, he actually wanted to accelerate it. But if there is no authority to waive those special prerequisites for the chemical destruction, then that program is going to be shut down.

Will you be asking for waiver authority for the special prerequisites for the Russian chemical weapons destruction program?

Secretary RUMSFELD. The administration either has or will be asking for that waiver authority with respect to the chemical weapons destruction facility.

Chairman LEVIN. Do you support that request?

Secretary RUMSFELD. Indeed I do.

Chairman LEVIN. Thank you.

General, do you support that, too?

General MYERS. Yes, sir.

Chairman LEVIN. Thank you very much.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

It is quite interesting. I will read the one paragraph in the treaty which in my judgment embraces what it is that is before us today for discussion. It is Article I, very simple: "Each Party shall reduce and limit strategic nuclear warheads, as stated by the President of the United States of America on November 13, 2001, and as stated by the President of the Russian Federation on November 13, 2001, and December 13, 2001, respectively, so that by December 31, 2012, the aggregate number of such warheads does not exceed 1,700-2,200 for each Party. Each Party shall determine for itself the composition and structure of its strategic offensive arms, based on the established aggregate limit for the number of such warheads."

Now, for those of us who have had some exposure over many years to these types of treaties and goals, it is understandable. But to others who are beginning to absorb the importance of this landmark document, I would like to clarify with you one or two of the words used here so that we have a legislative history, such that if future generations begin to challenge what was intended at the time this language was written at least there is the colloquy and the testimony provided here this morning to clarify it.

My first question is, was there reason to not incorporate the word "operational" with respect to the aggregate of the weapons to end up in 2012, namely 1,700 to 2,200? In simple forms, you take the existing inventory over the years between now and 2012, you detached the warheads from certain systems, you put them in storage, and the balance remain in an operational status. Is that my understanding and your understanding?

Secretary RUMSFELD. Well, first let me say that the discussions took place between President Putin and President Bush, they took place between Secretary Powell and Foreign Minister Ivanov, and between Don Rumsfeld and Sergei Ivanov, the Defense Minister of Russia, as well as at the Feith and Bolton levels. You asked if there was any discussion about something. There were so many meetings and discussions, I really am not in a position to say precisely that.

I was trying to read what you were citing here. It was in Article I?

Senator WARNER. That is correct. In other words, it just states that you will end up with such a number of warheads, "the aggregate number of warheads does not exceed . . ." Now, those are in an operational status.

Secretary RUMSFELD. Exactly, as defined by General Myers' testimony.

Senator WARNER. Fine. Now, the others are non-operational. Can you describe—and the General can join in—what status they are in?

Secretary RUMSFELD. Sure.

Senator WARNER. In other words, I understand, and I think the public following this do, they are detached.

Secretary RUMSFELD. Exactly.

Senator WARNER. But could you put them back on in an hour's time? No.

Secretary RUMSFELD. No.

Senator WARNER. A week's time? No.

Secretary RUMSFELD. Right.

Senator WARNER. I think it is important—

Secretary RUMSFELD. It is.

Senator WARNER.—to show how when they go to storage they are really in a status that would not lend themselves to be utilized in any regrettable and unfortunate rapid exchange between the two nations of portions of its arsenals which are operational.

Secretary RUMSFELD. You are correct. A non-deployed warhead could be used in any number of circumstances and the circumstances in our country would be different from those in Russia, because Russia, for example, has an open production line. So every day or week or month another warhead may be coming off their production line. Where is it? Well, it is where it is. It has just been produced and it now exists. Then it goes someplace.

In addition, the Russian system is that they tend to remove old warheads and they then are taken off and in some cases refurbished and in some cases put in a queue to be destroyed, and in some cases in the process of destroying them they disaggregate them and they are in piece parts. So they may have 5, 10, 15 parts, and some of those parts would lend themselves to be re-used, in which case they might then be refashioned into restored or refurbished warheads.

The United States, quite to the contrary, we tend to make these things in a way that they last much longer. We do not have a pattern of changing them out anywhere near as rapidly as does Russia.

Senator WARNER. If I could interrupt, Mr. Secretary, with a series of presidents we intentionally made the decision not to build any new ones, in sharp contrast with Russia, which is building new ones.

Secretary RUMSFELD. Exactly.

Senator WARNER. Therefore, we did have the requirement of placing these in some type of status such that if there is a deterioration in the operational warhead we could simply go back and extract one from the inventory in storage and replace it.

Secretary RUMSFELD. Exactly. So therefore the answer to your question with respect to Russia is that their warheads that are not operationally deployed are in the following categories at least: coming off a production line, in a queue ready to be restored, stored for the purpose of use, and piece parts waiting to be reassembled in some form or another.

In the United States, weapons that are not operationally deployed would tend to be in the following categories—and check me here, Dick Myers. We do not have anything coming off a production line. We would have them away from a bomber base some distance, because the ones not on a bomber but near a bomber base would be considered operationally deployed. They would be in a queue to be destroyed, or they would be held in reserve in the event a phone rang one day and we were advised that we had a class of weapons that were no longer safe or no longer reliable, in which case we very likely would use ones that were not operationally deployed and not in the queue to be destroyed because they are no longer in good enough shape to be used. They then would be used to replace anything that was seen as being unsafe or unreliable.

Senator WARNER. I would like to have the General amplify that response and also give us, frankly, some hands-on examples of when a weapon is removed pursuant to this treaty from an operational status, stored, and then if it were required to go back into a system, what are the steps required to re-integrate it and the time involved?

General MYERS. I would be happy to, Senator Warner. First of all, let us keep in mind that we are not making warheads any more. I put them in some bins in my mind, the way my mind works, of what we would do with warheads that are not operationally deployed. You would have an operational reserve, spares for weapons that you have to change out that check out bad during the numerous checks we do on operational weapons all the time.

You would have a strategic reserve. If the environment changes, you need some number, which has not been decided yet. That is yet to be decided.

Then you need a reserve to cope with reliability issues. As the Secretary said, we will count as operationally deployed those weapons that are kept on the base with the bombers in the weapons storage areas, because presumably you can upload those in a matter of let us say hours. It would probably take you, to generate all the bombers, a matter of days, but you could start that process in a matter of hours.

Then you go to land-based component. Those weapons will be stored in the weapons storage area at the base. We get to the weapons fields, by land, but they can be many hours, up to 6 hours,

away by vehicle. To upload weapons on a missile is a pretty slow process because you have to secure the site before you open the silo, then you have to open the silo, you have to get the maintenance people on site, you have to bring the weapons to the site and then install them on the missile.

Senator WARNER. I would appreciate if you would amplify that for the record.

[The information referred to follows:]

Once the weapons installation process is complete, which could take several hours by itself, the maintenance teams must close the site and return all of the special vehicles and equipment to the base. After weapons installation, the missile combat crew, who is remotely located from the missile, must transfer targeting data and run a series of commands, tests, and calibrations to return the missile to full alert status. The missile combat crew's actions could take as long as 12–16 hours. The entire process for one ICBM could take between 24 to 30 hours under current conditions. Actual minimum generation times are classified and can easily be supplied to you upon request.

Senator WARNER. I want to just ask one last technical question. The end date is 2012.

General MYERS. Correct.

Senator WARNER. There is no schedule. Theoretically, one side could wait until perhaps the last year or two to reach its entire reduction of inventory, thereby leaving the other side at a disadvantage. What steps are in place to ensure that as these drawdowns occur there is basic stability between the two parties to the treaty so that one does not gain an advantage?

Secretary RUMSFELD. I think the way to think about the treaty is that these are really decisions that were made unilaterally and then brought together in a treaty. The treaty provides the flexibility so either side can do anything they feel that is in their security interest during that period of drawdown.

In the event that, as General Myers indicated, the world environment changed, either side has the ability to level off or not continue in a drawdown period. My guess is that there will be an uneven drawdown. Their situation is quite different from ours. Their weapons do age. They do have a problem of moving them off, and they are on that path.

I do not think there could be a problem, but if there were a problem all either side would have to do would be to have the flexibility to make an adjustment that is in their security interest. If the worse came to worst, there is a clause in the treaty that permits, as there is with every treaty, either side to pull out with notice.

Senator WARNER. Let us hope that is not achieved.

But would that flexibility enable us—if we had drawn down significantly further than Russia, and we noted that Russia was not keeping pace, and our strategic analysts felt that there was an instability in the balance—to restore to an operational status some of the weapons taken down?

Secretary RUMSFELD. We have that flexibility, although one would think that we would be wise enough as we go down—we do have the verification provisions in the START Treaty between now and 2009. So we are going to have national technical means capable of knowing.

Senator WARNER. I understand that.

My time is up.

Chairman LEVIN. Thank you very much.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

I want to thank Secretary Rumsfeld and General Myers for joining us this morning. I want to wish you well in all the work you do for our great country.

Secretary RUMSFELD. Thank you, sir.

Senator AKAKA. I also look at the treaty as giving us great promise as we come out of the Cold War and the age of mutual assured destruction. I look upon it as a beginning on a long road toward true arms reduction and cooperation.

Unfortunately, this treaty does not explicitly establish a timetable or verification process for warhead destruction, nor does it address tactical nuclear weapons that are what might be considered attractive to terrorists. During his testimony before the Senate Foreign Relations Committee, Secretary Powell indicated that this treaty is likely to be superseded by more ambitious agreements that will answer many of our questions on verification and questions on compliance. It has been noted that it took 9 years to work out these details in START. If we hope to have something in place when START expires in 2009 or 3 years later when SORT expires, I believe it is critical that we start now.

I spent yesterday at the Governmental Affairs Committee markup to determine the structure of the future Homeland Security Department. Several times during the day my colleagues asked, will this make the American people more secure? To make America more secure, nuclear arms reductions must prevent terrorists from acquiring nuclear material and nuclear weapons. The most attractive kind of weapons for terrorists are tactical nuclear weapons. SORT does not deal with tactical nukes, but SORT is only the beginning. I want to continue to stress that.

What steps, Mr. Secretary, are we taking to address the large number of Russian tactical weapons?

Secretary RUMSFELD. Senator, you are of course correct that we do need to address the subject of transparency and predictability or verification, as it is sometimes called, and both sides have indicated that they do intend to begin discussions fairly promptly that would pursue that issue. I believe the treaty fashions a group of the two defense ministers and the two foreign ministers who are supposed to meet and begin to discuss those things. We have a meeting scheduled already for September, even before the treaty has been ratified by the United States Senate or the Duma.

Second, with respect to theater nuclear weapons, you are also correct. That is a subject that has not been addressed between the two countries. I have raised it in every meeting we have been in. I think that what is important there—and the Russians have many multiples more than we do of theater nuclear weapons.

We believe that our interest is in gaining better awareness as to what they have, and we do not have a good fix on the numbers from an intelligence standpoint, nor have they been forthcoming in discussing that.

Second, we think that some degree of transparency would be helpful as to what they are doing by way of production, what they are doing by way of destruction, what they are doing by way of

storage. You are quite right, there is no question but that the security issue with respect to theater nuclear weapons is a very serious one.

You can expect that we will continue to raise those questions and bring the issue forward in the U.S.-Russia discussions that are scheduled shortly.

Senator AKAKA. I was so glad to see that part of the treaty is the inclusion and establishment of a bilateral commission. I believe that the bilateral commission is tasked to meet twice a year. I feel that it is a most promising aspect of the treaty because it will give us a chance to continue to talk with the Russians, and I believe that this is one way of filling in the details that we are asking ourselves.

My question is, when will the commission meet, and what are the principal topics to be discussed?

Secretary RUMSFELD. I think the way to characterize it is that it will be somewhat different than prior bilateral commissions or standing consultative commissions or arms control type commissions. This group has as its purpose, I believe the language suggests, a relatively narrow focus on implementation of the treaty. It would probably be the other group I mentioned, which would be the Secretary of Defense of both countries and the Secretary of State of both countries, that would discuss issues like theater nuclear weapons, transparency, predictability, verification, and other aspects of the relationship.

Senator AKAKA. It is likely that Russia would have had to reduce its nuclear stockpile to 1,200 to 1,500 warheads without this treaty. I am concerned that Russia will feel forced to maintain an arsenal of 1,700 to 2,200 warheads to match the U.S. stockpile. Considering the state of Russian stockpile stewardship, will Russia be able to safely maintain and secure this larger number?

Secretary RUMSFELD. It is a matter of priorities. Russia has choices to make, like every country in the world does, and they have to recognize the importance of preventing proliferation. Any country that has weapons of mass destruction has by definition a responsibility to manage them very carefully. The power of these weapons is enormous, and it would be inexcusable for any country not to establish a very high priority on the security of such weapons.

Senator AKAKA. Thank you very much, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Akaka.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

First let me just say to both of the witnesses today how thankful I am that we have you, General Myers, and you, Secretary Rumsfeld, and the entire national security team at the helm at this time that I really believe is the most threatening time in our Nation's history.

One of the most compelling statements I have heard you make, Secretary Rumsfeld, is when you talk about the margin of error. It was kind of buried in your statement. You only mentioned it at the very last, and I think that is something we need to talk about over and over again. I would like to have you at this time elaborate a

little bit on the margin of error today as opposed to the margin of error in the past against conventional threats.

Secretary RUMSFELD. Senator Inhofe, it is certainly something that we worry about as much as anything, and it is this. We have moved from a 20th century security environment to a 21st century security environment. We have moved from a period where we were facing the carnage that can result from the use of conventional weapons, meaning hundreds and thousands of people can die, into the 21st century where we are dealing with the proliferation of weapons of mass destruction and we are not talking about hundreds or thousands, we are talking about the potential loss of hundreds of thousands or millions of human beings as a result of the use of biological, chemical, nuclear, or radiation weapons.

That is so different for the world, it is so different for us. Not only has there been proliferation of these weapons, but there has been proliferation of the denial and deception techniques as to how people can hide those capabilities. It is a big world, and regrettably, we know a great deal, but there is a great deal we do not know. We keep finding that more information is coming available to us and in fact it occurred not today or yesterday, but 1, 2, 4, 5 years ago.

That says to me, as you point out, that our margin for error is much less, that we are living in a period of little or no warning, that we have to organize, train, equip, and manage our affairs so that we can live in that world, a vastly more dangerous world.

Senator INHOFE. I think that is very well said. Several of us on this panel have expressed concern over the last 10 years, in my case since 1994 when I came from the House to the Senate, with the fact that they are getting so dangerously close in some rogue nations to developing the capability. We know that most of them have weapons of mass destruction. We know that they have access and they are developing the missile means of delivering those. Where they are I do not think we know exactly, but we do know that there are three countries that have missiles that will reach the United States and that those countries, two of them anyway, are dealing, and trading technology and systems with countries like Iraq, Iran, Syria, Libya, and other countries.

What concerns me—during the discussion of today's meeting I have not said very much about it—is how this relates to our ability to have a missile defense system. In other words, we know that when you talk about the margin of error, if on September 11, the terrorists had had the weapon of choice, a nuclear warhead on a missile, as opposed to what they had, how devastating that would be.

Now, if for some reason the United States does not deploy a missile defense system, will we still be able to comply with the reductions that are stated in the Moscow Treaty?

Secretary RUMSFELD. Senator, that is a good question, and it is a question that is probably not knowable until we move along. In the Nuclear Posture Review we did conceptualize a somewhat modified treaty, not to say we are going to move away from land-based, sea-based, and air-based strategic nuclear weapons, but rather that if one looks at offensive weapons, they would be both conventional and nuclear. Another leg of the triad would be defen-

sive capabilities, and a third would be the infrastructure, and then coordinated by command control in the center of that concept.

As I mentioned in my remarks, the proposals with respect to 1,700 to 2,200 are premised on some investments that need to be made in missile defense, some investments that need to be made in infrastructure, and the capability to manage our affairs going forward. Fortunately, we have a good long period to pursue our missile defense research and development program, make judgments as to which are the most fruitful areas, and, one would hope, be able to deploy missile defenses during that period.

My guess is that there will be each year a calculation made as to how we are doing with respect to all elements that were considered in the Nuclear Posture Review.

Senator INHOFE. Conceivably, I would assume that we would be able to make alterations in this treaty as time went by and conditions changed also.

Secretary RUMSFELD. My guess is that we will be talking starting in September on possible increments or additions or changes.

Senator INHOFE. Let me read from your previous testimony. I think this actually was in your statement today. You said: "First, there simply is not any way on Earth to verify what Russia is doing with all the warheads. Second, we do not need to. Neither side should have an interest in evading the terms of the treaty since it simply codifies unilaterally-announced intentions and reductions, and it gives both sides broad flexibility in implementing those decisions."

Further in your statement, you said: "In this century, Russia and the United States both face new and different security challenges, not exactly the same, but certainly the threats of terrorism, fundamentalism, and the spread of weapons of mass destruction to rogue nations are common."

Now, as we move ahead into this treaty, how do you balance this? We are trying to forge this relationship between Russia and the United States. We all want that. Yet we want at the same time to make sure that weapons that are taken from active deployment do not fall in the hands of the wrong people. How do you balance those two things?

Secretary RUMSFELD. I think that a weapon, regardless of where it is located, has to be maintained in a secure manner. So I think the difference between those that are deployed or those that are not deployed is really not so much the issue as how wise we are in carefully managing weapons regardless of their location.

Senator INHOFE. When you get into the issue of storage versus destruction of warheads, it is well known that not all of the warheads which will be removed from deployment will be destroyed. A number of them, although the number has not really been talked about, and it is not carved in stone yet, they would be placed in storage. Mr. Secretary, would you give this committee some examples as best you can in this forum of situations that would cause the stored warheads to be redeployed?

Secretary RUMSFELD. Yes, sir. I can think of three circumstances. One would be that a judgment was made that a category of weapons or some specific weapons were no longer reliable and the stewardship of the stockpile came to the conclusion that they are not

reliable, there is a discussion that takes place, then judgments are made as to how you can remove something that is no longer considered reliable and what do you replace it with.

A second would be that a judgment was made that some category was not safe, a different issue, but an important issue.

A third would be that, for whatever reason—anyone’s imagination is as good as mine—you move out 6, 8, 10 years in this process and some significant change in the world situation occurs in terms of something that affects the desired posture with respect to nuclear weapons. Very likely, the two countries would talk and make a judgment as to what one or both countries think they ought to do about that changed security environment.

Senator INHOFE. I am surprised that I have time for my fourth question, but I do. This will be real quick.

Chairman LEVIN. You do not have time, but if Senator Allard is willing, please proceed with your question.

Senator INHOFE. Thank you. A short question. Thank you, Senator Allard.

You had said on July 17, in your testimony, “I think that to go from a system that was totally untrustworthy and secret and doing things underground, behind cloaks, as a way of life to something where they let the sun shine in is not something that you can do in 5 minutes.” You elaborated on that, and my question would be how long do you think it will take for the Russians to arrive at a level of transparency that would make you feel comfortable?

Secretary RUMSFELD. That is a difficult question. If you think about Russia’s situation, it is a country that was a superpower. It still is militarily in a sense. A number of republics have departed the Soviet Union and left Russia. A number of people have left, intelligent people, well-educated people. There has been an outflow of brain power. They have serious health problems. They have a military that is not being funded at anywhere near the level it previously was funded. It creates difficulties.

President Putin has clearly made a judgment to turn west and to connect with the United States, to connect with Western Europe, to begin that process of creating an environment in Russia that is hospitable for investment. If you think about it, decision makers all over the globe are deciding every day where they want to put their money, where they invest, where they want to build a plant, what countries they feel safe and secure with.

To the extent Russia decides that they want to be transparent, and they want to have those linkages with the west, to create an environment that is hospitable for investment and for enterprise, then they will become more transparent. To the extent they, for whatever reason, decide that they want to continue as their most important relationships to be with Cuba or North Korea, Iraq or Syria, the world’s walking wounded, it seems to me that they are not a very attractive place for investment, and they would be less likely to be transparent.

So the President has made a decision. Not everyone in that country has, but the President has, and his leadership has, and they are pointing west. I think that is a good thing, and we ought to try to do things that encourage it. We will see over time. I am one of those people who likes to be careful. I am a conservative person.

So I will watch, and we will keep meeting and encouraging transparency.

We are such an open system that the issue of predictability and transparency is quite easy for us. They have historically been a closed system, and it is going to take a culture change in their military, it is going to take a culture change in their bureaucracy.

Senator INHOFE. Thank you very much.

Chairman LEVIN. Thank you.

Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman.

Thank you, General Myers and Mr. Secretary, for sharing your thoughts with us today. When we talk about our international agreements, I think we tend to just focus on the two parties to the agreement, for example the Moscow agreement, Russia and the United States. But in reality there is a whole different world out here. What I see happening is an interest outside the agreement in other countries to try and develop a nuclear capability. We know about Iran, Iraq. We know that one of the motivating drives behind India and Pakistan, for example, is they wanted to become a nuclear power so that somehow or other they would have an enhanced image in the world when they come to the negotiating table.

We have set limits on ourselves in this treaty of 1,700 to 2,200. How do you view this treaty and the limits that we have placed in it as it compares to the progress of nuclear technology to the rest of the world? I know you cannot talk about specific numbers, but are Russia and the United States in their program so much further ahead that we do not have to worry about this for a century, or is it something that we do not have to concern ourselves with in the next decade or 5 years? If you would give me a feel for that, I would appreciate it for the record. Both of you could comment.

Secretary RUMSFELD. Yes, sir. Senator, when we went through the many months of consideration, study, thought, debate, and discussion with respect to our Nuclear Posture Review, we did not only look at the U.S.-Russia relationship. We looked at the entire world. We looked at the current situation. We looked at trend lines. We projected out. The number 1,700 to 2,200, that range, of course is not oriented simply to Russia. It is oriented to what we see as the likely circumstances going forward.

The number, as small as it is relative to the current levels, is a large number. Seventeen hundred to twenty-two hundred operationally deployed strategic nuclear weapons is a lot. The number was selected because of our conviction that it would be desirable for us to be able to, in the first instance, reassure our allies that we had that capability and that they need not develop nuclear weapons; second, to leave no doubt in other countries' minds that it would not be in their interest to think they could sprint to parity or superiority. Our numbers are sufficiently large that to do that would require a substantial investment, a substantial period of time, and therefore we felt that the number was appropriate, taking into account our allies, potential adversaries, the entire world, the current situation, and the trend lines we see.

Senator ALLARD. Now, when you put that together—and I will ask General Myers—was Russia considered as an ally or a potential adversary?

Secretary RUMSFELD. Oh, no, Russia was considered for what it is, a country that is embarked on turning west, that has a very large number of nuclear weapons.

Senator ALLARD. General Myers.

General MYERS. The only thing I would add to that, and I think it is very important, is that the term that came out of the Nuclear Posture Review, where we said we were going to be capabilities-based, not threat-based, pretty much exactly answers the description that the Secretary put on the Nuclear Posture Review.

It really was capabilities-based. We did not focus on any one country, as we have in the past, frankly. So this is a new era.

The other thing about the Nuclear Posture Review, it said it is not just nuclear weapons that provide for deterrence and our security posture. They are a very important part of it, and we testified to that today. But there is also our non-nuclear strike capabilities, which is in this new triad notion that came out of the Nuclear Posture Review. There are the defenses, both active and passive, and then there is the infrastructure, which is our intelligence capabilities, our command and control capabilities, the capabilities that DOE has, for that matter.

As the Secretary said, a lot of that is in the budget that you have just looked at, and a lot of it will be in the 2004 budget as well, because they all have to come together to give us the result we want, which is deterrence and national security.

I would also add that the other thing I think that makes us very comfortable about all this is the flexibility inherent in the Moscow Treaty. The one cornerstone of that treaty is it provides great flexibility.

Senator ALLARD. I do like the treaty, and I think it is a good starting point. Right now we have some nonproliferation programs with Russia. I think, if I remember correctly, they are close to a billion dollars in what the President suggested in his budget. One of the concerns that I have heard is how that program proceeds is not so much a factor of how many dollars we are putting in there, but the problem is access to Russian facilities. Apparently that is a major obstacle to the treaty nonproliferation efforts in Russia.

Can you comment as to how we will work this treaty along the verification side if we have difficulty in accessing some of these facilities?

Secretary RUMSFELD. Of course if you separate two things, one is the security of nuclear weapons, and the other is the nuclear threat, so to speak. We do have the START Treaty and verification regimes. We do have national technical means. We feel we can monitor within some range what is actually taking place with respect to their deployed weapons.

With respect to their tactical nuclear weapons, their non-deployed weapons, the weapons coming off production lines, the weapons in a queue waiting to be destroyed, the weapons they have in reserve, that is a very different thing. There is where your point becomes terribly important. There is no question but that Russia

even today is not transparent. It is not clear. They do not allow access. They have a very secretive approach to a great deal of this.

It is a concern, and there have been a great many people in Congress, in the Senate, in the House, and in the Executive Branch over a good many years who have invested a lot of money, the American taxpayers have invested a lot of money, trying to improve their security and improve their destruction process. There have been a great many meetings held and efforts made to improve transparency, and we will continue them. But we are a good distance from feeling comfortable.

Senator ALLARD. I would like to join my colleague from Hawaii in the bilateral implementation commission. I think it provides a good opportunity for dialogue on how we can improve the discussion, continue with the discussions we have started already. Your answer indicated that those discussions would be going on at the highest level, secretaries of defense, secretaries of state, which I think is a good sign that both sides are going to take this seriously.

There is not a lot of detail in this agreement. It is just a sentence stating that you are going to have the bilateral implementation commission. Have you given any thought about how these meetings will be run and the type of issues that may come up in these discussions?

Secretary RUMSFELD. Well, Senator, there are really two pieces to this follow-on relationship. One piece was contained in the treaty and that is the bilateral commission. It is really not a negotiating forum. It is more a forum to monitor implementation of the treaty as such. The group you are referring to was actually established outside the treaty. It was established in a joint declaration that was issued simultaneously, I believe, and it is the one that provides for the meetings between the two ministers of defense and the two secretaries of defense which I indicated are going to start in September.

Senator ALLARD. I see.

Secretary RUMSFELD. That is where the substantive discussions with respect to verification, with respect to transparency, with respect to theater nuclear weapons, these other pieces of the relationship which are so important, will take place.

Senator ALLARD. Who is going to make up the bilateral implementation commission? What level are we going to have there in that commission?

Secretary RUMSFELD. I do not know that the level has been set. Let me just check. [Pause.]

It would probably be at the ambassadorial level, as opposed to the under secretary or secretary level.

Senator ALLARD. I see. My time has expired, Mr. Chairman. Thank you.

Chairman LEVIN. Thank you very much, Senator Allard.

Secretary Rumsfeld, one notable difference between this treaty and virtually every other arms control treaty is the withdrawal clause in Article IV. It says that either side may withdraw upon 3 months notice to the other side, but it does not mention anything about supreme national interest. Am I correct in assuming that the intention, though, is not to make it easy for either side to withdraw from the treaty for convenience or without due consideration, but

it is intended, at least by us and hopefully by the Russians, that the withdrawal option would only be exercised if there were some serious change in the global security environment that compelled us to withdraw?

Secretary RUMSFELD. Certainly the discussions that I have been involved in with respect to that clause would reflect that sentiment, that neither side is entering into a treaty lightly, and neither side would depart from the treaty lightly. It would have all kinds of implications politically and so forth.

Assuming our two countries stay on the paths they are on, which are paths where our interests are converging rather than diverging, in the event the world circumstance were to change I would suspect that the two countries would sit down and discuss that. They would give a good deal of thought to the ways in which it has changed and how those changes conceivably might affect one or even both parties as the case might be, and there would be very thoughtful discussions about that. Certainly no one would depart from the treaty lightly.

Chairman LEVIN. You made reference a number of times to the different approach that we and the Russians take toward the maintenance of nuclear weapons—right now they are assembling new weapons. We are not. Ours have longer life than theirs do. Does their assembly of new weapons create a security threat to us or put us at some disadvantage?

Secretary RUMSFELD. Senator, I think the only way that question can be answered is if one looks at the totality of our activities. Clearly it is an asymmetry that they have an open production line and we do not, and one could make the case that that gives them an advantage. Is it an advantage that worries me? No.

They also have weapons that last a shorter period. So it is quite logical they would have an open production line if they have weapons that are required to be moved out of the process for safety or reliability reasons.

I think it is more useful to look at the totality of their circumstance and the totality of our circumstance, recognize there are a lot of differences and that we cannot expect to have perfect symmetry between what we are doing.

Chairman LEVIN. Thank you.

You made reference to our ability to rely on the START Treaty for the verification and transparency it provides. It expires, however, in 2009 and that then creates a 3-year gap between the expiration of that START Treaty and the date of implementation of the Moscow Treaty, which has no mechanisms at all for verification, transparency, or confidence.

Would it make sense then to extend the START Treaty to continue those benefits that you have referred to at least until the Moscow Treaty takes effect, if not beyond?

Secretary RUMSFELD. I guess that is a decision that others would have to make. But from my standpoint, it does not seem to me that it would be necessarily appropriate. I think that times are changing, and there may very well be various ways to achieve the kinds of transparency that would be appropriate between our two countries. My personal view is that we ought to sit down with Russia

starting in September and get on with the task of looking at what kinds of transparency arrangements are appropriate.

I also want to see that theater nuclear weapons are brought up on the table and talked about, again from the standpoint of transparency less than the standpoint of numbers or controls over them. But I guess I would not say that I think that would necessarily be a good idea. My guess is we will find better ideas than that.

Chairman LEVIN. Hopefully you are right. If we do not find better ideas I would suggest you keep in mind the possibility of the extension of that treaty. At least it provides some verification and some confidence that otherwise would not exist unless you can negotiate or agree upon, whatever word you folks like—I guess you do not like “negotiate.” But in any event, whatever understanding you can reach relative to that would be helpful.

Secretary Rumsfeld, you have again today indicated the heavy reliance that you place on missile defenses against long-range missiles, arguing that a defense against long-range missiles would make us more secure, just as we have a defense against short-range missiles.

A recent article in *The Washington Post* indicated that we are going to be telling the Indian Government that they should not deploy a missile defense system, that they should not be able to defend themselves against incoming missiles. Why are we opposing another country’s efforts to deploy a missile defense system if we feel that a missile defense system to protect our homeland would make us more secure?

Secretary RUMSFELD. I do not know the answer to your question. I also do not know that *The Washington Post* article is necessarily accurate. To the best of my recollection, I do not believe that that issue has been raised, at least to my level, within the administration. So it is not something that I have had a chance to really address.

Chairman LEVIN. If it were accurate would you know about it?

Secretary RUMSFELD. Oh, goodness. There are always going to be things that I am not going to know. Paul Wolfowitz handles any number of things. He attends all kinds of meetings, my deputy.

Chairman LEVIN. I did not mean you personally. I meant the Defense Department.

Secretary RUMSFELD. Oh, no. It may very well be that someone in the Department knows something I do not know. I certainly hope so. I hope they know a lot I do not know.

Chairman LEVIN. I am not going there, I can assure you that. [Laughter.]

Would you let us know for the record what the position of the administration is relative to India’s, or any other country’s, efforts to deploy a missile defense to give them the same kind of protection against incoming missiles that you feel will make us more secure? Can you give us that for the record?

Secretary RUMSFELD. The what?

Chairman LEVIN. What the administration position is on that, and also what your, here referring to the Department, role has been or will be in that decision?

Secretary RUMSFELD. I will be happy to. If we have a position, I will be happy to give it to you, and I will give you a response in any event.

[The information referred to follows:]

The President's stated policy is to design missile defenses capable of protecting not only the United States and its forces, but also our friends and allies. Generally speaking, we believe missile defenses would be a stabilizing factor by dissuading offensive missile acquisition and discouraging attacks and by providing new defensive capabilities for managing crises. The Indian Government shares this view as evidenced by their support immediately after the President's May 1, 2001, speech at the National Defense University in which he outlined his new approach to deterrence. More recently, we have engaged in dialogue with India on the subject of missile defense. Our shared sentiments were reflected in the Joint Statement issued after the 20–23 May 2002, meeting of the India-U.S. Defense Policy Group. Specifically, the statement says that the U.S. and India have "reaffirmed the contribution that missile defenses can make to enhance cooperative security and stability."

I think that we are talking apples and oranges here. I think the earlier questions that related to missile defense were referring to ballistic missile defense and longer range. I think that I have a vague recollection that the system that India was interested in was the Arrow system, which was a system developed jointly between the United States and Israel, but it is basically an Israeli system, which is a shorter range ballistic missile defense.

Chairman LEVIN. To give them a defense against missiles—

Secretary RUMSFELD. Exactly.

Chairman LEVIN.—that could reach their homeland. That is strategic defense for them.

Secretary RUMSFELD. You bet.

Chairman LEVIN. Or other countries, not just India.

Secretary RUMSFELD. Yes.

Chairman LEVIN. One final question, then I will be done, if Senator Warner would—

Senator WARNER. Oh, sure. The only thing I would ask, I think you raised a very important question which you have now clarified. It does relate to this article in the July 25 *New York Times*. But we should also as a part of the response, I would think, Mr. Chairman, want to know—the United States has made a major financial contribution toward the research and development of the Arrow system. We did it primarily with the thought in mind to help our friends in Israel defend themselves, given the lessons learned in the Gulf War.

But if there is a sale, how does that relate to our dollar contribution? Indeed, we have before us in the conference a significant item for further support, which this Senator from Virginia has willingly supported. But it seems to me that is an ancillary question.

Secretary RUMSFELD. Senator, I was just passed a note saying that the administration has not yet developed a view with respect to the Arrow system for India and that the discussion would more likely focus on technology transfer as opposed to the ability to defend oneself.

Chairman LEVIN. I am more interested in the ability to defend oneself, frankly, the principle of it.

Secretary RUMSFELD. Right.

Chairman LEVIN. You have argued that we will be more secure being able to defend against incoming long-range missiles. We have defenses, and there has been strong support for defenses in terms

of short-range missiles, protecting our troops and our allies. But the argument that has been debated relates to whether or not we will be more secure, whether the world will be more stable, if we install defenses against incoming long-range missiles.

Put aside that argument for the moment without rearguing that issue as to whether on balance unilateral deployment by us will make us more secure. Lay that aside because the administration argument is that the world will be more stable and that we have a right to defend ourselves against an incoming long-range missile. The question is: Do not any other countries have that same right?

It is not the tech transfer issue that I am really into. I am into the principle of it.

Secretary RUMSFELD. I understand.

Chairman LEVIN. Do we have a right the other countries do not, and if so why? That is the question.

Secretary RUMSFELD. I understand.

Chairman LEVIN. Thank you.

I do have one other question.

Senator WARNER. Sure, why do you not go ahead.

Chairman LEVIN. I think I can complete it, and then I will call on Senator Warner. I know we have a vote coming. I do not want to use up all the time. I want to make sure you have enough time for what questions you have.

Mr. Secretary, you have taken a very strong position against media leaks. I must tell you it is a position that I share. I find them astounding. One of, if not the most, astounding leaks I have ever seen is the leak that you are investigating now that relates to these alleged war plans.

I guess the question is this: The FBI is investigating a leak which apparently came from somewhere in the intelligence committees, either the House or the Senate, not the war plan allegations, a different kind of a leak. Is the FBI going to investigate that war plan leak for you? I mean really going into it. The FBI is really looking into the intelligence committee leak. They are even talking about the possibility of doing lie detector testing.

I just want to know if you are involving the FBI, if there is any accuracy to it—the fact that it appeared in the paper does not mean that there is such a plan that exists. I do not want to assume that. But since you have talked about looking into that leak, you have understandably expressed your outrage, and I totally agree with that outrage, will you involve the FBI in the investigation of that particular egregious leak?

Secretary RUMSFELD. I asked the appropriate people in the Department to advise and initiate an investigation of the leak you are referring to. I am told that the Air Force has an investigative unit that is functioning as executive agent for that activity and they have initiated an investigation, and part of it was to request the FBI to step in and do the investigation.

I am also told that the FBI has to make decisions about what they investigate and what they do not investigate, that it is not within the control of the Department of Defense. I suspect and hope that the FBI will decide that this is something that they do want to participate in. If they do not, why, I will probably encourage them.

Chairman LEVIN. Would you let us know the outcome of this investigation?

Secretary RUMSFELD. Indeed.

Chairman LEVIN. Whatever that outcome is.

Thank you so much.

Senator WARNER.

Senator WARNER. Thank you, Mr. Chairman.

Mr. Chairman, I think we have had an excellent hearing, and it is very important from the standpoint of the responsibility of this committee. We value greatly the work that has been done by the Foreign Relations Committee, and I think this hearing builds on those hearings such that we will have before the Senate an adequate record for each Member to reflect on as he or she casts this important vote with regard to advice and consent.

Mr. Secretary, I think I can fire these questions rather quickly, and also your responses I think can be straightforward. At any time General Myers wishes to join, please do so.

As we proceed with this historic reduction of weapons, there should be no perception that we should in any way lessen our approach led by our President toward strengthening missile defense capabilities in this country, limited missile defense programs, which he has initiated very boldly here during the course of the administration. Do you agree with me on that?

Secretary RUMSFELD. I do.

Senator WARNER. General.

General MYERS. Yes, sir.

Senator WARNER. This committee has also dealt at length with the stockpile stewardship program and the reliability of our inventory. That program seems to grind on year after year, and I presume that it is your judgment progress is being made. Since we no longer do actual testing, we have to rely on substitutes to give us the same information to assure that our stockpile is reliable and that it is safe for the men and women of the Armed Forces and civilians who must handle it, and certainly those people that live in the environs of that stockpile should have the confidence that it is safely stored.

That program receives no less emphasis, am I correct?

Secretary RUMSFELD. You are correct. It is receiving emphasis, although it should be noted that there are from time to time things that occur that may involve corrosion, that may involve some other things as elements age in these weapons, and we have to be attentive to that. We have to be alert to the fact that we could very well arrive at a point where we are advised that there is some non-trivial problem with respect to safety or reliability.

But we are attentive to it, and the Department of Energy is.

Senator WARNER. I think you and the General pointed out today that there are different approaches between Russia and the United States in strategic forces, namely they build that warhead to last for a period of time and, frankly, it is discarded, dismantled, or otherwise. We build ours to last for very long periods, in the hopes that we can just make minor modifications as technology comes along.

That leads me to my next questions. The Moscow Treaty reductions are consistent with the force structure you defined in the Nu-

clear Posture Review, but the NPR also identified the need for improved missile defenses—you have mentioned that—and the revitalization of nuclear weapons infrastructure. That means our ability to get into our existing operational weapons, and those that are in storage where it is necessary, and make those technical corrections to maintain their reliability.

There is going to be no less emphasis on that, am I correct?

Secretary RUMSFELD. No, and it is expensive. It is important that we make those investments and that we recognize the fact that these weapons will not last forever and that we have to manage them and exercise appropriate stewardship over them.

Senator WARNER. Now, how important is it that the United States maintain the ability to design and modify these nuclear weapons as we draw down?

Secretary RUMSFELD. Senator, it is important that we have people who are trained, experienced, and capable of managing that process, as well as seeing that we are prepared, in the event we ever have to, to take the steps necessary to assure that we have the appropriate deterrent. As the people that have spent a good many years of their lives doing that age, retire, and leave the scene, it is important that there be sufficient activity, that new people are drawn into that process, and those skills and capabilities are transferred to them.

Senator WARNER. Mr. Secretary and General, in my next question I am going to depart from the subject matter before us here and bring up a subject which I have discussed privately with both of you from time to time and one which I have on several occasions over the past 6 weeks spoken on the floor of the Senate. Our distinguished colleague who has just joined us was the presiding officer when I addressed this subject late last night on the floor.

It is my grave concern over the deteriorating situation in the Middle East and what further might be done to try and bring about a condition of stability, of cessation of hostilities, such that meaningful discussions can go on toward a lasting peace. It is a goal which you, Secretary Rumsfeld, have dealt with for a good deal of your career. At one time you were the President's special envoy in that region.

Several things brought this to mind very vividly to this Senator. We celebrated the Fourth of July, and it was necessary and prudent for our President and others to notify this Nation of a heightened alert, and we thank God that nothing occurred on that weekend. Since that time we have seen a repetition of these suicide bombings, killing innocent persons in Israel. Now we are witnessing a tragic use of military equipment where there was loss of life of many children and innocent people in the pursuit of trying to destroy an individual or individuals which are clearly linked with this ongoing terrorism.

But I am not here to try and resolve that. What I am saying is, are we considering all the options? I pose again here in open session the option that I have had of asking the NATO nations to consider whether or not their organization can be brought to bear under certain conditions to help provide stability. I am talking about an added peacekeeping role, such as they are doing now in the Balkan region.

Should we not formally ask NATO to consider it from a political standpoint as well as a military standpoint? NATO is the one organization that has credibility in the world today, that is ready to roll, and has the proven track record of peacekeeping.

Now, clearly certain conditions have to be established before they could be involved. One, a consensus among the NATO nations that this problem is of sufficient magnitude to affect their own vital security interests as it begins to spread and fester. Second, they would have to be literally invited by both the people of Palestine and the people of Israel through their respective elective leadership. So it has to be by virtue of invitation.

There also has to be an expression by both Palestinian interests and Israeli interests that they will cooperate in every way possible to maintain peace and stability once those forces are in place.

Once that is established, it seems to me a lot of support can flow to both sides to heal the wounds—economic assistance, food, medicine to the Palestinian people. Once that is seen by the people, I think it will bring about a cessation of those cells that want to continue to foster suicide bombings, and with the people of Israel, I think a great wave of relief that they can once again walk the streets and the cafés and live a life without fear. That would enable the diplomats, the leaders of both nations, to sit down and conscientiously work out a long-term peace arrangement.

I think that that step should be looked at along with others. There may be better ideas. That is just one of this particular Senator. Others have talked about it, others have written about it. It is not entirely original with me. But I think I have spoken to it perhaps more than any other member of this body, in my firm belief that this very valuable asset of NATO can be brought to bear to bring about peace, and maybe the next Fourth of July there will be less hatred directed toward this Nation.

We must not let an hour go by without studying what the root causes are of the anger that is being unleashed against the United States of America and our people. I think it is vitally important that we look at this.

Europe is viewed as sympathetic to the Palestinian causes. The United States is viewed as sympathetic to the Israeli causes. That goes way back in history. But NATO bonds us as one unit, as it has for the 50-plus years of its existence, and we would go, not as the United States nor as Europe, but as NATO, solely to preserve the condition of peace and stability, with the cooperation of both sides, so that the talks can take place and hopefully bring about a cessation of hostilities.

We cannot quantify the amount of anger generated toward this country from that dispute, but clearly that ongoing tragic chapter of killing and suffering is one of the root causes of the anger being directed toward our Nation today, necessitating a creation of a whole new Department of Homeland Defense, necessitating the creation of a new command authority under CINCNORTH, necessitating the barriers which guard every entrance to the Capitol buildings here in the United States, and all of the other steps that we are trying to take, whether it is in our airports or in our homes and cities and villages, to defend against terrorism.

No idea should go unexamined. I hope that you place some credibility to it, at least enough to justify a study of this concept and determine whether or not it is a feasible one.

I thank you for listening. If you have a response I would be pleased to receive it.

Secretary RUMSFELD. Thank you very much. I appreciate having those thoughts.

Senator WARNER. Thank you.

General.

General MYERS. No, sir.

Senator WARNER. Thank you.

Chairman LEVIN. Senator Warner, let me first commend you on your continuing creative thinking, looking for solutions there.

We want to leave a few minutes here for Senator Nelson, so I will, if it is all right, turn to him.

Senator WARNER. Thank you, Mr. Chairman. I appreciate it. Yes, of course.

Chairman LEVIN. We have a vote coming up, I believe, in a few minutes. But I want to again thank you for raising an issue which should be on all of our minds at all times and applying your usual creative and constructive approach to looking for solutions.

Senator Nelson.

Senator BILL NELSON. Thank you, Mr. Chairman.

Good morning. You arrived apparently at the figure of 1,700 plus out of a determination that that is what it would take to defend the interests of the United States. Can you share with us why?

Secretary RUMSFELD. Yes, sir.

Senator BILL NELSON. If we need to do that in a classified setting, then please so indicate.

Secretary RUMSFELD. We can do it one way here and one way in a classified setting. But the fact is that the Chairman and I, the senior military leadership, the senior civilian leadership, the National Security Council, and over a period of time the President spent many months, the better part of a year, engaged in the Nuclear Posture Review analyzing the subject. We look not just at Russia or China or any country that currently has a nuclear weapon, but we looked at the world, we looked at trend lines, and we came to a judgment that the many thousands of weapons we currently have were not needed and that in fact we could make deep reductions down to a range of 1,700 to 2,200, and that we could do it regardless of what Russia did with their weapons.

It was a number that was arrived at with an eye toward what currently existed and what conceivably might exist. It was a range that was arrived at as a way of reassuring our friends and allies that we have and will have the kind of capability necessary to provide a nuclear umbrella over them, which is a way of dissuading them from thinking they need nuclear weapons, which we do not believe they do; and second, a range that was designed to dissuade other countries from thinking that the number was so low that they could with a modest amount of effort race and achieve parity or even superiority.

As low as 1,700 and 2,200 is compared to 6,000, it is still a substantial number of nuclear weapons.

Senator BILL NELSON. Indeed it is, and I commend you for it.

No doubt under the chairman's persistent questioning the concerns have been expressed about the fact that the warheads that will be taken off the ICBMs will not have been destroyed on either side. That issue has been addressed by the chairman. It is my understanding the chairman also addressed the question of the tactical nuclear weapons and the destruction of them. In this uncertain world of terrorism that we live in, I would like to further address the question of fissile material, if you would give us the value of your thoughts there for this committee.

Secretary RUMSFELD. First to clarify the record here. You said they will not be destroyed. There will be weapons destroyed on both sides. There are weapons destruction programs that exist in Russia and there are weapons destruction programs that will exist here. So there will be some of them.

Not all of them, as you properly point out, will be destroyed, nor should they. It would be irresponsible to recognize the reality that we could have safety and reliability problems with our stockpile and with our deployed weapons and have no open production line and no capability to replace unsafe or unreliable weapons. I cannot imagine anyone thinking that it would be desirable to reduce or eliminate or destroy all non-deployed weapons. It would be mindless to do that.

The question of tactical nuclear weapons, theater weapons, you are quite right, we did discuss it. It is a worry. It is something that I raise at every meeting with the Russians. We have very little transparency into what they are doing. We do worry about the security of those weapons. The fact that they have many multiples more than we do does not concern me because they have a different circumstance than we do. But I do believe that we, as our relationship evolves, should gain better visibility into what they are doing.

With respect to fissile material, it is something that the world best worry a great deal about, and there are enough countries with sizable appetites to develop nuclear weapons, with programs and people available to them from other countries who have competence and experience and knowledge in nuclear weapon development, the proliferation of those technologies among the so-called rogue states is extensive. One of the pacing items is fissile material and any movement of that to additional countries would indeed be a danger to the world.

Senator BILL NELSON. Mr. Secretary, I appreciate your comments. With regard to the reduction of weapons from 6,000 to 1,700, that is a reduction of over 4,000. How many of those are needed to be kept in reserve, as you just suggested, to replenish those that are actually deployed? Therefore, in an ideal world how many would you destroy of that 4,000 plus?

Secretary RUMSFELD. That is a number that we are considering. It is not something that we will decide. It will not be a fixed number. It very likely will be a number that over the 10-year period of the treaty will change. It will depend on what we learn from a safety standpoint, what we learn from a reliability standpoint. It will depend on how much investment is made and how long it would take us to be capable of replacing weapons, since we do not have an open production line like the Russians.

It also would be dependent on what we see evolving with respect to the world security, what the security environment is. It is hard to look at 3 or 4 years, let alone 8 or 10. But as we move down and reduce our deployed weapons, there is no question but that some will be destroyed and some will be stockpiled, and what the number will be we simply do not know yet.

Senator BILL NELSON. Is it the intent of the administration that that will be the next item to negotiate with Russia, which is what you just said, the destruction of the warheads that you take off?

Secretary RUMSFELD. No, it is unlikely. Each side has the flexibility to do that which they wish to do, the way the treaty is written. The most likely subjects for the United States and Russia it seems to me are transparency, predictability, theater nuclear weapons, but certainly not the destruction of weapons.

We do worry about the security of weapons while they are waiting to be destroyed or while they are waiting to be redeployed or replace an unsafe or an unreliable weapon. That is discussed.

Senator BILL NELSON. I certainly commend you on the direction it is going, and I think it is a great breakthrough which you have negotiated. I ask the obvious question, the question that is begged, which is if you have taken weapons off ICBMs that are also weapons that do not need to be in storage for replacement, why would it not be to the interest of all parties, including Russia, for an agreement to be reached to destroy those weapons?

Secretary RUMSFELD. Because we do not need an agreement to destroy them. We are each going to destroy—no one is going to keep weapons they do not need. It costs a lot of money and there is plenty of demand for the funds that are supplied to the Russian military and the U.S. military. So you are not going to have any advocates that I know of, certainly not in the United States, desiring to keep weapons we do not need.

The question is figuring out what the world is going to look like over the next decade and trying to look into the future and say that we have confidence that we are not going to have a whole class of weapons that are going to be unsafe. We could get the phone call tonight: We are very sorry, Mr. Secretary, but your stockpile is no longer safe or reliable, or this whole category is no longer safe or reliable. Well, that being the case, you darn well better have something you can replace it with.

Senator BILL NELSON. Certainly, as you say, from the standpoint of the United States we would want to destroy some of those weapons. My concern, however, is looking at the old Soviet Union and the modern day Russia, what is in their interest? Unless there is an agreement to destroy with the United States, what is in their interest to destroy? Given the fact of the new world of terrorists that we live in, the less weapons out there in storage the less weapons there are for terrorists to get their hands on.

Secretary RUMSFELD. Fair enough. Any country that has nuclear weapons or chemical or biological weapons has a responsibility to see that they are managed safely. There are always going to be weapons that are not deployed. Russia has no interest in keeping weapons around that are not useful to them. Their weapons age relatively rapidly compared to ours, as you know well. That means that they are more likely to use new production warheads than

they are to use older warheads. They are more likely to use piece parts of disassembled older warheads that are still good and reassemble, I suspect.

We do not know. We do not have any visibility into this. We know very little about what they are doing. We do not know their production rate. We do not know their destruction rate. We do worry about their security of them.

But we know of certain knowledge that they are making new weapons, they are destroying weapons, they are holding weapons, and they are dismembering weapons. No matter what stage they are in, it is terribly important to all of us, including Russia, that they be managed in a secure way.

Senator BILL NELSON. I certainly commend you. You are moving along in what most objective observers would consider the advancement of world peace. The note of caution that I raise is: is there not some discussion that should be started immediately upon the ratification of this treaty for the destruction of those weapons in the Russian arsenal that are not on top of their ICBMs? I add to that the tactical nuclear weapons as well as the fissionable material.

The administration has come forth with a plan of 10 plus 10 over 10, \$10 billion from us, \$10 billion from our allies, over 10 years, a total of \$20 billion. No less respected folks than Senator Baker and Mr. Cutler in issuing the Baker-Cutler report have said that at a minimum it should be \$30 billion, and that is of the highest priority in the Baker-Cutler report in their conclusion of expenditures for protecting the interests of the United States.

Would you comment, please, on that?

Secretary RUMSFELD. Senator, I am not an expert on this piece of it. The Department of State, the Department of Energy, as well as the Department of Defense are involved in, I guess it is called the Cooperative Threat Reduction program.

My recollection is—and I hope someone will correct me if I am wrong—that the taxpayers of the United States have already spent something like \$4 or \$5 billion over a period of some years for the destruction or management or security of Russian nuclear weapons and materials. I am familiar with the 10 plus 10 over 10. What the right number is I do not know.

I think it is important for all of the countries of the world to recognize that it is not just the United States that has the obligation to destroy Russian nuclear weapons. Russia has an obligation and they have to make priorities and choices, and they have people who are potentially every bit as vulnerable as anyone in the United States to the mismanagement or mishandling or lack of security of their weapons. But so too do the countries in Western Europe have an obligation or an interest.

It seems to me that the 10 plus 10 that was negotiated, I believe up in Canada very recently, was a useful thing to do. Whether that is the right number, I cannot answer.

Senator BILL NELSON. May I say in conclusion that what I have tried to articulate is of enormous concern to a number of the Members of this body, not the least of which are the Chairman of the Foreign Relations Committee and one of the senior members of that committee, Senator Lugar, whose name has been etched in the

history of this institution, having teamed with Senator Nunn in trying to get their arms around the proliferation of nuclear weapons.

I would encourage you that, from your standpoint of defense and protection of this country's interests, whenever you get into those councils of government discussing this, that the ultimate objective of lessening the proliferation possibility is of enormous consequence to this country. For what it is worth, I offer those thoughts to you, Mr. Secretary, and to you, Mr. Chairman.

I thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Nelson.

Let me very simply say that I share Senator Nelson's point. When you read the Baker-Cutler report, as I have, it seems to me you have to really think about their conclusion that the greatest threat to our security is the proliferation of weapons of mass destruction and the presence of nuclear weapons and nuclear material on Russian soil because of the fact that they are unable to secure it to the extent that it should be secured. The contribution of Nunn-Lugar toward that end is critical.

But nonetheless, the fewer nuclear weapons on Russian soil and elsewhere, the quicker they are destroyed rather than being stored, where they are much more readily available to theft or to leakage or to some kind of an illegal sale, the safer we are going to be.

So there is a relationship between the number of nuclear weapons, whether they are destroyed or not, and the proliferation issue. The Russians apparently wanted to destroy weapons, not store them. We are the ones who decided that they should be stored, not destroyed, as I understand the discussions. I hope that over time, as Senator Nelson has expressed, that we will find ways to destroy weapons, not just store them. The world will be a lot more secure in my judgment and the proliferation threat reduced if we can not just see weapons stored on Russian soil, but actually see them destroyed and put the resources into it that we apparently need to contribute to make sure that, as long as those weapons are there, that they are secured. That goes as well to the chemical and biological issue.

On the other hand, it is clear this treaty is a significant advance, and I think we all welcome it; we applaud it. We are grateful for your contributions to it, both of you. The perspective may be a little different on whether destruction or storage is a greater contribution to our security, but nonetheless the reduction in the number of deployed nuclear weapons is a plus. The treaty is moving us in the right direction, and not just in terms of nuclear weapons, but in terms of the relationship between ourselves and Russia, which, as you have pointed out, Secretary Rumsfeld, is so critically important, and this contributes to it in a very significant way.

I hope, General, that we will continue to have military-to-military relations with Russia that are continually expanded. We have had some good connections with them in Bosnia and other places, but that effort also will continue apace. They may not be a superpower now, but they have all of the ingredients to return to superpower status. They have huge numbers of nuclear weapons, they have all of the talent, capability, and resources that are needed for a return to that status, and your military-to-military relationship

is frankly just as important as the diplomatic discussions and relationship.

We thank you both for your presence, for your contribution to this Nation's security, and we will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR THURMOND

MOSCOW TREATY REDUCTION SCHEDULE

1. Senator THURMOND. Secretary Rumsfeld, although the "Moscow Treaty" requires both parties to reduce deployed strategic warheads to no more than 2,200 by 2012, there is no specific schedule to accomplish this task. What are the Department's plans for achieving the 2012 goal?

Secretary RUMSFELD. The Moscow Treaty imposes no reduction timelines. Each party is free to carry out reductions in its own way, provided that it meets the required force level on the specified date.

In terms of current U.S. planning, as the first step in reducing strategic nuclear warheads, the United States plans to deactivate 50 Peacekeeper ICBMs from operational service, remove four Trident submarines from strategic service, and no longer maintain the capability to return the B-1 to nuclear service. In addition, Trident D-5 and Minuteman missiles will be downloaded and some bombs removed from heavy bomber bases to reduce the operationally deployed strategic force to approximately 3,800 weapons by 2007.

Specific decisions about U.S. forces beyond 2007 have not yet been made. It is anticipated that reductions beyond 2007 will involve decreasing the number of operationally deployed strategic nuclear warheads on ballistic missiles and lowering the number of operationally deployed warheads at heavy bomber bases. These plans, however, will be periodically assessed and may evolve over time.

RUSSIA'S PLANS TO REDUCE WARHEADS

2. Senator THURMOND. Secretary Rumsfeld, what do you know about Russia's plans to reduce the number of warheads?

Secretary RUMSFELD. Russia did not state during the negotiations how it intends to carry out its reductions, nor does the treaty require that any specific procedure be followed. We anticipate that our understanding of Russian plans will evolve as we move forward with implementing the treaty, including as transparency is enhanced through ongoing diplomatic consultations. I would note that the President's original decision to reduce the number of our operationally deployed strategic warheads was not dependent on any Russian decision to reduce their own nuclear forces, and that we believe Russia has compelling reasons of its own, unrelated to the Moscow Treaty, to wish to reduce to the 1,700-2,200 range or even lower.

COUNTING RUSSIAN MIRVED WARHEADS UNDER THE MOSCOW TREATY

3. Senator THURMOND. Secretary Rumsfeld, some critics of the treaty state that it disadvantages the United States since it does not address MIRVs, which are one of Russia's strengths. How are MIRVed warheads counted under the Moscow Treaty?

Secretary RUMSFELD. The Moscow Treaty will not place new restrictions on Russia's potential to deploy MIRVed ICBMs. It affords Russia the same force planning flexibility that we ourselves require. We are not overly concerned with hypothetical "break-out" scenarios (as we were during the Cold War), as shown by the fact that we intend to reduce to 1,700-2,200 warheads regardless of what the Russians do.

Regardless of whether Russia retains its SS-18 or SS-19 ICBMs or builds a new MIRVed missile, Russia's deployment of MIRVs has little impact on U.S. national security under current conditions. The issue of Russian MIRVed ICBMs was considered in the Nuclear Posture Review and during the treaty negotiations. Since neither the United States and its allies nor Russia view our strategic relationship as adversarial, we no longer view Russian deployment of MIRVed ICBMs as destabilizing to this new strategic relationship.

If Russia retains MIRVed ICBMs, it will be required to have fewer missiles than if each carried only one warhead. However, we do not believe that Russia will retain its current inventory of MIRVed ICBMs. Russia is already deactivating its 10-warhead rail-mobile SS-24 force for age and safety reasons. We expect that most of the

SS-18 heavy ICBMs and six-warhead SS-19 ICBMs will reach the end of their service life and be retired by 2012. Ongoing diplomatic consultations should improve our understanding of how Russia plans to carry out its reduction obligations. We expect that continued improvement in our relationship with Russia will provide greater transparency into the strategic capabilities and intentions of each party.

UNITED STATES ESTABLISHMENT OF CONFIDENCE-BUILDING MEASURES

4. Senator THURMOND. Secretary Rumsfeld, in a May 28, 2002, article Senator Joseph Biden wrote that the United States should establish confidence-building measures that would enable Russia to verify U.S. compliance with the treaty. He apparently is concerned that Russia does not have the means to verify our compliance with the treaty. Do you agree with the Senator's concerns? If not, why not?

Secretary RUMSFELD. During the initial stages of the talks, we exchanged ideas about possible transparency measures. The ideas of each side were designed to implement the approach that it proposed the treaty take in defining reduction obligations. However, once both countries agreed that the treaty's reduction obligations should preserve the flexibility for each side to make reductions in its own way, it appeared to the United States that there was no immediate need to work out transparency measures applicable to this context. Among other things, START's verification measures would continue to be available for some time. Russia, too, agreed that the Moscow Treaty need not include such measures. Accordingly, no specific transparency measures were negotiated.

We recognize that more contacts and exchanges of information could be useful and that the parties could decide to develop additional transparency in the future. However, we do not believe that any specific new transparency measures are needed in order to implement the Moscow Treaty.

VERIFICATION OF TREATY

5. Senator THURMOND. General Myers, compliance verification is a concern of both the proponents and opponents of the treaty. In your professional judgment, are you satisfied that both Russia and the United States have the means to verify compliance with the Moscow Treaty?

General MYERS. I agree with the assessment of the verification of the Moscow Treaty contained in the "Moscow Treaty: The Determination Pertaining To Verification," submitted to Congress on June 24, 2002, by the Secretary of State (in accordance with Section 306 of the Arms Control and Disarmament Act). The Moscow Treaty was not constructed to be verifiable within the meaning of Section 306, and it is not. The Moscow Treaty recognizes a new strategic relationship between the United States and Russia based on the understanding that we are no longer enemies and that the principles which will underpin our relationship are mutual security, trust, openness, cooperation, and predictability. This understanding played an important role in our judgments regarding verification. Our conclusion was that, in the context of this new relationship, a treaty with a verification regime under the Cold War paradigm was neither required nor appropriate. START's verification regime, including data exchanges and inspections, will continue to add to our body of knowledge over the course of the decade regarding the disposition of Russia's strategic nuclear warheads and the overall status of reductions in Russia's strategic nuclear forces during the same period. We recognize, however, that more contacts and exchanges of information could be useful and that the parties could decide to develop additional transparency in the future. The Consultative Group on Strategic Stability (CGSS) will meet in September to begin this dialogue.

DESTRUCTION OF NUCLEAR WARHEADS

6. Senator THURMOND. General Myers, although I understand that there are capacity limitations on our ability to dismantle warheads, is there a military necessity for not dismantling warheads?

General MYERS. Yes, there is a clear military necessity to not dismantle all our nuclear warheads. Storing non-operationally deployed nuclear warheads serves the United States interests in several ways. First, they provide a responsive capability against unanticipated changes in the international security environment. We need to retain the flexibility to meet significant unforeseen challenges. Second, we do not currently have the capability to produce nuclear warheads, but our Russian counterparts—and other nuclear powers—do. Therefore, stored warheads provide an operational reserve for surveillance and testing replacements. Third, stored warheads

provide a hedge against a technical or catastrophic failure of a class of deployed warheads that could affect safety or reliability and, ultimately, our national security.

The exact number of weapons to be stored has not yet been determined. However, the overall number of warheads in the stockpile will be comprised of operationally deployed warheads; spares and replacements to meet operational and surveillance testing requirements; the number of weapons required to hedge against future uncertainties; and a number to hedge against technical "surprises" that could render a complete warhead family unusable.

SECURITY OF RUSSIAN WARHEADS

7. Senator THURMOND. General Myers, although I believe Russia has the means to appropriately secure its "operationally deployed" warheads, I am concerned about those warheads that are in storage. What are your views on the security of Russia's nuclear warheads?

General MYERS. I believe, as Secretary Rumsfeld has stated, that any nation who possesses nuclear weapons has an obligation to properly manage those weapons, to include safe and secure storage. I fully support Cooperative Threat Reduction efforts to assist Russia in improving the safety and security of its non-deployed nuclear warheads. The United States is working to help Russia improve the security of its fissile material through DOE's Material, Protection, Control and Accounting (MPC&A) program and DOD's construction of a fissile material storage facility at Mayak and DOE's many MPC&A projects. We plan to also continue the support of the Cooperative Threat Reduction program when the Moscow Treaty is in force, regardless of Russia's decisions on how many warheads to eliminate. With assistance from the United States and other countries, Moscow has taken steps to reduce the risk of theft. Some risks remain even though Russia's nuclear security has been improving over the last several years.

[Whereupon, at 11:50 a.m., the committee adjourned.]

THE NATIONAL SECURITY IMPLICATIONS OF THE STRATEGIC OFFENSIVE REDUCTIONS TREATY

THURSDAY, AUGUST 1, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee met, pursuant to notice, at 9:00 a.m., room SD-106, Dirksen Senate Office Building, Senator Jack Reed presiding.

Committee members present: Senators Lieberman, Reed, Bill Nelson, Bingaman, Warner, Inhofe, and Sessions.

Committee staff members present: Christine E. Cowart, chief clerk; and Kenneth Barbee, security clerk.

Majority staff members present: Madelyn R. Creedon, counsel, and Richard W. Fieldhouse, professional staff member.

Minority staff members present: L. David Cherrington, minority counsel, and Brian R. Green, professional staff member.

Staff assistants present: Leah C. Brewer, Daniel K. Goldsmith, and Thomas C. Moore.

Committee members' assistants present: Frederick M. Downey, assistant to Senator Lieberman; Elizabeth King, assistant to Senator Reed; Peter A. Contostavlos, assistant to Senator Bill Nelson; John A. Bonsell, assistant to Senator Inhofe; Robert Alan McCurry, assistant to Senator Roberts; Arch Galloway II, assistant to Senator Sessions; and Derek Maurer, assistant to Senator Bunning.

STATEMENT OF SENATOR JACK REED

Senator REED. The hearing will come to order. The Senate Armed Services Committee meets today to continue its hearings on the military and national security implications of the Strategic Offensive Reductions Treaty (SORT). The hearing this morning will consist of two panels.

On the first panel, we are pleased to have Charles Curtis, former Deputy Secretary of Energy and currently the President and Chief Operating Officer of the Nuclear Threat Initiative, and Dr. Ashton Carter, formerly the Assistant Secretary of Defense for International Security Policy and currently the Ford Professor of Science and International Affairs at Harvard's John F. Kennedy School of Government. Gentlemen, it is a pleasure to welcome you back to the committee today.

On the second panel, we will hear from Admiral James Ellis, Commander in Chief of the Strategic Command, and Dr. Everet

Beckner, Deputy Administrator for Defense Programs of the National Nuclear Security Administration.

Previously, the committee heard testimony concerning the Strategic Offensive Reduction Treaty from Secretary Rumsfeld and General Myers. As a follow-on to that hearing, we wanted an opportunity to discuss the treaty and the broader context of U.S.-Russian relations with witnesses outside of the administration. Each of you has had substantial experience with nuclear weapons and materials issues from both policy and practical perspectives. We look forward to hearing from you on the SORT and getting your views on a variety of issues, including the role of nuclear weapons in U.S. national security policy, current and future nonproliferation efforts, the future course of U.S.-Russian relations, and other topics.

The SORT has no timetable for implementation, and no milestones against which to measure and verify progress. Neither does the treaty use or define the term "deployed strategic offensive nuclear weapons." These are the weapons that will be reduced by the United States. Similarly, the treaty does not define what weapons are to be reduced by Russia or establish any timetable for those reductions.

As we discussed in our hearing last week, there are a number of uncertainties associated with this treaty, including its implications on the size of the stockpile and the future of nuclear weapons.

However, the treaty is an important symbolic element of our improving relationship with Russia. How the United States and Russia view each other militarily is an important question. These views could drive, in a large or small way, U.S. nuclear planning and stockpile concerns, or they might have no impact at all. This treaty is a starting point for shaping the future nuclear weapons stockpile and further arms control, as well as an important boost to our relationship with Russia.

But there is much more work to be done to continue improving mutual security with Russia, work that includes further reducing nuclear weapons and nuclear proliferation dangers, and improving confidence, transparency, and cooperation with Russia.

We will conclude the first panel and proceed to the second panel at approximately 10:15. We will start the second panel in open session and then move to a closed session in SR-222, Russell Senate Office Building.

Senator Bingaman, do you have any opening comments?

Senator BINGAMAN. Mr. Chairman, I do not, other than to welcome the witnesses. I look forward to their testimony.

Senator REED. Mr. Curtis and Dr. Carter, your prepared statements will be included in the record.

Mr. Curtis.

STATEMENT OF CHARLES B. CURTIS, PRESIDENT AND CHIEF OPERATING OFFICER, NUCLEAR THREAT INITIATIVE

Mr. CURTIS. Thank you, Mr. Chairman and Senator Bingaman. As you introduced me, I am the President of the Nuclear Threat Initiative, which is a charitable organization dedicated to reducing global threats from nuclear, chemical, and biological weapons. The Strategic Offensive Reductions Treaty, which is sometimes referred to as the Treaty of Moscow, is a truly remarkable document. I be-

lieve that it deserves the Senate's endorsement. It should be ratified without amendment or, in my judgment, without reservation.

But this treaty's true value is not so much in its substance, which is sparse; its only legally binding part deferred to the next decade. Indeed, its value is best seen in the joint statement issued by Presidents Bush and Putin and the foundation that the ancillary document provides for transforming the U.S.-Russian relationship today and in the years to come. So I would like to address my remarks today to the steps required to bring about that transformation.

Former Senator Nunn, testifying last week before the Senate Foreign Relations Committee, called the Moscow Treaty "a good faith treaty." It relies on an expressed faith in the common vision of our leaders and in our two nations' closely parallel strategic force plans. I agree that a treaty built on faith can survive only by building on common interests and gaining the trust that comes from transparency. If you never see someone do what they say they will do, trust cannot grow. When trust cannot grow, suspicions soon will, so I believe this treaty must be followed with milestones and transparency mechanisms to track progress.

While we are working on these trust-building transparency measures, we must also work with urgency with Russia to ensure accurate accounting and security of Russia's tactical nuclear weapons. Indeed, gaining such accurate accounting and assured security of these weapons will be the first serious test of the new U.S.-Russian relationship.

We simply don't know with specificity how many tactical nuclear weapons the Russians have, where they are, or how secure they are. These weapons, as this committee knows, are small enough to be man portable and powerful enough to destroy a small city. In an age of terrorist threats, this dangerous gap must be closed at the earliest possible date. The United States and Russia should at the same time move to revise the Cold War operational status of our nuclear forces.

President Bush spoke on this potentially dangerous situation more than 2 years ago as a candidate for President. Decrying what he called another unnecessary vestige of Cold War confrontation, he said, "the United States should remove as many weapons as possible from high alert, high trigger status. For two nations of peacekeeping, so many weapons on high alert may create unacceptable risks of accidental or unauthorized launch. As President, I will ask for an assessment of what we can safely do to lower the alert status of our forces." Mr. Chairman, I doubt the assessment that candidate Bush called for has yet to be presented to President Bush. The recently conducted Nuclear Posture Review, at least by public accounts, dealt almost entirely with force structure issues and did not separately discuss the alert conditions of weapons, or at least options with respect to the alert conditions of weapons. Similarly, the Treaty of Moscow does not explicitly address operational conditions, but does so by indirection.

The U.S.'s use of the term "operationally deployed weapons" to describe its commitments under the treaty implies an extension of today's high alert conditions at least until 2012, and perhaps for the indefinite future. Is this a potential risk for this Nation that

it is willing to bear? This committee knows, I believe, that this is a special concern of Senator Nunn. It was when he chaired this committee. It remains in his capacity as co-Chairman of the initiative on CERT, so what may be done? Here's what Senator Nunn has suggested:

First, the President can and should direct the immediate standdown of the forces as they become identified for reduction under the treaty. This has a noble precedent. George Herbert Walker Bush, when President in 1991, did the same thing on the occasion of the signing of the first Strategic Arms Reduction Treaty (START).

Second, our two presidents should direct their military leaders to meet and return in the near future with a developed set of options to begin to stand down the remaining nuclear forces to the maximum extent possible consistent with the national security interests of each country. This is important because the more time we build into our process for launching missiles, the more time is available to gather data, exchange information, gain perspective, and discover or avoid a mistake. If we were smart enough at the height of the Cold War to be able to begin reducing weapons, surely in the second decade after the end of the Cold War we can be smart enough to find a way to expand decision time with no loss of security. It is at least worth a serious look.

Third, our two presidents should sweep away the bureaucratic impediments to getting the Joint Early Warning Center up and running. Countering the deterioration of Russia's early warning and protection capability is in the security interest of both countries. We must get on with the job.

Now, let me also say a word about the issue of warhead dismantlement, which has been discussed in the Senate Foreign Relations Committee and also before this committee. The treaty does not require the dismantlement or destruction of warheads or delivery systems. There are no force size limits in the new treaty, only limitations on operationally deployed forces.

Eventually, under the evolving U.S. security relationship, I expect we will need to address the actual size on our respective strategic forces. Beginning with the dismantlement of excess warheads we can begin this objective, build trust, and also serve the larger goal of giving the world community greater assurances that the United States and Russia are actually reducing their forces. If asked, the Department of Energy probably could set out an explicit schedule for beginning the dismantlement of excess weapons. But we must understand that while we can and should begin the dismantlement process, the development of a bilateral warhead dismantlement regime would be quite challenging, testing our available technologies and classification barriers. It is a task that must be examined in the context of U.S. strategies and plans for maintaining the stockpile into the future in the absence of a full warhead production capability.

I note here that Russia maintains multiple nuclear warhead production facilities, while the U.S. currently has none still operating. This asymmetry poses an inherent structural complication for the negotiation of a 4-month dismantlement regime. Therefore, while I agree that both sides should get about the job of dismantling excess

weapons, I don't believe that securing an agreement on warhead dismantlement rises to the same level of urgency as the other issues I have just mentioned. Moreover, many of the treaty's specific compliance issues discussed before the committee do not rise to the same level of urgency of other issues at play in U.S.-Russian dynamic, such as ensuring the security of weapons materials and weapons know how and the destruction of chemical weapons and biological weapons facilities.

The critical job in Cooperative Threat Reduction (CTR) started by this committee under Nunn-Lugar and extended in Nunn-Lugar-Domenici must be unlocked, refocused, and accelerated. Following through on this urgent agenda has to be at the heart of U.S.-Russian security relationship. Expanding on this agenda to engage a global coalition in the fight against catastrophic terrorism is the next essential step in realizing the full province of the real Russian-U.S. security relationship. Should we fail to take this last and most important step in providing for our security future, all semblance of security will be lost.

September 11, if it taught us anything, taught us this: the number of innocent people al Qaeda is willing to kill is not limited by any political considerations or any spark of human conscience. Their compassion for killing is limited only by the power of the workings they have. We must keep the world's most deadly weapons out of their hands. We know that terrorists are seeking weapons of mass destruction. We also know where they are looking to find them. In the post-Soviet period, Russia's dysfunctional economy and eroded security systems combined to undercut controls on the stocks of weapons, materials, and know-how inherited from the Cold War. This dysfunction increased the risk that they can throw to terrorist groups or hostile forces. Considerable progress and improvements have come through the Nunn-Lugar program and its projects, but we have a long way to go in Russia still. Moreover, the vulnerabilities reach well beyond Russia, and well beyond other parts of the Former Soviet Union.

Last May, in the immediate aftermath of the summit, former Senator Nunn and Senator Lugar co-hosted a conference of Russian and American legislators, officials, and experts. Senators Nunn and Lugar used this point in time to call for a new effort to finish the job of CTR in Russia and the Former Soviet Union, and to extend its principles beyond the United States and Russia to include the whole world with Russia and the United States linked in partnership sharing best practices and lessons learned. They called it the Global Coalition Against Catastrophic Terrorism. In Senator Lugar's words, "we have to make sure that every nation with nuclear, biological, or chemical weapons capacity accounts for what it has, puts in securities for what it has, and pledges that no other nation will be allowed access. This security first agenda has to energize the global coalition."

We should include every nation that has something to safeguard or that can make a contribution to safeguarding. This vision we seek received dramatic endorsement with the recent G-8 announcement that its member states were establishing a global partnership against catastrophic terrorism and combining for this purpose a \$10 billion commitment from the United States with a \$10

billion pledge from the G-8 partners over the next 10 years. I applaud President Bush's leadership and success in achieving this pledge to unified action.

One of the most essential next steps in the U.S.-Russian relationship, therefore, is to make the G-8 commitments real, to follow up with diplomatic rigor and resources, and to begin to extend that partnership beyond the G-8. Mr. Chairman, the whole world is engaged in a new arms risk. Terrorists are racing to acquire nuclear, chemical, and biological weapons and we must together race to stop them. Reducing the numbers of U.S.-Russian deployed or deployable strategic forces is important. The Treaty of Moscow is important, and it should be ratified. But if we are to have a secure future, we must first win the race against catastrophic terrorism, and we must win it on a global scale.

It is my hope that the Treaty of Moscow will be remembered, therefore, more as a hinge of the U.S.-Russian relationship, not an end point, but a turning point, leading towards a transformed security relationship. If it serves this purpose, and propels us on the course of action outlined above, it will be truly historic and worthy of history's praise. Thank you.

[The prepared statement of Mr. Curtis follows:]

PREPARED STATEMENT BY CHARLES B. CURTIS

Mr. Chairman and members of the committee: thank you for inviting me to offer my views on the national security implications of the Strategic Offensive Reductions Treaty (sometimes also referred to as the Treaty of Moscow) and discuss with you the opportunities it creates to build a safer world.

I appear before you as the President of the Nuclear Threat Initiative (NTI), a charitable organization dedicated to reducing the global threats from nuclear, biological, and chemical weapons. NTI is co-chaired by former Senator—and former chairman of this committee—Sam Nunn and CNN founder Ted Turner. Two of your colleagues, Senators Richard Lugar and Pete Domenici, sit on our Board as do two members of the Russian Duma, former Deputy Defense Minister Andrei Kokoshin and former Ambassador Vladimir Lukin.

The testimony I offer today, however, represents my own views and has not been cleared with our board.

The Strategic Offensive Reductions Treaty that Presidents Bush and Putin signed in Moscow in May to reduce by two-thirds by 2012 the operationally deployed nuclear weapons on both sides is truly a remarkable document. I believe it deserves the Senate's endorsement. But this treaty's true value is not so much in its substance, which is admittedly sparse; its only legally binding part deferred to the next decade. Instead, its value is best seen in the joint statement issued by the two Presidents and the foundation this ancillary document provides for transforming the U.S.-Russian relationship today and in the next years to come. So I would like to address my remarks today to the steps required to bring about that transformation.

Former Senator Nunn, testifying last week before the Senate Foreign Relations Committee, called the Moscow Treaty a "good-faith treaty." It relies on an expressed "faith" in the common vision of our leaders and in our two nations' closely parallel strategic force plans. I agree with that characterization. This treaty, unlike its predecessors, does not have an elaborate text born of suspicion, but ten sentences based on trust. Yet I believe a treaty built on trust can survive only with continued investment in the trust relationship by building on common interests, and gaining the trust that comes from transparency. If you never see someone do what they say they will do, trust cannot grow. When trust cannot grow, suspicions soon will.

What matters most is what happens next. As Sam Nunn has pointed out, "if this treaty is not followed with substantive actions, it will become irrelevant at best—counterproductive at worse. A good faith treaty, without follow-up, means that if relations improve, the two sides may not need it. If relations turn bad, the two sides may not (plan to) honor it."

So I believe this treaty must be followed with milestones and transparency mechanisms to track progress on the way to 2012. Toward that end, it's important that the Department of Defense develop and make public at the earliest possible date

its own plans for reducing our “operationally deployed” forces under this treaty. Russia should do the same with its forces, and then both nations should follow with agreed mechanisms specifically designed to allow both sides to monitor these reductions. It is not, and will not, be enough for inspectors and site visitors under START I to look over their shoulders and try to see what’s happening on the Russian or the U.S. side to build down forces to meet the Treaty of Moscow commitments. Moreover, as the committee has heard, even this indirect method of monitoring this treaty will be lost in the last 3 years when START I expires.

We should act quickly in the Consultative Group for Strategic Security to fill in these blind spots.

While we are working out these trust-building transparency measures, we must work with Russia to ensure an accurate accounting and the security of Russia’s tactical nuclear weapons. Tactical nuclear weapons have never been covered in any treaties or agreements—and that is an ongoing, decades-long mistake that we must correct immediately. We don’t know with any specificity how many tactical nuclear weapons the Russians have, where they are, or how secure they are. These are weapons small enough to be man-portable and powerful enough to destroy a small city. In an age of terrorist threats, this dangerous gap must be closed at the earliest possible date.

The United States and Russia should at the same time move to revise the Cold War operational status of our nuclear forces. Today, the United States and Russia have thousands of nuclear weapons on high alert, the great bulk of which are ready to launch within minutes—essentially the same posture we had throughout the Cold War.

President Bush spoke of this dangerous situation more than 2 years ago as a candidate for President. Decrying what he called “another unnecessary vestige of Cold War confrontation,” he said “The United States should remove as many weapons as possible from high-alert, hair-trigger status. For two nations at peace, keeping so many weapons on high alert may create unacceptable risks of accidental or unauthorized launch. As President, I will ask for an assessment of what we can safely do to lower the alert status of our forces.”

I doubt that the assessment that candidate Bush called for has yet to be presented to President Bush. The recently conducted Nuclear Posture Review—at least by public accounts—dealt almost entirely with force structure issues and did not separately discuss the alert conditions of the weapons. Similarly, the Treaty of Moscow does not explicitly address operational conditions, but by indirection, it does. The U.S. side’s use of the term “operationally deployed weapons” to describe its commitments under the treaty implies an extension of today’s high alert conditions at least until 2012 and perhaps for the indefinite future. As significant as the arms reduction numbers in the treaty are, the world envisioned for 2012—two decades after the end of the Cold War—is a world where the U.S. and Russia would still collectively maintain several thousand nuclear weapons on high alert. To echo President Bush’s earlier quoted words: “For two nations at peace, keeping so many weapons on high alert may create unacceptable risks of accidental or unauthorized launch”—with the most catastrophic of consequences, I might add. As Sam Nunn has long advocated, we must take steps to reduce this danger. So what are the next steps to take in this area?

First, the President can and should direct the immediate standdown of the forces identified for reduction under the new treaty. Such an action has a respected and successful precedent. President George Herbert Walker Bush ordered a similar standdown of nuclear forces in 1991, when he directed the military to unilaterally standdown the forces scheduled for reductions under the START I Treaty he had just signed. The Russians soon followed this action with a reciprocal commitment.

Second, our two Presidents should direct their military leaders to meet and return in the near future—say 3 months from now—with a developed set of options to begin to standdown the remaining nuclear forces deployable within the Treaty of Moscow cap levels to the maximum extent possible consistent with the national security of both countries. This is important because the more time we build into our process for launching missiles, the more time is available to gather data, exchange information, gain perspective, discover an error, or avoid a mistake. Expanding nuclear decision time may require still unidentified force structure changes, deployment changes, and other approaches. It is sure to be a complicated undertaking, but if we were smart enough at the height of the Cold War to be able to begin reducing nuclear weapons in a verifiable way, surely in the second decade after the end of the Cold War we can find a way to expand decision time with no loss of security.

Third, our two Presidents should sweep away the bureaucratic impediments to getting the Joint Early Warning Center up and running. Countering the deteriora-

tion of Russia's early warning and detection capability is in the security interest of both countries. We must get on with the job.

Let me also say a word about the issue of warhead dismantlement, drawing upon my past governmental experience. The treaty does not require the dismantlement or destruction of warheads or delivery systems. There are no "force size" limitations in the new treaty, only limitations on "operationally deployed forces." Senators from both sides of the aisle have been right to raise questions about this matter. Eventually, under the evolving U.S.-Russian security relationship, we will need to address the actual size of our respective strategic forces. Beginning the dismantlement of excess warheads can contribute to this objective, build trust, and also serve the larger goal of giving the world community greater assurance that the U.S. and Russia are actually reducing their forces. In the near-term, the symbolism of the act is probably even more important than the actual numbers of warheads destroyed. If asked, the Department of Energy probably could set out an explicit schedule for beginning the dismantlement of some excess weapons. Certainly, some level of excess warhead elimination is already a part of the Department of Defense and the Department of Energy's planning process.

But we must understand that while we can and should begin the dismantlement process, the development of a bilateral warhead dismantlement regime will be quite challenging, testing our available technologies and classification barriers. It is a task that must be examined in the context of U.S. strategies and plans for maintaining the stockpile into the future in the absence of a full warhead production capability. I note here that Russia maintains multiple nuclear warhead production facilities while the U.S. currently has none still operating. This asymmetry poses an inherent structural complication to the negotiation of a formal dismantlement regime. Therefore, while I agree that both sides should get about the job of dismantling excess weapons, I don't believe that securing an agreement on warhead dismantlement rises to the same level of urgency as other issues. It is a logical next step if the two sides are eventually to get to agreed force size limitations, but the time frame for action is somewhat long term and certainly less immediate than that required for the securing of tactical weapons and for reducing the alert status of our remaining nuclear forces. Any ranking of next steps and any guidance the Senate may wish to give on the subject should reflect this ordering of priorities.

Moreover, many of the treaty specific compliance issues discussed before the committee do not rise to the same level of urgency of other issues at play in the U.S.-Russian dynamic, such as ensuring the security of weapons materials and weapons know how and the destruction of chemical weapons and biological weapons facilities. The critical job in CTR started by this committee under Nunn-Lugar, and extended in Nunn-Lugar-Domenici, must be unblocked, refocused, and accelerated. Following through on this urgent agenda has to be at the heart of the U.S.-Russian relationship. Expanding on this agenda to engage a global coalition in the fight against catastrophic terrorism is the next essential step in realizing the full promise of the new Russian-U.S. security relationship. Should we fail to take this last and most important step in providing for our security future, all semblance of security could be lost.

September 11, if it taught us anything, taught us this: the number of innocent people al Qaeda is willing to kill is not limited by any political considerations, or any spark of human conscience—their capacity for killing is limited only by the power of their weapons. We must keep the world's most deadly weapons out of their hands.

I am afraid far too many do not understand how immediate the danger is. Many Americans are aware that Osama bin Laden has said acquiring weapons of mass destruction is "a religious duty." But fewer understand how far bin Laden has come in pursuing his so-called duty. According to reports in the last several months, the following evidence of al Qaeda activity has been uncovered since Taliban and al Qaeda forces fled Afghanistan:

- Rudimentary diagrams of nuclear weapons were uncovered at a suspected safe house for al Qaeda in Kabul confirming that al Qaeda was exploring ways to make low-grade, nuclear devices;
- Material that could be used to make a radiological bomb was found in an underground al Qaeda base near Kandahar;
- Documents that include details of a biological and chemical weapons program were uncovered at another al Qaeda safe house;
- At the same site, a memo was discovered, apparently written by bin Laden's number two, saying: "the destructive power of (biological) weapons is no less than that of nuclear weapons;" and
- Finally, a June 1999 memo was discovered by the *Wall Street Journal* on the hard-drive of a computer left in Kabul by al Qaeda. It recommended that the al Qaeda biological weapons program seek cover and talent in edu-

cational institutions, which the memo said “allow easy access to specialists, which will greatly benefit us in the first stage, God willing.”

We need to remind ourselves that these are just the documents they left behind that we have recovered. We don’t know what they took with them, nor what they left behind that we have not found.

At the same time, we know not only that terrorists are seeking weapons of mass destruction. We also know where they are looking to find them.

As the committee is well aware, 10 years ago, when the Soviet Union broke apart, it left a mind-numbing legacy of more than 20,000 strategic nuclear warheads, and enough highly enriched uranium and plutonium to make 40,000–60,000 more, stored in over 250 buildings in more than 50 sites distributed throughout the Russian Federation across 11 time zones.

Unofficial estimates of Russia’s tactical nuclear weapons vary from 3,000 to 20,000 weapons, some of which pack the destructive power of the bomb dropped on Hiroshima. As I said before, these weapons have never been the subject of arms control regimes and are largely unaccounted for. Russia also has 40,000 metric tons of chemical weapons awaiting disposition. The Shchuchye storage site alone houses almost 2 million rounds of chemical weapons—any one of which could be carried away in a suitcase and every one of which is potent enough to take hundreds and perhaps thousands of lives and create terror. Russia also has an elaborate bio-weapons apparatus, and thousands of scientists who know how to make weapons and missiles, but no longer have secure jobs or secure futures.

In the post-Soviet period, Russia’s dysfunctional economy and eroded security systems combined to undercut controls on these weapons, materials, and know how—and increased the risk that they could flow to terrorist groups or hostile forces. Considerable improvements have come through the Nunn-Lugar program, but we have a long way to go in Russia. Moreover, the vulnerabilities reach well beyond Russia and other parts of the Former Soviet Union.

Last May in Moscow, former Senator Nunn and Senator Lugar co-hosted a conference of Russian and American legislators, officials, and experts. The Moscow conference marked the 10-year anniversary of Nunn-Lugar CTR. Nunn and Lugar used this point in time to call for a new decadal effort to finish the job in Russia and the Former Soviet Union and to extend the principles of CTR beyond the United States and Russia to include the whole world, with Russia and the United States linked in partnership, sharing best practices and lessons learned. They called it a “Global Coalition Against Catastrophic Terrorism.” The approach was described by Senator Lugar some months ago in the *Washington Post*: “We have to make sure that every nation with nuclear, biological, or chemical weapons capacity accounts for what it has, secures what it has, and pledges that no other nation or group will be allowed access.” That simply stated mission should energize the world community and provide the core basis for transforming the U.S.-Russian security relationship.

A Global Coalition Against Catastrophic Terrorism must be grounded on the central security realities of our new century: First, the greatest dangers are threats all nations face together and no nation can solve on its own. Second: The most likely, most immediate threat is terrorist use of weapons of mass destruction. Third: The best way to address the threat is to keep terrorists from acquiring nuclear, biological, and chemical weapons.

How difficult it is for terrorists to acquire a nuclear weapon depends on how difficult we make it. It becomes obvious from analyzing the terrorist path to a nuclear attack that the most effective and least expensive way to prevent nuclear terrorism is to secure weapons and materials at the source. Acquiring weapons and materials is the hardest step for the terrorists to take, and the easiest step for us to stop. By contrast, every subsequent step in the process is easier for the terrorists to take and harder for us to stop. Once they gain access to materials, they’ve completed the most difficult step. That is why defense against catastrophic terrorism must begin with securing weapons and materials in every country and every facility that has them. A single point failure in security anywhere in the world can have the gravest of effects.

Members of the Global Coalition Against Catastrophic Terrorism would include every nation that has something to safeguard or that can make a contribution to safeguarding it, including our European allies, Japan, China, India, Pakistan, and the many nations that host research reactors using weapons-grade fuel.

Each member could make a contribution to the coalition’s activities commensurate with its capabilities. As with the coalition against al Qaeda, this coalition would extend to wherever weapons of mass destruction exist or might be made and wherever terrorist cells exist that might build them, steal them, or use them. The cooperation would extend from prevention, to include detection, protection, interdiction, and response.

This vision received a dramatic endorsement with the recent G-8 announcement that its member states were establishing a global partnership against catastrophic terrorism and combining for this purpose a \$10 billion funding commitment from the U.S. with a \$10 billion pledge from our G-8 partners over a 10-year period. I applaud President Bush's leadership and success in achieving this G-8 pledge to unified action to combat catastrophic terrorism. Importantly, the G-8 commitment includes Russia in a full partnership role and acknowledges that the most immediate and urgent work must begin in Russia. One of the most essential next steps in the U.S.-Russian relationship, therefore, is to make the G-8 commitments real, to follow up with diplomatic rigor and resources, and to begin to extend the partnership beyond the G-8 members.

To make the most of this opportunity to improve our security and build a wider partnership against catastrophic terrorism, it is useful to think of the whole world as being engaged in a new arms race. Terrorists are racing to acquire nuclear, chemical, and biological weapons, and we must be racing together to stop them. Reducing the numbers of U.S.-Russian deployed or deployable strategic forces at some point in our still distant future is important. The Treaty of Moscow is important and should be ratified. But if we are to have a future and be secure in that future, we must first win the race against catastrophic terrorism—and we must win it on a global scale.

It may be difficult to find champions for the most urgent and pressing priority of building a global effort to prevent catastrophic terrorism. If you pursue it and succeed completely, it won't make anyone's life better, it will just keep millions of lives from becoming infinitely worse. That is not the kind of message political leaders like to highlight or voters like to hear. But, this is too serious an issue for the standard political calculus. In the end, Mr. Chairman, we all should imagine the awful aftermath of a terrorist nuclear attack on the United States and imagine, if it happened, what steps we would wish we had taken to prevent it. Then we should take those steps without delay.

It is my hope that the Treaty of Moscow will be remembered more as a hinge in the U.S.-Russian relationship; not an end point, but a turning point, leading to a transformed security relationship. If it serves this purpose and propels us on the course of action outlined above, it will truly be historic and worthy of history's praise.

Thank you.

Senator REED. Thank you very much, Mr. Curtis.
Dr. Carter.

**STATEMENT OF DR. ASHTON B. CARTER, FORD FOUNDATION
PROFESSOR OF SCIENCE AND INTERNATIONAL AFFAIRS,
JOHN F. KENNEDY SCHOOL OF GOVERNMENT, HARVARD
UNIVERSITY**

Dr. CARTER. Thank you, Senator. It is a privilege to be here and to offer you my views on the Moscow Strategic Offensive Reductions Treaty. On one hand, it is easy to do, because I, like virtually every other witness who has appeared before Senate committees deliberating this matter, support the treaty. I do so on the basis that it provides for the United States to make changes in our nuclear forces that are desirable anyway—on cost and strategic grounds—and does not require us to change our military capabilities in significant ways. The treaty, therefore, doesn't require us to make any difficult tradeoffs in our own capabilities for those required in the Russian Federation.

On the other hand, the treaty is correspondingly modest in terms of the limits it places on the Russians. Senator Nunn has pointed this out most elegantly in his recent testimony before the Foreign Relations Committee, and I think Charlie Curtis has as well in the statement he just made.

SORT addresses only a small subset of the overall Russian nuclear capability, namely strategic weapons. It is silent on the larger and more dangerous portion of the Soviet nuclear legacy: tactical

weapons, nuclear weapons, and fissile materials. As far as strategic forces are concerned, as Senator Nunn pointed out, it addresses numbers and is silent on hair-trigger operational practices. I would be pleased to answer questions about the SORT to the best of my ability, but there is another dimension of this issue that I would like to address squarely.

The SORT, while it makes a net contribution to our security, positive in sign though small of magnitude, does not point to the future or to the nuclear danger that most threatens the Nation's security. That danger is the potential acquisition by terrorists of nuclear weapons or fissile materials, either from Russia or elsewhere. It has been a full decade since the problem of loss of custody of nuclear weapons or fissile materials replaced deterrence of Moscow as the central objective of nuclear policy.

I was privileged to participate in the early deliberations that led Senators Dick Lugar and Sam Nunn to create the Nunn-Lugar CTR program—deliberations in which I remember Senator Bingaman also being centrally involved. I later led that very program at the Pentagon, and I conducted the Clinton administration's Nuclear Posture Review with my counterparts in the Joint Staff. We concluded even then, 8 years ago, that traditional arms control is no longer the central tool for dealing with the nuclear danger to the United States. The Nuclear Posture Review instead focused on stabilizing a chaotic Russia, expanding the Nunn-Lugar program, and ensuring that of all the successor states to the Soviet Union only Russia ended up with all the Soviet Union's nuclear weapons.

While traditional arms controllers criticized that at the time, events have born out that it was the correct focus. By any measure, the Nunn-Lugar program has been a tremendous success. In May, I had the privilege of accompanying Senators Lugar and Nunn together with Representatives John Spratt and Chris Shays to sites in Russia where nuclear, chemical, biological, and ballistic missile threats are being systematically safeguarded or eliminated altogether. Senator Bingaman, I would also add, accompanied the other senators and representatives in the early part of that trip. His schedule didn't permit him to travel to all of the sites.

These projects that we saw in May were just a gleam in our eyes a decade ago. Now they are mature engineering projects. At the G-8 summit, President Bush took an important step in gaining pledges of other nations, which have just as much at stake as we do in the so-called 10 plus 10 over 10 plan, and I applaud that. But in a move that defies all understanding, the Bush administration has taken a step that is bringing these projects to a screeching halt.

This administration has failed to make the certifications required by Congress, certifications that were made every year by the Bush senior and Clinton administrations. This move occurs 2 months after President Bush claimed that a new era in U.S.-Russian relations has begun and 2 months after he signed the new treaty. It occurs 11 months after al Qaeda proved that there are no limits to its destructive urges, and considers acquisition of nuclear weapons and other weapons of mass destruction, in bin Laden's words, "a religious duty." It occurs 10 months after President Bush declared that keeping the most dangerous weapons out of the hands of the

most dangerous people to be his highest priority. This certification mistake must be corrected quickly.

I understand that Senators Lugar and Levin have made some progress in finding interim solutions to this problem. As Senator Lugar has said, the engineers and program managers running these valuable programs should not be made to suffer the “perils of Pauline” every year. Russia is the largest potential source of loose nuclear weapons and fissile material for terrorists, but it is not the only one. Pakistan and India built nuclear arsenals to deter their neighbors, but Pakistan’s political future, at the very least, is as uncertain as Russia’s was when the Soviet Union was crumbling.

Less well recognized is that scores of nations—from Serbia to Ghana—have research reactors fueled by highly enriched uranium in bomb-capable quantities. Plutonium remains in North Korea, though under U.S. and international observation, and even non-nuclear allies such as Japan and Belgium have large repositories of weapons capable plutonium as a by-product of their nuclear power program. These caches of fissile material around the world pose an unacceptable long-term risk to human-kind. Each is a sleeper cell of potential mass terrorism. Once a terrorist fashions a bomb, a device like that will be extremely difficult to detect.

I noticed, by the way, on the basis of my service on the National Academies of Science panel, which recently reported its results on science and technology as they apply to terrorism, that a bomb would be very difficult to detect as it passes through international borders and shipping containers. Unlike its dangerous cousin bioterrorism, nuclear terrorism cannot be countered with vaccines or antibiotics. Once the material gets out, it is probably too late. The simple technical fact is that nuclear terrorism can only be effectively prevented at the source.

Nature, however, has not been totally unkind. Only governments have produced uranium and plutonium. All these materials are accordingly in the possession of governments, and whatever their disagreements about the arsenals in their possession, all governments should have a profound common interest in ensuring that these materials do not fall into the hands of terrorists. The Preventive Defense Project at Harvard and Stanford, which I co-chair with former Secretary of Defense William Perry, has in an impressive reprise of their invention of CTR a decade ago, promoted the concept of a global coalition against catastrophic terrorism. The coalition concept takes its cues from the coalition against al Qaeda, and involves all governments that perceive the common interests of keeping fissile material away from terrorists, especially those that have bomb-capable materials. It also calls for including Japan, China, India, Pakistan, and the many nations I mentioned earlier that host reactors using nuclear weapons capable fuel.

The coalition would seek to extend the reach of its activities wherever in the world the means of nuclear terror are harbored. The Nuclear Threat Initiative, as Charlie Curtis mentioned earlier, sponsored a conference in Moscow, on May 27, for American and Russian experts to define a specific agenda of activities. I have appended the report of that conference and a summary that I wrote

to the *Washington Post*, and I would request that both be entered into the record.

Senator REED. Without objection.

[The information referred to follows:]

Preventive Defense Project

A research collaboration of Stanford & Harvard Universities
William J. Perry & Ashton B. Carter, Co-Directors

TO: Colleagues of the Preventive Defense Project

FROM: Ash Carter

SUBJECT: Trip Report: Nunn-Lugar Sites in Russia

This May represented the tenth anniversary of a trip to the former Soviet Union led by Senators Sam Nunn and Dick Lugar, which launched the Nunn-Lugar program. I was privileged to accompany them on that first trip. Last week Nunn and Lugar led another trip and invited me to join them.

Moscow Conference Launching the Coalition Concept. The trip began in Moscow on Memorial Day with a conference sponsored by the Nuclear Threat Initiative, the non-governmental organization co-founded by Sam Nunn and Ted Turner. The purpose of the conference was to promote the concept of a Global Coalition Against Catastrophic Terrorism. As most of you know, developing the Coalition concept is one of the main thrusts of the Preventive Defense Project this year, with support from NTI, the Carnegie Corporation of New York, and the MacArthur Foundation. The conference program is attached to this memo. I gave the conference wrap-up, the gist of which is contained in the conference report, also attached to this memo. An oped by Lugar and me from the Financial Times provides a short summary.

The Congressional Delegation led by Lugar consisted of Senators Bob Graham, Pete Domenici, Barbara Mikulski, and Jeff Bingaman; and Representatives Chris Shays and John Spratt. Sam Nunn and I were guests of the CODEL. PDP team members John Shalikashvili, Liz Sherwood, John Reppert, and Gretchen Bartlett also contributed to the Moscow conference.

Blowing Up SS-18 Silos. From Moscow the CODEL, with Nunn, Laura Holgate, and myself, flew to Magnitogorsk in the Urals on a U.S. Air Force C-9. We crossed the Ural River from Europe into Asia, driving past the town's Dickensian landscape of sulfur-belching smokestacks (thanks to Stalin), and made our first stop: the Strategic Rocket Forces base at Kartaly. There, in a ceremony of the type Holgate and I first

Stanford University
Center for International
Security & Cooperation
Encina Hall
Stanford, CA 94305-6165
Telephone: (650) 723-6501
Facsimile: (650) 725-0920

Harvard University
John F. Kennedy School
of Government
Belfer Center for Science &
International Affairs
72 John F. Kennedy Street
Cambridge, MA 02138
Telephone: (617) 495-1495
Facsimile: (617) 495-9259

devised for Bill Perry, Russian Defense Minister Grachev, and Ukrainian Defense Minister Shmarov to showcase the denuclearization of Ukraine, the Members of Congress and I flipped switches on a platform mounted a distance from a hardened SS-18 silo (the SS-18 was the Soviet Union's largest ICBM and the inspiration for President Reagan's Strategic Defense Initiative). Three thousand pounds of explosives turned the silo into a deep, conical, blackened hole – thanks to the Nunn-Lugar program.

ICBM removal is complete in Ukraine, Kazakstan, and Belarus, of course. In Russia the process will continue for some years and include implementation of the arms control agreement signed by Presidents Bush and Putin in Moscow in the days before our arrival.

Destroying Chemical Weapons. After an overnight in Chelyabinsk, we traveled to Shchuch'ye (pronounced as in "Hands up or I'll...") where some 20,000 artillery shells and missile warheads filled with nerve gas are stored. After changing into gas masks and uniforms and testing the seals with CS riot gas, we walked through the sheds that house the munitions in shelves like bottles in a wine cellar. One "leaker" would kill us all if we were unprotected. One shell stolen by terrorists could kill a stadium full of people. All told, there was enough sarin, soman, and VX in those bunkers to kill the human race several times over.

The Nunn-Lugar program is building a facility to destroy the artillery shells from Shchuch'ye and another Russian storage site. For those like me who struggled for years to get this project going, it was gratifying indeed to see ground broken and construction underway.

Entombing Weapons-Grade Plutonium. This project was also a struggle to get underway, with plenty of blame to go around for the U.S. bureaucracy, U.S. Congress, and the Russians. But I am happy to report that the Mayak plutonium storage facility is a reality at long last, and an impressive one. Plutonium from dismantled Russian nuclear weapons is to be placed in cans and the cans entombed in a huge concrete "massif" covered by 16 feet of concrete and overburden. Access to the facility is strictly controlled. No terrorist group could easily storm this fortress. And that's a good thing, since the half-life of plutonium-239 is 24,400 years.

Reorienting a Bioweapons Lab. Our last stop was Novosibirsk, in Siberia north of Mongolia. There the Soviet Union built an entire city dedicated to exploring the use of viruses for biological warfare – Ebola, Marburg fever, Venezuelan Equine Encephalitis, and, of course, smallpox. We toured the VECTOR laboratory at which the world's second known smallpox culture is preserved (the other one is at the Centers for Disease Control and Prevention in Atlanta). We entered the "hot zone" of one of the labs.

Happily, VECTOR's viral stocks are now surrounded by a Berlin-wall-style security perimeter built under the Nunn-Lugar program. Just as important, its scientists are working on peaceful collaborative scientific projects with American and other

international scientific laboratories.

Summary. Thanks to the Nunn-Lugar program, projects like these dot the former Soviet Union, totaling some \$9 billion. These are large industrial projects, generally run by U.S. contractors with subcontracting to local firms for materials and services. They are beginning to make a substantial dent in the weapons of mass destruction legacy of the cold war. But they need continuing support and funding, which can be provided by members of Congress, like those on this CODEL, who take the time to visit and then bear witness to their colleagues in Washington. \$9 billion is only one fortieth of this year's defense budget!

Alas, Russia is not the only place where the stuff of mass destruction exists. Pakistan and India have it. Scores of countries have research reactors containing weapons-grade uranium fuel. Power reactors in nations from Japan to Belgium produce plutonium (you can make perfectly good bombs from reactor-grade plutonium). In North Korea, which Bill Perry and I visited in 2000, plutonium still exists at Yongbyon. The ingredients of chemical and biological weapons are even easier to find, since they are widespread in industry and science. In short, the problem is global, and – as the Global Coalition Against Catastrophic Terrorism proposes – the solution must be global.

Finally, since I was present at the birthing of Nunn-Lugar and worked to make it a reality in the Pentagon, seeing the job being accomplished is an inspiration – and we and our families all owe great gratitude to Sam Nunn and Dick Lugar.

Moscow Conference Report

Connecting the Dots on Nuclear, Biological, and Chemical Terrorism: The Clear Danger and the Imperative of a Global Coalition Response

Report on a Conference Sponsored by
The Nuclear Threat Initiative (NTI)
Moscow
May 27, 2002

Senator Richard Lugar and NTI Co-Chairman Sam Nunn

Senators Richard Lugar and Sam Nunn called for the creation of a Global Coalition Against Catastrophic Terrorism at a conference of Russian and American legislators, officials and experts on nuclear, biological, and chemical weapons of mass destruction (WMD) held in Moscow on May 27. The Coalition would extend the global effort to combat terrorism in the wake of the September 11, 2001 attacks on the World Trade Towers and Pentagon to preventing the quantum leap in destructive potential that would result if such terrorists got access to WMD. The conference, sponsored by the Nuclear Threat Initiative, took place on the tenth anniversary of the historic visit to Russia, Ukraine, and Kazakhstan that launched the Cooperative Threat Reduction program, commonly known as Nunn-Lugar. The Global Coalition Against Catastrophic Terrorism would build on the foundation of the highly successful Nunn-Lugar program in the former Soviet Union, applying its principles globally to situations that pose similar risks of WMD terrorism.

To prevent the most dangerous people from gaining possession of the most dangerous weapons, the Global Coalition Against Catastrophic Terrorism would aim to eliminate "sleepers cells" of unsafeguarded ingredients for catastrophic terrorism – nuclear, biological, or chemical. If terrorists like Osama bin Laden get their hands on WMD, there will be no shield of deterrence or negotiation as there was between Washington and Moscow during the Cold War to prevent their use; terrorists will simply use them. The result – for example, a crude nuclear device detonated in lower Manhattan or downtown Moscow, or the release of smallpox in the U.S. or Russia – would dwarf 9/11 in destructiveness and transform our societies into camps of fear.

Unfortunately, the ingredients of WMD terror are all too readily available. Only a fraction of Russia's huge store of nuclear bomb materials, enough for up to 80,000 or so devices, has yet been furnished with the latest protections under the Nunn-Lugar program. While Russia's stocks are the largest, sleeper cells of bomb-making potential exist throughout the world as a result of nuclear

weapons programs, as a byproduct of nuclear power projects, or in research reactors. Research reactors in nations from Serbia to Ghana use bomb-sized quantities of highly-enriched uranium as fuel. Pakistan and India continue to build nuclear arsenals aimed at one another but posing a wider global risk if they fall prey to seizure by extremists. The grim bottom line is that the wherewithal for nuclear terrorism exists in score of nations and in hundreds of individual buildings. Once these materials get out, they are extremely difficult to locate and retrieve. And once a terrorist fashions a bomb from them, no vaccine or antibiotic offers protection.

The ingredients of biological and chemical terrorism are also frighteningly available, since they are a widespread and necessary part of industry and scientific practice. There is no worldwide effort to safeguard them from misuse, to detect attack in time for treatments to work, or to research and deploy better protections and treatments.

In short, "sleeper cells" of the makings for catastrophic terrorism dot the globe, as do terrorists who would use them. It is time to connect the dots. The objective of the Coalition Against Catastrophic Terrorism is to extend what the U.S.-Russian Nunn-Lugar program has been doing for the past decade to the entire globe, and with global cooperation and partnership.

Conference participants called upon Presidents Bush and Putin to join in gathering international partners in a Global Coalition Against Catastrophic Terrorism.

The Coalition Against Catastrophic Terrorism would be spearheaded by the United States and the Russian Federation. President Putin was the first head of state to join the coalition against al Qaeda, in his much-publicized telephone call to President Bush on September 11 as the World Trade Towers fell. But the coalition against al Qaeda quickly gained the adherence of virtually all governments because all had a profound common interest. Members of the Coalition Against Catastrophic Terrorism would include every nation that has something to safeguard or that can make a contribution to safeguarding it -- including Europe, Japan, China, India, Pakistan, and the many nations that host research reactors that use weapons-grade fuel. All nations, whatever else might divide them, and however much they might differ over policies on the nuclear arsenals possessed by governments, can recognize a clear and profound common interest in unifying to keep WMD away from terrorists. Each member could make a contribution to the Coalition's activities commensurate with its capabilities and traditions. The Coalition would extend the reach of its activities wherever in the world the means of WMD terror seek harbor.

Nations in the Coalition would cooperate to combat WMD terrorism in all phases -- prevention, detection, protection, interdiction, and consequence

management.

In the case of nuclear terrorism, examples of Coalition activities discussed at the conference included:

- Establishing common, “world-class” standards for inventory control, safety, and security for weapons and weapons-usable materials – standards of the kind worked out between Russia and the United States in the Nunn-Lugar program.
- Establishing progressively stronger standards of transparency, to demonstrate to others that standards are being met.
- Providing assistance to those who need help meeting the Coalition’s standards.
- Cooperating to provide effective border and export controls regarding nuclear materials.
- Devising cooperative procedures to find and regain control of bombs or fissile materials if they are lost or seized by terrorists. One possibility is a Coalition version of the U.S. Department of Energy’s Nuclear Emergency Search Team (NEST) – a “global NEST.” Another possibility is to agree to facilitate deployment of national NEST teams, in the way that many nations deploy canine search teams to earthquake sites to search for survivors.
- Planning and researching cooperative responses to a nuclear or radiological explosion, such as mapping the contaminated area, addressing mass casualties, administering public health measures like iodine pills and cleaning up contaminated soil.
- Cooperating on forensic radiochemical techniques to find the source of a nuclear incident from its residue.

In the case of bioterrorism, conference participants discussed an equally rich menu of possible actions that the Coalition Against Catastrophic Terrorism could take, including:

- Establishing common, “world-class” techniques for safeguarding biological materials in preparation, handling, and scientific use.
- Developing public health surveillance methods on a global scale to detect an incident of bioterrorism in its early stages. Such methods would also provide important benefits in combating infectious disease and improving global public health.
- Shaping normative standards for the conduct of scientific practice in the area of biotechnology and microbiology, including the possibility of making it a universal crime, punishable under national laws, to make or assist the making of bioweapons.
- Cooperating in research on diagnosis, prophylaxis (e.g., vaccines against bioagents), and treatment (e.g., antibiotics and antivirals).
- Cooperating in developing protective techniques like inhalation masks and filtered ventilation systems.
- Cooperating in developing techniques for decontaminating buildings that have been attacked (as was needed in the Hart Senate Office Building after

anthrax-contaminated mail was sent there).

- Cooperating in forensic techniques for identifying the perpetrators of a bioattack (as was needed in the analysis of the anthrax mailings in the United States).

Conference participants emphasized that only by taking urgent, concrete action on a global scale could terrorism be stopped from escalating to catastrophic scale. The Coalition approach we advocate would open a new and more important front in the war on terrorism. It would also extend the principles of the successful Cooperative Threat Reduction or Nunn-Lugar program in a new way – from WMD in the former Soviet Union to WMD worldwide, from a U.S.-funded program to wider international participation, and from a focus on putting the Cold War behind us to focusing on the 21st century's most riveting security problem.

In the context of U.S.-Russian relations, uniting against catastrophic terrorism as their highest priority would reflect the expressed determination of both President Bush and President Putin to move to a qualitatively new level in their relationship and to focus on the new problems of the 21st century at the same time they continue to deal with other issues such as arms treaties and treaty compliance, NATO, the Balkans, Chechnya, Iran, Iraq, missile defense, Jackson-Vanik, and trade issues. All these issues are important, and on some of them the United States and Russia differ. But the specter of WMD terrorism is more dangerous than any of them and should remind both nations that they have a deep and overriding common interest in combating terrorism. The Coalition concept can provide a new context within which the United States and Russia can pursue U.S. concerns about Russia's bioweapons program and its nuclear technology exports. Russia's technical expertise can be turned into a considerable asset in service of the Coalition concept, as befits one of the Coalition's founding members.

Recalling the launching of the Nunn-Lugar program ten years ago, conference participants agreed to work to build international support for the concept of a Coalition Against Catastrophic Terrorism. Senator Lugar, as the senior Republican on both the Foreign Relations and Intelligence Committees of the U.S. Senate, pledged to work with colleagues in the Congress to promote the concept. Senator Nunn pledged the assistance of the non-governmental Nuclear Threat Initiative in developing and promoting the Coalition concept. We are traveling to Norway after leaving Russia to discuss the Coalition concept with European policymakers and experts.

Moscow Conference Program

Reducing the Threats from Weapons of Mass Destruction Building a Global Coalition Against Catastrophic Terrorism

Monday, May 27

Location: Marriott Aurora
Petrovksy 1 Meeting Room

8:00-9:00 AM Registration

9:00-9:15 AM Welcome by Conference Chairman
The Hon. William S. Cohen, Former Secretary of Defense

9:15-9:45 AM The Unfinished Business of Nunn-Lugar: New Threats in the New
Century—U.S. Sen. Richard G. Lugar, Senate Foreign Relations
Committee

9:45-10:15 AM Combating Terrorism and WMD: The Path Ahead
Russian Foreign Minister Igor Ivanov (Invited)

Introduction by Susan Eisenhower, President, The Eisenhower
Institute

10:15-10:30 AM Break

10:30 AM-12:00 PM The U.S.-Russian Response to the Terrorists Attacks of September
11, 2001: A Panel Discussion of Congress and Duma Members

Moderator: U.S. Senator Bob Graham, Chairman of Senate
Intelligence Committee

Panelists:

Vladimir Lukin, Deputy Chairman, Duma

U.S. Sen. Barbara Mikulski

U.S. Rep. Chris Shays

Ilya Klebanov, Minister of Industry, Science and Technology

Sergei Karaganov, Deputy Director of the Institute for Europe

- 12:00-1:00 PM Buffet Lunch
Petrovsky 2 and 3 Meeting Rooms
- 1:15-1:45 PM A New Chapter in Threat Reduction:
A Multinational Coalition Against WMD Terrorism—Senator Sam
Nunn
- Introduction by Andrei Kokoshin, Deputy of the Duma and
Russian Academy of Sciences
- Petrovsky I Meeting Room
- 1:45-3:00 PM Agenda of a Coalition to Counter Nuclear Terrorism
- Moderator: Sergei Rogov, Director of the Institute of the USA and
Canada
- Panelists:
- Alexander Rumyantsev, Minister of Atomic Energy
- U.S. Sen. Pete Domenici
- Anatoliy Zrodnikov, Institute of Physics and Power Engineering
- Amb. Linton Brooks, DOE
- Col. Gen. Igor Valynkin
- 3:00-4:15 PM Agenda of a Coalition to Counter Biological and Chemical
Terrorism
- Moderator: Amy Smithson, The Henry Stimson Center
- Panelists:
- Dr. David Franz, Southern Research Center
- Zinoviy Pak, General Director, Munitions Agency
- Prof. Lev Sandakhchiev, Director "Vector"

Vladimir Andreevich Gavrilov, Pokrov Plan of Biopreparations
Gennady Onischenko, 1st Deputy Health Minister
U.S. Sen. Jeff Bingaman, Chairman, Energy and Natural Resources
Committee

4:15-4:30 PM Break

4:30-5:45 PM Agenda for Global Coalition Against Catastrophic Terrorism.
Moderator: Rose Gottemoeller, Carnegie Endowment for
International Peace
Panelists:
Col. Gen. Yuri Baluyevsky
U.S. Rep. John Spratt
Amb. Rolf Ekeus, Chairman, Stockholm International Peace
Research Institute
Alexei Arbatov, State Duma

5:45-6:00 PM Summary and Action Plan: Ashton Carter

6:00-6:30 PM Nunn and Lugar Press Conference

6:30-10:00 PM U.S.-Russian Business Council Dinner
Hotel Metropol

Lugar-Carter OpEd on Coalition Concept

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SECTION: COMMENT & ANALYSIS; Pg. 15

HEADLINE: A new era, a new threat: The US and Russia should form a coalition to stop terrorists obtaining nuclear weapons, say Richard Lugar and Ashton Carter:

BYLINE: By ASHTON CARTER and RICHARD LUGAR

BODY:

The news that George W. Bush and Vladimir Putin plan to sign a pact to bring cold war arsenals down to post-cold-war levels should be welcomed. But that should not disguise the fact that the agreement belongs to a bygone era.

Until little more than a decade ago, the biggest single threat in the world was the power of mass destruction in the hands of governments. Washington's and Moscow's greatest fear was each other. Today, things have changed dramatically and Russia and the US face a common enemy: terrorist groups in possession of nuclear, biological or chemical weapons. Presidents Bush and Putin have worked hard to forge the beginnings of a new relationship. When they meet tomorrow in Moscow, the two leaders should use this diplomatic momentum to declare a new front in the war on terrorism, aimed at building a coalition against weapons of mass destruction (WMD) terrorism. The goal should be the formation of a coalition to safeguard nuclear, chemical, or biological weapons and their component materials and technology so that they do not fall into the wrong hands.

The heaviest concentration of such materials is in Russia, where they are being systematically safeguarded and eliminated under the so-called Nunn-Lugar Co-operative Threat Reduction programme. But the coalition against WMD terrorism should be global, like the ongoing war against al-Qaeda.

Weapons-grade uranium exists in research reactors in scores of nations around the world. Allies such as Belgium and Japan, which possess no nuclear arsenals, maintain large stocks of plutonium that, if stolen by terrorists, could produce many bombs. The nuclear programmes and arsenals of Pakistan and India constitute a growing and obvious risk of leakage that must be dealt with. Although China is not a party to traditional arms control regimes, exploratory overtures should be launched to determine its willingness to join a co-operative effort aimed at "loose nukes".

The coalition members would be asked to agree on standards for safeguarding weapons-grade materials. If any party needed help in meeting those standards, it could receive assistance from the others through a global, Nunn-Lugar-like coalition threat reduction programme. This could be financed via a fund made up of contributions from the US, Europe, Russia, Japan and others. Such a fund could be used for key coalition acquisitions in the area of materiel and weapons site enhancements.

The coalition members would work together on measures to retrieve dangerous materials or bombs in the event of theft or loss. They could even agree to aid any victim of nuclear terrorism, helping to define the area contaminated and to undertake the process of cleaning up radioactive areas and making them habitable.

One vital aspect of the coalition's duties would be to combat bio-terrorism. It would recommend standards for handling pathogens and for conducting peaceful and defensive scientific work in this field. Its members could share research results on diagnosis, prevention and treatment of likely bio-terror agents, on air filtration and other methods to stop their spread and on ways to decontaminate buildings exposed to bio-attack.

Russia has leading experts on biological warfare. Mr. Putin could use the establishment of such a coalition to open up Russia's bio-weapons laboratories and, working co-operatively with the US, put such scientific expertise to work for the broader cause of global public health. A gesture along these lines would increase exponentially the opportunities for enhanced co-operation with the US and other coalition partners.

By proposing that the next phase of the war on terrorism focus on weapons of mass destruction, and by forming a coalition including Russia to combat it, Mr. Bush would be tackling arguably the most important problem in international security today. By asking Russia to join as a founding member in the coalition against WMD terrorism, he would be seeking to draw Russia into a new - and vastly more influential - international role. Indeed, such a coalition could provide both leaders with a focus for the new post-cold-war relationship they have propounded but have yet to give real content. It would be a fitting replacement for the old-style bi-lateral arms control regimes whose era is drawing to a close.

Pursued creatively, the concept of a coalition could serve as a model for a new type of arms regulation for the 21st century. September 11 signalled the need. This week's summit in Moscow provides the opportunity.

Senator Lugar is a senior member on the Senate foreign relations and intelligence committees. Ashton Carter is a professor at Harvard's Kennedy School of Government and former assistant secretary of defence during the Clinton administration

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page A31

Throw the Net Worldwide

By Ashton B. Carter

There's been much talk in the past few weeks about failures to connect the dots to find a pattern that might have alerted us to the terrorist plot of Sept. 11. Recently I visited a dot in a more fearsome pattern configuring the virtual certainty of mass terror involving nuclear, chemical or biological weapons if the international coalition does not extend its efforts from hunting al Qaeda-like cells to locking up the ingredients of mass destruction.

The dot I visited was at Mayak, east of the Ural Mountains in Asian Russia. There, a huge concrete sarcophagus rises from the landscape. Its purpose is to entomb some 20,000 nuclear bombs' worth of plutonium and highly enriched uranium. Russia is dismantling the Soviet Union's Cold War surplus warheads. The fissile metal chunks taken out of the bombs will be placed in stainless steel cans and the cans embedded in a concrete "massif," itself enclosed within 16-foot thick walls. Access to and from this fortress will be highly restricted and monitored with the latest in radiation and other sensors.

Fortunately, when the sarcophagus is completed, it will be nearly impossible for a terrorist raid, or even a military assault, to breach Mayak's security. This fortress is being built with U.S. Department of Defense funds, through the foresight of former senator Sam Nunn and Sen. Dick Lugar, who led last week's trip to Mayak. The Defense program, universally known as Nunn-Lugar, is probably the wisest investment in security, dollar for dollar, of any piece of the defense budget.

Unfortunately the cans of fissile material have not yet been lowered into the massif at Mayak, nor will they be for several more years. Only a fraction of Russia's huge store of fissile materials, enough for a staggering 80,000 bombs, has yet been furnished with the latest protections. And if terrorists such as al Qaeda get such materials, there will be no shield of deterrence or negotiation as there was between Washington and Moscow; terrorists will simply use them.

Worse news, and far less well known, is that caches of bomb-making potential literally dot the globe. Research reactors in nations from Serbia to Ghana use bomb-sized quantities of highly enriched uranium as fuel. Pakistan and India brandish nuclear arsenals. Pakistan's political future is at least as shaky as Russia's was in 1992, when the Nunn-Lugar program began. Plutonium remains in North Korea, though under U.S. and international observation. Even non-nuclear allies such as Japan and Belgium have repositories of weapons-capable plutonium as a byproduct of their nuclear power programs.

Nowhere is this material protected to anything like Mayak's standards, and in many cases

there are not even armed guards at the repositories. The grim bottom line is that the wherewithal for nuclear terrorism exists in scores of nations and in hundreds of individual buildings. Once these materials get out, they are extremely difficult to locate and retrieve. And once a terrorist fashions a bomb from them, no vaccine or antibiotic offers protection.

After leaving Mayak, I traveled with Nunn and Lugar to the "hot zone" of a once-secret city in Siberia that houses the only known smallpox culture outside the Centers for Disease Control and Prevention in Atlanta. Another dot. The ingredients of biological and chemical terrorism are even more widely available than fissile material, since many are widespread and necessary parts of industry and scientific practice.

In short, sleeper cells of the makings for catastrophic terrorism dot the globe. If a bomb goes off in New York, Moscow or Berlin, won't it be clear in hindsight that we should have connected these dots?

What is needed, as Nunn and Lugar have pointed out, is a global coalition against catastrophic terrorism, patterned on the coalition formed after 9/11. It should be spearheaded by the United States and the Russian Federation, a forward-looking move for Bush and Putin, and a refreshing change from once again declaring an end to the Cold War.

Members of the coalition against catastrophic terrorism would include every nation that has something to safeguard or that can make a contribution to safeguarding it, including Europe, Japan, China, India, Pakistan and the many nations that host research reactors using weapons-grade fuel. All nations, however much they might differ over policies on the nuclear arsenals possessed by governments, can recognize a clear shared interest in unifying to keep weapons of mass destruction away from terrorists.

Each member could make a contribution to the coalition's activities commensurate with its capabilities and traditions. As with the coalition against al Qaeda, this one would extend its reach to wherever in the world the means for terrorism using weapons of mass destruction can be found. Nations in the coalition would cooperate to combat such terrorism in all phases -- prevention, detection, protection, interdiction and cleanup. For nuclear weapons, the coalition would agree to world-class standards for protecting all fissile material everywhere as though it were a bomb. Assistance could be offered to those who need help meeting the standards. Coalition members could also agree to come to one another's aid to find materials lost or seized.

For bioterrorism, the coalition would develop world-class standards for safeguarding such pathogens as the Siberian smallpox cache, develop public health surveillance methods to detect bioterrorism in its early stages and perform cooperative research in vaccines, treatments, forensics and decontamination.

The coalition approach would open a new and more important front in the war on

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terrorism. It would also extend the principles of the successful Nunn-Lugar program in a new way -- from dots in Russia to dots worldwide, from a Pentagon-funded program to wider international participation, and from a focus on putting the Cold War behind us to focusing on the 21st century's most riveting security problem.

The writer is a professor at Harvard's Kennedy School of Government and was assistant secretary of defense in the Clinton administration, where he ran the Nunn-Lugar program.

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Dr. CARTER. The agenda called for action in prevention, detection, protection, interdiction, and cleanup. For nuclear terrorism, it

focused on the following actions: first, establishing common world class standards for inventory control, safety, and security for weapons and weapons usable materials, standards of the kind worked out between Russia and the United States in the Nunn-Lugar program; second, establishing progressively stronger measures of transparency to demonstrate to others that the standards are being met; third, providing assistance to those who need help in meeting the coalition standards, the Nunn-Lugar program; fourth, cooperating to provide effective border and export controls regarding nuclear materials; and fifth, devising cooperative procedures to define and regain control of bombs or fissile materials if they are lost or seized by terrorists. One possibility is a coalition version of the U.S. Department of Energy's Nuclear Emergency Search Team (NEST); sixth, planning and researching cooperative responses to a nuclear or radiological explosion if, God forbid, one occurs, such as mapping the contaminated area, addressing mass casualties, administering public health measures or iodine pills, and cleaning up contaminated soil; and seventh, cooperating on forensic radio-chemical techniques to find the source of a nuclear incident from its residue.

Mr. Chairman, members of the committee, it is clear to most of us that the SORT agreement upon which you are deliberating is probably the last of its kind. Its only parties are Moscow and Washington. It covers only deployed strategic forces, which were of paramount importance during the Cold War, but are but a tip of the nuclear iceberg, and I would suggest that the concept of a Global Coalition Against Catastrophic Terrorism as I have described, and Charlie Curtis described as well, is the seed of the arms control of the 21st century.

The coalition concept addresses the single most urgent problem of international security. It just might provide a big tent for governments that have not participated in much arms control of the 20th century style—China, India, and Pakistan—since it is grounded in a deep and obvious common interest. The United States and Russia should join and spearhead the coalition. Moreover, doing so would be a fitting next step after the SORT; and unlike the SORT, the new coalition concept would provide Presidents Bush and Putin with an opportunity to give substance to their oft-spoken desire to move to a qualitatively new phase in relations.

The coalition approach would open up a new and vitally important front on the war on terrorism. It would extend the principles of the successful Nunn-Lugar program in a new way from nuclear materials in Russia to nuclear materials worldwide, from a U.S. funded program to wider international participation, and from a focus on putting the Cold War behind us to focusing on the 21st century's most riveting security problem. Thank you.

[The prepared statement of Dr. Carter follows:]

PREPARED STATEMENT BY DR. ASHTON B. CARTER

Mr. Chairman and members of the committee, it is a privilege to appear before you to offer my views on the Moscow Treaty on Strategic Offensive Reductions Treaty (SORT).

On the one hand, it is easy to do so: I, like virtually every other witness that has appeared before Senate committees deliberating on the treaty, support it. I do so on the basis that the treaty provides for us to make changes in our nuclear forces that are desirable anyway on cost and strategic grounds, and it does not constrain our capabilities in militarily significant ways. The treaty therefore does not require

us to make any difficult tradeoffs of our own capabilities for those required of the Russian Federation. In terms of the limits it places on the Russian arsenal, the treaty is correspondingly modest. Former Senator Sam Nunn has pointed this out most elegantly in his recent testimony before the Foreign Relations Committee. SORT addresses only a small subset of the overall Russian nuclear capability—deployed strategic weapons. It is silent on the larger and more dangerous portion of the Soviet nuclear legacy—tactical nuclear weapons, reserve weapons, and fissile materials. As far as the strategic forces are concerned, Senator Nunn also pointed out that SORT addresses only numbers and is silent on “hair-trigger” operational practices.

I would be pleased to answer questions about the SORT to the best of my ability. But there is another dimension to this issue that I would like to address squarely. The SORT, while it makes a net contribution to our security—positive in sign if small in magnitude—does not point to the future or to the nuclear danger that most threatens the Nation’s security. That danger is the potential acquisition by terrorists of nuclear weapons or fissile materials, either from Russia or elsewhere.

It has been a full decade since loss of custody of nuclear weapons or fissile materials replaced deterrence of Moscow as the central objective of U.S. nuclear policy. I was privileged to participate in the early deliberations that led Senators Dick Lugar and Sam Nunn to create the Nunn-Lugar CTR program. I later led that very program in the Pentagon. I conducted the Clinton administration’s Nuclear Posture Review with my counterparts in the Joint Staff. We concluded even then, 8 years ago, that traditional arms control was no longer the central tool for dealing with nuclear danger to the United States. The Nuclear Posture Review instead focused on stabilizing a chaotic Russia, expanding the Nunn-Lugar program, and on ensuring that only Russia ended up with all the Soviet Union’s nuclear weapons. While traditional arms controllers criticized that focus at the time, events have borne out that it was the correct focus.

By any measure, the Nunn-Lugar program has been a tremendous success. In May I had the privilege of accompanying Senators Lugar and Nunn, together with Representatives John Spratt and Chris Shays, to sites in Russia where nuclear, chemical, biological, and ballistic missile threats are being systematically safeguarded, or eliminated altogether. These projects were just a gleam in our eyes a decade ago, and now they are mature engineering projects. At the G-8 summit, President Bush took an important step in gaining the pledges of other nations who have just as much at stake as we do to contribute to the Nunn-Lugar program, in the so-called “10 plus 10 over 10” plan.

In a move that defies all understanding, however, the Bush administration has taken a step that is bringing these projects to a screeching halt. This administration has failed to make the certifications required by Congress, certifications that were made every year by the Bush Sr. and Clinton administrations. This situation occurs 2 months after President Bush proclaimed a “new era” in U.S.-Russian relations and 2 months after he signed the new SORT arms control treaty whose implementation would be accelerated by Nunn-Lugar; it occurs 11 months after al Qaeda showed there are no limits to its destructive urges and considers acquisition of nuclear weapons “a religious duty;” it occurs 10 months after President Bush declared that keeping the most dangerous weapons out of the hands of the most dangerous people to be his highest priority. The certification mistake must be corrected, and quickly. I understand that Senators Lugar and Levin have made some progress in arranging an interim solution to this problem, and I hope Congress and the administration can find a more lasting solution. As Senator Lugar has said, the engineers and program managers running these valuable programs should not be made to suffer the “perils of Pauline” every year.

Russia is the largest potential source of “loose” nuclear weapons and fissile materials for terrorists, but it is not the only one. Pakistan and India have built nuclear arsenals to deter their neighbors, but Pakistan’s political future, at the very least, is as uncertain as was Russia’s when the Soviet Union was crumbling and the Nunn-Lugar program was begun. Less well recognized is that scores of nations from Serbia to Ghana have research reactors fueled by highly enriched uranium. Plutonium remains in North Korea, though under U.S. and international observation. Even non-nuclear allies such as Japan and Belgium have repositories of weapons-capable plutonium as a byproduct of their nuclear power programs.

These caches of fissile materials around the world, we now must realize, pose an unacceptable long-term risk to humankind. Each is a “sleeper cell” of potential mass terrorism. Once a terrorist fashions a bomb, a device will be extremely difficult to detect as it passes through international borders in, say, shipping containers. Unlike its dangerous cousin bioterrorism, nuclear terrorism cannot be countered with vaccines or antibiotics. Once the material gets out, it is probably too late.

The simple technical fact is that nuclear terrorism can only be effectively prevented at the source. But here Nature has been kind. Highly enriched uranium and plutonium are difficult and conspicuous to produce. Only governments have done so to date, and all these materials are accordingly in the possession of governments. Whatever their disagreements about the arsenals in their possession, all governments should have a profound common interest in ensuring that these materials do not fall into the hands of terrorists.

The Preventive Defense Project at Harvard and Stanford has therefore worked to elaborate a concept put forward by Sam Nunn and Dick Lugar, in an impressive reprise of their invention of CTR a decade ago—the concept of a Global Coalition Against Catastrophic Terrorism.

The coalition concept takes its cues from the coalition against al Qaeda. The coalition would contain all governments that perceive the profound common interest of keeping fissile materials away from terrorists, especially those that have bomb-capable materials to protect or that can make a contribution to safeguarding it, including Europe, Japan, China, India, Pakistan, and the many nations that host research reactors using weapons-capable fuel. Each member could make contributions to the coalition's activities commensurate with its capabilities and traditions. The coalition would extend the reach of its activities wherever in the world the means of nuclear terror seek harbor.

The Nuclear Threat Initiative sponsored a conference in Moscow on May 27, 2002, where American and Russian experts defined a specific agenda of activities for the coalition. I have appended the report of that conference and a summary of the concept I wrote for *The Washington Post* to this statement, and I would request that both be entered into the record with my statement. The agenda called for a global coalition to combat terrorism in all phases—prevention, detection, protection, interdiction, and cleanup—focused on the following actions:

- Establishing common, “world-class” standards for inventory control, safety, and security for weapons and weapons-usable materials—standards of the kind worked out between Russia and the United States in the Nunn-Lugar program.
- Establishing progressively stronger standards of transparency, to demonstrate to others that standards are being met.
- Providing assistance to those who need help meeting the coalition's standards.
- Cooperating to provide effective border and export controls regarding nuclear materials.
- Devising cooperative procedures to find and regain control of bombs or fissile materials if they are lost or seized by terrorists. One possibility is a coalition version of the U.S. Department of Energy's Nuclear Emergency Search Team (NEST)—a “global NEST.” Another possibility is to agree to facilitate deployment of national NEST teams, in the way that many nations deploy canine search teams to earthquake sites to search for survivors.
- Planning and researching cooperative responses to a nuclear or radiological explosion, such as mapping the contaminated area, addressing mass casualties, administering public health measures like iodine pills, and cleaning up contaminated soil.
- Cooperating on forensic radio-chemical techniques to find the source of a nuclear incident from its residue.

Mr. Chairman and members of the committee, it is clear to most of us that the SORT agreement upon which you are deliberating is probably the last of its kind. Its only parties are Moscow and Washington. It covers only deployed strategic forces, which were of paramount importance during the Cold War but are but a tip of the nuclear terrorism iceberg. I would suggest that the concept of a Global Coalition Against Catastrophic Terrorism is the seed of the arms control of 21st century.

The coalition concept addresses the single most urgent problem of U.S. national security and international security. It just might provide a “big tent” for governments that have not participated much in “arms control” of the 20th century style—especially China, India, and Pakistan—since it is grounded in a deep and obvious common interest. If the United States and Russia jointly spearhead the coalition, it would be a fitting next step after the SORT and would provide Presidents Bush and Putin with an opportunity to give substance to their oft-spoken desire to move to a “qualitatively new” phase in relations.

The coalition approach would open up a new and vitally important front in the war on terrorism. It would extend the principles of the successful Nunn-Lugar program in a new way—from nuclear materials in Russia to nuclear materials world-

wide, from a U.S.-funded program to wider international participation, and from a focus on putting the Cold War behind us to focusing on the 21st century's most riveting security problem.

Thank you.

Senator REED. Thank you very much, Mr. Curtis and Dr. Carter, for your excellent testimony. Let me ask a few questions and turn to my colleagues. First, with regard to the SORT, you both realize that in its deliberations the Senate can include conditions and understandings in the resolution of ratification. I wonder if there is anything that you would suggest either at this moment or if you need some time in writing that might be properly included as a condition or reservation or statement with respect to the SORT. Mr. Curtis?

Mr. CURTIS. Mr. Chairman, I think I will take that opportunity to submit it to the record.

[The information referred to follows:]

Witness declined to respond in writing to the committee.

Senator REED. Dr. Carter.

Dr. CARTER. Mr. Chairman, I may give that some additional thought, but one thing that comes to mind immediately that I mentioned in my statement is that implementing this treaty on the Russian side will be facilitated and accelerated by the Nunn-Lugar program. It does seem to me that solving this problem with certifications, which has so unfortunately held things up this year and giving some permanent disposition to that matter, ought to be part of the deliberation surrounding this treaty.

Senator REED. Following up on that, Dr. Carter, with respect to the failure to certify, can you illuminate from your own perspective what is going on?

Dr. CARTER. I have the following impression, which is from the outside looking in, and that is that the senior leadership of the administration was in fact surprised to find that this move had been taken. It arose at lower levels, and left them in a situation where big projects that are under way, buildings being built, sites being cleared, arsenals being prepared to enter into the facilities where the weapons will be destroyed, all this was coming to a halt because somebody did not feel a certification that had been made for 10 consecutive previous years could be made this year. It is also my understanding that the senior leadership is trying to get on top of it, but that is a view from the outside looking in.

Senator REED. Thank you, Dr. Carter. One of the aspects of the SORT of concern, and again I think it is quite clear that it will be virtually unanimously adopted, is the presence of reversibility. It is so easy to do nothing for any number of years and simply let the treaty lapse. Any thoughts about things that might be done to make these reductions in warheads difficult to reverse? Mr. Curtis.

Mr. CURTIS. Senators, in my formal testimony I suggested that we should identify the forces that we intend to schedule for meeting the reductions in the treaty, and that should be a transparent document and planned for and monitored through the transparency mechanisms that are yet to be developed under the Bilateral Implementation Commission. I think that the Senate could expect to see that schedule laid out and transparency mechanisms put in place.

I would hope that the Senate would avail itself of the understandings authority in its treaty ratification responsibility, rather than making more formal reservations to the treaty. I also think, as I called for in other testimony, that we could lay out specific warheads and an explicit schedule for this matter. If that were laid out, I think it would help to build confidence in the relationship between the two nations, and in the larger sense, give the world community some assurance that both sides are actually reducing their strategic forces. The vocabulary in this treaty is, of course, curious, because it talks about reductions of arms, but the substance of the treaty does not require that. It only addresses operationally deployed weapons. There are two ways of getting real meaning to reductions of arms. One of those is to get about the dismantling process, and the other is to lay out the schedule of how you are going to meet this treaty in a transparent way. This is necessary so that the treaty is not a single point in time some 12 years distant, but a treaty that ushers in a plan that will build down these forces in the interim between now and 2012.

I think that would help both sides trust that we are actually serious about the intentions stated in this treaty, which are very elegantly stated in what I call the vision statement that is the joint statement of the two presidents that will come between the treaty.

Senator REED. Dr. Carter.

Dr. CARTER. Two thoughts very briefly; first is that Mr. Curtis suggested, and I wholeheartedly concur, that it will be valuable for both sides to do what we arranged in the START I context in the early 1990s, something called early deactivation, whereby one undertakes to take off alert immediately weapons slated for elimination under the treaty.

In our system, and, we learned, in the Ukrainian and Kazakhstani systems through the Nunn-Lugar program, once you deactivate, you stop maintenance and life extension programs and you put yourself on a glide slope where it becomes more and more difficult to have the weapon's life preserved.

The second thing, of course, is that if we continue the Nunn-Lugar program, and continue to eliminate strategic launchers the way we have done in Russia, that is a pretty dramatic demonstration of irreversibility. I was in Kartaly, Russia in May, and as I mentioned earlier we used 3,000 pounds of explosives under the Nunn-Lugar program to blow up an SS-18 silo, and I will tell you it looks pretty irreversible even from half a mile away on a viewing stand. You get that because you have an understanding with the Russians and an agreement which provides for it. You get it because you have some rules in START for what destruction means. Above all, you get it because you are in a cooperative mode under the Nunn-Lugar program and you get to do it with your own hands and watch it with your own eyes.

Senator REED. Thank you very much.

Senator Bingaman.

Senator BINGAMAN. Thank you very much. Let me summarize what I have gleaned in terms of concrete steps that we, our administration, and our government could be taking right now to actually follow through in dealing with some of these difficult problems. One is the certification that is required under Nunn-Lugar. That

could be fixed today if the will were there in the White House to fix it.

Second, is the publishing of the schedule of how we are going to go ahead and comply with SORT. That is something that we should be doing unilaterally, urging the Russians to do the same thing unilaterally, but there is no requirement as I understand it under SORT for some kind of mutual negotiation before that occurs. Am I right about that?

Mr. CURTIS. That is my understanding, Senator.

Senator BINGAMAN. So we could be publishing a schedule about how we are going to go forth complying with SORT. A third item that both of you mentioned is that President Bush could do what his father did and order the immediate stand down of forces that have been identified for reduction as soon as we make that schedule or publish that schedule of reduction, which I think would be a very positive step. Mr. Curtis, you referred to the possibility of us moving ahead with dismantlement of excess weapons, and you indicated the Department of Energy probably could set out an explicit schedule for beginning the dismantlement of some excess weapons. Could you elaborate on the extent of the excess weapons you believe might be promptly considered for dismantlement, both on our side and on the Russian side, and any obstacles to getting this done if the will were there to do it?

Mr. CURTIS. Senator, I think that with the next panel you will discover that there is probably already in the planning process a schedule for weapons elimination, and they would be the better witnesses. Some weapon types, the B-53 for example, have been taken out of the stockpile. That is a 10 megaton weapon that certainly can be scheduled for elimination, and it would have important symbolic value. I believe the W-62 has now been released as well. That can be scheduled for elimination.

What I have tried to say is that we should start to get about this process and lay out an explicit schedule. It is going to take a long time. Campaigns to eliminate warheads take considerable planning time. Quite obviously, it has to be done safely and carefully, and it also competes for occupying the lines with the life extension program and refurbishment of weapons. That is an ongoing part of the Stockpile Stewardship Program, so I want to emphasize it is a complicated piece of business, but it certainly is capable of being planned for and laid out in considerable detail in an advanced schedule that can give this committee and others confidence it will get the job done.

Senator BINGAMAN. Dr. Carter, do you have any comment on that?

Dr. CARTER. I think your list is comprehensive and right on. If I could add one item to it, Senator, I would like to request that the administration show us a road map or begin the process of discussion about what the next step is after this treaty. As I indicated, and I think just about everybody that I talked to agrees with me, this is the end of the road for the Washington-Moscow style of arms control. One cannot conceive of another treaty because one doesn't conceive of Washington and Moscow together being the core of the nuclear problem going forward.

As I said, even if we are just talking about Washington and Moscow, we are working in a tiny corner of the arsenals, deployed strategic weapons, and we have not addressed all the rest. The big problem in the future is less nuclear weapons in the possession of governments than nuclear weapons in the possession of nongovernments. These are big things to think about. To me, I am uncomfortable with the idea of marching through the 21st century with just this treaty, which is so clearly the end of the road.

Senator BINGAMAN. Let me ask each of you if you have any additional thoughts as to how we move ahead with this problem of getting an inventory of tactical nuclear weapons in Russia. Is this something that we just continue to request the Russians do, or are there things, concrete actions that we can take that will facilitate or incentivize this and bring this about one way or another? It seems to me ever since I have been hearing about this set of issues and working with others here to deal with it, the problem of not knowing the extent of the tactical nuclear weapons arsenal in Russia has been one of the central concerns. I do not see them as making progress in resolving it. Do you have a plan on how we can get it resolved?

Dr. CARTER. I do not know if “plan” is the right word—perhaps concept. In 1994, when the Russian defense minister came here and met with President Clinton in the Roosevelt Room, we were pressing him on this very matter of a confidential exchange of stockpile information, and the point he made then, which I think essentially continues to animate the Russian military, is that in this period of conventional weakness they rely more on tactical nuclear weapons. They do not want to see tactical nuclear weapons, therefore, swept up in the maw of arms control and limited in this way. That is at least one important reason why they are reluctant to do this.

I think that President Putin might be induced to engage in some transparency regarding tactical nuclear weapons if one changed the stage from U.S.-Russia arms control. Let us initially talk about our tactical nuclear weapons not with some idea of mutual reduction in mind, but instead in the context of this coalition against catastrophic terrorism that I referred to earlier. We might say to Putin, “look, we, the United States and you, have an important interest in getting everybody else to explain what they have and protect what they have.”

We do not think the Indians and Pakistanis ought to have nuclear weapons, but let us set that aside and say, “if you have it, protect it,” and we will ask for transparency around the world. In that context, Russia is really getting something for divulging information about its own arsenal. It doesn’t need us to divulge what we have, and therefore it has no incentive for data exchange in this bilateral context. It gets back to my previous point about enlarging the scene here. We are not going to get anything done in the axis between Washington and Moscow anymore. The world’s affairs do not run in that axis anymore. They used to, and they do not now.

Mr. CURTIS. If I could just add briefly, I am not sure I share Dr. Carter’s judgment that this is the end of the U.S.-Russian negotiated agreement regime. The tactical weapons certainly could be the subject of a bilateral agreement between the two. Secretary

Powell very clearly laid out before the Senate Foreign Relations Committee that there may be agreements that would substitute for the Treaty of Moscow earlier than its end point of 2012, or extensions thereafter. So there is certainly within the contemplation of this agreement between the two sides, the suggestion that there may be further refinement of the U.S. security—Russian security relationship through treaty means.

Second, as to your question on tactical nuclear weapons, I think the process of establishing this consultative group for strategic security, which involves the defense ministers of both countries in periodic meeting, is an important procedural mechanism for getting at this issue. Secretary Rumsfeld has said that tactical nuclear weapons are going to be foremost on that agenda.

I think Congress should not reinforce in any formal way with this treaty a new U.S.-Russian security relationship, but certainly reinforce that as a priority and a test, as I said in my earlier remarks. If it lives up to its promise in the joint statement, then the U.S. and Russia ought to be able to provide for an accountability of tactical weapons as it has escaped them in the past, so this will be an important test of that relationship.

Obviously, there are things that might be engaged in this that would involve a broader security relationship, but I don't think it would be particularly useful to Secretary Powell and Secretary Rumsfeld for me to suggest exactly how they should do it.

Senator BINGAMAN. Thank you both very much.

Senator REED. Senator Lieberman.

Senator LIEBERMAN. Thank you. Dr. Carter and Mr. Curtis, it is great to see you both. The questions that I came with this morning run along the same lines as my colleagues. So maybe I will begin by recounting a conversation I had with somebody here recently on the Hill and get your reaction to it in broad terms. This person said to me that the more he learned about SORT, the more it seemed to him like an empty vessel. I think that this feeling has grown here, although everybody believes the treaty will be ratified overwhelmingly, if not unanimously. Perhaps it has been implicit in the questions that have been asked in your statements, but is this an empty vessel?

Mr. CURTIS. I think it is a step, but this step alone would not provide meaningfully for our security. This step must be followed by other steps, which I have tried to lay out in my testimony. I think, at least in Secretary Powell's testimony, there is the suggestion that it is very much on his agenda that there will be follow-on steps to this treaty. I think it is an important step. It has symbolic value at the very least, which in the world of U.S.-Russian relationships has always been, and is maybe now, especially important. This treaty is clearly important on the Russian side, and is important for us if it propels us to redefine our relationship with Russia, so that it becomes a genuine partnership. It is not yet a partnership, but it must become a genuine partnership to address these security concerns that are concerns of both nations and are indeed concerns for global security. If that happens, then this treaty will have a real historical value because of what it was a catalyst to do.

Senator LIEBERMAN. Dr. Carter.

Dr. CARTER. I would agree with that. It is not an empty vessel. I think it is an important step, and we all need to be thinking and helping the administration figure out what the next step is and where that next step might go. I also agree with Mr. Curtis' comments about the symbolic value in Russia and the meaningful partnership. I believe that in this context the kind of coalition concept that I have been talking about in regards to a U.S.-Russian partnership can become real.

We have talked a lot about partnership in the last decade. I had a million meetings and attended summits and so forth in which partnership was declared again and again. The question is are we really partners, besides dismantling the Cold War, which is an important task. This is a step in that direction.

Where else can we be partners with Russia? I think we can also be partners in facing this problem of nuclear weapons that are not ours or theirs, but somebody else's, because we share a common interest in doing so. We have wrestled with these problems of nuclear dangers for decades and have some thoughts that others might be induced to share because we have the technical knowledge about how to safeguard and destroy them. So here's a topic where the United States and Russia might actually have a substantive partnership and we might actually benefit from working with Russia. If we could turn our arms control dialogue with Russia from one about each other to one about everybody, that opens up a whole new front of constructive activity that would give real substance to partnership.

Senator LIEBERMAN. We still have to deal with one another, and there is an oddity to that. It seems unconnected to the present and the future, which is to say that the dominant relationship in the world is no longer the Soviet- or Russian-American relationship. The greatest security fears going forward are more global than bilateral, and yet the fact is that as a carryover from the Cold War, both Russia and the United States still possess a disproportionate, overwhelming percentage of strategic nuclear weapons.

So this is a holdover from the last century. You have to deal with that, as well as reaching forward. In saying this was the last treaty, I am sure you are not denying that reality.

Dr. CARTER. No. I want to make clear that it is not my wish that it be the last. It is my prediction, as I look out and see how people stack up the priorities. I don't think having another U.S.-Russian arms control agreement focused on just us is going to make the cut. I would be happy to support such an agreement if it could be negotiated. You are absolutely right.

As we march forward and deal with the problems of the 21st century, we are not going to be able to do that successfully unless we contend with this huge overhang. It involves nuclear, chemical, biological, and ballistic missiles. There is a big effort there, and that is what the Nunn-Lugar program is about.

Senator LIEBERMAN. One of the several very hopeful articles in the treaty, and one that is interesting to me, is article 3. Article 3 states that for purposes of implementing this treaty, the parties shall hold meetings of a Bilateral Implementation Commission at least twice a year. Do you have any thoughts about how the Senate might play an active role in giving some substance and authority

to that commission, perhaps as a bilateral jump-off point to the global security concerns that you have both been talking about, or attempting to focus on the next phase of Russian-American nuclear threat reduction?

Mr. CURTIS. Senator, there are two devices under the treaty. One is the Bilateral Implementation Commission, and the other is the consultative group for strategic security, which I mentioned, that is composed of four minister level officials.

Obviously, the consultative group has the rank for policy. I think the administration needs to address this, but I took the bilateral commission to be more of a working group or technical body.

Senator LIEBERMAN. At a lower level?

Mr. CURTIS. Yes, at a lower level. If the Senate wishes to address the U.S.-Russian relationship, that should be charged with the consultative group for strategic security.

Dr. CARTER. I would agree with that. I would hope that the Senate would so charge the consultative group. This is too important a topic to drop, and the implementation of the details of this agreement, while important, is not the whole story.

Mr. CURTIS. If I might add one thing, I think it is very regrettable that the press and the political world have not well noted what was accomplished in the G-8. The commitment to unified action by the G-8, where Russia in the document is identified as a full partner with the acknowledgment of the work that is beginning in Russia on a six-point program, is a very significant joining of interests of the G-8 members. The recognition that that must be extended to the global community, and of gaining that pledge of the \$10 billion match of U.S. funds to serve that partnership, is also a significant accomplishment of this administration and should be well credited. What we need to do is to build on that successful effort, and encourage U.S.-Russian participation in that context to expand it to the full dimension of a global coalition of the kind that Senators Nunn and Lugar and Dr. Carter have been discussing.

Senator LIEBERMAN. I agree. Perhaps in the Senate's consideration of SORT we can give more visibility and encouragement to what came out of the G-8. Thank you very much to both of you. Mr. Chairman.

Senator REED. Thank you very much for your excellent testimony, Mr. Curtis and Dr. Carter. We will carefully consider what you said and make some improvements in the situation. Let me thank you both and release you, and ask if the second panel could now come forward. [Pause.]

Let me now welcome the second panel, which consists of Admiral Ellis, the Commander in Chief of United States Strategic Command, and Dr. Everet Beckner, the Deputy Administrator for Defense Programs NNSA. I expect nothing less than insightful testimony today. Let me at this time turn to Senator Warner for any opening comments.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you. I wish to welcome our witnesses. I know them both, and I have known Admiral Ellis for many years. I have vivid memories of times we shared together during some pretty stressful chapters of the Balkan conflict when he served as

our NATO Commander, South with great distinction in a great period of American history. I welcome you this morning and once again thank you for your continued service in uniform to our nation.

The hearing our committee held last week with Secretary Rumsfeld and Chairman Myers confirmed my belief, and I think all these reasonable perspectives, that this is an excellent treaty. The Moscow Treaty represents a significant step forward for the security of the world.

It is a very simple, straightforward treaty. I have had some moderate experience in this area. I will state for the record that I was with President Nixon in 1972 when we went to Moscow to execute the Anti-Ballistic Missile (ABM) Treaty and other arms control agreements. That is a long time ago. I witnessed through these many years that I have been privileged to serve in the Senate and prior thereto in the Department of Defense in arduous negotiations that had to be undertaken with the Soviet Union, subsequently Russia. But this time, two heads in government got together and bridged old differences and achieved this treaty, and I commend both our President and President Putin.

In essence, this treaty reduces U.S. and Russian strategic arsenals by two-thirds over the next decade. There are no complicated accounting rules or detailed verification regimes. The treaty recognizes the new relationship between the United States and Russia, and allows both parties the flexibility to decide how and when the required reductions are to be made. Could the treaty have dealt with other issues? Of course. But they had a mission and they kept their eye on that goal.

The Moscow Treaty establishes a firm foundation for our future relations with Russia, a foundation that we will build in years ahead. I still find implicit in this treaty the famous Ronald Reagan doctrine, "trust but verify." In my judgment, there are sufficient verification procedures to protect both parties to the treaty. I note that all who participated in our committee's hearing last Thursday, Senators and witnesses alike, acknowledged that the United States must continue its efforts.

The Moscow Treaty is a strategic nuclear arms treaty, and no one can reasonably expect diplomatic achievement to address all these difficult issues. This treaty is one step in the process of improving our security and relationships with Russia. This treaty is not only built on a new relationship with Russia, but it reinforces that relationship and provides a sound basis on which to perceive further steps. We are here today to explore and work out the detail and the merits of the Moscow Treaty.

Our witnesses are uniquely qualified to comment on the military implications of the treaty and the military requirements that drove the treaty's structure and the reasons for the flexibility provided in the terms of the treaty. Thank you.

Senator REED. Admiral Ellis.

**STATEMENT OF ADM. JAMES O. ELLIS, JR., USN, COMMANDER
IN CHIEF, UNITED STATES STRATEGIC COMMAND**

Admiral ELLIS. Thank you, Mr. Chairman. It is an honor to be back with you, Senator Warner, and other distinguished members

of the committee. As the Senator so generously noted, this is my third appearance before you on issues related to national strategic nuclear issues in the last 8 months. It is a pleasure to be back before you today to offer my views on the Strategic Offensive Reductions Treaty.

As we all recall, on May 24, President Bush declared on reaching this agreement that it was a historic and hopeful day for Russia, America, and the world. I certainly share the President's optimism and his hopes for the future. I certainly support fully the President's goal of drawing down our operationally deployed strategic nuclear warheads to the lowest level consistent with national security needs.

In a real sense, this is a unique treaty, but it is the right treaty at the right time. It codifies, as we all understand, results of a process begun over a year ago in the form of the Nuclear Posture Review, a process in which United States Strategic Command was fully involved and whose inputs were fully considered. As we all recall, the Nuclear Posture Review proposed a dramatic two-thirds reduction in the levels of operationally deployed strategic nuclear warheads, and also, I think, more effectively addressed the broader issue of deterrent requirements in the new construct in the new international security environment and the challenges that our Nation faces.

This treaty allows me, as the commander of the Nation's strategic forces, the latitude to structure our strategic forces to better support the national security pillars of assuring our allies, dissuading those who might wish us ill, deterring potential adversaries, and, if necessary, defending the Nation. I am here to convey to you that in my judgment this treaty provides me the ability to prudently meet those national security needs and provide a range of deterrent options to the Secretary and President for their consideration, should the need arise.

Most importantly, it gives me the flexibility to deal with the uncertainty that is an inherent part or consideration as we look to the future. It gives me flexibility with regard to the specific details of that drawdown, the composition of our Nation's nuclear stockpile as we drawdown in size, the ability to hedge against the possibility of technological surprise as our stockpile ages in the future, the ability to deal with the potential for a changing international security environment, should it arise, and it also allows me the flexibility to take the dual-use platforms, these strategic platforms that have such important tactical applications, and transform them in support of the Nation's security needs in a broader way. That includes the conversion of SSBNs to SSGNs.

It includes the retaining of a bomber force that also provides a very capable conventional capability that is so much a part of our ongoing efforts in the global war on terrorism, and will likely be a part of any future security challenges that the Nation faces. Finally, it allows me to take missiles and convert those to space launch applications should the need arise.

I wish to thank the committee for the opportunity to appear side-by-side with Dr. Beckner. As he notes in his statement, and I in mine, our organizations are partners in the challenging and prom-

ising journey ahead, and the NNSA and its success is the key to our own success from a deterrent perspective.

I express my continuing appreciation for the support this committee has provided to the men and women of the United States Strategic Command and its antecedent organizations who have provided stewardship over the Nation's nuclear capabilities.

I understand there is only one military commander who directly oversees our Nation's strategic forces. I am humbled that the task has been assigned to me, and I am honored to be able to convey to you today my full support for the Moscow Treaty and recommend its ratification as proposed. I thank you for your consideration and look forward to your questions.

[The prepared statement of Admiral Ellis follows:]

PREPARED STATEMENT BY ADM. JAMES O. ELLIS, USN

Mr. Chairman, Senator Warner, and distinguished members of the committee:

It is an honor to appear before you once again representing the outstanding men and women of United States Strategic Command and our Nation's strategic forces. You have asked me to share with you my professional military assessment of the Strategic Offensive Reductions Treaty, also known as the Moscow Treaty. Earlier in the year, I appeared before this committee to discuss the Nuclear Posture Review, and I now welcome the opportunity to address this treaty which codifies the President's decision to significantly reduce operationally deployed strategic nuclear warheads. This historic treaty represents the most recent milestone in a journey toward a new and more positive relationship with Russia within a dramatically changed strategic environment.

I am pleased to convey to you today my strong support for the Moscow Treaty. The global security environment has evolved in new and unexpected ways over the last 10 years. I believe that properly shaping the strategic environment as we draw down our deployed stockpile over the next ten years, and beyond, will require both constructive engagement and increased adaptive flexibility in appropriately structuring our strategic forces. This treaty is a step towards meeting those national security needs. While recent events have highlighted new dangers, on the positive side of the ledger our historical Cold War enemy, the Soviet Union, has disappeared. Its place has been taken by a renewed Russia, with the stated goal of transforming into a peaceful, democratic, free-market nation. Today, as a Nation, we have more in common with Russia than we have lingering differences, and for the first time in my lifetime we face similar shared global challenges and not each other. The Moscow Treaty acknowledges this new relationship and the increasing trust and flexibility each nation seeks as we address the changing security requirements of the 21st century.

MILITARY SUFFICIENCY

The Moscow Treaty will allow the United States to sustain a credible deterrent with the lowest possible level of operationally deployed strategic nuclear warheads consistent with our national security requirements and obligations to our allies. This lower level, 1,700–2,200 operationally deployed strategic nuclear warheads, is roughly one-third the level specified in the START Treaty. Our country faces an array of security challenges that differ dramatically from our Cold War past. The Moscow Treaty will permit me, as the commander of our strategic forces, to prudently plan and anticipate a broad range of possible scenarios. As we look to the future, our planning necessarily includes adaptively positioning and posturing our strategic forces to meet the unique deterrent and security challenges posed by rogue states, non-state actors, and unknown adversaries yet to come. The Nuclear Posture Review and the Moscow Treaty allow warhead reductions reflective of our emerging relationship with Russia while enabling the Department of Defense to plan and prepare for a broader range of strategic options to present to the Secretary of Defense and the President.

If unforeseen circumstances arise, either through a decline in the safety and reliability of our aging stockpile or the emergence of unexpected new threats, this treaty allows the United States to react appropriately in response to our changing security needs. In short, under the Moscow Treaty we can militarily meet our deterrence needs, be prepared for a range of technological or security uncertainties, while con-

tinuing to encourage a relationship of trust, cooperation, and friendship with Russia that can lead to ever larger diplomatic, economic, and security benefits for us all.

FLEXIBILITY

From a military perspective, a primary benefit of this innovative arms control agreement is its flexibility, which is achieved in several new ways. The Moscow Treaty allows each side to determine an appropriate pace for reducing operationally deployed strategic nuclear warheads enroute to significantly lower codified levels. As we implement the Nuclear Posture Review (NPR) and develop a broader range of advanced conventional forces, new defenses, and renewed infrastructure, we must be able to carefully draw down the right number and mix of operationally deployed strategic nuclear warheads based on actual and anticipated need. This approach acknowledges the uncertainties associated with sustaining an aging stockpile, and permits the best sequencing of life extension and dismantlement programs according to military necessity and the capabilities of the supporting Department of Energy infrastructure.

Under the Moscow Treaty the United States has the option of storing those warheads not operationally deployed. As a result of decisions made over a decade ago, the United States is the only nuclear power in the world today that does not possess a nuclear warhead production capability. From a military perspective, it is essential that we retain the capability to respond to emerging threats or weapon safety and reliability issues. Under these circumstances, the storing of an appropriate number of non-deployed nuclear warheads provides an important weapon reliability and contingency response capability that will allow us to meet national security needs over the life of the treaty.

While we will continue to follow START I counting rules, one important aspect of this treaty is that the actual deployed warheads are counted rather than assigning notional numbers to each potential delivery platform. This construct allows the United States to retain, reduce, or restructure critical dual-use weapons delivery platforms—those that also can employ conventional weapons—so as to meet a broader range of military requirements. Specifically, the provisions of the Moscow Treaty will enable the United States to pursue transformational concepts such as modifying Trident submarines for conventional missions. The agreement will also permit us to properly size and configure the bomber force, which continues to prove its value in the skies over Afghanistan.

VERIFICATION

A dramatic reflection of the emerging strategic relationship with Russia is the absence of unique verification provisions in the Moscow Treaty. The comprehensive verification regime of the START Treaty will remain in force until at least December 2009, providing a solid foundation for continued confidence-building and improved transparency. But, in a real sense, the Moscow Treaty formalizes a weapon drawdown that reflects the declared interest and intent of both parties.

Rather than unnecessarily focus on inspection and compliance, we have an opportunity to forge a relationship, which may encourage even further cooperation, transparency, and trust. At United States Strategic Command, we are beginning important steps toward this goal in order to complement the efforts of the Consultative Group for Strategic Security created under the Joint Declaration on May 24, and the Moscow Treaty's Bilateral Implementation Commission. As a new initiative, I have recently added a senior State Department political advisor to my staff, who will bring valuable experience and expertise to the Command as we continue to work with our Russian counterparts. As part of the Defense Department's engagement program, we have also reinvigorated the Command's military-to-military security cooperation program and submitted detailed 1, 5, and 10-year goals to incrementally broaden the exchange of information, develop new relationships, and help preserve strategic stability. When the United States Strategic Command and the United States Space Command unite on October 1, 2002, the new unified command will have the opportunity to expand this program to even wider participation across the spectrum of global military missions.

This emerging and positive relationship will also permit the United States and Russia to address issues and challenges that are important, but appropriately not addressed in this treaty. Tactical nuclear weapons remain a concern and will be addressed in future consultations and engagements. The Secretary of State and Secretary of Defense have each indicated to the Senate they intend to use the upcoming discussions with their counterparts to continue the dialogue on this issue. In regards to the dismantlement of unneeded warheads, the different approaches taken by both parties in pursuit of this shared goal are appropriately reflective of their

individual circumstances and capabilities. Having chosen a decade ago to forego weapon production, the United States' dismantlement effort is paced by long term stockpile reliability and potential national security needs. Russia simultaneously sustains an active production and disassembly capability and has a broader range of weapon and nuclear material security concerns. The continued support provided by the Nunn-Lugar CTR program, as part of a larger international effort, remains essential to the success of improved Russian counter-proliferation efforts.

CONCLUSION

The Moscow Treaty is a positive milestone early in our strategic journey toward a new partnership with Russia, and formalized the decisions made by the nation's civilian leadership. As the Secretary of Defense highlighted recently before the Senate Foreign Relations Committee, this treaty provides all of the benefits attributed to arms control agreements—dialogue, consultations, lower force levels, predictability, stability, and transparency—without the need for extensive and adversarial negotiations and debates over compliance and enforcement issues. Under the Moscow Treaty, our nation can accomplish its essential military force re-structuring, meet its anticipated critical national security needs, and retain the ability to react to the inevitable unexpected challenges yet to come. I fully support this treaty.

As always, I must also express my appreciation for your continued support of the men and women of United States Strategic Command and the unique and essential contributions they continue to make to our Nation's security.

Thank you, and I welcome your questions.

Senator REED. Thank you, Admiral Ellis.
Dr. Beckner.

STATEMENT OF DR. EVERET H. BECKNER, DEPUTY ADMINISTRATOR FOR DEFENSE PROGRAMS, NATIONAL NUCLEAR SECURITY ADMINISTRATION

Dr. BECKNER. Senator Reed and members of the committee, it is a pleasure to be here this morning to review the Moscow Treaty and its implication for the National Nuclear Security Administration (NNSA) and its vital work to support a safe, secure, and reliable nuclear weapons stockpile.

Before proceeding, I ask that my entire written statement be included in the hearing record.

Senator REED. Without objection.

Dr. BECKNER. I'd also like to take this opportunity to thank the committee and the Senate for its strong support for the President's 2003 request. The Senate bill will allow NNSA to pursue its important national security mission in non-proliferation, stockpile stewardship, and naval reactors.

The NNSA fully supports the terms of the proposed Moscow Strategic Offensive Reductions Treaty. It enhances national security and international stability by making dramatic reductions in the number of deployed nuclear warheads.

The treaty requires that both the U.S. and the Russian Federation reduce strategic nuclear warheads to the level between 1,700 and 2,000 warheads each by 2012. This is nearly a two-thirds cut in the deployed U.S. strategic arsenal. This reduction is consistent with conclusions reached by the administration in the recent Nuclear Posture Review. The treaty also provides the United States with the flexibility to maintain a "responsive force" for use as a hedge against unexpected changes to the international security environment or technical issues arising in the smaller, deployed nuclear weapons stockpile.

Key to ensuring the long-term safety, security, and reliability of the nuclear weapons stockpile is NNSA's Stockpile Stewardship

Program and more specifically for purposes of this hearing, its life extension work on various weapons including at this time the W-87, the W-76, the W-80, and the B-61. Life extension activities on the W-87 involve structural upgrades. Work on the W-76 involves a comprehensive overhaul of the warhead. We will also be re-qualifying the weapon primary. For the W-80, we will be replacing the trajectory sensing signal and neutron generators. For the B-61, we will be refurbishing it. These developments were revalidated by the Nuclear Posture Review.

While the total number of warheads to be refurbished in the future stockpile may be less than currently planned, maintaining the life extension schedule is vital to fulfilling NNSA commitments to the Department of Defense, restoring lost production capabilities, and recruiting and retaining technical expertise needed for the long-term.

Once completed, it will ensure that these weapons will remain safe, secure, and reliable in the U.S. nuclear deterrent for an additional 30 years.

It is not unreasonable to think that as both countries progress to lower numbers of operationally deployed strategic warheads, the President may opt to retire and subsequently dismantle warheads. Once that decision is made, the NNSA will begin the detailed planning process needed to ensure that Pantex and the Y-12 plants in particular can safely and securely dismantle weapons. Planning for a dismantlement campaign typically takes several years since we must safely and securely handle the thousands of parts that will be generated by the process. The industrial process at the plants have to be defined, the hazards analyzed, and NNSA safety authorization basis must be approved. Transportation, storage, and disposition must be arranged, both for the weapons prior to dismantlement, and for the waste streams resulting from the dismantled activities.

The dismantlement begins with the arrival of the weapons at the Pantex plant. Upon arrival, the weapon undergoes receipt inspection. The dismantlement is complete when the weapon primary High Explosive (HE) is separated from the special nuclear material. The HE is disposed of at the Pantex plant by burning consistent with environmental regulations.

The special nuclear material is handled through the Material Disposition Program. Some special nuclear material components may be retained for possible reuse in the future, and subassemblies containing highly enriched uranium are returned to the Y-12 plant. The pace of this disassembly work at Pantex is slow because we have completed dismantlement of the majority of the retired warheads. Ongoing dismantlement work includes the W-79 and Army artillery shell that has been under dismantlement for several years. In addition, the W-56 disassembly is under way and will continue through fiscal year 2005. The disassembly of the B-53 and some excess B-61 nonstrategic bombs will begin soon. The NPR reaffirmed that the W-62 will be retired by 2009.

In conclusion, NNSA recommends that the Senate exercise its advice and consent and ratify the proposed treaty on strategic offensive reductions. The Moscow Treaty stands as an example of the emerging relationship between the United States and the Russian

Federation, a relationship based on trust and cooperation, rather than Cold War confrontation.

I will be happy to answer your questions.

[The prepared statement of Dr. Beckner follows:]

PREPARED STATEMENT BY DR. EVERET H. BECKNER

Mr. Chairman and members of the committee, it is a pleasure to be here this morning to review the Moscow Treaty on Strategic Offensive Reductions and its implications for the National Nuclear Security Administration (NNSA) and its vital work to support a safe, secure, and reliable nuclear weapons stockpile. The NNSA fully supports the terms of the Moscow Treaty because it enhances the U.S. national security and international stability by making dramatic reductions in the number of deployed strategic nuclear warheads. The treaty requires both the U.S. and the Russian Federation to reduce their strategic nuclear warheads to a level between 1,700 and 2,200 by December 31, 2012. This represents nearly a two-thirds cut in the deployed U.S. strategic arsenal. This reduction is consistent with the conclusions reached by the administration in the recent Nuclear Posture Review (NPR). The treaty provides the United States with the flexibility to maintain an important hedge against unforeseen changes in the international environment or technical issues in the smaller, enduring nuclear weapon stockpile. The NNSA strongly endorses Senate advice and consent to ratification of the treaty as submitted.

POLICY OVERVIEW

NNSA's Stockpile Stewardship Program is working today to ensure that the Nation's nuclear deterrent is safe, secure, and reliable. NNSA was an active participant in the Department of Defense's Nuclear Posture Review. Several conclusions of the NPR are of particular relevance to the NNSA.

First, nuclear weapons, for the foreseeable future, remain a key element of U.S. national security strategy. The NPR reaffirms that NNSA's science-based Stockpile Stewardship Program is necessary to ensure the safety and reliability of the smaller, less diverse nuclear stockpile in the absence of nuclear testing. This includes surveillance of our aging weapons, weapons refurbishment, chemistry and metallurgy of materials aging, detailed understanding of weapons physics, and development of additional diagnostic, and predictive tools for long-term stewardship. It also includes refurbishments and Life Extension Programs for the current stockpile, as required and coordinated with the DOD. Several NNSA initiatives endorsed by the NPR include enhanced test readiness and revitalization of advanced concepts work.

Second, more than any previous review, the NPR's concept of a New Triad emphasizes the importance of a robust, responsive research and development and industrial base. This calls for a modern nuclear weapons complex, including planning for a Modern Pit Facility, and new tritium production to provide the Nation with the means to respond to new, unexpected, or emerging threats to U.S. national security in a timely manner.

NNSA sees this as recognition of the importance of its mission, facilities, and personnel. It is an enormous responsibility to maintain the enduring stockpile and to dismantle warheads determined to be excess to national security requirements. The NNSA and the DOD have developed a credible, realistic plan to meet the President's direction for a safe, secure, and reliable stockpile, all while reducing the numbers of strategic warheads consistent with the NPR and the Moscow Treaty.

LIFE EXTENSION PROGRAMS (LEP)

A key element of ensuring a safe and reliable stockpile for the next 30 years is the Life Extension Program for selected elements of the nuclear stockpile. The NNSA has validated requirements from the President through the joint NNSA/DOD Nuclear Weapons Council to extend the service life of the W-87, W-76, and W-80 warheads and the B-61 strategic bomb. These requirements were revalidated by the Nuclear Posture Review. The life extension work will involve the entire weapons complex. The Kansas City Plant will manufacture the non-nuclear components; Y-12 National Security Complex will refurbish the secondaries; Savannah River Tritium Facility will supply the gas transfer systems; Sandia National Laboratory will produce the neutron generators and certify all non nuclear components; Pantex Plant will serve as the central point for all assembly and disassembly operations in support of the refurbishment work; and Los Alamos and Lawrence Livermore will continue to certify nuclear warhead design performance.

The W-87 refurbishment is well underway, with over 60 percent of the planned quantity complete and delivered to the Air Force. The program achieved First Production Unit (FPU) in the second quarter of fiscal year 1999. The ongoing work at Pantex enhances the structural rigidity of the warhead. The warhead will be mated to the Minuteman III missile following deactivation of the Peacekeeper missile. Life Extension for the W-76 involves a comprehensive overhaul of the warhead, including replacement of the arming, firing, and fuzing set. We will also be requalifying the weapon primary. For the W-80, we will be replacing the trajectory sensing signal and neutron generators, the tritium bottles, and incorporating surety upgrades. For the B-61, we will be refurbishing the secondary.

The Moscow Treaty does not alter our schedule to begin key LEPs later this decade, although it will likely affect the total number of warheads to be refurbished. Indeed, maintaining the First Production Unit schedule is vital to fulfill NNSA commitments to the Department of Defense, to fix known areas of concern; to drive the nuclear weapons complex to restore lost manufacturing capabilities, and recruit and retain technical expertise needed for the long term.

PANTEX PLANT OVERVIEW

Located in the Texas panhandle, NNSA's Pantex Plant is the Nation's only facility for the assembly and disassembly of nuclear weapons. Over the years Pantex has disassembled over 50,000 warheads in a safe, secure, efficient, and environmentally sound manner. The plant covers some 16,000 acres and employs some 3,000 people. For fiscal year 2003, the administration has requested a total of \$367 million for stockpile stewardship related activities at the facility. Having a dedicated facility like Pantex allows us to meet our responsibilities to maintain the enduring nuclear weapons stockpile and dismantle excess nuclear warheads while concentrating our efforts in areas such as nuclear explosive safety and assembly/disassembly operations, but it does present us with some capacity and infrastructure issues which we are aggressively working to resolve.

The current approved work plan of Life Extensions, surveillance, and dismantlements at Pantex, requires facility upgrades. Seventeen bays where weapons with Insensitive High Explosives are worked on and five cells where weapons with the more sensitive Conventional High Explosives are worked on, will be refurbished in the next decade. Bays differ from cells in that bays are designed to vent an explosion to the atmosphere while protecting adjacent facilities from the blast, while cells are designed to filter the explosion products through a collapsing gravel bed, while also protecting the adjacent facilities from the blast. To accomplish the workload, the plant will go to a two shift operation, a third shift is impractical for most operations due to the need for facility maintenance.

In addition to the facilities upgrades, over 100 new Production Technicians, the people who do hands-on weapons work, will augment the current force in the next decade. Employee training is an integral part of operations at Pantex. Each technician must receive over 1,000 hours of training in nuclear explosives safety and emergency procedures, weapons certification, and radiation safety before being certified to work on nuclear explosives.

Pantex does not have any excess storage capacity now or in the foreseeable future, and has no plans to store any warheads on a long-term basis for the Department of Defense. Of the 60 storage magazines at Pantex, 36 are filled with plutonium pits. Most of these pits are excess to national security needs and await further disposition. The remaining magazines are mostly filled with warheads in the process of evaluation, refurbishment, repair, or dismantlement. The DOD has determined that it can accommodate storage for the warheads no longer deployed, and does not need to rely on NNSA for long-term warhead storage.

RETIREMENT/DISMANTLEMENT PROCESS

Weapon retirements are directed in the annual Nuclear Weapons Stockpile Memorandum (NWSM), which is approved by the President on the recommendations of the Secretaries of Defense and Energy. The NWSM is prepared by the Nuclear Weapons Council, through which the Navy and Air Force express their nuclear stockpile needs and the DOE/NNSA and the Department of Defense reach agreement on the nuclear stockpile to recommend to the President. When a weapon system is retired it is removed from the stockpile. The decision to retire is separate from a decision to dismantle—retired weapons can be held indefinitely should that be consistent with national priorities. The normal practice, however, has been for the NWSM to authorize dismantlement after a weapon is retired.

Planning for a dismantlement campaign typically takes several years. The industrial processes at the Pantex and Y-12 plants need to be defined, their hazards ana-

lyzed, and an NNSA-approved safety authorization basis must be prepared. Transportation, storage, and disposition must be arranged, both for the weapons prior to dismantlement and for the waste streams resulting from dismantlement activities.

The dismantlement process begins with the arrival of the weapon at the Pantex Plant. Due to the limited storage space at the Pantex Plant weapons normally remain at a DOD facility in the custody of the Navy or Air Force until just before they are to be dismantled. Upon arrival at the Pantex Plant the weapon undergoes a receipt inspection and is placed into interim storage. Just prior to dismantlement it is verified to be in a safe configuration through radiography of its critical safety components. If the weapon has Insensitive High Explosive (IHE) the entire dismantlement will take place in the bay. If the weapon has Conventional High Explosive (CHE) the bay process will disassemble the weapon to a point defined by safety considerations, and then the partial assembly will be taken to a cell. Whether in a bay or cell, the dismantlement is complete when the weapons primary high explosive is separated from the Special Nuclear Material (SNM). The High Explosive is disposed of at the Pantex Plant by burning, and the SNM is disposed of through the Materials Disposition Program. Some SNM components may be retained for possible reuse in future warheads and some subassemblies containing Highly Enriched Uranium are returned to the Y-12 plant for further disassembly.

NNSA has been working with Department of Defense to develop plans for the size and composition of the future nuclear weapons stockpile. The Moscow Treaty does not limit the size of the stockpile. Moreover, within the overall warhead limits imposed by the Moscow Treaty, both the U.S and Russia can determine for themselves the composition and structure of their respective strategic forces.

Any plan to increase dismantlements prior to at least fiscal year 2014 would compete for resources with critical refurbishment or evaluation work. Since reductions to the 1,700-2,200 level are up to each country under the Moscow Treaty, so long as these levels are achieved by December 31, 2012, NNSA prefers to retain flexibility in setting any resulting disassembly schedules so as not to interfere with ongoing refurbishments and surveillance activities.

Previous arms control treaties have not included a requirement to specifically dismantle warheads, nor does the Moscow Treaty. Disassembly of warheads is something the U.S. has always done on its own terms, based on national security requirements and as resources permit. While the pace of disassemblies at Pantex has slowed because we have completed dismantlement of the majority of retired warheads, we still have a busy dismantlement program. The W-79 (Artillery-Fired Atomic Projectile) disassembly will be complete next year. The W-56 (Minuteman II) disassembly is underway and will continue at least through fiscal year 2005. Disassembly of the B-53 (strategic bomb) and some excess B-61 non-strategic bombs will begin soon. The NPR reaffirmed that the W62 (Minuteman III) will be retired by fiscal year 2009.

As we deploy fewer strategic nuclear warheads, some may be deemed excess to national security needs. It would then be NNSA's responsibility to disassemble the excess warheads as resources and workload priorities permit. Any decision to retire and dismantle warheads would be made by the President, in the context of an NNSA nuclear weapons complex that is fully engaged with warhead refurbishments and that cannot make new warheads if needed until at least the end of this decade.

NUCLEAR WEAPON TRANSPORTATION

NNSA is also responsible for the transportation of nuclear weapons and weapons-grade nuclear material within the U.S. Our transportation system of SafeGuards Transporters, manned by Federal agents who also guard the cargo, is fully engaged for the next decade. We are trying to minimize the impact to the weapons program, but with limited assets, and extensive agent training requirements, and plans by DOE's Office of Environmental Management to consolidate nuclear material from Rocky Flats, Hanford, and Idaho Falls, any additional moves will cause a disruption in existing transportation plans.

DEVICE ASSEMBLY FACILITY

The Device Assembly Facility (DAF) is an NNSA facility at the Nevada Test Site, which was originally envisioned for underground nuclear test support, and for potential receipt and processing of damaged nuclear weapons or improvised nuclear devices. With the halt of underground nuclear testing in 1992, the primary mission for the Device Assembly Facility is subcritical experiment support. NNSA, in the coming weeks will issue a final Environmental Impact Statement relating to a proposal to relocate the TA-18 criticality experiment activity from the Los Alamos National Laboratory to the Device Assembly Facility. This capability must be located

in a relatively remote and highly secure area. While warhead dismantlement at the Device Assembly Facility is a possibility, the time and cost of starting up nuclear explosive operations at what is essentially a new facility are not easily predicted and would be substantial.

TRITIUM SUPPLY

While the NPR will result in a smaller active stockpile of both operationally deployed and augmentation forces, the future U.S. nuclear stockpile—by warhead type, year, and readiness state—has not yet been determined. This will be done in detail as part of the Nuclear Weapons Council process and will enable NNSA to plan for the delivery of sufficient tritium to meet all military requirements. Because stockpile reductions will not be accomplished for several years, we do know that there will be no near-term reduction in the immediate demand for tritium. Thus, NNSA is continuing with its plan to begin tritium production in commercial reactors in Fall 2003, and to complete construction and begin operations of a new Tritium Extraction Facility (TEF) at the Savannah River Site so that tritium can be delivered to the stockpile in advance of need.

CONCLUSION

In conclusion, NNSA recommends Senate advice and consent to ratification of the proposed Treaty on Strategic Offensive Reductions. The Moscow Treaty stands as an example of the emerging relationship between the United States and the Russian Federation—a relationship based on trust and cooperation rather than Cold War competition.

With Congress' continued strong support for the NNSA Stockpile Stewardship Program we expect to be able to provide the Nation with a safe, secure, and reliable nuclear weapons stockpile

Senator REED. Thank you very much, Dr. Beckner. Thank you both. Admiral Ellis, throughout the treaty, the key phrase “operationally deployed” seems to be the most significant one. Could you explain what you think operationally deployed means with respect to the classical weapons, Intercontinental Ballistic Missiles (ICBMs), and submarine operated bombs?

Admiral ELLIS. Operationally deployed strategic nuclear warheads in the context of treaty are those warheads actually mounted on ICBMs located in their silos that are also mounted on the submarine launch ballistic missiles in the tubes on those platforms. In terms of bombers, are those weapons that are actually loaded on bombers or located in the weapons storage areas at bomber bases. It specifically does not include a set of spares that may be located in the bomber WSAs. That is the construct under which operationally deployed is defined.

Senator REED. Would it include warheads on submarine launch ballistic missiles not on submarines?

Admiral ELLIS. No, sir. In fact, that is one of the flexible elements of the treaty that includes those weapons that are mounted on missiles and missiles that are in submarines. As you are well aware, in overhead periods those missiles are removed from submarines, and the warheads themselves are demated.

Senator REED. Given that definition for operationally deployed, do you have any indication at this point when we will reach the threshold of 1,700 or the limit of 2,200 missiles or warheads.

Admiral ELLIS. Certainly, the provisions of the treaty are clear in that regard and the end state is well-defined. We will certainly meet that goal for the treaty. Specific timelines and drawdown, as I mentioned earlier, are an inherent part of the flexibility. We have the option, as do the Russians, to adjust that as our needs indicate. Clearly, we will be on a slope that is appropriately matched to Dr.

Beckner's capacity and to our own strategic force planning over the 10-year period as we drawdown to meet that objective.

Senator REED. In regards to the Russians, what is their equivalent of operationally deployed? Is that a mutual term, which applies to both sides? Is there any equivalence?

Admiral ELLIS. The approach that the Russians take to the treaty, as you are aware, dictates that each nation is allowed to approach this in a legitimate way to meet their own national security needs. There was no definition other than that which I have just given to you of operationally deployed in the Russian context. But they are certainly free to follow the approach that we are taking—as long as we consistently match the warhead levels that have been defined in the treaty at the end state.

Senator REED. Dr. Beckner, your role is critical in terms of scheduling the reduction of these warheads over the next 12 years or so. Are you participating in the development of the schedule? You have indicated in your testimony that the organizational decisions are issued by the President, but at NNSA are you actively participating, based upon logistics as much as policy, in what the schedule is?

Dr. BECKNER. We certainly are actively engaged through several mechanisms between the NNSA and the Department of Defense, particularly through the Nuclear Weapons Council, where we jointly obtain instructions as to the actions that we should take. We have been involved in looking at the various scenarios and at assessing our capabilities to work off the warheads as they are released by the DOD. We have a fairly aggressive plan in our 5-year planning documents that we have submitted to Congress previously, as to the need and our intent to enlarge the capacity, particularly at the Pantex Plant, to accommodate dismantlement, as well as to conduct the life extension programs, which are ongoing over this same period of time.

Quite honestly, that has the potential for requiring a lot of management attention to maximize the capability of the plants over the next 10 years, because we do have a very aggressive program to do life extension work on several of those warheads. But to answer your question, yes indeed, we have been involved.

Senator REED. It seems to me, given the scope of what you have described, that this presents budgetary challenges as well as technical challenges as you go forward to accommodate the treaty. Did your budget submissions support that?

Dr. BECKNER. Our budget submissions were based upon first, the life extension programs, to be certain that we have those planned carefully over the 5-year period that we have submitted, and second, to analyze on that basis the amount of additional capacity we have for dismantlement so we know what we can handle without difficulty.

If the instructions are developed later to pursue a more aggressive dismantlement program, we have thought through how we would do that. It would require some additional workforce, particularly at Pantex and some additional expansion of bays and cells, which is in the 2003 request. But we believe that unless the workload was for some reason pushed to a very high number during the middle part of this decade, we believe we can handle it in fairly

smooth fashion. It would require a little bit of expansion. If people want a larger number of weapons worked off earlier in time than we are presently requiring, we would have some issues. We have some room now, between now and about 2005, but from 2005 to 2012 or so we have a large workload in the life extension program, so we will have to work that out.

Senator REED. Thank you, Dr. Beckner.

Senator Warner.

Senator WARNER. Senator Reed, one of my colleagues has a scheduling conflict. I am going to remain throughout the hearing, so I now defer to the Senator from Alabama.

Senator SESSIONS. Thank you, Senator Reed. Dr. Beckner, I am not sure we have appreciated the historic nature of this new treaty compared to the ABM Treaty. We had a number of people that expressed opposition to moving from the ABM Treaty to a new relationship. They felt that the ABM Treaty represented some sort of cornerstone of our relationship with Russia. I thought that was not true at the time, and spoke against that concept. Just looking at these treaties it is just so stunning, the difference in the nature of them.

The ABM Treaty, first of all, was between the United States and the Union of Soviet Socialist Republics, and this one is with the Russian Federation. There is a whole world of difference. There it is dealing with the current, existing entity, not a dead Soviet totalitarian empire. I think it is important that any relationship we have with the people of Russia need to be based on who these people are today, not the way they were before. They have rejected the Soviet system, and wish to move forward to a new and brighter day. I think that is important for us to build this kind of relationship.

I noticed the language is significant. It says in the new treaty, "embarking on the path of new relations for a new century and committed to the goal of strengthening their relationships through cooperation and friendship, believing that new global challenges and threats require the building of a new foundation of strategic relations between the parties desiring to establish a genuine partnership based on principles of mutual security, cooperation, trust, openness, and predictability." Compare this to the preamble of the ABM Treaty that says in the first paragraph, which is proceeding from the premise that nuclear war would have devastating consequences for all mankind "considering that effective measures to limit antiballistic missile systems would be a substantial factor in curbing the race in strategic arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons."

I would just ask you to comment. Doesn't this reflect a tremendous change in the way we are seeing our relationship with Russia?

Dr. BECKNER. It would certainly seem so to me. I do not see how you can draw any other conclusion.

Senator SESSIONS. I just think you are moving in the right direction. This is a bold effort by the President that is establishing a new relationship with a people and a nation that we ought to be friends with, as opposed to the past when we were facing a totalitarian regime that oppressed its people and sought to oppress the entire world.

Something that troubles me is the question of dismantling the weapons rather than destroying weapons. I am not troubled with that concept. I think it is correct, because of this fact, and let me ask you if I am correct. Is it true that the United States does not have production capability for nuclear weapon? That is, we do not have a production facility so if we needed more in the future, we do not have the capability of producing it?

Dr. BECKNER. I think you need to look at that question in detail because the only capability we do not have today for specific components is the plutonium component, generally referred to as the pit. That capacity was shut down at Rocky Flats, just outside Denver, more than 10 years ago. We are in the process of developing the capability to make a limited number of pits at Los Alamos for a specific weapon program. Beyond that, we have begun the process to contemplate and send forward to Congress for approval at a future date the construction and operation of the new pit manufacturing facility. But that is easily 10 years in the future. Today, we do not have a capability to make pits for new weapons if they were required.

Senator SESSIONS. That is an essential component of it?

Dr. BECKNER. Absolutely.

Senator SESSIONS. So for a decade or so we have a window where it is problematic?

Dr. BECKNER. That is correct. The only alternative you have at this time, and for a number of years in the future, is to find a way to reuse an existing pit or other full sections of weapons or stay with what you have.

Senator SESSIONS. Isn't it true that most nations that have nuclear capabilities to date have a nuclear production capability?

Dr. BECKNER. I think that is true. We probably do not know everything about everything that is going on out there, but certainly for the more prominent members that is true.

Senator SESSIONS. We are proceeding on the assumption that we will dismantle rather than destroy the weapons. Is that a decision that will be left within the discretion of the President, or is it controlled by the treaty?

Dr. BECKNER. It's my understanding that it would be at the discretion of the President. The treaty does not specify what we have to do with the parts after we take the weapons apart.

Senator SESSIONS. My concern simply is this: I don't think we should leave ourselves in a circumstance where we have limited substantially our nuclear weapons and we have frozen ourselves in that position. Therefore, we would in effect, be saying to any nation in the world, "if you develop any nuclear weapons, you are the virtual equal of the U.S." I believe this is important. We shouldn't destroy our weapons and not have the world know that we could increase them if we were threatened.

Senator REED. Senator Inhofe.

Senator INHOFE. Thank you, Senator Reed. I am going to be very quick. I have come down with one question. Someone has already asked it, so I will ask it a different way. We have had so many of these hearings, I have run out of questions.

I find an analogous situation between this discussion today and our old ABM discussion that just did not make any sense to me.

Maybe back in 1972, the ABM Treaty made sense to some people. There certainly could be a persuasive argument that may force necessity. But we are in a totally different situation right now, and I see the same thing with this treaty.

Russia is now our ally. We do not have any kind of a defense against a ballistic missile right now and so our primary defense would be deterrent, and that is what we are talking about today. We are talking about taking down these things and we are doing this with one of our allies, and yet Iran, Iraq, North Korea, China, and other countries do pose a threat. This is fine if we waited until we had a national missile defense system in place, at least for limited time. Tell me where I am wrong?

Admiral Ellis.

Admiral ELLIS. Senator, as I mentioned earlier in my opening statement, this treaty codifies an in-depth analytical effort in this regard for over a year. The analysis was part of the Nuclear Posture Review that assessed the levels that are the specified objective of the treaty, the 1,700 to 2,200 operationally deployed weapons. All of those issues that are likely to confront the Nation in the foreseeable future, among which you highlighted several important ones, were considered in arriving at that number.

The considered judgment of those was, even though we all know we are not capable of predicting with precision the future 10 years hence, that this range of weapons for the foreseeable future and the flexibility inherent in this treaty, should that turn out to be a much different future, will be more than adequate to the Nation's national security needs. We can talk more in closed session about the specific concerns you have, but from a military perspective, I want to assure that all of those issues were preeminent as we looked at reshaping the Nation's strategic systems and the Nation's stockpile. We have the provisions in the Nuclear Posture Review for continually reassessing that as we proceed through the next decade to ensure the conditions that were a part of our original assessment still pertain as we move into this new control.

Senator INHOFE. It goes closely to what Senator Sessions was asking also. This treaty, as I understand it, means we are not going to be in a bad position should we want to manufacture some of this equipment in another 10 years, when, in fact, Russia is keeping that capability. We are all in that?

Admiral ELLIS. Sir, that is exactly right, and that is the reason for the term operationally deployed and for the necessity for a stockpile that is larger than that number of operationally deployed strategic nuclear warheads. We have the option to deal with those uncertainties in the future to reconstitute that force or to adjust the slope of that drawdown as appropriate to the international security environment.

Senator INHOFE. I am looking forward to working with both of you. Thank you, Senator Reed.

Senator REED. Senator Warner.

Senator WARNER. Admiral, I just think we ought to look at the background of this treaty. Russia is experiencing, and I do not say this in any negative or pejorative way, an economic decline of considerable proportions here. I think President Putin has been addressing this.

That has just led to a shortage of funds across the board for the Russian Armed Forces. They fully acknowledge this in open forum, not in any classified material. Russia maintained the readiness and safety requirements, which they as the professional armed force desire in their own self-interests, as well as the necessity to protect their own people. So that was one of the driving forces, am I not correct here?

Admiral ELLIS. Yes, sir. We certainly understand, and you mentioned in your opening statement that there are many dimensions that have to be addressed in this new security environment. This treaty is one essential element of that, but there are other elements of our relationship with which you and your colleagues are so familiar: CTR efforts.

Senator WARNER. It is a composite of things, but the concern over the fact that we are not dismantling, means I think we ought to cover this somewhat. Russia, from its inception as far back as I have gone in this business, has followed one method of construction, namely that method which would enable them to quickly replenish the warheads with brand new ones, as opposed to our approach, namely to take the existing warheads and work on them from time to time. Russia currently is progressing on the construction of some new warheads, am I not correct, gentlemen?

Admiral ELLIS. Yes, sir. That is correct. We have taken a fundamentally different approach.

Senator WARNER. Our Nation is not, am I correct?

Admiral ELLIS. That is correct.

Senator WARNER. It seems understandable to me that we have a reserve of these warheads to take parts from time to time to maintain the readiness and safety of our own inventory. I don't think the public or the rest of the world should look upon the fact that we are not destroying these all immediately as means by which to cheat or evade the purpose of this treaty.

There are more adequate monitoring methods in here if we were to reincorporate these into our arsenal. We have to have the warheads coming back in with the launch platforms. It is just impossible to do it under any type of concealment. It should add an element of insecurity to the treaty. Am I correct in those observations? Do any of you wish to question or amplify?

Admiral ELLIS. You are exactly right, Senator. It is a fact that one of the most significant considerations in shaping the size of the stockpile is the sustainability and the reliability issues that we have to deal with over the next decade or more, as we prepare ourselves for the possibility we may encounter a technical problem within our aging stockpile.

Senator WARNER. I thank the witnesses, Senator Reed.

Senator REED. Thank you very much, Senator Warner. The subcommittee stands in recess and will reconvene for the closed session.

[Questions for the record with answers supplied follows:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

DISMANTLEMENT

1. Senator WARNER. Dr. Beckner, what is your top priority among warhead refurbishment, surveillance, and dismantlement? Is that priority related to the age of the stockpile?

Dr. BECKNER. The mission of the National Nuclear Security Administration (NNSA) is to ensure that the U.S. nuclear weapons stockpile is safe, secure, and reliable. Therefore, surveillance and refurbishment are higher priorities than dismantlement. Surveillance of weapons components through disassembly and inspection and the use of advanced diagnostic tools is needed to ensure that we understand the health of the stockpile as it ages. The refurbishments of the W87, W76, B61, and W80, key elements of the enduring stockpile, are needed to keep the stockpile viable over the long-term, especially in light of no new warhead production. The high priority of refurbishments and surveillance will become more important as the stockpile ages further and the number of warhead types in the stockpile and the number of operationally deployed strategic warheads is reduced; problems must be found and corrected quickly. Though the activities tend to be age-related, they are not necessarily driven exclusively by the age of a particular weapon.

Dismantlement is also important, but it is generally not time-critical. Currently, we are meeting a commitment to dismantle warheads under a presidential nuclear initiative. When this work is complete, there are no other similar commitments or treaties that require the disassembly of warheads. The NNSA disassembles warheads that are excess to national security needs on a schedule coordinated with the Department of Defense, seeking minimal impact to support of the enduring stockpile. Dismantlement is used to maintain a level industrial workload.

2. Senator WARNER. Dr. Beckner, do you believe it would be prudent to suspend or reduce surveillance activities to increase the rate of warhead dismantlement?

Dr. BECKNER. No. I do not believe it would be prudent to suspend or reduce surveillance activities to increase the rate of warhead dismantlement. Warhead surveillance is absolutely essential to support the Nation's nuclear weapons stockpile and should not be suspended or reduced for the sake of dismantlements. Surveillance is needed to ensure that we know the health of the stockpile and can assure its reliability, safety, and security. Surveillance activities have uncovered a number of problems in the stockpile which have been corrected. Surveillance becomes more important as the stockpile ages further and the number of operationally deployed strategic warheads is reduced. Similarly, warhead refurbishment programs and other repairs to maintain the safety and reliability of the stockpile cannot be curtailed for warhead dismantlements.

3. Senator WARNER. Dr. Beckner, when is the life extension program for the W76 warhead scheduled? Do you believe, given the average age of the W76, that the scheduled life extension program for this warhead is both timely and prudent?

Dr. BECKNER. The life extension program for the W76 warhead is scheduled to deliver its first production unit in fiscal year 2007 with sufficient units produced to give the DOD an initial operational capability in fiscal year 2008. The refurbishment will focus on replacement of the high explosives, detonators, organic materials, replacement of cables, and addition of a new gas transfer system.

Given the average age of the W76, the life extension program, as currently scoped and scheduled, is timed to optimize the design life while correcting identified aging concerns before they can result in a degradation to warhead quality and reliability. This schedule is also a result of a significant amount of effort to coordinate this program with other life extension programs and routine work within the NNSA complex. The refurbishment plan is also synchronized with work the U.S. Navy intends to perform on the Trident II missile.

4. Senator WARNER. Dr. Beckner, how much of the workload at Pantex will be absorbed by planned warhead life extension programs?

Dr. BECKNER. The current production complex is limited in the number of weapons that can be processed at the Pantex Plant, with the work split among units undergoing surveillance, refurbishment, or dismantlement. We plan to complete the disassembly of warheads already retired by no later than fiscal year 2007. Retirements of the W62 Minuteman III warheads will begin in fiscal year 2006—decision reaffirmed by the NPR—but no further decisions were made on disassembly. Planned renovations of existing facilities at Pantex will expand capacity sufficient to meet the anticipated NPR workload of refurbishments, along with warhead sur-

veillance. During the period fiscal year 2008 through fiscal year 2010—when three refurbishments (W80, W76, B61) are under way—there would be some reserve capacity available to fix unanticipated problems in the stockpile, respond to warhead production requirements, or insert dismantlement activity to maintain a level workload.

5. Senator WARNER. Dr. Beckner, how practical is the notion of expanding the capacity to dismantle warheads by using the Device Assembly Facility at the Nevada Test Site for this purpose?

Dr. BECKNER. Using the Device Assembly Facility (DAF) for dismantling warheads is not practical. The time and cost of starting up nuclear explosive disassembly operations at this facility would be substantial. DAF was originally envisioned for underground nuclear test support, and for potential receipt and processing of damaged nuclear weapons or improvised nuclear devices. With the cessation of underground nuclear explosive testing in 1992, the primary mission for the Device Assembly Facility was shifted to subcritical experiment support. NNSA has issued a final Environmental Impact Statement relating to a proposal to relocate the TA-18 criticality experiment activity from the Los Alamos National Laboratory to the Device Assembly Facility. If the NNSA decides to relocate TA-18, approximately half of the DAF will then be taken over by those activities. Furthermore, we must preserve some capability if it is necessary to resume nuclear testing sometime in the future to meet U.S. national security requirements.

SAFETY REQUIREMENTS AT PANTEX

6. Senator WARNER. Dr. Beckner, it is my understanding that the capacity at the Pantex facility to conduct warhead life extension programs, surveillance, and dismantlements has been reduced during the 1990s. This is in large part due to new safety requirements and practices, including issues concerning lightning and the maximum number of warheads per room, which have slowed the weapon “throughput” rate at Pantex. Would you please provide a general overview of the new safety requirements and practices that have been adopted at Pantex.

Dr. BECKNER. The NNSA is committed to supporting the Nation’s national security needs without compromising the safety of the worker, public, or the environment. This commitment requires NNSA to strike a reasonable balance between production requirements and increased safety expectations. Pantex is moving towards a more quantitative, documented safety analysis approach as required by 10 CFR 830 for both the nuclear facilities at Pantex as well as the nuclear explosive operations performed within. This transition is occurring while continuing plant operations.

This formal, methodical approach of hazard analysis and control selection has resulted in a better understanding of the overall safety of the operation, and more and better controls. Some of these controls are administrative in nature (such as lightning standoff and limitations on the number of weapons within a facility). These measures are necessary in order to compensate for what the current analysis is telling us while allowing us to continue to operate. As the analysis is further refined and/or engineering solutions are achieved, we will be able to improve efficiency and capacity. It is important to emphasize that NNSA working with the DNFSB has met all deliveries to the DOD while improving safety at Pantex.

7. Senator WARNER. Dr. Beckner, in general terms, to what extent have the new safety requirements slowed down the nuclear weapon “throughput” rate at Pantex?

Dr. BECKNER. It is difficult to determine the extent which weapon “throughput” rate is affected due to new safety requirements, since it is dependent on several variables. One variable has been the increased safety expectations, requirements, and practices. The 10 CFR 830 mandates a rigorous and defensible safety analysis of nuclear operations, the result of which has been the introduction of new controls at Pantex. Engineered safety controls are the most effective way to increase safety.

Administrative controls are less effective than engineered controls at improving safety but are easier and less expensive to implement in the near-term. In order to continue operations while performing the required safety analyses, some administrative controls (such as those requiring facility standoff for lightning and fire concerns, ceasing movement of nuclear explosives during lightning warnings and limitations on the number of weapons that can be present in a facility due to weapon interaction concerns) have reduced the available facility “footprint” or the available window of time for weapon processing. The Pantex Plant is working through this by continuing to refine the analyses and/or implementing engineered solutions (such

as the enhanced transportation cart) to improve process efficiency and plant capacity. Ultimately, Pantex will have dramatically increased safety while achieving product deliverables to the DOD efficiently.

8. Senator WARNER. Dr. Beckner, what criteria are used to help ensure our nuclear weapon process at Pantex is conducted in a safe manner?

Dr. BECKNER. Pantex is transforming its operations to ensure compliance with 10 CFR 830. As a part of that activity, NNSA has instituted the Seamless Safety for the 21st Century (SS-21) process at the Pantex Plant. This process dictates a formal, organized approach to planning, performing, assessing, and improving nuclear explosive operations at the Pantex Plant. The SS-21 process focuses on designing out hazards and includes integrating the weapon, facility, tooling, testers, equipment, procedures, and personnel to form a safe, efficient, and effective operating environment. This approach also ensures that a safety basis is developed (or improved) and implemented that defines the extent to which a nuclear explosives operation can be safely conducted.

A set of design/performance criteria is integral to the SS-21 process. These criteria must be evaluated for implementation by the project team assigned to implement SS-21 on a weapon program. These criteria set a high standard and are used by the project team in redesign of the procedures, equipment, facility, testers, and tooling that minimizes the adverse impacts to the environment, and the safety and health of the workers and the public.

9. Senator WARNER. Dr. Beckner, in light of the other nuclear warhead activities, do these safety requirements inhibit the ability to increase the rate of warhead dismantlements?

Dr. BECKNER. Safety is paramount in any nuclear warhead activity. It is true that procedural and equipment changes have slowed production of all activities, including dismantlements. Plans are underway to increase production capability without compromising advances in operations safety to meet planned surveillance and life extension. The complexity of the warhead itself, the ease with which it can be dismantled, the ability to ship units/components into and out of Pantex and available resources are some of those factors.

DETERRENT CAPABILITY

10. Senator WARNER. Admiral Ellis, we have relatively few nuclear warhead types deployed on our Intercontinental Ballistic Missiles (ICBMs), Submarine-Launched Ballistic Missiles (SLBMs), and bombers. What would happen to the operational effectiveness of U.S. deterrent forces if a serious problem were to develop in any one of our deployed nuclear warheads or bombs?

Admiral ELLIS. I am very confident, should a problem develop in any one of our deployed warheads, that the flexibility designed into the Moscow Treaty will allow the Nation to maintain a highly effective nuclear deterrent.

We are the only nuclear power that cannot produce nuclear weapons today, and as a result, we maintain a warhead reserve. This allows us to have stockpile replacements in case of potential technical problems or catastrophic failure in an entire class of warheads. Under the provisions of the Moscow Treaty, this flexibility is preserved and the United States will continue to retain a portion of our non-deployed warheads in a reserve status to ensure a credible nuclear deterrent.

MULTIPLE WARHEAD MISSILES

11. Senator WARNER. Admiral Ellis, do you believe that a Russian Multiple Independently-Targetable Reentry Vehicle (MIRV) capability poses a significant military threat to the United States?

Admiral ELLIS. Although MIRVs represent a significant military capability, in the stable and nonadversarial relationship we now enjoy with Russia, MIRVd forces pose no significant increase in threat over that posed by non-MIRVd forces.

Importantly, the threat any system poses to the United States is measured in terms of both capability and a nation's will to use it. As the friendship between the United States and Russia continues to grow, the exact composition of the Russian force structure will diminish even further in importance. Also, the provisions of the Moscow Treaty allow the United States sufficient flexibility in force size and structure to respond to any sudden, unexpected changes in the global security environment.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

MODERN PIT FACILITY

12. Senator SESSIONS. Dr. Beckner, during the hearing we discussed our Nation's lack of production capability to build new nuclear weapons. Specifically, we discussed that the United States does not have a current production capacity to manufacture more than a few primaries, also known as "pits." This is a much different status compared to Russia, which has a current nuclear weapon production capacity. Please explain with some specificity our current plan for bringing a modern pit facility on line. In your response, please list and explain each major step the NNSA must take to maintain our current plan, and how long each step is expected to take.

Dr. BECKNER. The current NNSA plan for bringing a modern pit facility on line includes: (1) reestablishing the capability to manufacture plutonium pits at Los Alamos National Laboratory (LANL), (2) developing pit manufacturing technology, and (3) completing the NEPA process and the design and construction of a modern pit facility.

NNSA remains on track to reestablish the capability to fabricate a certifiable W88 pit in fiscal year 2003 followed by completion of both a certified W88 pit and a limited W88 pit production capacity at LANL in fiscal year 2007. Significant accomplishments to date include manufacture of 15 development pits and completion of four subcritical physics tests required to confirm pit performance without nuclear testing. Based on these successes and continued congressional support, I expect the program to meet these important national security milestones.

Simultaneously in fiscal year 2003, the NNSA plans to proceed with the NEPA process and a conceptual design of a Modern Pit Facility (MPF) in fiscal year 2003. Site selection for an MPF is scheduled for fiscal year 2004 and the conceptual design will be completed in fiscal year 2006 with final design completion and the start of plant construction in fiscal year 2011. The present plan shows that the MPF will undergo start-up manufacturing activities in 2018 and reach full production capacity in 2020.

13. Senator SESSIONS. Dr. Beckner, in general terms, please discuss the total cost estimate to bring a modern pit facility on line. If it is helpful, describe the cost in comparison to other NNSA projects with regards to size and scale.

Dr. BECKNER. Nuclear facilities are difficult and costly to construct because of safety and environmental considerations and the extensive regulatory oversight. MPF is likely to require some 200,000 square feet and is expected to cost between \$2-\$4 billion. The other major NNSA construction project similar in size and scope is the National Ignition Facility at 280,000 square feet with a cost of \$3.5 billion. We expect to have a better understanding of cost projections for the MPF by 2006.

14. Senator SESSION. Dr. Beckner, in what year, or range of years, do you plan to have an operating modern pit facility using NNSA's current baseline, including a reasonable expectation of technical, legal, budget, and other challenges which always face projects of this size and magnitude?

Dr. BECKNER. NNSA expects to begin physical construction of the MPF in fiscal year 2011. The MPF will be completed and will undergo start-up manufacturing activities in 2018 and reach full production capacity in 2020. The 2020 date for an on line MPF includes time for technical, legal, budget, and other challenges as you have suggested. The facility will be capable of operating for up to 50 years.

15. Senator SESSION. Dr. Beckner, please explain how a modern pit facility helps meet the vision of the new triad described in the Nuclear Posture Review (January 2002), which first described the goal and is now codified in the Strategic Offensive Reductions Treaty, to reduce our Nation's nuclear stockpile to between 1,700 and 2,200 "operationally deployed strategic nuclear warheads."

Dr. BECKNER. The nuclear posture review concluded that we need to build a new TRIAD. One element of that new TRIAD is the infrastructure necessary to support the nuclear deterrent. A modern pit facility is a key element of that infrastructure. A modern pit facility would allow the construction of significant numbers of pits with a new design if a need for them develops. The lack of an ability to produce new nuclear weapons increases our requirements to retain inactive weapons, or to furnish warheads for new weapon systems. Within foreseeable bounds for numbers of nuclear warheads, a modern pit facility will be required because we expect that all pits in the stockpile will eventually need to be replaced. Modern plutonium pit science can only provide an estimate for the lifetime of pits and accelerated aging techniques remain to be proven. Therefore, the NNSA must have an operational

MPF no later than 2020 based on the current estimate of 45–60 years for pit lifetime and the projected numbers of warheads that we must maintain.

[Whereupon, at 11:02 a.m., the committee adjourned to closed session.]

