Statement of the Honorable Edward L. Warner, III
Assistant Secretary of Defense for Strategy and Threat Reduction
Before the Senate Armed Services
Subcommittee on Strategic Forces
Hearing on Nuclear Deterrence

14 April 1999

Mr. Chairman, I am delighted to meet with this subcommittee to discuss a topic of great importance to the American people and to our national security: the role of nuclear weapons in U.S. defense policy.

First, I will review why U.S. nuclear weapons remain a vital part of our national security posture, and describe how we expect our forces to evolve over the next few years. I will develop the rationale in support of the strategic force structure this administration will seek to deploy absent Russian ratification of START II. Next, I will summarize the substantial progress we have made toward our goal of reducing and ultimately eliminating the nuclear threat. Finally, I will address our approach to ensuring the continued safety, security and reliability of our nuclear forces. In doing so, I will demonstrate that our nuclear deterrent is not wedded to the past but supports both current and future security needs.

Continued Role for Nuclear Deterrence

The international security environment has changed dramatically over the past decade. While the long confrontation with the Soviet Union has ended, events over the past year clearly demonstrate that we live in a dangerous and uncertain world. Although the threats we face today, and foresee for tomorrow, are not the ones we faced during the Cold War, we are not at the point where we can eliminate U.S. nuclear forces, or even reduce to a few hundred weapons as some would have us do. There are a number of reasons for this.

First, we clearly have an enormous stake in Russia's transition to a stable democracy with a market-based economy and are actively providing financial and moral support to Russia as it proceeds along this difficult path. This transition, however, is by no means assured. Thus, we must "hedge" against the possibility that Russia, which continues to maintain a formidable nuclear arsenal consisting of thousands of deliverable strategic and tactical warheads, could reemerge at some time in the future as a threat to the West.

With regard to China, the main goal of our policy of engagement is to promote that country's evolution as a positive force for regional stability and peace. But, again, we are not now assured that this will be the case, and that our nuclear forces will not be needed at some future point to deter China. China has a much smaller nuclear force than Russia's, but one that is still formidable, consisting of about 20 CSS-4 ICBMs capable of reaching the United States in addition to several dozen theater-range nuclear ballistic missiles. And China continues to make steady efforts to modernize these forces.

Given the overall positive trends in Russia and China over the past decade, however, one of our most critical security challenges today is the proliferation of weapons of mass destruction (WMD) and systems for their delivery. There is growing evidence that countering this proliferation, particularly when such weapons are acquired by rogue states, will become increasingly important in future U.S. defense efforts. In July 1998, the *Commission to Assess the Ballistic Missile Threat to the U.S.*, led by former Secretary of Defense Donald Rumsfeld, concluded that several countries, including North Korea, Iran and Iraq, are involved in a concerted effort to acquire medium- and long-range ballistic missiles to deliver chemical, biological or nuclear payloads. It warned that a rogue nation would be able to inflict major destruction in the United States within about five years of a decision to do so (during several of those years, we might not be aware that such an effort was underway). Moreover, it noted that any nation that desires to develop ballistic missiles and WMD warheads has substantial opportunities to obtain extensive technical assistance from other states. The launch last August of a North Korean Taepo Dong-1 long-range missile, with a solid-fuel third stage that we had not anticipated, and Iran's test of the medium-range Shahab-3, demonstrate the rapid progress rogue states can achieve in developing and producing or, alternatively, simply acquiring, medium- and long-range ballistic missiles. In the case of Iran, there is substantial evidence that it has received significant foreign assistance in its ballistic missile development program.

The U.S. capability to deliver an overwhelming, rapid and devastating military response with the full range of our military capabilities will remain a cornerstone of our strategy for deterring rogue nation ballistic missile and WMD proliferation threats. The U.S. has taken a number of active steps in counterproliferation. These include diplomatic initiatives such as the Framework Agreement with North Korea, sensible export controls, and enhanced military capabilities in such areas as early warning, information operations, attack operations against enemy chemical and biological weapons and their delivery systems prior to launch, passive defense measures, and ballistic missile defenses. (The latter I address in more detail below.) These capabilities strengthen deterrence by helping convince a rogue leader contemplating WMD use that his political and military objectives could be denied by U.S. forces employing conventional weapons.

The variety and dynamic nature of rogue threats underscore the problem in deterring the leaders of these states over the full range of potential conflict. During the Cold War, we had a fairly clear understanding of those assets most highly valued by Soviet leaders and we held those assets at risk with our nuclear forces as part of our deterrence strategy. But the matter is not so clear with rogues. Our knowledge of these regimes is incomplete, and so is our understanding of the value structure of rogue leaders. This is an issue that we continue to study. But the very existence of U.S. strategic and theater nuclear forces, backed by highly capable conventional forces, should certainly give pause to any rogue leader contemplating the use of WMD against the United States, its overseas deployed forces, or its allies.

Ballistic missile defenses can also play an important contributory role in strengthening deterrence of aggression by rogue states. While the threat of retaliation with offensive forces increases the perceived political and military costs of aggression, a credible capability to counter an opponent's WMD by intercepting and destroying ballistic missiles in flight will reduce the perceived gains, and increase an aggressor's doubts about his ability to inflict substantial damage

on U.S. forces in theater, and on the U.S. itself. Defenses thus affect an enemy leader's calculation of the risks and benefits of WMD aggression in a way that enhances deterrence. Partly for this reason, we are developing and deploying a series of theater missile defense systems, and developing a limited national missile defense which, if we decide to deploy it, will be capable of countering the long-range missile threat that certain rogue states, including North Korea, are vigorously pursuing. But we must emphasize, while missile defenses are an important supplement to robust conventional and nuclear forces, they are not a replacement for these forces in deterring rogue state aggression.

As we look to the future, these factors will cause us to continue to strive to maintain a reliable and flexible nuclear deterrent—survivable against the most aggressive attack, under highly confident, constitutional command and control, safeguarded against both accidental and unauthorized use, and capable of inflicting a devastating retaliatory response.

Evolution in U.S. Strategic Nuclear Forces

The United States continues to field a diverse, modern and highly effective arsenal of nuclear delivery systems. Currently, our long range, strategic forces deployed within START I limits include:

- 500 Minuteman III and 50 Peacekeeper ICBMs
- 18 Trident SSBNs, each carrying 24 Trident I/C-4 or Trident II/D-5 SLBMs
- 76 B-52 bombers each equipped to carry up to 20 nuclear-armed air launched cruise missiles
- 21 B-2 bombers each equipped to carry up to 16 nuclear gravity bombs

The 1994 Nuclear Posture Review identified the strategic nuclear force structure that we plan to deploy under the START II Treaty. Specifically, if START II enters into force, we would eliminate the Peacekeeper ICBMs and four Trident I SSBNs. Because the NPR was conducted under the expectation that START II would enter into force during the latter part of the 1990s and be fully implemented by 2003, Air Force and Navy budget submissions during this period were geared to reflect a transition to a START II force. When it became clear that Russia's ratification of the Treaty would be delayed, we took steps to "plus up" these budgets on a year by year basis to preserve a viable option to continue to deploy 18 Tridents and 50 Peacekeepers pending START II entry into force. Moreover, over the past few years Congress has mandated that we maintain our strategic forces at START I levels absent Russian ratification of START II.

In FY 99, we added $57 million to support continued Peacekeeper operations and to protect the option for refueling, backfitting and buying D-5 missiles for the four Trident ballistic missile submarines slated for elimination. For FY 00, an additional $51 million has been included in the DoD budget request for Peacekeeper; no additional funds were necessary to maintain the four Tridents due to an adjustment in the Navy's Trident submarine refueling and refit schedule.

In future years, costs to sustain these forces will increase significantly. To sustain Peacekeeper would require an addition of funds in the range of $100 M per year for the next three years, ramping up to about $170 M per year in the years beyond 2003. The cost to sustain the four

Tridents is much larger. Over the FY 00-05 FYDP, an additional $5 to $6 billion would have to be added to refuel these SSBNs, refit them for D-5, and purchase the needed D-5 missiles.

By taking these steps to maintain our START I force structure we have, in part, kept up the pressure on the Russians to ratify START II. Indeed, one of the Russian MOD's main arguments to the Duma in support of ratification is that it will be much more difficult for Russia to maintain its forces at START I levels than it will be for the Americans. We agree. Although Russia currently deploys approximately 6000 strategic warheads under START I, our assessment is that it will be unable, by the middle of the next decade, to maintain strategic forces at even a START II level of 3,000-3500 warheads. In fact, by 2010, the Intelligence Community believes that the Russian force will drop below the 2000-2500 warheads that would be permitted under START III. If the Intelligence Community is correct, absent an unexpected infusion of resources into strategic forces, Russia will struggle beyond 2010 to maintain a force of even 1500 strategic warheads. Although a significant concern, the size of Russia's strategic forces is not the only factor in determining the sufficiency of U.S. nuclear forces. At the same time, it obviously bears on our thinking about options for future evolution of U.S. forces.

Taking these and other factors into account, including the continued delay in Russian ratification of START II, the expected evolution of Russia's strategic forces, and the increased cost that would be required to sustain U.S. forces at START I levels, the Secretary has made two key decisions. First, he has decided that we will continue to need the Peacekeeper ICBM's contributions for the next year as a political and military offset to Russia's anticipated continued deployment of heavy, highly-MIRVed, silo-based ICBMs and, as a result, has requested the funds needed to sustain Peacekeeper operations for FY 00. For the out years, funding to sustain the fifty Peacekeepers will be reviewed on a year by year basis. Second, he will seek Congressional support to reduce our force of Trident SSBNs from 18 to 14 over the next few years. The Trident force is highly survivable; the Chiefs and the CINCs are convinced that a START I force structure that includes 14 Tridents, which would be deployed with almost half of U.S. strategic warheads, is sufficient to meet all of our military requirements. With this force structure, the U.S. will still be able to maintain the capability to deploy nearly 6000 strategic warheads as allowed under START I, well above the 3000-3500 permitted under START II. At the same time, if we are forced to expend funds to refuel, backfit and equip the four designated Tridents in a strategic role, it will weaken our defense posture in other areas.

Thus, we are requesting that Congress not include language in next year's Defense Authorization Bill that would mandate deployment of a specific number of platforms under START I (e.g., 18 Tridents) absent Russian ratification of START II.

Finally, as part of our actions to reach the START I-mandated sublimit of 4900 ballistic missile warheads by 5 December 2001, we have commenced downloading one wing of Minuteman III ICBMs from the current configuration of three warheads per missile, to one warhead per missile.

Strategic System Sustainment

The President has directed that the DoD "ensure the continued viability of the infrastructure that supports U.S. nuclear forces and weapons." To this end, as recommended by the recent Defense Science Board Task Force on Nuclear Deterrence, the DoD has embarked on an ambitious effort

to develop an overall nuclear force management "roadmap." This so-called Nuclear Mission Management Plan is a broad examination of the Department's near- and long-term capability and plans to support nuclear missions, including readiness, modernization, support forces, personnel and infrastructure. The plan will allow senior leaders to focus immediate and longer-term decisions on maintaining the nuclear deterrent as a core element of U.S. national security policy. The integrators of this plan are the Defense Threat Reduction Agency and U.S. Strategic Command.

Part of this effort will involve ensuring the long-term viability of the R&D and manufacturing infrastructure for strategic nuclear systems. We have a number of efforts underway. First is completion of our on-going system acquisitions which include the B-2 bomber and the D-5 SLBM.

The second area includes efforts to replace aging components or systems. This includes the backfit of Trident SSBNs for the D-5 missile, the overhaul of the nuclear reactors on those boats, and the Propulsion Replacement Program and the Guidance Replacement Program for the Minuteman III ICBM.

The third is to identify and engage the critical and unique design, development and production capabilities that will be needed in the future. These efforts have included a Reentry System Applications Program and a Guidance Applications Program. Other efforts include initiatives on solid rocket motors, their aging and surveillance, post-boost vehicle control system components, radiation hardened micro-electronics, submarine navigation, and underwater launch systems.

Finally, we are monitoring the health of our strategic systems, possible changes in the threat to their survivability and effectiveness, and the need for life-extension programs, upgrades, and replacements.

U.S. Theater Nuclear Forces

Our shorter-range, theater nuclear forces provide an important element of flexibility, particularly against regional threats. Currently, they are composed of:

- Dual-capable fighter-bombers, with their associated nuclear bombs, deployed both in the United States and in Western Europe;
- Nondeployed nuclear-armed Tomahawk land attack cruise missiles (TLAM/N) stored in the United States.

Non-strategic nuclear forces provide national command authorities with responsive and flexible options for dealing with the threat or use of NBC weapons. Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and North American members of the Alliance, as well as linkage to U.S. strategic systems. They also permit widespread participation by European allies involved in collective defense planning for nuclear roles, in the peacetime basing of nuclear forces on their territories, and in command, control, and consultation arrangements, and thus obviate the need for these states, all highly-capable technologically, to develop their own nuclear weapons.

Reducing the Nuclear Threat

President Clinton stated at the United Nations that he looks forward to a new century "in which the roles and risks of nuclear weapons can be further reduced, and ultimately eliminated." We are fully committed to Article VI of the nuclear Nonproliferation Treaty (NPT) that calls for the eventual elimination of nuclear weapons under strict and effective international control in the context of a treaty on general and complete disarmament. In this context, in 1995, when the NPT was indefinitely extended, we reiterated this Article VI pledge.

The U.S. has made substantial progress in fulfilling its commitments under the NPT. The nuclear arms race has been halted, and, in fact, reversed. Since the end of the Cold War, our nuclear posture has changed dramatically.

In September 1991, President Bush announced a unilateral nuclear initiative under which the U.S. proceeded to:

- Eliminate its entire inventory of ground-launched non-strategic nuclear weapons (nuclear artillery and Lance surface-to-surface missiles);
- Remove all non-strategic nuclear weapons on a day-to-day basis from surface ships, attack submarines, and land-based naval aircraft bases;
- Remove its entire strategic bomber force from alert;
- Stand down the Minuteman II ICBMs whose launchers have been largely eliminated under START I;
- Terminate the mobile Peacekeeper ICBM and mobile small ICBM programs; and
- Eliminate the SRAM-II nuclear short-range attack missile.

In January 1992, a second nuclear initiative by President Bush limited B-2 production to 20 bombers, ceased production of the W-88 Trident II warhead, halted purchases of advanced cruise missiles, and stopped new production of Peacekeeper ICBMs.

In 1994 President Clinton, acting on the recommendations of the Nuclear Posture Review, directed the Navy to eliminate the capability to deploy nuclear weapons (bombs and cruise missiles) on any surface ships. As pointed out earlier, the NPR also identified the U.S. strategic force structure to be deployed under START II which, in addition to reducing the SSBN force from 18 to 14 Tridents and eliminating Peacekeeper, would convert the 500 Minuteman III ICBMs to a single warhead, convert the B-1Bs to a purely conventional weapons delivery role and would reduce the number of B-52s from 94 to 66. (In January 1999, the number of B-52Hs was increased to 76 for fleet sustainment purposes.)

In addition to these unilateral steps, the U.S. remains committed to bilateral arms control as a means of achieving stabilizing, verifiable, agreed reductions in nuclear forces. The United States and Russia have made great strides in this area over the past decade. START I, which entered into force in December 1994, will reduce each side's deployed strategic weapons from well over 10,000 to 6000 accountable warheads by December 2001. The START II Treaty, in which each side would reduce to 3000-3500 strategic warheads, was signed in January 1993, was ratified by the U.S. Senate in January 1996, but has not yet been ratified by the Russian parliament.

Russia's delay in ratifying START II has been disappointing, and we have taken steps to reduce some of the concerns Russia has expressed about that Treaty. Specifically, we agreed to extend the timeline for full implementation of START II when the Russians stated that completion by 2003 would be infeasible for economic reasons. At the March 1997 Helsinki summit, Presidents Clinton and Yeltsin agreed to extend the original treaty deadline by five years from January 2003 to December 2007, and to deactivate by December 2003, by means of warhead removal or other jointly agreed measures, those systems slated for elimination under START II. Further, our agreement, once START II is ratified, to begin immediate negotiations on START III with a goal of limiting deployed strategic warheads for each side to 2000-2500, responded to Russia's concern that it would be unable to "build up" to START II levels. In September 1997, the commitments made at Helsinki were codified as a Protocol to START II in an exchange of letters between Secretary Albright and Russian Foreign Minister Primakov. When and if Russia ratifies START II, the Protocol and associated documents will be submitted to the Senate for ratification.

We continue to monitor the progress of START II ratification by the Russian parliament and hope to commence follow-on negotiations for START III soon after ratification occurs. When fully implemented, START III would represent a 30-45 percent reduction in the number of deployed strategic warheads permitted under START II, and a 60-65 percent reduction from those permitted under START I. Most importantly, strategic force levels would be reduced by 80 percent below Cold War levels.

Cooperative Threat Reduction

The economic conditions that followed the disintegration of the Soviet Union raised concerns regarding the ability of Russia, Ukraine, Belarus and Kazakhstan to meet their inherited treaty commitments on time, for Ukraine, Belarus and Kazakhstan to denuclearize, and for Russia to maintain secure, effective control of nuclear and other WMD and related materials.

Under the leadership of Senators Sam Nunn and Richard Lugar, Congress established the Cooperative Threat Reduction (CTR) program in 1991 to cope with these problems. The CTR program has helped to remove nuclear warheads from strategic missiles and bombers, and helped assure their safe and secure transport to storage sites. It has led to the destruction of long range ballistic missiles and heavy bombers and their supporting equipment and turned them into scrap metal. It has assisted in eliminating ICBM silos and SLBM launch tubes, and also in the dismantlement of ballistic missile submarines. It has helped Russia store fissile material removed from dismantled warheads. Finally, CTR also assists in the dismantlement of WMD-related production facilities, including those that produced chemical and biological weapons.

The CTR Program has been an extremely successful program and an extraordinary bargain. For the roughly $2 billion spent so far, the bottom line has been impressive. Ukraine, Kazakhstan and Belarus have become nuclear weapons free states; CTR assistance has enabled these new countries to ship their nuclear weapons back to Russia. Thanks to CTR assistance, the New Independent States (NIS) are ahead of schedule in implementing strategic delivery systems reductions called for under START I. CTR assistance has also led to the deactivation of 4838 strategic nuclear warheads that were once targeted on the U.S., and helped to destroy or eliminate almost 400 strategic ballistic missiles, 350 ICBM silos, 10 ballistic missile submarines, and almost 50 heavy bombers. Moreover, 191 nuclear weapons test tunnels and bore holes have

been destroyed with CTR help. By eliminating weapons that could be used against us, the CTR program has helped make possible the prudent reductions in our nuclear force posture that I have described in this testimony.

U.S.-Russia Shared Early Warning

In recent years, several defense experts, including some in Congress, have expressed concern that deterioration of Russia's early warning network and nuclear command and control system has increased the risk of inadvertent nuclear war resulting from false warning of ballistic missile attack. This has led some to call for the United States and Russia to take steps to reduce the alert status of their nuclear forces. We have studied a number of options for "dealerting." Many of these are not verifiable, an essential requirement for increased strategic stability. Those measures that could be verifiable, such as the removal of warheads from missiles, were seen to be highly destabilizing in a crisis in that steps to realert these forces could very easily set off a dangerous chain of events.

In order to address directly the problem of an inadvertent launch based on false warning, Presidents Clinton and Yeltsin agreed last September at the Moscow Summit to a joint initiative on shared early warning. This initiative consists of three elements. First, the two Presidents agreed to a continuous exchange of information on the launches of ballistic missiles and space launch vehicles detected by their respective ballistic missile early warning systems. Second, they agreed to the creation of a Joint Warning Center in Moscow, in which military personnel from each nation would work side by side to monitor launches and to resolve any ambiguities that could arise. Third, they agreed that the United States and Russia would jointly develop the elements of a regime for prior notification of planned launches of ballistic missiles and space launch vehicles. Once such a regime was activated, other nations would be would be invited to participate.

We have had two meetings with the Russians on implementing the joint summit initiative, the most recent being last month where we made substantial progress on a concept of operations for the Joint Warning Center and pre-launch notification regime. When fully implemented, we believe that shared early warning will represent an important confidence building measure and a significant step to reducing the risk of inadvertent nuclear war.

Maintaining Safe, Reliable and Effective Nuclear Forces

Because nuclear deterrence will remain an indispensable part of our national security strategy for the foreseeable future, U.S. nuclear forces, including the command and control system that supports them, must remain credible. Nuclear delivery systems and warheads must be safe, reliable, and effective. We place the highest priority on maintaining and improving the safety and security of our nuclear forces, and on sustaining the capabilities of the people who operate them. Our nuclear safety record has been extraordinary. Given changes in our posture, and technical improvements made since the end of the Cold War, the risk of a nuclear accident will continue to decrease.

We have high confidence in the safety and reliability of the enduring stockpile today. Our confidence is based on past nuclear testing. As time passes and the stockpile ages, however, we must have a means for continued high confidence in the nation's deterrent forces. Indeed,

President Clinton has pledged that, under a Comprehensive Test Ban Treaty (CTBT), the U.S. will continue to maintain high confidence in the safety, reliability and performance of U.S. nuclear weapons as a matter of supreme national interest. Under his direction, the Department of Energy has established an aggressive, well-funded program that will utilize sophisticated experimental facilities and computer simulations aimed at ensuring that the stockpile remains safe and reliable. When age related problems do develop, DOE will have the means to refurbish aged components while maintaining weapon performance. Another key feature of stockpile stewardship is the annual process for certifying nuclear warhead safety and reliability; we recently completed the third such certification.

The Department of Defense fully supports these efforts. Today, we have high confidence in the safety and reliability of our nuclear weapons, the stockpile stewardship program will provide the tools to assure this in the future.

Summary

In summary, for the foreseeable future, the United States will retain sufficient strategic and theater nuclear forces to help deter any hostile future leadership with access to nuclear weapons from acting against vital U.S. interests, and to convince such a leadership that seeking a nuclear advantage would be futile. U.S. nuclear forces also help deter an adversary's use of chemical or biological weapons as well. We intend to insure that our nuclear deterrent is safe, secure, reliable, effective and sufficient into the future, and will seek to achieve this within prudent fiscal guidelines. Finally, we continue to believe that our deterrence goals can be achieved at substantially lower force levels. Accordingly, we are taking the lead in seeking to negotiate additional nuclear force reductions and other measures that will reduce the risk of inadvertent nuclear war.

Mr. Chairman, this completes my formal statement.