INSIDE | N. Korean Nuclear Test Prompts Global Rebuke

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Herbert York, 1921-2009

Cover photo: Two B61 trainers are loaded onto a C-17 cargo plane during an exercise at McChord Air Force Base, Alaska, in February 2009, Department of Defense.
In some areas of nuclear weapons policy, the Obama administration has made significant changes and is beginning to see results. In other areas, the administration has sketched out policies but has not yet implemented them. In still other areas, the policies are being formulated even now.

The results of new approaches were visible in last month’s meeting of the Preparatory Committee for the 2010 Nuclear Nonproliferation Treaty Review Conference. In her feature article on the meeting, Rebecca Johnson sees the situation as significantly improved from the comparable point in the run-up to the 2005 review conference. But she also highlights some major issues and obstacles that need to be addressed in the coming year to bring about a successful review conference and a successful follow-up, carrying out whatever agreements are reached at the conference.

Another recent example of changes leading to success is the adoption of a program of work in the Conference on Disarmament, a long-awaited development that Cole Harvey covers in our news section.

Budgets provide a good window into an administration’s thinking and priorities. The fiscal year 2010 budget request clearly reflects some Obama policies, but not others. Our news section provides detailed coverage of key parts of the budget request dealing with nuclear weapons policy.

A large part of the administration’s nuclear weapons policy depends on the outcome of the Nuclear Posture Review to be completed within the next year. The report of the Congressional Commission on the Strategic Posture of the United States, which was released last month, was designed to inform the administration’s review. In our cover story, Hans Kristensen and Ivan Oelrich dissect the report and find it wanting, not only in relation to President Barack Obama’s April 5 Prague speech, but also in relation to the goals that Congress set for the commission.

In another policy area, the Obama administration appears to be pondering changes in policies dealing with non-nuclear weapons. British Minister of State for Foreign and Commonwealth Affairs Bill Rammell, in an interview with Arms Control Today, said he saw signs of a change in the U.S. position on a legally binding arms trade treaty. The United States has been against the pact.

Finally, as a sad coda to our coverage of unfolding change in policies on arms control and disarmament, we mark the death of Herbert York. As Katherine Magraw makes clear in her tribute, he was a giant in the field. —Daniel Horner
Testing the World’s Patience

North Korea’s second—and the world’s 2,052nd—nuclear weapons test explosion represents yet another low in the long-running multilateral diplomatic effort to freeze and verifiably dismantle Pyongyang’s nuclear capabilities. Pyongyang’s test blast is also a stark reminder of the need finally to bring about a permanent, global test ban.

Coming just two years after North Korea agreed to refreeze its plutonium-separation operations and disable some of its key nuclear facilities in accordance with the 2005 six-party denuclearization agreement, North Korea’s estimated 2- to 4-kiloton test blast, missile launches, and renewal of plutonium separation are reckless and exasperating.

But we have seen this behavior before. In each of the past, major nuclear-related crises in 1994, 2002, and 2006, when Pyongyang conducted its first nuclear test, North Korea has raised the stakes with provocative actions. Each time, U.S.-led diplomacy, backed by sanctions, has led to agreements involving food aid, fuel, and offers of normalized relations in exchange for verifiable constraints on Pyongyang’s nuclear program.

Because there is no viable or prudent pre-emptive strike option and punitive sanctions alone cannot stop North Korea’s nuclear and missile buildup, the latest crisis requires a renewed diplomatic push, led by Washington, combined with the implementation of more effective economic, military, and political sanctions that have the full support of North Korea’s main trading partner, China.

Containing the North Korean nuclear threat will likely be even more difficult this time around. Kim Jong Il’s poor health and an opaque succession process probably mean that North Korea’s leadership will be reluctant to return to the path of verifiable disarmament for a year or more.

For now, North Korea possesses fissile material for fewer than a dozen bombs. It is not yet capable of delivering working nuclear warheads on long-range ballistic missiles. Such a threat is still deterrence without the United States or other countries resorting to nuclear weapons threats.

If left unchecked, however, North Korea can and will separate more plutonium at a rate of about one bomb per year, and conduct more nuclear tests. If desperate enough, it could sell some of its fissile material to third parties. Over time, Japan and South Korea might reconsider their nuclear options, which would lead to even more instability and the unraveling of the nuclear Non-Proliferation Treaty.

So far, the Obama administration, which had hardly begun to re-engage Pyongyang following last year’s impasse over the verification of North Korea’s denuclearization, has promised that North Korea will “pay a price” for its defiance. Diplomats have been deployed to reassure allies in the region. International condemnation has been strong, swift, and universal. The UN Security Council will likely call for the implementation of the sanctions authorized by Resolution 1718.

But history shows that punitive sanctions and stern lectures by themselves will not halt North Korea’s nuclear activities or force the collapse of the already isolated regime. As he has done with his policy toward Iran, President Barack Obama must reject the false ideology that dialogue with adversaries is a reward for bad behavior. Rather than waiting in vain for North Korea to return to the six-party negotiating table while it improves its nuclear and missile capabilities, Obama should authorize official and unofficial direct talks with senior North Korean officials to gather facts and resolve differences regarding the implementation of the six-party agreement.

Most importantly, such talks are needed not only to clarify the costs of further defiance, but also to highlight the benefits of cooperation. Washington must outline, again and in detail, the security assurances, trade benefits, and energy support that the United States and its regional allies would be prepared to provide if North Korea once again halted its nuclear and missile programs, ended its proliferation behavior, and dismantled its nuclear complex.

China must also step up and exert its diplomatic and economic influence to rein in North Korea’s provocative behavior. Beijing should be more concerned about the prospect of a nuclear-armed North Korea triggering a full-blown East Asian arms race than the possibility that tighter sanctions might lead to a refugee crisis. China, which accounts for 73 percent of North Korea’s international trade, must do its part by helping to shut down trade in military items and luxury items and joining others in using financial sanctions to shut down entities involved in Pyongyang’s missile and nuclear programs.

Without bold U.S. and Chinese diplomatic leadership to contain proliferation in North Korea, as well as steps that would strengthen the global nonproliferation system, including ratification of the Comprehensive Test Ban Treaty and negotiation of a global fissile material production cutoff, Pyongyang’s test may become a nuclear proliferation tipping point.
Notable Quotable

“People understand intuitively that nuclear weapons will never make us more secure. They know that real security lies in responding to poverty, climate change, armed conflict and instability. They want Governments to invest in plans for growth and development, not weapons of mass destruction. If you can set us on a course towards achieving a nuclear-weapon-free world, you will send a message of hope to the world.”

—UN Secretary-General Ban Ki-moon, May 4, 2009, statement before the Preparatory Committee for the 2010 Nuclear Nonproliferation Treaty Review Conference, in New York

Five Years Ago in ACT

The Proliferation Security Initiative: Can Interdiction Stop Proliferation?

“No interdiction effort can be 100 percent effective. Intelligence will not always be accurate, ships may only dock in ports of states that do not subscribe to the initiative, and the indigenous capability to produce WMD [weapons of mass destruction] components without foreign assistance is rapidly spreading. The [Proliferation Security Initiative], although useful and necessary, is not a silver bullet against WMD proliferation. Any desire to view it accordingly will only undermine the cause of nonproliferation.”

—Jofi Joseph, June 2004
A panel of U.S. and Russian technical experts concluded that Iran is years away from developing the technology to successfully launch a nuclear-tipped missile that could threaten the United States or Europe. The group also concluded that the proposed European elements of the U.S. missile defense system would not be able to reliably counter such an attack were Iran to launch one. “It does not make sense, therefore,” the report argues, “to proceed with deployment of the European missile defense system in Poland and the Czech Republic.” Instead, the committee advocates intensified diplomatic efforts among the United States, Russia, and Iran. The report also includes an analysis of the current status of Iran’s nuclear and ballistic missile programs.

Unblocking the Road to Zero: India and China
Edited by Barry Blechman, Henry L. Stimson Center, March 2009.
In the March 2009 installment of the Henry L. Stimson Center’s “Unblocking the Road to Zero” series, Rajesh Basrur and retired Maj. Gen. Pan Zhenqiang discuss the perspectives of India and China, respectively, on efforts to abolish nuclear weapons. Basrur highlights New Delhi’s position that disarmament must be pursued in a universal and nondiscriminatory manner, rather than in a way that addresses nuclear Nonproliferation Treaty nuclear-weapon states separately. He recognizes that India has no practical experience with the process of disarmament and the compliance assurances that would be necessary as part of such an effort. Zhenqiang examines the evolution of China’s nuclear doctrine and raises two key questions about China’s participation in nuclear disarmament efforts: when China would feel comfortable engaging in arms reduction efforts with Russia and the United States and how to overcome the conceptual value of Beijing’s nuclear modernization program as a sign of parity with Western powers.

Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyberattack Capabilities
Co-edited by William A. Owens, former vice chairman of the Joint Chiefs of Staff, this wide-ranging National Academy of Sciences report addresses military, technology, policy, legal, and ethical issues surrounding destructive “cyberattack” capabilities, as distinct from intelligence-gathering “cyberexploitation.” Although dealing primarily with U.S. use of cyberattack capabilities, the report also raises questions about U.S. responses to such attacks. According to the report, current U.S. policy contemplates, in certain cases, a nuclear response to cyberattack. The authors glean insights on controlling cyberconflict by exploring traditional arms control agreements involving space, nuclear, chemical, and nonlethal weapons. Finding secrecy surrounding U.S. cyberattack capabilities and a lack of policy clarity on their use, the authors call for a “broad, unclassified national debate and discussion about cyberattack policy.”
Lots of Hedging, Little Leading: An Analysis of the Congressional Strategic Posture Commission Report

Among the flood of security policy reports issued in recent months, one of the most anticipated has been the one from the Congressional Commission on the Strategic Posture of the United States. The panel, which Congress established last year, is a bipartisan, 12-member group of policy veterans, headed by former Secretaries of Defense William Perry, the commission’s chairman, and James Schlesinger, the vice chairman.

The report, released May 6, is supposed to help guide the Obama administration’s Nuclear Posture Review (NPR), which is scheduled to be completed within the next year.

According to the law that created the commission, the report is to provide a review of the U.S. strategic posture, including a threat assessment and “a detailed review of nuclear weapons policy, strategy, and force structure.” The back cover of the report says, “Twenty years after the end of the Cold War and with the arrival of the new administration in Washington, it is time to think through fundamental questions about the purposes of nuclear deterrence and the character of the U.S. strategic posture.”

That statement is certainly true, but the commission’s report is, overall, a conservative and cautious document, arguing largely for maintaining the status quo, perhaps with minor adjustments, into the indefinite future. Anyone hoping for fundamental change in the direction of the nuclear policy and posture of the United States will be disappointed.

The report is modest in its ambitions and views the United States as strangely passive or, at best, reactive. It gives more emphasis to describing how the world is today and how the United States must accommodate itself to those realities than to suggesting how the United States might aggressively seek to transform the world’s nuclear reality. The report sees the world as dangerous but manageable; the non-proliferation regime is threatened but not necessarily about to collapse. The future, as far as the commission can see, will be very much like the present. In defining the balance between nonproliferation and “deterrence” policies, between leading with arms control initiatives and hedging by retaining strong nuclear forces, the commission muddles its message. The report states that all members of the commission supported “programs that move in two parallel paths—one path which reduces nuclear dangers by maintaining the status quo, perhaps with minor adjustments, into the indefinite future. Anyone hoping for fundamental change in the direction of the

Hans M. Kristensen is director of the Nuclear Information Project at the Federation of American Scientists (FAS) and co-author of the “Nuclear Notebook” feature in the Bulletin of the Atomic Scientists. Ivan Oelrich is vice president of the Strategic Security Program at FAS. He formerly held positions with the Institute for Defense Analyses and the Office of Technology Assessment.
The report acknowledges the conflict:

[C]ooperation of other nations increasingly depends on whether these nations perceive that the U.S. and Russia are moving to seriously reduce the salience of nuclear weapons in their own force posture and are continuing to make significant reductions in their nuclear arsenal. This has been called into question with the new nuclear programs and rhetoric in Russia, the debate in the U.S. about nuclear weapons being used for tactical roles (nuclear bunker busters) and by a perceived stall in formal arms control treaties. Thus U.S. nuclear forces must be positioned to have the needed deterrent benefits but also to promote the international cooperation needed for preventing and rolling back proliferation.2

Thus, on one path the report recommends a strong push via the nuclear Nonproliferation Treaty (NPT) regime to prevent other countries from acquiring nuclear weapons. On the other path, the report recommends only “modest” reductions in nuclear arsenals, saying that nuclear weapons should be retained for the “indefinite future.” Unlike the recent bipartisan Council on Foreign Relations task force that strongly endorsed U.S. ratification of the Comprehensive Test Ban Treaty (CTBT) (see Table 1), the commissioners were split on whether to recommend U.S. ratification of the treaty, and the commission calls for an increase in U.S. nuclear weapons production capacity. Such positions would make it more difficult to get international support for nonproliferation and give ammunition to those who want to block it.

The commission’s report spans too wide a range of issues, from nuclear forces to infrastructure to ballistic missile defense, to address all of them thoroughly in one article. We will focus on nuclear forces, which, given the START follow-on negotiations and upcoming NPT review conference in 2010, probably constitute the most urgent nuclear issue facing the administration and the international community. The report complicates both efforts.

Small Reductions, No Disarmament

At a first glance, the report appears to favor reductions in the number and mission of nuclear weapons, stating that “[t]he moment appears ripe for a renewal of arms control with Russia, and this bodes well for a continued reduction in the nuclear arsenal” and that “[t]he opportunities to engage China are also significant.” The report also says that the United States “should reaffirm its commitment to end the arms race and work to create the conditions that might enable nuclear disarmament in the context of general and complete disarmament.”

Yet, these endorsements come with so many caveats, reservations, and cautions that they quickly become very difficult or even unattainable. “The United States and Russia should pursue a step-by-step approach and take a modest first step to ensure that there is a successor to START 1 when it expires at the end of 2009. Beyond a modest incremental reduction in operationally deployed strategic nuclear weapons, the arms control process becomes much more complex as new factors are introduced,” the commission warns.4
### Table 1: Comparing Policy Recommendations

“U.S. Nuclear Weapons Policy,” a report issued by a Council on Foreign Relations independent task force chaired by William Perry and Gen. Brent Scowcroft, and “America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States,” by the Congressional Commission on the Strategic Posture of the United States, were released in April and May, respectively. Below is a summary comparison of their recommendations on major issues.

<table>
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<th>Policy Issue</th>
<th>Council on Foreign Relations</th>
<th>Strategic Posture Commission</th>
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<tr>
<td>Comprehensive Test Ban Treaty (CTBT)</td>
<td>“The Task Force believes that the benefits outweigh the costs and that the CTBT is in U.S. national security interests” and recommends that the United States “[i]ncrease national and international efforts toward entry into force” of the CTBT.</td>
<td>“The Commission is divided over whether the United States should ratify the [CTBT].… [T]he Obama administration should help to frame a broad...debate about the CTBT by conducting a broad net assessment of the benefits, costs, and risks of ratification and entry into force of the CTBT.”</td>
</tr>
<tr>
<td>Fissile Material Cutoff Treaty (FMCT)</td>
<td>“The Task Force recognizes that although an FMCT faces daunting political and technical hurdles, the United States has an interest in efforts to ban the production of fissile material for weapons purposes.... The Task Force believes that the United States should treat the FMCT, though it is an important initiative, as a lower priority than the CTBT” at the 2010 Nuclear Nonproliferation Treaty Review Conference.</td>
<td>“Negotiation and entry into force of a ban on the production of fissile material for weapons purposes would be a valuable addition to the global nonproliferation regime.... A well[-]crafted [FMCT] would impose few burdens on the United States, solidify China’s stated moratorium, and rein in worrisome arms production in South Asia.... The United States should explore a treaty with strong verification mechanisms.”</td>
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<td>Missile Defense</td>
<td>“Delay ballistic missile defense deployments in Europe until this defense system is technically viable and shown to be needed. Equally important, perform a joint missile threat assessment.”</td>
<td>“Work to come to an understanding with Moscow on missile defense, if possible. The United States should explore more fully Russian concerns. The two should define measures that can help build needed confidence.... Revive the moribund effort to establish a joint warning center.”</td>
</tr>
<tr>
<td>START follow-on</td>
<td>“Provide for a START-type legal and verification foundation for uninterrupted regulation, transparency, and predictability for U.S. and Russian nuclear forces.... Include, as an important part of strategic dialogue, discussions on missile defense, nondeployed warheads, nonstrategic nuclear forces, and prompt conventional strike weapons.”</td>
<td>“[T]he first step on U.S.-Russian arms control [should be] modest and straightforward in order to rejuvenate the process and ensure that there is a successor to...START I...before it expires at the end of 2009. The United States and Russia should not over-reach [sic] for innovative approaches.”</td>
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Only reserve warheads can potentially be reduced unilaterally, the report says, but even that comes with the condition “if the nuclear infrastructure is refurbished,” which can be read as “only if warhead production capacity is boosted.”

Despite its significance to the nonproliferation agenda and the future of the NPT regime, the report comes close to dismissing the prospect of global elimination of nuclear weapons as utopian: “The conditions that might make possible the global elimination of nuclear weapons are not present today and their creation would require a fundamental transformation of the world political order.” In fact, the report does not even begin down the path toward elimination. The chairman’s introduction explicitly states that “some of the commissioners do not accept the feasibility or even the desirability of seeking global elimination,” and the commission as a whole seems to have adopted their view by concluding that the United States should retain a viable nuclear deterrent for the “indefinite future.” The indefinite future is a long time.

By effectively dismissing the realization of the disarmament goals in Article VI of the NPT and the expectations of
the vast majority of NPT member states, the commission undercuts the broader international security value of further reductions in the number and role of U.S. nuclear weapons. The commission’s recommendation to retain nuclear weapons for the indefinite future is even more

advocate many of them as president. On April 5, in a speech in Prague, Obama stated “clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons.” He pledged that the United States would “reduce the role of nuclear

The Nuclear Mission

The report concludes that “as long as other nations have nuclear weapons, the U.S. must continue to safeguard its security by maintaining an appropriately effective nuclear deterrent force,” but the commission fails to ask fundamental

In the chairman’s introduction, Perry likened eliminating nuclear weapons to climbing a mountain: Perhaps we cannot see the cloud-shrouded mountaintop of complete, global elimination, but we can start up the mountain and establish a “base camp.” The commission as a whole not only finds the peak obscured by clouds but, from here, cannot even see the base of the mountain.

remarkable given that the commission warns of a “turning point” in nuclear nonproliferation that demands strong U.S. leadership, beginning with the 2010 NPT Review Conference. The statement is also completely at odds with a recent declaration from the five countries that the NPT designates as nuclear-weapon states. In the May 15 statement at the NPT preparatory committee meeting in New York, China, France, Russia, the United Kingdom, and the United States reiterated their “enduring and unequivocal commitment to work towards nuclear disarmament.”

The commission’s reticence on the subject contrasts sharply with the influential 2007 and 2008 Wall Street Journal essays by Perry, Henry Kissinger, Sam Nunn, and George Shultz, calling for a world free of nuclear weapons. Those essays argued that such a goal was not impossible. At the same time, they acknowledged that reaching the goal would certainly take time and hard work and that the path to that ultimate goal might not be clear today. Even with an uncertain path, however, the steps needed to move in that direction would enhance U.S. and global security today. The authors of the essays cited CTBT ratification, deep cuts in nuclear arsenals, and removal of nuclear weapons from alert as examples of such actions.

Barack Obama largely adopted the four statesmen’s nuclear weapons policy recommendations during the presidential election campaign and has continued to

weapons in [its] national security strategy and urge others to do the same.” He also vowed to quickly reduce U.S. and Russian arsenals to “set the stage for further cuts” in collaboration with “all nuclear weapon states.”

The commission report offers little support for this vision of “an end to end Cold War thinking,” as Obama put it. This is surprising because it was issues such as the proposals to build the Robust Nuclear Earth Penetrator and Reliable Replacement Warhead and the efforts to incorporate pre-emptive strike options into U.S. nuclear doctrine that triggered the legislation that created the commission in the first place.

If the commission does not agree that global elimination of nuclear weapons is a realistic goal, then whether a decision today about nuclear force structure takes us closer to that goal can hardly serve as a criterion. In the chairman’s introduction, Perry likened eliminating nuclear weapons to climbing a mountain: Perhaps we cannot see the cloud-shrouded mountaintop of complete, global elimination, but we can start up the mountain and establish a “base camp.” The commission as a whole not only finds the peak obscured by clouds but, from here, cannot even see the base of the mountain, and some commission members think we should not start climbing even if we could find it. Global nuclear elimination had no role as an organizing principle in this report, which seems preoccupied with managing the status quo.

questions about what nuclear weapons are for and what their character should be. Maybe there was no consensus on these matters, but it would have been better to ask the question and admit the panel had no answer than simply to state over and over that nuclear weapons are for “deterrence” and that we have to have them because others have them.

The “as long as other nations” formula is an assertion that should be challenged but is not. Does this really mean that if North Korea has one nuclear bomb, intended to counter overwhelming U.S. conventional capability, the United States needs to have nuclear weapons to counter it? That may be true, but it is certainly not clear to us and should not be asserted as though it needs no explanation.

Elsewhere, the report says the United States faces decisions about how to reduce “nuclear weapons to the absolute minimum.” These sorts of statements are vague they are meaningless. Two honest people could agree on this goal and differ by a factor of a hundred or a thousand on what constitutes an “absolute minimum.” When the United States had 32,000 nuclear weapons, that was also considered the “absolute minimum” needed for national security.

Without examination of the mission of nuclear weapons, how can we say what their characteristics should be? Even if nuclear weapons are for deterrence, how do they deter? What are their targets? How should those targets be attacked and for what purpose? If we do not answer or
even ask those questions, how can we say that we need high levels of warhead reliability? How can we say we need a triad of nuclear systems, many of which can be launched on a moment’s notice? How can we say we need a vast nuclear weapons complex to design advanced two-stage thermonuclear weapons with hundreds of kilotons of yield? There are other examples as well, dealing with reliability, safety, and so on, that presume missions and capabilities for nuclear weapons that are simply not analyzed.

The commission acknowledges that it is difficult to replicate the “relatively simple” deterrence calculus of the Cold War, determined by the damage inflicted, in today’s much more complicated security environment. Yet, the report apparently is doing that, asserting that the United States still “needs a spectrum of nuclear and non-nuclear force employment options and flexibility in planning along with the traditional requirements for forces that are sufficiently lethal and certain of their result to threaten an appropriate array of targets credibly.” The justification for this sweeping conclusion about capabilities is that “the security environment has grown more complex and fluid.”13 If it is so new and confusing, why does the commission recommend capabilities that are similar to those of the past?

As with many discussions of nuclear weapons, the commission’s use of the term “deterrence” is confused and the logic self-referential. The report is filled with explicit declarations that nuclear weapons are for deterrence and, from there, slips into the error of assuming that deterrence must be nuclear deterrence. It repeatedly refers to U.S. nuclear forces as the “deterrent” or the “deterrent forces” as though they were the same thing. Nuclear weapons designers, according to the report, are maintaining their “deterrent skills.”

In describing the role of deterrence, the commission glosses over many important developments that have shaped U.S. nuclear policy, strategy, and doctrine over the years. “In a basic sense, the principal function of nuclear weapons has not changed in decades: deterrence. The United States has these weapons in order to create the conditions in which they are never used,” the report declares.14 Yet, we recall hugely important developments such as mutual assured destruction, flexible response, adaptive planning, global strike, and pre-emptive strike options, all of which changed the policies and conditions under which the weapons might be used.15 The report’s more accurate statement would be, “Over many decades, presidents have not changed their reluctance to authorize use of nuclear weapons.” The unthinking use of the word “deterrence” does not clarify the debate.

Likewise, the report does not describe the important development after the end of the Cold War, where U.S. nuclear targeting policy expanded from Russia and China and their satellite states to deterring use of any weapons of mass destruction by six individual countries, some of which do not have nuclear weapons.36

Nonuse, First Strike, and Alert

A particularly important conclusion in the commission report, with which we agree, is that the tradition of nonuse of nuclear weapons serves U.S. interests and should be continued.17 What that implies for policies and capabilities is not explained. In fact, the commission concludes that not only must U.S. nuclear forces be able to retaliate against an attack, but “the United States must also design its strategic forces with the objective of being able to limit damage from an attacker if a war begins.” Such damage-limitation capabilities “are important because of the possibility of accidental or unauthorized launches by a state or attacks by terrorists” and can be achieved “not only by active defenses, such as missile defenses, but also by the ability to attack forces that might yet be launched against the United States or its allies.”18 How the United States is going to anticipate an accidental launch and know to destroy the soon-to-be offending weapon is left as an exercise for the reader.

First-strike planning can be used against other nuclear-weapon states, as it was during the Cold War against the Soviet Union and China. For the commission to advocate such a mission for nuclear forces today, however, is deeply troubling because fear of a first strike is a primary reason that Russia insists it must have large numbers of nuclear weapons on alert, a dangerous posture that is a direct threat to the interest of the United States and its allies.

Nonetheless, the report flatly rejects the idea that U.S. or Russian nuclear forces should be taken off alert. In doing so, the commission insists that U.S. nuclear forces are not on “hair trigger alert,” a phrase frequently used in the public debate to describe the alert posture that keeps nuclear weapons on high alert ready to launch in minutes.19 “This is simply an erroneous characterization of the issue. The alert postures of both countries are in fact highly stable. They are subject to multiple layers of control, ensuring clear civilian and indeed presidential decision-making.”20 Yet, whether weapons are under their nation’s control does not address the question of whether they are ready for rapid launch or why they need to be on alert.

The commission does seem to acknowledge that alert forces present a
challenge, and it recommends “increasing the decision time and information available” to the U.S. and Russian presidents so that they do not authorize launch of the alert weapons by mistake. On the U.S. side, the commission concludes that increasing the president’s decision time would be sufficient but remains “even more concerned about the possibility that the president of Russia might authorize a launch as a result of decision made in haste that is deliberate but mistaken.” That could be fixed, the report argues, by improving the Russian warning systems.21 Not by reducing the alert status of U.S. weapons.

The “Resurgence” of Russia

After nearly two decades of the Clinton and Bush administrations insisting that Russia is not an adversary and not an immediate contingency for setting U.S. nuclear force levels—we have even heard officials say that planning against Russia does not affect the size of the U.S. arsenal at all—the commission at least admits that Russia largely drives the U.S. nuclear posture. “The sizing of U.S. forces remains overwhelmingly driven by the requirements of essential equivalence and strategic stability with Russia,” the report says.22

Thus, the commission essentially reinstates Russia as a central pillar in U.S. nuclear posture planning. Numerous other references to Russia throughout the report underscore this shift, including that “the United States should not abandon strategic equivalency with Russia,” the United States “should not cede to Russia a posture of superiority in the name of deemphasizing nuclear weapons in U.S. military strategy,” and the United States should “retain enough capacity, whether in its existing delivery systems and supply of reserve warheads or in its infrastructure, to impress upon Russian leaders the impossibility of gaining a position of nuclear supremacy over the United States by breaking out of an arms control agreement.”23

To a certain extent, this view returns the United States and Russia to an adversarial relationship and a nuclear arms competition that the commission seems to accept and to be surprisingly flummoxed about how to end.

Although the commission says there is no risk of an imbalance emerging in strategic weapons in the near term, the situation is quite different with nonstrategic weapons. The commission does not know how many shorter-range, or “tactical,” nuclear weapons Russia has, and it cannot say how many the United States has because the number is a secret. It also acknowledges that strict U.S.-Russian equivalence in nonstrategic-force numbers is unnecessary. Nevertheless, it warns that the current imbalance is stark and will become apparent as strategic weapons are reduced. This, the report correctly concludes, “points to the urgency of an arms control approach” involving nonstrategic weapons.

Rising China

China looms in the background in many parts of the report, reflecting uneasiness among the commission members about the direction China is taking with its military modernization. Yet, how that direction relates to the U.S. nuclear posture is not analyzed. Even so, the commission concludes, in addition to being able to deal with Russian and regional scenarios, the United States “should also retain a large enough force of nuclear weapons that China is not tempted to try to reach a posture of strategic equivalency with the United States or of strategic supremacy in the Asian theater.”24

In other words, a form of arms race apparently does exist between the United States and China, but no analysis is offered for how the nuclear posture is supposed to function in U.S.-Chinese scenarios, only that it is supposed to deter.

Curiously, the commission is so concerned about China’s potential nuclear capacity that it urges that Russia, with which it is otherwise concerned, not reduce its nuclear forces too much. This perverted logic is a mild, reversed version of the Reagan administration’s policy that sought China as a nuclear deterrence partner against the Soviet Union.

Extended Deterrence

The commission report gives much attention to the need to reassure friends and allies by extending nuclear deterrent guarantees. This mission, which has a special legitimacy because it is cast as a nuclear mission that actually reduces countries’ incentives to acquire nuclear weapons, is likely to be one of the key arguments for retaining nuclear forces. The commission paints a dire picture:

One crucial element [of the concept of deterrence] is extended deterrence and the assurance this provides to allies and partners of the United States.... [T]heir assurance remains a top U.S. priority in the current security environment and there are some important new challenges to extended deterrence associated with Russia, China, and proliferation. Some U.S. allies believe that extended deterrence requires little more than stability in the central balances of nuclear power among the major powers. But other allies believe that their needs can...
only be met with very specific U.S. nuclear capabilities. This point was brought home vividly in our work as a commission. Some allies located near Russia believe that U.S. non-strategic forces in Europe are essential to prevent nuclear coercion by Moscow and indeed that modernized U.S./NATO forces are essential for restoring a sense of balance in the face of Russia’s nuclear renewal. One particularly important ally has argued to the commission privately that the credibility of the U.S. extended deterrent depends on its specific capabilities to hold a wide variety of targets at risk, and to deploy forces in a way that is either visible or stealthy, as circumstances may demand.\(^{25}\)

Nevertheless, the report, in our estimation, seriously understates the complexity of arriving at arrangements for allied reassurance. During the Cold War, the United States and European allies engaged in complex back-and-forth negotiations about plans for nuclear deployments. In fact, the United States has significant leeway in promoting or downplaying the role of nuclear weapons in reassurance. Assurance of allies involves a wide range of capabilities and measures, most of which have nothing to do with nuclear weapons, yet the commission report portrays assurance as essentially nuclear. The report further recommends existing and future nuclear capabilities with little analysis of the validity of these claims. Indeed, “the requirement to extend assurance and deterrence to others may well impose on the United States an obligation to retain numbers and types of nuclear weapons that it might not otherwise deem essential to its own defense.”\(^ {26}\)

The report greatly skews the views of the allies by selectively including some but excluding others. Even those that are mentioned are portrayed only as opposed to deep cuts, even though the overwhelming majority of the allies in NATO have repeatedly and consistently called for the elimination of nuclear weapons and many allies have called for the withdrawal of nuclear weapons from Europe. In Germany, Foreign Minister Frank-Walter Steinmeier recently called for a dialogue on the withdrawal of nuclear U.S. weapons from Europe,\(^ {27}\) the Belgian Senate in 2005 unanimously called for a withdrawal,\(^ {28}\) and opinion surveys indicate that an overwhelming majority of Europeans want the weapons out.\(^ {29}\)

Likewise, in Asia, Japan has long been a vocal advocate for elimination of nuclear weapons. On April 27, Prime Minister Taro Aso outlined an 11-point plan for global nonproliferation and disarmament. Unfortunately, the commission ignores these important allied voices.

The report recommends increased consultations between the United States and its allies on extended deterrence. All NATO member states except France already participate in ongoing and detailed nuclear consultations in the Nuclear Planning Group, which is the ultimate authority within NATO on nuclear policy issues. This consultation covers a broad range of nuclear policy matters, including the safety, security, and survivability of nuclear weapons, communications, and information systems, as well as deployment. It also covers wider questions of common concern, such as nuclear arms control and nuclear proliferation.

So why is there a need for more consultation? We agree that there is a problem in NATO’s decade-long refusal to discuss in detail the future of nonstrategic nuclear weapons in Europe. Some NATO members, especially Canada and Germany, still have scars from the beating they received in 1998 when they dared propose that NATO reassess its nuclear policy. We do not believe the reluctance to confront head-on the question of nuclear deployment in Europe reflects any uncertainty about U.S. guarantees. In our view, the main factor is a dread of the complexity of negotiating any change in the status quo.

Japan is also held forward, although mostly anonymously, by the commission as an ally with great reservations about future U.S. nuclear reductions and concerns about the credibility of the extended deterrent. The United States withdrew nonstrategic nuclear weapons from the Pacific in 1992 and scrapped most of them, retaining a small number of sea-launched cruise missiles in storage on land. Fewer than a dozen attack submarines are equipped to deliver the missiles, which are but a tiny fraction of the U.S. nuclear posture in the Pacific.\(^ {30}\)

Even so, the commission report says that...
less steps are taken to maintain it. U.S. allies in Asia are not integrated in the same way [as NATO is] into nuclear planning and have not been asked to make commitments to delivery systems. In our work as a commission it has become clear to us that some U.S. allies in Asia would be very concerned by TLAM/N retirement.

Although there might be a need to consult more closely with Asian allies about the nature of the U.S. extended deterrent, we agree with other commentators that this alleged Asian concern over potential retirement of the TLAM/N is overstated and reflects the view of a few individuals in the Japanese government and the commission.

Comprehensive Test Ban Treaty

Obama and the international community are adamant about the importance of U.S. ratification of the CTBT. It is therefore very unfortunate that the CTBT was the one major issue on which the commission could not reach consensus. The report contains two parallel position summaries, pro and con. The anti-CTBT arguments come down to two parts: an old and unsubstantiated assertion that other countries, particularly Russia and China, interpret the treaty’s prohibition on “all nuclear test explosions” differently than the United States does and that they can conduct militarily significant tests at very low yields without detection.

The CTBT itself does not define “nuclear explosion,” but its meaning is clear to all negotiating parties. As U.S. CTBT negotiator Ambassador Stephen Ledogar said in his testimony before the Senate Foreign Relations Committee in October 1999, I have heard some critics of the Treaty seek to cast doubt on whether Russia...committed itself under treaty law to a truly comprehensive prohibition of any nuclear explosion.... In other words, did Russia agree that hydrodynamic experiments would be banned, and that hydrodynamic explosions (which have no yield because they do not reach criticality) would be banned? The answer is a categoric ‘yes.’ The Russians, as well as the other weapon states, did commit themselves.

Some commissioners also assert that “the CTBT is unverifiable” and “even a ‘zero-yield’ CTBT could not prevent countries from testing to develop new nuclear warfighting capabilities or improve existing capabilities.”

This argument misses the point on verification and implies that low-yield tests are militarily significant. Verification of arms control agreements does not have to achieve 100 percent certainty to be effective. The goal is to achieve high confidence that militarily significant activities can be detected. This means that potential cheaters must consider the reality that there is a high probability that clandestine tests will be detected, especially if they are repeated.

In other words, although there is a theoretical chance that small clandestine tests could be conducted undetected, there is a substantial chance they could be detected. This risk of discovery probably has some deterrent effect because the political costs of cheating could be great while the military benefits would be small.

The anti-CTBT section of the report asserts that the United States should not ratify the treaty because its formal entry into force depends on getting eight other states, including North Korea and Pakistan, to ratify it.

This perspective overlooks the substantial benefit of having the other major nuclear powers, in particular Russia and China, within the treaty framework. As the pro-CTBT section of the commission report notes, “CTBT ratification would greatly enhance essential U.S. leadership in preserving and strengthening the NPT” and “other CTBT hold-outs likely would be influenced by U.S. ratification, especially if there was a major diplomatic effort to secure additional ratifications.”

Given the skepticism toward the CTBT expressed by some commissioners in the past, it is perhaps not surprising that the commission was divided on the subject. It is disappointing that Perry, Schlesinger, and the other members of the commission failed to provide greater clarity and consensus on these core technical and legal issues relating to the CTBT.

The Future Nuclear Posture

The commission could not come up with a recommendation for the most appropriate nuclear posture, even though that was one of its primary tasks. As the report explains, “There is no right number of weapons needed for the U.S. strategic posture other than one that is derived from a complex decision-making process, originating with

Navy machinists on board the Los Angeles-class attack submarine USS Norfolk secure a Tomahawk missile capsule to the pivot tray in the ship’s torpedo room in April 1999.
the president. To determine that number, the strategic context must be assessed. Political judgment from the highest level of the government is required. Numbers associated with different force sizes must be set in a strategic context.”38

Even so, the commissioners concluded that the United States should retain its current Cold War structure of a triad of strategic nuclear forces. No basis for this recommendation is provided other than claims about the virtues of each leg, the assertion that the “resilience and flexibility of the triad have proven valuable as the number of operationally deployed strategic nuclear weapons has declined,” and the belief that the triad “promise[s] to become even more important as systems age and if back-up systems within each leg of the triad are reduced.”39 Under that formula, the United States should still have a triad when it has three nuclear weapons left.

The recommendation to retain the triad is a clear example of where the “parallel tracks” of the commission’s policy result in worst-case scenarios that conflict with the task of reducing nuclear dangers. The current U.S. nuclear posture exceeds national security needs so greatly that even if two nuclear warheads were targeted against every single Russian and Chinese nuclear ballistic missile and long-range aircraft, there would be hundreds of warheads to spare under the Strategic Offensive Reductions Treaty limit of 2,200 operationally deployed strategic warheads. That does not take into account that many Chinese and Russian missiles and aircraft are clustered on the same submarine or base. The comparison also does not include the several thousand additional warheads that the United States keeps in reserve for potential upload or its inventory of nonstrategic warheads.40 Even if a START follow-on were to set a limit as low as 1,000 for the number of deployed strategic warheads, that level would still exceed the combined number of Russian and Chinese nuclear ballistic missiles and long-range aircraft.

Indeed, unless the Obama administration’s NPR significantly reduces the U.S. triad, the ICBM leg alone could soon include more delivery vehicles than the entire Russian strategic arsenal of land- and sea-based ballistic missiles and long-range bombers.41

Conclusion
Our concerns about the report are not simply limited to its conclusion that the United States continues to need a nuclear deterrent, but also to its lack of analysis for deciding what that deterrent should look like. It strongly endorses the status quo and does not take a hard look at where U.S. nuclear forces are and where they ought to be. The national security interests and foreign policy of the United States deserve better.

The report shows that the commissioners believe that the current nuclear posture by and large is the force level the United States should retain indefinitely while it waits for the world to change enough to permit elimination of nuclear weapons. It is difficult to find differences between the commission report and the 2001 NPR.

The report repeats the Clinton administration’s nuclear “lead and hedge” policy from 1994 but actually focuses on hedging with very little leading. Indeed, the report seems strangely detached from the current president’s vision and the widespread support it and the four statesmen’s op-eds have received worldwide.

A common reaction to the report is that it is remarkable that such a diverse group could agree on so much and that its agreement shows that there is, after all, a bipartisan consensus on the central elements of U.S. nuclear policy. We see a larger issue: if left unchallenged, the commission report, when seen together with other recent reports, such as the December 2008 “Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management Phase II: Review of the DoD Nuclear Mission” and the September 2008 joint Department of Defense-Department of Energy report entitled “National Security and Nuclear Weapons in the 21st Century,” risks creating considerable uncertainty in the international community about the domestic support for Obama’s more transformative nuclear vision. Some allied countries, to use the anonymous phrasing of the com-
mission report, already have approached us about what this means for the Obama administration’s nuclear policy.

In Prague, Obama stated “clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons.” Although he acknowledged the challenge of achieving that goal, he cut through the “hedge” that so dominates the commission’s report by saying, “[N]ow we, too, must ignore the voices who tell us that the world cannot change. We have to insist, ‘Yes, we can.’”

ENDNOTES


2. Ibid., p. x.

3. Ibid., pp. xviii, 78, 97, 98.

4. Ibid., p. xviii.

5. Ibid., p. 100.

6. Ibid., pp. xii, 98.

7. Article VI of the nuclear Nonproliferation Treaty states that “[i]n the interests of the Parties to the Treaty undertaken to pursue negotiations in good faith effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.”


12. Ibid., p. 15.

13. Ibid., p. 23.


18. Ibid., p. 23.


21. Ibid.

22. Ibid., p. xvii.

23. Ibid., p. 21.

24. Ibid., p. 22.


26. Ibid., p. 21.


34. Strategic Posture Commission final report, p. 83.

35. On the question of what constitutes military significance, the definitive 1995 JASON study “Nuclear Testing” (see www.fas.org/rlg/jsr-95-320.htm) said nuclear explosions below approximately 500 tons in yield—potentially low enough to evade detection if decoupled—are not very useful in assessing a new nuclear thermonuclear warhead design because that level is generally below the yield required to initiate boosting. A nuclear-weapon state could design and might even fully test an unboostered fission weapon with a yield of a few tens of tons in modest cavities at a test site if it felt such a test were worth the high risk of detection. Yet, it is unclear why a nuclear-weapon state would engage in such risky behavior with smaller-yield fission weapons already in their arsenal. The commission report fails to note that unclassified, civilian arrays of seismic instruments continuously and routinely monitor vast areas of the globe down to very low seismic magnitudes. At Russia’s former test site at Novaya Zemlya, this translates to the ability to detect the equivalent of as little as 10 tons of TNT. U.S. national technical means of intelligence at Novaya Zemlya and China’s Lop Nor and near other states of concern are likely even better than that. As the JASON report noted, very low-yield hydro-nuclear explosions, in the equivalent range of 4 pounds of TNT, are not useful for validating new designs and may only have utility in confirming whether a warhead is one-point safe, which is unnecessary for the U.S. arsenal.


37. Ibid., p. 82.

38. Ibid., pp. 28, 99.


Enhanced Prospects for 2010:
An Analysis of the Third PrepCom and the Outlook for the 2010 NPT Review Conference

The just-concluded third Preparatory Committee (PrepCom) meeting for the 2010 Nuclear Nonproliferation Treaty (NPT) Review Conference has been heralded as a much-needed success story, with much of the credit given to the Obama administration’s more positive approach to multilateral diplomacy and arms control.

In the most constructive and collegial atmosphere seen in an NPT meeting since 2002, the agenda and all significant procedural decisions for 2010 were adopted expeditiously in the first week of the May 4-15 meeting in New York. Barring any unforeseen and dramatic deterioration in relations, there is an excellent chance that next year’s review conference will be able to open smoothly and get down to work without the kind of frustrating procedural delays that marred the 2005 NPT Review Conference. Although the PrepCom was not able to agree on substantive recommendations to transmit to the review conference, the negotiations on the chair’s three successive drafts established a useful framework for forward-looking recommendations to be negotiated in 2010 and provided a reality check on the commitments that different states will seek to include in or exclude from the documents that emerge from next year’s conference.

The PrepCom has given a boost to hopes for a productive review conference in 2010, but it also demonstrates how much work will need to be done over the next year politically and diplomatically to achieve the kind of agreements that will genuinely strengthen the nonproliferation regime and provide a basis for building security in a world free of nuclear weapons.

President Barack Obama’s April 5 speech in Prague laid the groundwork for the U.S. delegation, headed by Assistant Secretary of State for Verification, Compliance, and Implementation Rose Gottemoeller, to engage more constructively on disarmament issues. Although Obama’s nonproliferation team is not fully in place, the U.S. delegation contributed to the positive atmospherics and successful adoption of important agreements to pave the way for the review conference. The delegation adopted a more progressive position than its predecessor on the Comprehensive Test Ban Treaty (CTBT) and highlighted forthcoming negotiations with Russia on verifiable nuclear arms reductions before START expires in December while reiterating long-held U.S. positions that placed emphasis on the need for full compliance and stronger tools to detect and punish treaty violations.

The five countries recognized as nuclear-weapon states by the NPT—China, France, Russia, the United Kingdom, and the United States—intended to demonstrate unity by issuing a joint press release on the last day, but this effort did not succeed in masking the significant differences among the five on a number of issues. Apart from being able for the first time in years to mention the CTBT positively and welcome the U.S.-Russian negotiations for a follow-on to START, the statement was bland and brief. With the group of nonaligned states also increasingly unable

to agree on anything but the basics, it was interesting to see the growing number of cross-group and cross-regional alliances coming together to pursue shared objectives. These contributed to better multilateral dynamics—very different from 2005—and enabled the chair, Ambassador Boniface Chidyausiku of Zimbabwe, to pilot the PrepCom through its decisions and debates.

Although the Obama administration can claim most credit for improving NPT dynamics, others played their part. Iran, for example, tabled several strongly worded working papers and made its usual combative speeches but did nothing to impede consensus on the agenda or other procedural decisions, choosing instead to go along with positions put forward collectively by the Nonaligned Movement (NAM). Egypt died at times with Iran to raise concerns about the lack of progress on disarmament, but on seeing three core elements of its proposals on the 1995 resolution on the Middle East reflected in the draft recommendations, Egypt had a vested interest in maintaining constructive dialogue, especially with Russia, the United Kingdom, and the United States on this issue. Like the United States, Iran and Egypt were more willing to compromise at this PrepCom than in recent years. Iran’s more constructive attitude may have signaled a desire to come in from the cold and renew engagement with the United States and other NPT parties to resolve international mistrust over its nuclear program, but the influence of domestic and pre-election politics should not be discounted. In addition, having supported Chidyausiku as the NAM’s nominee to chair the meeting and in view of the friendly relations between Iran and Zimbabwe, it would not have been in Iran’s interests to undermine the chair.

The change in NPT dynamics put the spotlight on other players. France, which had joined the United States in opposing a similar agenda in 2004, tried to reinstate phrasing that would take into account developments since 2000, which NAM countries, chiefly Iran, had made clear they would not accept. With the United Kingdom supporting the United States’ flexible approach on this point, France came under pressure from the rest of the Western group to join the consensus and allow the chair’s proposed agenda to be adopted without the additional language. Signaling its continuing resistance to implementing the 2000 commitments on disarmament, a position that could have challenging implications for 2010, France reasserted itself later by opposing references to a nuclear weapons convention and, together with Russia, playing a prominent role in diluting and distorting the disarmament recommendations put forward in the chair’s first draft. China also gave cause for concern, reportedly exerting behind-the-scenes pressure, for example, to remove references to a moratorium on fissile materials production, in ways that belied the virtuous exhortations of its public statements. Meanwhile, the shadow of North Korea’s 2003 withdrawal from the treaty and subsequent development and testing of nuclear weapons pervaded the meeting, most notably in discussions on the importance of the CTBT and how to interpret and apply the NPT Article X provision on withdrawal.

All in all, the PrepCom’s conduct and debates, described in greater detail below, give cause for hope but show that leadership and quiet diplomacy will be necessary to turn hopes into agreed action plans to reduce nuclear dangers and promote sustainable disarmament and nonproliferation. The challenges still facing the nonproliferation regime should not be underestimated.

A Russian shipyard worker uses an acetylene torch to dismantle a section of an Oscar-class ballistic missile submarine May 29, 1996, as part of the Nunn-Lugar Cooperative Threat Reduction program. President Barack Obama’s recent statements on disarmament were welcomed at the May Preparatory Committee meeting for the 2010 Nuclear Nonproliferation Treaty (NPT) Review Conference, but questions about the progress the United States and the other nuclear-weapon states are making on their NPT disarmament obligations are expected to be a major part of the review conference.
Agreement on Agenda, Procedures

In multilateral diplomacy, the agenda is viewed as providing a basis and framework for discussion, and those wishing to obstruct negotiations often make the agenda their first battleground. This happened in 2005, when NPT parties learned the bitter lesson that failure to adopt a review conference agenda in advance can lead to days, even weeks, of wasted time. With France aiding and abetting, the United States refused to accept the agenda that had been proposed by the chair and the NPT Secretariat at the 2004 PrepCom. U.S. opposition to that agenda had opened up a can of worms, as a small number of delegations insisted on introducing or removing references to past conferences and nuclear-related developments in subsequent drafts of the 2005 agenda. Each suggestion was viewed through the political lens of opponents as providing legitimacy for parties to walk away from consensus decisions taken by previous review conferences or to pile additional issues on to the NPT plate. The procedural debates in 2005 became so debilitating that, in the end, an agenda was adopted only in the third week of the four-week meeting, held together with an asterisk referring to statements by the review conference president and the NAM.

This year, the United States was clearly determined to avoid a repetition of the 2004-2005 mess. Taking a more flexible approach, the Obama administration signaled that it was keen to enable the 2010 review conference to start from day one with a workable agenda. Chidyausiku consulted widely and concluded that, without the toxic political atmosphere of 2004-2005, the simplest approach would work best. His starting point was the agenda used in 2000, which took into account the “decisions and the resolution adopted by the 1995 NPT Review and Extension Conference.” To these he added “and the Final Document of the 2000 Review Conference.”

Associated with the agenda, the PrepCom also agreed to allocate specific issues for consideration by the three main committees. Although broad questions of strengthening the tools and institutions of nonproliferation, nuclear disarmament, peace and security, and NPT universality are to be covered by all the committees, Main Committee I is specifically charged with reviewing the operations of the NPT’s Article I and II provisions relating to the nontransfer of nuclear technologies, and nuclear disarmament, as specified in Article VI and the “13 steps” disarmament action plan agreed in 2000.

Main Committee I is also required to address the use of nuclear weapons. This part of the committee’s mandate includes UN Security Council Resolutions 255 (1968) and 984 (1995) on security assurances by the nuclear-weapon states not to use nuclear weapons against non-nuclear-weapon-state NPT parties.

Main Committee II is intended to focus more directly on Article III, which contains the obligation on non-nuclear-weapon states to conclude safeguards agreements with the International Atomic Energy Agency (IAEA). This will be the forum for discussions on making full-scope safeguards the standard for receiving nuclear exports and increasing the number of countries applying the IAEA’s Additional Protocol. This committee also addresses Article VII, which covers nuclear-weapon-free zones and other regional issues. The 1995 resolution on the Middle East is considered part of this committee’s jurisdiction, but it now looks likely that the review conference will establish a special “subsidiary body” to focus more specifically on this issue. As a result of the UN General Assembly’s study and subsequent adoption of annual resolutions on disarmament education, both committees are also expected to discuss how to promote public education on these issues.

Developments related to the safety and security of fissile materials and what delegations call the “peaceful uses of nuclear energy” comprise the subject matter of Main Committee III, together with “other provisions of the treaty.” Since North Korea’s announcement of its withdrawal from the NPT in 2003, these debates have generally focused on Article X, with consideration of how to respond and what conditions to impose if parties wish to leave the treaty. Most of the proposals aim to find ways to dissuade potential proliferators from withdrawing from the treaty and developing nuclear weapons by addressing their stated security concerns or increasing the political and economic costs of withdrawing. The issue is highly sensitive, however, raising concerns among some states that their right to withdraw could become restricted or subject to sanctions.

To the relief and satisfaction of PrepCom participants, the chair’s proposals on the agenda and allocation of items were adopted without any opposition on the third day of the meeting. Another decision that has caused problems in the past but received unanimous assent from the delegates to this PrepCom concerned agreement on background documentation to be prepared by the UN Office for Disarmament Affairs, the IAEA, and various nuclear-weapon-free-zone secretariats.

Among the other procedural decisions that will smooth the way for the 2010 review conference, the PrepCom agreed on draft rules of procedure and designated the main chairs and post holders for the conference. Ambassador Libran N. Cabactulan of the Philippines, nominated by NAM, has been endorsed as president-designate for 2010, despite private fears expressed by some delegations that he had insufficient
Testing the Waters on Substance

Once the critical administrative decisions for the 2010 review conference had been made, the rest of the meeting was devoted to matters of substance, as the PrepCom was formally tasked with transmitting recommendations to the review conference. Over six days, delegations made statements and submitted papers on a range of the most important nonproliferation and disarmament issues. These added to the proposals and ideas from the previous two PrepComs, which were in turn summarized in working papers issued by the chairs of those meetings, Ambassador Yukiya Amano of Japan and Ambassador Volodymyr Yelchenko of Ukraine. Using this range of proposals and arguments as a basis, Chidyauskis and the NPT Secretariat did their best to identify areas of agreement that could be recommended to the 2010 review conference.

Divided into eight sections, the first draft reconfirmed or indicated ways to implement commitments deriving from consensus agreements adopted by the 1995 NPT Review and Extension Conference and the 2000 review conference, the two most recent meetings at which NPT parties were able to make decisions. It sought to look further forward, suggesting recommendations that would take into account the transforming commitments to pursue deeper disarmament, de-emphasize nuclear weapons, and build a world free of nuclear weapons, ideas evoked by more and more leaders around the world, including Obama and British Prime Minister Gordon Brown. Although it took into account many of the ideas and proposals for making future progress, it inevitably did not satisfy everyone.

After receiving formal and informal objections and alternatives, the chair put forward a revised draft. That appeared to please even fewer delegations. A bit like the three bears’ porridge, the first draft was regarded as hot on disarmament, but too lukewarm on compliance, with no mention of full-scope safeguards. The second draft was warmer on safeguards and compliance but so cool on disarmament that many considered it to be a step backward from the 2000 agreements. By the time a third draft, showing tracked options, was circulated on the last morning, it was clear that the PrepCom was not going to get agreement on substantive recommendations to send to the review conference.

There was something for everyone, but not enough all around.

Although it would have been a mistake to lower the common denominator until the recommendations could be pushed through at the PrepCom, the drafts demonstrate useful areas for potential agreement that will help governments as they prepare for 2010. The drafts also highlight a number of important issues that may require certain governments to consult with one another and resolve their differences sufficiently to enable sensitive subject matter to be addressed without deadlocking or derailing the review conference.

Perhaps the most striking development was contained in the recommendations on the 1995 resolution on the Middle East, which survived all three drafts. The draft text on the issue said the resolution was “an essential element of the outcome of the 1995 Review and Extension Conference and of the basis on which the treaty was indefinitely extended.” Recommendations followed to establish a subsidiary body at the review conference “to consider concrete practical steps to promote the earliest implementation” of the resolution and for the review conference to consider appointing a special coordinator and convening a future conference on the issue. These recommendations were based on proposals from the League of Arab States, NAM, and others. Conflicts among NPT parties related to proliferation and security concerns in the Middle East, notably the nuclear programs of Israel, a non-NPT party, and Iran, have brought past review conferences to the brink of failure, but many are now hoping that, with constructive U.S. leadership in 2010, it will be possible to move forward on the basis of the proposals. Attainment of that goal would be greatly complicated, however, if the Arab states and Iran push for specific measures to be taken by Israel.

Also welcome was the reappearance of commitments to bring the CTBT into force, after years of opposition from the Bush administration. Obama’s promise to pursue U.S. ratification of this treaty, which has already been signed by 180 states and ratified by 148, ensured that CTBT entry into force was prominently advocated in the first draft of the recommendations. This draft underscored the importance of Article VI and “the growing expectations for progress to achieve nuclear disarmament” and called for an “action plan” setting “practical, achievable and specified goals, and measures leading to the elimination of nuclear weapons.” Another paragraph specified practical disarmament initiatives. In addition to the CTBT and negotiations on a “verifiable fissile materials treaty,” the document updated the disarmament commitments adopted in 2000, calling for further deep and verifiable reductions in strategic and nonstrategic nuclear arsenals. Other goals cited in the document were expanding transparency, ensuring irreversibility, reducing the operational status of nuclear forces, diminishing the role of nuclear weapons in security policies, refraining from the qualitative improvement of nuclear weapons, and strengthening monitoring and verification for nuclear dismantlement and fissile materials.

Following up on the exhortations of UN Secretary-General Ban Ki-Moon and reflecting growing momentum for a nuclear weapons prohibition treaty to be put on the world’s future agenda for serious consideration, the first draft also called on the review conference to “[e]xamine, inter alia, ways and means to commence negotiations, in accordance with Article VI, on a convention or framework of agreements to achieve global nuclear disarmament and to engage non-parties to the Treaty.” This language appeared unacceptable to some, if not all, of the nuclear-weapon states, and subsequent revisions rendered the aspiration of aiming towards negotiating a nuclear weapons convention almost invisible.

As illustrated in the second draft, the nuclear-weapon states insisted that the reference to a fissile material treaty should include the word “cutoff” to underline their position that a fissile materials production ban should prohibit only future production and not address existing stocks. The word “cutoff” appeared in brackets in subsequent drafts. China also opposed language that...
encouraged all nuclear-weapon states to declare a moratorium on the production of plutonium and highly enriched uranium for weapons, pending conclusion of a fissile material cutoff treaty. China is widely believed to have halted such production years ago, but its persistent opposition to declaring a moratorium may continue to be a problem in 2010 and beyond.

Lessons for 2010
The above analysis of the chair’s three drafts on recommendations is intended to give a flavor of the process and some of the key issues but does not purport to provide a comprehensive representation of the recommendations or the working papers and proposals from which they were derived. As it turned out, the PrepCom was unable to adopt any of the drafts. Although there were ritual expressions of disappointment and accusations that some delegations had not been willing to “go the extra mile,” the failure to agree on recommendations for 2010 was not necessarily a bad thing. On the contrary, many participants were actually relieved.

Russia pushed for caveats that would make the fulfillment of any disarmament commitments contingent on “international stability and the principle of undiminished security for all.” Although they may sound innocuous, such phrases are heavily loaded with contradictions. The security of non-nuclear-weapon states and, some might argue, of the nuclear possessors themselves may have long been diminished by the nuclear arsenals and policies of the nuclear-weapon states. Yet if certain nuclear powers associate their own possession of nuclear weapons with stability and security, they could argue that any step toward disarmament would diminish the security they feel. The context of such conditions can be particularly significant. As placed in the first revision to the chair’s draft, the phrase appeared to provide the nuclear powers with a ready-made, if improbable, justification for refusing to take any disarmament actions. The third draft sought to address some of the contradictions but left loopholes that could continue to constitute a barrier to further disarmament undertakings.

Western insistence ensured that the second and third drafts contained stronger language on compliance, with specific references to the importance of universalizing full-scope safeguards and increasing the IAEA’s “ability to detect undeclared nuclear activities.” Elsewhere, the draft recommendations on nuclear safety went beyond the nuclear waste and accident concerns of earlier review conferences. Covering nuclear terrorism and the need to prevent black-market supply networks, trafficking, and acquisition of nuclear weapons or related materials by nonstate actors, these recommendations referred to the importance of implementing various Security Council resolutions passed during 2004-2008, such as Resolutions 1540, 1673, and 1810.

With caveats claiming that they would be “conveyed without regard to priority, without prejudice to other initiatives that States parties may wish to offer, and without any intention to represent a comprehensive summary of all initiatives proposed.” Such texts, however, once diplomats reach agreement on them, have a habit in diplomacy of getting embedded in the minds of advocates, who then use the prior agreement to resist revisions.

In addition to highlighting areas that will need further work before the review conference, the drafting process demonstrated the kind of relatively short documents on forward-looking recommendations that might be possible in 2010. The structure of the first draft was retained in subsequent revisions although there were disagreements over section headings. This structure made sense and was regarded as having checked off the treaty parties’ essential boxes: universality; nuclear disarmament; strengthened safeguards to prevent proliferation; peaceful uses of nuclear energy; safety and security; implementation of regional nonproliferation and disarmament, including the 1995 resolution on the Middle East; measures to prevent proliferation; peaceful uses of nuclear energy; safety and security; implementation of regional nonproliferation and disarmament, including the 1995 resolution on the Middle East; measures to address treaty withdrawal; institutional measures to strengthen the nonproliferation regime; and engagement with civil society, including disarmament and nonproliferation education.

Such an approach, if carried forward in 2010, could be helpful in enabling NPT parties to negotiate next steps in parallel with their review of the treaty’s operation. In previous review conferences, it has been particularly difficult to gain consensus on how to characterize past performance, so it would be helpful if states agreed to separate the tasks of deciding on future actions and reviewing the past record. Because it will be 10 years since the NPT governments last
managed to agree on anything substantive, there are likely to be highly contested differing views on whether there has been full compliance by all parties or sufficient progress on disarmament. There will also be sensitivities around which to navigate, especially with regard to the nuclear-weapon states that are in the process of renewing or modernizing nuclear weapons systems and countries that have been investigated for noncompliance with their safeguards or NPT obligations, such as Iran and Syria.

Attempts to name specific countries or criticize the nuclear powers for failing to live up to their obligations have caused deadlock in the past. Even the 1995 NPT Review and Extension Conference failed to agree on a final document covering the review of the treaty. As the negotiations in the main committees became bogged down in disagreements about whether the previous five years should be characterized positively or negatively, the 1995 conference undertook separate negotiations on principles and objectives for nuclear nonproliferation and disarmament and strengthening the review process. Without these decisions, as well as the resolution on the Middle East, it is unlikely that the treaty could have been indefinitely extended without a vote. Similarly, in 2000, the 13 steps on nuclear disarmament were negotiated first in a subsidiary body on practical disarmament measures and then by the five nuclear-weapon states and the New Agenda Coalition, while the main committees focused on the review. On this occasion, although the negotiations on the review of the treaty’s operation and commitments for the future were negotiated separately, the political environment was sufficiently positive to enable the forward-looking commitments to be combined with the review and adopted as a single final document. It is too early to predict what might happen in 2010, but a constructive outcome would be greatly facilitated if parties recognize and accept that the forward-looking recommendations and the text reviewing and evaluating the past decade’s developments need to be negotiated separately.

Conclusions
Because it proved impossible to agree on recommendations for 2010, some diplomats have characterized the 2009 PrepCom as a procedural success but a substantive failure. Such assessments misunderstand both the role and the significance of the PrepCom. The chief role of the third PrepCom should be to lay the groundwork for the following year’s review conference. A critical part of this preparatory task is to decide on the agenda, officers, and background documentation, which this meeting achieved. A further, equally important function of the PrepCom is to make governments aware of expectations and contentious issues so that these matters can be addressed in the months leading up to the review conference.

Among all the relevant issues that were debated, three seem most likely to determine the success or failure of the review conference. What emerged from the PrepCom was a clear sense of the need to develop practical measures for carrying forward commitments on nuclear disarmament and the Middle East and strengthening the regime institutions to deal more effectively with questions of compliance and implementation. The principal mechanisms for identifying and discussing these issues were the chair’s drafts on recommendations. By airing these issues in a context that was reasonably cooperative and forward-looking, the PrepCom performed a useful service.

Notwithstanding their rhetoric encouraging Chidyauziku to keep trying because “we are nearly there,” few delegates really believed that consensus on any significant recommendations would be achievable one year prior to the deadline for the real decisions. Somewhat to their surprise, they found themselves closer to accomplishing this task than any previous PrepCom, but the negotiators next year will have cause to thank them for not locking down the possibilities prematurely.

By sending the NPT a direct message in which he reiterated his commitment to seeking the “peace and security of a world free of nuclear weapons,” Obama hoped to restore confidence in the NPT’s credibility and effectiveness. This more constructive U.S. approach clearly had a beneficial influence on the conduct and outcome of the 2009 PrepCom, and its positive effects are now being felt in the Conference on Disarmament (CD), which two weeks later agreed on a program of work, including negotiations on a verifiable fissile material treaty, ending more than 11 years of paralysis.

If sustained in the CD and carried into the 2010 review conference, the improved dynamics and cross-group alliances may create new opportunities for substantive progress in 2010 and beyond. Many challenges lie ahead. Obama’s leadership will be necessary to ensure that the U.S.-Russian negotiations on a START follow-on bear fruit and lead to further reductions
in non-strategic as well as strategic nuclear weapons. His leadership also will be needed in facilitating U.S. ratification of the CTBT, which would reinvigorate efforts to bring the treaty into full legal effect, reinforcing the international community’s hand when dealing with North Korea’s continuing attempts to develop and test nuclear weapons. Now that the CD appears ready to start negotiating a fissile material production ban, the nuclear-weapon possessors will need to dust off their political, technical, and verification resources and encourage other countries to send effective negotiating teams to Geneva. Obama has made a good start by re-establishing a constructive arms control relationship with Russia but must reach out to China to allay its concerns about future threats from missile defenses or space-based weapons and to forge a more effective partnership to address the proliferation challenges coming from North Korea.

The British government has expressed support for a world without nuclear weapons and has made intriguing statements about becoming a “disarmament laboratory.” Closer British and U.S. cooperation could provide leadership to work on the technical challenges of verifying nuclear disarmament and bring the other nuclear possessors—the non-NPT parties as well as the declared nuclear-weapon states—onto the path toward reducing reliance on nuclear weapons. Although no one is arguing for the 13 steps to be reaffirmed without change, the summaries from the 2007 and 2008 PrepComs and the chair’s draft recommendations this year suggest that states will want to identify more concrete steps and negotiate a more urgent action plan to implement these commitments. International eyes will be watching to see whether the Obama administration makes good on its rhetoric and further de-emphasizes the role of nuclear weapons when its new nuclear posture is determined in the coming year.

It is widely recognized that the problems besetting the Middle East cannot all be addressed or resolved in the NPT context. Nevertheless, it is clear that strengthening the nonproliferation regime means that more must be done to engage Iran and reduce the proliferation dangers arising from its uranium-enrichment program. Finally, the PrepCom has demonstrated yet again that there is a need to develop some concrete and practical options for strengthening the NPT’s institutional powers, resources, and authority, whether through converting the current review process into one with annual decision-making meetings or by giving intersessional powers to a secretariat or nominated bureau.

For the review conference in 2010 to be judged successful, there will need to be agreement on renewed principles and objectives for nuclear nonproliferation and disarmament, together with an action plan and some practical steps for reducing nuclear dangers, strengthening the nonproliferation regime, and accelerating progress on nuclear disarmament. The real challenge, however, is not about what kind of document can be adopted in 2010, but what kind of agreements and commitments are undertaken, and whether the NPT parties have the political will and institutional capacity to ensure their implementation. Although the positive atmospherics of the 2009 PrepCom give cause for hope, the 2010 review conference will be successful only if it results in decisions that are taken seriously and implemented.

For this, the key governments need to project beyond 2010 and work hard over the next year to develop convincing action plans and apply the requisite resources for meeting proliferation challenges and moving toward a world free of nuclear weapons. **ACT**

**ENDNOTES**


Toward a Legally Binding Arms Trade Treaty: An Interview With British Minister of State for Foreign and Commonwealth Affairs Bill Rammell

Bill Rammell serves as minister of state for foreign and commonwealth affairs in the United Kingdom. His responsibilities encompass the Middle East, including Iraq and Iran; counterterrorism; counterproliferation; the Far East and Southeast Asia; North America; drugs and international crime; and migration policy. Arms Control Today met with Rammell May 5 to discuss the United Kingdom’s efforts on an arms trade treaty and other international arms control issues.

**ACT:** The United Kingdom is playing a leadership role in the arms trade treaty, promoting a legally binding global arms trade treaty. By some accounts, the United Kingdom is the second- or third-largest arms supplier in the world. Why is the United Kingdom still interested in this treaty when it could in theory limit its ability in the arms market?

**Rammell:** This would put no greater constraints on the legitimate trade in arms. And yes, we have got substantial jobs and business investments in that. That is something that we support. But there is nothing within our proposal for an arms trade treaty that would constrain us any more than our current arms export controls, which are very strong. It will be an international treaty implemented by domestic law. It is about creating a level playing field with the same environment for everybody. There is a fundamental issue that, in some circumstances, weapons are exported to countries of conflict, to countries of civil disorder, that are creating enormous problems and carnage for civilians. That is what we are trying to tackle. It is not the legitimate arms trade, which I think is here to stay.

**ACT:** Other countries have been less enthusiastic about the arms trade treaty. What do you think their rationale for supporting the treaty would be? Is it the same as yours, or would it be different and require different arguments?

**Rammell:** One, what is interesting with the way we have led this is that this isn’t just a government or nongovernmental organization backing it. We’ve got substantial elements of our own arms exporting industry that are backing it because they can see it makes life clearer and it reinforces their legitimate trade and underlines those companies that seek the illegitimate route. I think there is growing support for an arms trade treaty. I mean, if you look at the figures from when we first raised this, there were 114 countries who co-sponsored a resolution. There was then, at the back end of December, 133 states who voted in favor of the resolution. We’re now going through the open-ended procedure at the United Nations. I think there are grounds for optimism that this is an argument that is beginning to gain greater traction.

I’m sure you’re going to ask me about the position of the United States. My very strong sense is that, under the previous administration, it was no, no, no. It was interesting in the first meeting of the open-ended working group, the contribution from the U.S. delegate was not no, no, no. It was, “Well, how exactly would this work?” That, combined with our discussions with the administration, in-
dicates to me that there is now an interest in this issue. It is by no means at the point where [the U.S. position] is “Yes, we want to sign up” yet. But [there is] an interest, and we’re going to pursue that dialogue, and I hope it gets to a position where the United States can support it.

**ACT:** You mentioned that the British industry is behind this, which may not be happening in other countries. Do you have a feel for whether there is dialogue in that way to bring another voice to calling for an arms trade treaty at this point?

**Rammell:** Yeah, I guess because we’ve been very up front with this and taken the lead on it internationally, we’ve gone out of our way to take British exporters with us. And I think that has worked. We’re now trying to do two things. In the discussions that we have with other partners internationally, we’re saying, “Look, you guys need to be talking to your arms exporters.” And two, we’re actually getting British businesses to talk to their counterparts from overseas to try and build that momentum and coalition.

**ACT:** One criticism leveled at conventional arms treaties is that there is no real enforcement mechanism. The UN Security Council can have an arms embargo, but sometimes those are not effective. How do you think about an arms trade treaty and how it might be enforced, if “enforced” is the right word?

**Rammell:** We’re not saying that there’s going to be some global mechanism to enforce this, one, because I don’t think it would be very effective, and two, it would kill the treaty stone dead. It’s going to be a legally enforced situation, but down to national enforcement. Now if you look at the countries that have got strong arms export control regimes, that’s how it works. I think there are grounds for confidence that once you establish it, there will then be the legal powers within individual countries and it’s then down to them to enforce it.

There was one other thing on the United States I wanted to say because I think it’s important to make this very clear. This is in no way, shape, or form targeted at domestic gun control. You’ve got rigorous arms export controls at the moment. That doesn’t impact on domestic possession of guns in the United States. This wouldn’t in any way, shape, or form do that also.

**ACT:** Back to your point about those standards: What level of specificity do you have?

**Rammell:** Part of my difficulty in answering that question, and I’m not trying to duck it, is we’re in a process of negotiation and if I start setting out detailed prescriptions, then that’s going to put some people [off from] coming on board. Nevertheless, there will be standard benchmark criteria that will exist for every country, but it’s then down to those individual countries and their legal systems to enforce it. I think that’s the right way to go. There are a number of models we can look at internationally that already exist, like we’ve got now legally binding arms export controls within the European Union, which again are legally enforceable, but it’s down to the individual nation-states to enforce them.

**ACT:** As currently set up, the open-ended working group that is discussing the arms trade treaty could extend its work through July 2011. It has been suggested by some that if that goes too slowly, it might make sense to pursue negotiations outside of the group, perhaps something similar to the Oslo process. How do you assess progress so far in the open-ended working group? Do you think it realistic that countries might launch a separate process, and could you envision the United Kingdom ever being part of that separate process?

**Rammell:** Well, I never say never, but I’m actually cautiously optimistic at the moment. I think the figure—I quoted—133 states have signed up in principle to support, and when we had that vote in December there were only 19 abstentions, and I know the United States voted against it, and I think things have shifted since then. So there’s a lot of detailed work to be done. I would hope we can get there sooner rather than later, and I think this is developing a momentum. I never rule out any mechanism, but I think at the moment there are very reasonable prospects that we can achieve this through the open-ended working group.

**ACT:** Address some of the nuclear questions, especially along the lines of what Prime Minister Gordon Brown raised in his speech? Can you flesh out a little bit more of this concept of the new international architecture for nuclear security? There were some specific references to the IAEA [International Atomic Energy Agency] and the role of the IAEA, so how do you see that playing out, and how would you strengthen the role of the IAEA? Financially? Institutionally? Enforcement mechanisms?

**Rammell:** I mean, in personnel terms, we need a strong director-general, and the process of his appointment or election is currently being gone through...
on that front. We want a properly resourced IAEA. It is interesting that the IAEA recently undertook their own internal assessment.

It said actually there needs to be a greater prioritization, and I think also unrealistic at the time, was that there would be a massive explosion, excuse the pun, massive growth of nuclear-weapon states, and actually it hasn’t happened. We’ve got some challenges, but we’ve got to keep that deal going.

My very strong sense is that, under the previous administration, [the U.S. position on an arms trade treaty] was no, no, no. It was interesting in the first meeting of the open-ended working group, the contribution from the U.S. delegate was not no, no, no. It was, “Well, how exactly would this work?”

the idea, especially in the current fiscal climate, that you’re going to get a lot more resources is not realistic. I think we’ve got to bridge the divide that exists and really focus on the role of the IAEA in enforcing the international agreements that exist. I think we’re looking in the [Preparatory Committee] for the NPT [nuclear Nonproliferation Treaty] review for strong outcomes. I am encouraged by the moves that are being made generally on disarmament. If you look at our own record, we’ve reduced our number of warheads by 50 percent in the last decade. I think we’ve taken a leading position on that. But I’m now very encouraged by President Obama, what he’s been saying about further reductions. The Russians appear to be responding cautiously and in kind. That’s the disarmament side, and I think that is positive, and we’ve got to move forward with that.

The flip side is, we’ve absolutely got to tackle the problem of proliferation, which is why the IAEA dealing with Iran, why, through the six-party talks process, tackling the problem in North Korea is particularly important. Because go back to the heart of the NPT and there’s a deal there.... I think sometimes we can underplay how effective the NPT has been. I was giving some evidence recently to our foreign affairs select committee, and I came across [President John F. Kennedy’s] statements.... His projection, and I don’t think this was

**ACT:** Can I just backtrack on some of the points you sort of ticked off? “We need a strong director-general.” Do you think Mohamed ElBaradei has been a strong director-general?

**Rammell:** I think he’s been effective, but inevitably when you come for the election for somebody new, you look at what you need from that person. You see you need someone that is managerially focused, who can manage what is a very large organization. You need someone who will be able to bridge the divide between the advanced world nuclear-weapon states and the Nonaligned Movement. You critically need someone who is going to implement the rules and the authority of the IAEA and not try to paper over... if you got someone who is that sublime that they will actually seek to tackle that problem with the authority of the IAEA, not look at the compromises which actually lets an offender off.

**ACT:** And you’re implying that perhaps ElBaradei has done that?

**Rammell:** Nope, I think he’s been effective. But I’m saying to you whenever you have an election for a new post, you need to look at what qualities you’re looking for.

**ACT:** People have been talking for a long time that there would have to be some penalty for countries doing [something] like what North Korea did: they withdraw from the treaty and invoke this clause of the NPT of a supreme national interest, when it is apparently not the case. It is difficult to come up with a really feasible, implementable way to do that. What can you do?

**Rammell:** I think that is the difference if you look at North Korea, and I’m still the only British minister to have gone to North Korea, which I did in 2004, it is more cut off from any nation anywhere on Earth. Historically, it has not been able to feed its people, has very little trade links with the outside world. In those circumstances, what sanctions could you implement? I mean, there is a debate about those countries which do have trade links with the country actually being prepared to take action on that front. But a legally enforceable sanction, I think, would be difficult to achieve.

**ACT:** On the economic issue, you said, given the current financial situation, it would be difficult expect significant increases. The Zedillo report advocated an immediate $50 million euro increase, and the Obama administration has been talking about doubling the IAEA budget. Do you have some sort of quantity in mind or some goal?

**Rammell:** Over the medium term, I think you may get some movement on this. But I just think, at the moment, it is unrealistic to expect big increases in the budget. Actually, what came out of that report strongly for me was that [the] first call wasn’t for an increase in resources. It was actually, “Come on guys; we need to look at the way money is being spent and how it’s being prioritized at the moment.”
A CT: You said sort of an important parallel component to the strategic reductions and proliferation, substrategic weapons—do you see the United Kingdom as playing a role in pushing that? Do you still see those weapons as necessary in serving an important security function?

Rammell: At the moment, yes. But our longer-term ambition is to get further disarmament, and I think the commitment being made by the United States, the discussions, the potentially starting with the Russians, I would hope that that would make progress.

A CT: In April, the E3+3 welcomed the U.S. approach to Iran, including the occasional joint talks with Iran from now on. What does U.S. participation mean in the process, and is there a new approach to be pursued as a group?

Rammell: I think there is genuine unanimity on this. We certainly welcome President Obama’s commitment to engage in a dialogue with the Iranians. It’s not an open-ended offer. I think the Iranians need to recognize that this is a serious opportunity and they could have taken it by engaging seriously. I think there is a window of opportunity for that to happen this year. If they don’t, then I think we need to be in a much, much tougher position on sanctions. I think it is that twin-track approach that’s saying, “Look, come on, there’s all sorts of advantages and benefits to you here, in terms of normalization, in terms of trade relationship, in terms of giving you what you say you want in terms of access to civil nuclear power, if you can reassure us on your nuclear weapons intentions. If you don’t take that approach, we’re going to be in a much tougher position on sanctions.”

For a complete transcript of the interview, please visit www.armscontrol.org.

EN DNOTES

1. In recent years, Russia and the United Kingdom have been the second- and third-largest suppliers of conventional weaponry, depending on measurement metrics. See Jeff Abramson, “U.S. Atop Expanding Global Arms Market,” Arms Control Today, December 2008, pp. 56-57.

2. In 2006, 76 countries sponsored and, ultimately, 139 countries voted in support of the UN First Committee resolution that began “[t]owards an arms trade treaty: establishing common international standards for the import, export and transfer of conventional arms.” The United States voted no; 24 countries, many from the Middle East, abstained. That vote led to the establishment of a group of governmental experts to study the issue and to the submission of comments by nearly 100 countries on a possible treaty. On December 24, 2008, the General Assembly voted to move the process forward into an open-ended working group. In that vote, 133 countries voted in favor, the United States voted no, and 19 countries abstained. That resolution was co-sponsored by 114 countries. See Jeff Abramson, “Arms Trade Treaty Discussion Creeps Forward,” Arms Control Today, December 2008, pp. 53-54.

3. Prior to the March 2-6 open-ended working group meeting, the U.S. position had been interpreted as unsupportive of an arms trade treaty. On March 5, U.S. representative Donald Mahley stated that “[n]one of this history, though, can or should be taken to mean that the United States is not interested in and would not support effective international arrangements for controlling the international conventional arms trade and especially preventing such arms from serving illegitimate or anti-humanitarian purposes.” U.S. Statement, ATT Session One, March 5, 2009, www.un.org/disarmament/conven/ArmsTradeTreaty/docs/OEWG09_S1_statements_US-Smith.PDF.

4. British trade associations that have expressed support for an arms trade treaty include the Defence Manufacturers Association and the Society of British Aerospace Companies.

5. In December 2008, the European Union adopted a legally binding common position that updates the 1998 EU Code of Conduct on Arms Exports, which established criteria for examining applications for the export of conventional arms as well as consultative and transparency mechanisms.

6. Following the failure of the Convention on Certain Conventional Weapons to address the use of cluster munitions, Norway announced in 2006 that it would take the lead on reaching an agreement concerning the weapons. That effort, known as the Oslo process, resulted in the Convention on Cluster Munitions. See Jeff Abramson, “Countries Sign Cluster Munitions Convention,” Arms Control Today, January/February 2009, pp. 25-27.

7. On February 6, the British Foreign Office released “Lifting the Nuclear Shadow: Creating the Conditions for Abolishing Nuclear Weapons,” which identified steps toward ridding the world of nuclear weapons. In a March 17 speech in London, Prime Minister Gordon Brown further discussed the United Kingdom’s vision on nuclear issues.


9. The British government stated in a 1998 Strategic Defense Review that it would “maintain a stockpile of fewer than 200 operationally available warheads,” down from about 300. It is unclear how many warheads might be held in reserve.

10. At a press conference on March 21, 1963, President John F. Kennedy warned, “I see the possibility in the 1970s of the president of the United States having to face a world in which 15 or 25 nations may have [nuclear] weapons. I regard that as the greatest possible danger and hazard.”

11. Article X of the NPT says, “Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.” North Korea withdrew from the treaty in 2003.

12. Ernesto Zedillo et al., “Reinforcing the Global Nuclear Order for Peace and Prosperity: The Role of the IAEA to 2020 and Beyond,” 2008, p. 30, www.iaea.org/NewsCenter/News/ PDF/2008report0508.pdf. Zedillo, the former president of Mexico, was the head of an independent commission that prepared the report at the request of ElBaradei. According to the report, the IAEA Board of Governors should agree “to underpin the expansion of the Agency’s security and safety work, other activities in support of newcomer states embarking on nuclear programs, and an expansion of work in nuclear applications and technology transfer.” The report also says that “[t]he exact amount of additional regular budget should be determined after a detailed review of the budgetary situation and additional workloads of the Agency, but the Commission estimates that increases of about €50 million annually in real terms might be necessary during several years.”

13. “The IAEA is understaffed and under-resourced for the current and growing responsibilities placed on it by the international community. That is why the President-Elect has called for doubling the IAEA’s budget over the next four years.” Hillary Rodham Clinton, Answers to “Questions for the Record” from Senator John Kerry, January 2009, p. 29. The questions were submitted in conjunction with Clinton’s January 13 confirmation hearing.

14. The E3+3 comprises China, France, Germany, Russia, the United Kingdom, and the United States. An April 8 joint statement by the six countries said, “The other members of the group warmly welcome the new direction of US policy towards Iran and their decision to participate fully in the E3+3 process and join in any future meetings with representatives of the Islamic Republic of Iran.”
N. Korean Nuclear Test Prompts Global Rebuke

North Korea conducted its second nuclear test May 25, prompting international condemnation for violating UN demands and raising tensions in the region. The test comes a month after North Korea declared that it would no longer participate in multilateral talks on its denuclearization and would carry out nuclear and missile tests to strengthen its deterrent capability. (See ACT, May 2009.) After the test, Pyongyang’s official Korean Central News Agency (KCNA) struck a similar note, saying the blast was “part of the measures to bolster up [North Korea’s] nuclear deterrent for self-defense.”

U.S. statements responding to the test focused particularly on the consequence of Pyongyang’s increasing isolation following its actions and on Washington’s intention to coordinate a response both within the UN Security Council and with other countries in the region previously involved in six-way negotiations with North Korea. The morning after the test, President Barack Obama said that, in response to the nuclear test, the United States and its four partners in the regional talks—China, Japan, Russia, and South Korea—“have all come to the same conclusion: North Korea will not find security and respect through threats and illegal weapons.”

Moscow and Beijing issued their own condemnatory statements immediately after the test. Chinese Foreign Ministry spokesman Ma Zhaoxu said May 26 that China “resolutely opposed” the test and that, in carrying it out, North Korea had “ignored [the] universal opposition of the international community.”

Russia said the test undermined the nuclear nonproliferation regime, as well as regional security. Russian officials expressed particular concern over the continued development of North Korea’s nonconventional military capabilities. “Particularly disturbing is the fact that North Korea’s nuclear program is carried out in conjunction with the development of missile technologies,” Presidential Press Secretary Natalia Timakova said May 27.

Following a May 26 emergency meeting called by Japan, the UN Security Council responded to the test by issuing a statement declaring it to be a “clear violation” of Resolution 1718. Council members also indicated that they would begin work “immediately” on a new resolution.

Resolution 1718, which the council adopted in 2006 following North Korea’s explosion of a nuclear device earlier that year, prohibited Pyongyang from carrying out any further nuclear tests.

The United States will be seeking a new Security Council resolution “with teeth,” Susan Rice, U.S. permanent representative to the United Nations, said during a May 26 press briefing. “Those teeth could take various different forms. There are economic levers—there are other levers that we might pursue,” she added.

China’s Response

Although China strongly condemned the test, it is unclear how far North Korea’s closest ally and most significant benefactor is willing to go in imposing penalties on Pyongyang for violating the council’s demands. In his May 26 comments, Ma said that “relevant parties” must respond to the launch in a “coolheaded and appropriate way.” China used similar language in April when it agreed to a stern Security Council statement responding to North Korea’s rocket launch but opposed a more legally binding resolution. (See ACT, May 2009.)

Current and former U.S. officials and politicians seemed to be hopeful of China’s cooperation in crafting a strong response. White House Press Secretary Robert Gibbs told reporters May 28 that Beijing has been “very helpful” in discussions at the UN on North Korea.

Speaking to reporters in Beijing following meetings with senior Chinese officials there, Senate Foreign Relations Committee Chairman John Kerry (D-Mass.) said that Foreign Minister Yang Jiechi “agreed with us that North Korea’s actions were wrong and that there need to be consequences.”
According to Dennis Wilder, former senior National Security Council director for East Asian affairs, “We are seeing the Chinese beginning to move to a stronger position on this nuclear test.” Speaking to a Brookings Institution audience May 27, Wilder said China has used its political and economic leverage over North Korea in the past with positive results, including in 2003 to encourage Pyongyang to join in six-party talks and in 2006 in response to the first nuclear test.

South Korea Joins PSI

The day following the test, South Korea announced that it would formally join the Proliferation Security Initiative (PSI), a U.S.-led effort that focuses on interdiction and coordinated information-sharing to prevent the proliferation of nonconventional weapons and materials. Seoul previously was an observer to the informal group, which comprises about 96 participants.

Outlining Seoul’s rationale for joining the initiative, Foreign Minister Yu Myung-hwan told the South Korean National Assembly May 26 that the North Korean nuclear test “proves the threats of proliferation of dangerous weapons have increased” and that endorsing the PSI was Seoul’s “duty as a member of the international community.”

A South Korean diplomat told Arms Control Today May 27 that although Seoul is prepared to inspect and interdict suspect shipments, participation in the PSI is primarily intended to deter North Korea from using the South’s territory to proliferate or acquire sensitive technologies.

South Korea was already considering joining the PSI following North Korea’s rocket launch last month but delayed making an announcement because of apparent divisions within the South Korean government and concerns about North Korea’s reaction. (See ACT, May 2009.)

Pyongyang had previously stated that Seoul’s participation in the PSI would constitute an act of war. Following through on this threat, KCNA said May 27 that the North Korean army “will not be bound to the [1953] Armistice Agreement any longer” and that North Korea would “deal a decisive and merciless retaliatory blow” in response to the inspection of its ships by South Korea.

The Armistice Agreement ended hostilities following the Korean War. A formal peace agreement has never been concluded.

Test Analysis Under Way

Early estimates indicate that the test was at least more successful than North Korea’s first nuclear detonation in 2006. Siegfried Hecker, former director of Los Alamos National Laboratory, estimated May 26 that the yield was between two and four kilotons.

In comparison, North Korea’s 2006 test was estimated to be about 0.5 kilotons and at best a partial success. (See ACT, November 2006.) Prior to that test, Pyongyang reportedly informed Beijing that it expected a yield of four kilotons. It is unclear what yield North Korea intended to achieve with the May test.

Preliminary estimates of the yield of the test have been based solely on seismic data generated by the shockwaves that emanated from the test site, located a few kilometers from the 2006 test near the village of P’unggye. According to a May 25 press release by the Comprehensive Test Ban Treaty Organization, analysis of the noble gases released from the underground explosion will proceed in the coming days. —PETER CRAIL
Pakistani and U.S. officials have sought to allay increasing concerns in recent months that instability in Pakistan might threaten the security of Islamabad's nuclear weapons. Pakistani security forces have been engaged in open conflict with militant factions that now control large areas of the country's northwestern territories.

Adm. Michael Mullen, chairman of the U.S. Joint Chiefs of Staff, told reporters May 4, “I remain comfortable that the nuclear weapons in Pakistan are secure.” He added, however, that the potential that such weapons could fall into the hands of militants “is a strategic concern we all share.”

Pakistani officials have rejected outright any such concern. Husain Haqqani, Pakistan’s ambassador to the United States, was quoted May 3 in the London Guardian as saying, “The specter of extremist Taliban taking over a nuclear-armed Pakistan is not only a gross exaggeration, it could also lead to misguided policy prescriptions from Pakistan’s allies.”

It is not the first time that Pakistani officials have criticized questions about Islamabad’s ability to secure its nuclear arsenal. In January 2008, Pakistan called comments by International Atomic Energy Agency (IAEA) Director-General Mohamed ElBaradei expressing concerns that Pakistani nuclear arms may be acquired by extremists groups “unwarranted and irresponsible.” (See ACT, March 2008.)

Pakistan has an estimated nuclear arsenal of up to 60 warheads. For security purposes, the nuclear cores of these warheads are stored separately from the conventional explosives package, which initiates the nuclear explosion. The warhead components are also kept separate from the jet fighters and ballistic missiles that would be used to deliver them. Islamabad claims to be developing a nuclear-capable cruise missile as well.

Pakistan appears to have instituted an additional level of security to prevent unauthorized use of its nuclear arms. The director-general of Pakistan's Strategic Plans Division, Lt. Gen. Khalid Kidwai, stated during a lecture at the U.S. Naval Postgraduate School in 2006 that Pakistani nuclear weapons incorporate “some functional equivalent to the two-men rule and Permissive Action Links that the [United States] and some other nuclear-weapon states rely on to protect against loss of control.”

Lt. Gen. Michael Maples, director of the Defense Intelligence Agency, told the Senate Armed Services Committee March 10, “Pakistan has taken important steps to safeguard its nuclear weapons, although vulnerabilities still exist.”

Beyond the issue of the safety of Pakistan's nuclear arsenal are questions about Islamabad’s accounting and security controls over its nuclear material. Rolf Mowatt-Larssen, former director of the Department of Energy’s Office of Intelligence and Counterintelligence, said, “For years I was concerned about the weapons materials in Pakistan, the materials in the laboratories,” according to the May 3 New York Times. Mowatt-Larssen added that he was “growing more concerned about something going missing in transport,” the Times said.

Recent reports that Pakistan continues to expand its nuclear arsenal appear to add to worries about the security of nuclear material in the country. Maples said March 10 that Pakistan is expanding its nuclear infrastructure and its nuclear weapons stockpile.

An April 1 Congressional Research Service report stated that Pakistan reportedly continues to produce at least 100 kilograms of highly enriched uranium each year. Pakistan has also operated a 40- to 50-megawatt reactor at Khushab since 1998, which is not under IAEA safeguards.

David Albright, president of the Washington-based Institute for Science and International Security, said in an April 23 report that, under the present conditions of instability in Pakistan, “the security of any nuclear material produced in these reactors is in question.” According to the report, Pakistan has nearly completed a second reactor at Khushab that is much larger than the first and has begun construction of a third. Albright assessed in 2000 that the Khushab reactor can produce enough plutonium annually “for a few nuclear weapons,” and estimated in 2006 that the second reactor could
produce enough for 40 to 50 weapons each year.

Pakistani officials deny any expansion of the country’s nuclear arsenal. Information Minister Qamar Zaman Kaira said during a May 18 press briefing, “Pakistan does not need to expand its nuclear arsenals.” He added, “[W]e will maintain a minimum nuclear deterrence that is essential for our defense.”

The United States is planning on boosting its security assistance to Pakistan, and lawmakers have expressed concern that such aid may contribute to Islamabad’s nuclear efforts.

U.S. officials have sought to assure Congress that U.S. aid would not benefit Pakistan’s nuclear weapons complex. Secretary of State Hillary Rodham Clinton told the Senate Foreign Relations Committee May 20 that the administration is “quite convinced that none of our aid will in any way affect the efforts of Pakistan regarding their nuclear stockpile.”

Pakistan is believed to have modified its U.S.-supplied F-16 fighters to serve as nuclear-weapon delivery vehicles. House Foreign Affairs Committee Chairman Howard Berman (D-Calif.) introduced legislation in April that would limit U.S. assistance pledged by the Bush administration to upgrade Pakistan’s F-16 fleet.

Facing long-standing skepticism in Congress, U.S. officials have claimed that the F-16s can serve a counterinsurgency role. Richard Holbrooke, U.S. special representative for Afghanistan and Pakistan, told Berman’s committee May 5 that Pakistan did use F-16s in battles with militants in the Bajur and Swat Valleys. He added that the fighters can only be used in a counterinsurgency role with “very sophisticated training.”—PETER CRAIL
Progress Seen in Iranian Missile Test

Iran carried out its first successful flight test of a two-stage solid-fuel ballistic missile May 20, demonstrating increasing sophistication with its medium-range ballistic missiles (MRBMs), U.S. officials and technical experts said.

Iranian Defense Minister Mostafa Mohammad Najjar said just after the test that Iran would begin mass-producing the missile, called the Sajjil-2, that same day.

White House Coordinator for Arms Control and WMD Terrorism Gary Samore told the Arms Control Association’s annual meeting May 20 that the test was “a significant step forward in terms of Iran’s capability to deliver weapons.” He added, “[O]bviously, this is just a test. There is much more work to be done.”

Secretary of Defense Robert Gates confirmed in testimony before the House Appropriations Subcommittee on Defense May 20 that the test was successful. Tehran unsuccessfully tested nearly identical systems called the Sajjil and the Ashura in 2008 and 2007, respectively. (See ACT, January/February 2008.) Najjar said the Sajjil-2 uses a guidance system that is more advanced than ones in the previous tests.

Iran has traditionally relied on liquid-fuel technology for its ballistic missile arsenal. Solid-fuel propellants, however, offer a number of advantages over liquid fuel, including a shorter launch time, easier handling and storage, and the possibility of deploying smaller missiles.

The test “shows that Iran has a major program on solid-propellant missiles,” former UN weapons inspector Geoffrey Forden said in a May 20 e-mail. The group of Iranian solid-propellant experts is perhaps as large as the one dealing with its liquid-fuel program, he said.

Uzi Rubin, former director of the Israel Missile Defense Organization, told Arms Control Today in 2007 that Iran gained experience developing solid-fuel propellant domestically from its extensive work on large-diameter solid-fuel rockets. (See ACT, January/February 2008.)

Unlike Iran’s liquid-fuel programs, which depend heavily on Russian-origin technology, the Sajjil represents a significant advance in indigenous capabilities, Forden said. “As far as I can tell, only the jet vanes are probably dependent on imported Russian technology,” he said.

Najjar claimed May 20 that the Sajjil is “100 percent indigenous.”

The Sajjil-2 is the first multistage missile that Iran has successfully flight-tested. Staging involves the use of multiple engine systems, which are stacked on top of one another. The stages fire at different times during the missile’s flight, allowing the missile to cover much longer ranges. Iran successfully launched its first multistage rocket in February, when its Safir-2 placed a small satellite in orbit. (See ACT, March 2009.)

Advances in staging technology appear to have provided Iran with a moderate increase in the reach of its missiles. Gates said May 20 that the Sajjil has a range of about 2,000 to 2,500 kilometers. Yet, “because of some of the problems they’ve had with their engines, we think, at least at this stage of the testing, it’s probably closer to the lower end of that range,” he said.

Iran is believed to have deployed an extended-range version of its Shahab-3 missile. That missile has an estimated range of about 2,000 kilometers, making it capable of reaching parts of eastern and southeastern Europe. The Sajjil extends Iran’s potential reach further into those regions but remains in the category of “medium-range,” under the Department of Defense’s classification system. MRBMs have a range of 1,000 to 3,000 kilometers, according to the Defense Department scale.

According to an unclassified U.S. intelligence report to Congress on the proliferation of nonconventional weapons, the intelligence community judges that “Iran is currently focusing on producing more capable MRBMs.” The report, released in May, said Iran views its ballistic missiles “as its primary deterrent.”

—PETER CRAIL
Congress Weighs Iran Sanctions, Diplomacy

Congressional committee leaders are prepared to delay consideration of new legislation intended to stiffen existing sanctions aimed at Iran’s energy sector in order to allow time for the Obama administration’s diplomatic efforts to resolve the Iranian nuclear issue to make progress, according to public and private statements from Capitol Hill.

Introducing the legislation April 30, House Foreign Affairs Committee Chairman Howard Berman (D-Calif.) said in a statement, “I fully support the Administration’s strategy of direct diplomatic engagement with Iran, and I have no intention of moving this bill through the legislative process in the near future.” He added that “should engagement with Iran not yield the desired results in a reasonable period of time, we will have no choice but to press forward with additional sanctions,” including those contained in his bill.

Senate sources also indicated in May that a nearly identical companion bill to Berman’s legislation, which 25 senators introduced April 28, is not likely to proceed for several months. A Democratic Senate staffer said in a May 18 e-mail that the Senate is unlikely to move on its own petroleum sanctions bill until the fall because senators want “to give the administration time for their diplomatic strategy to work.” The staffer added, “[T]his is partly political posturing, partly the ‘good cop-bad cop’ routine between the Executive Branch and the Congress.”

It is unclear how long congressional committee leaders may decide to hold up the legislation, which has considerable bipartisan support. Several lawmakers who have expressed support for the Obama administration’s diplomatic strategy with Iran have also urged a limited time frame for negotiations with Tehran. Sen. Evan Bayh (D-Ind.), who introduced the Senate version of the new sanctions legislation, said in an April 28 press release that talks with Iran “should be time-limited to avoid a scenario where Iran stalls while continuing its [uranium-enrichment] activities and moving closer to possession of a nuclear weapon.”

Seven House Democrats called for a more specific time frame for talks in a March 26 letter to the president. Although President Barack Obama has rejected the notion of establishing “an artificial deadline” for talks, he indicated in May that the administration would review progress in any negotiations by the year’s end. During a May 18 press conference with Israeli Prime Minister Binyamin Netanyahu, he said the United States “should have some sense as to whether or not these discussions are starting to yield significant benefits” by the end of the year. He added that he expected discussion to begin “shortly after the Iranian elections,” which are scheduled for June 12.

The seven U.S. House members, including Berman, said in their letter that “Iran must verifiably suspend its uranium-enrichment program within at most a few months of the initiation of discussions.” Previously, the Bush administration demanded that Iran suspend such activities,
as required by UN Security Council resolutions, prior to negotiations.

Uranium enrichment can be used to produce low-enriched fuel for nuclear reactors or highly enriched material used in the explosive core of nuclear weapons.

**Measuring Progress**

The enrichment suspension might not be the only factor the administration uses to gauge progress in the negotiations. *The Wall Street Journal* reported May 15 that Washington and its European allies are considering other possible benchmarks to assess Iran’s cooperation in the negotiations. Potential benchmarks reportedly include allowing international inspectors to carry out “snap inspections” at additional Iranian nuclear facilities, an authority provided to inspectors under the International Atomic Energy Agency’s (IAEA) 1997 Model Additional Protocol. The IAEA has frequently stated that it cannot provide assurance that there are no undeclared nuclear activities in Iran without such a measure in place.

Iran signed an additional protocol in 2003 and agreed to implement it provisionally until the Iranian parliament ratified the measure. Tehran stopped adhering to the protocol in 2005 after the IAEA Board of Governors determined that Iran acted in noncompliance with its safeguards obligations.

Another potential benchmark reported by the journal is Tehran’s agreement to institute a “freeze-for-freeze.” This notion entails a pledge by Iran not to expand its uranium-enrichment program in return for an agreement on the part of the world powers not to pursue additional UN sanctions. (See *ACT*, July/August 2008.)

U.S. officials have suggested that if Iran did not demonstrate cooperation in the negotiations, such as agreeing to the benchmarks, the United States would pursue harsher sanctions. However, they have focused on the prospect of strengthened international measures, rather than unilateral U.S. ones. Secretary of State Hillary Rodham Clinton told the Senate Foreign Relations Committee May 20, “We already have a lot of sanctions in the books, but the most effective ones are the ones that we have been able to persuade a lot of our partners to pursue as well.”

About 100 co-sponsors have signed on to a House bill entitled the Iran Refined Petroleum Sanctions Act, while nearly half the Senate has co-sponsored that chamber’s version of the bill, which has been referred to the Committee on Banking, Housing, and Urban Affairs. Sen. Christopher Dodd (D-Conn.), who chairs that committee, is not a co-sponsor.

Both bills amend the 1996 Iran Sanctions Act and, if enacted, would broaden the conditions under which the president could penalize firms that contribute “directly and significantly” to the development of Iran’s petroleum resources, opening up the potential for additional types of sanctions.

The Iran Sanctions Act authorizes the president to impose at least two of a choice of six different types of penalties on firms that invest at least $20 million in Iran’s ability to develop its petroleum sector. The new legislation, which is focused particularly on refined petroleum products rather than oil extraction, would apply sanctions to firms that supply refined petroleum to Iran or help it to construct petroleum refineries.
The expansion appears to resolve a potential discrepancy in the interpretation of the 1996 law. According to a March 9 Congressional Research Service (CRS) report, it is not clear whether the existing sanctions apply to planned Iranian investments to help build oil refineries in China, Indonesia, Malaysia, Singapore, and Syria. The report also said that no administration has yet indicated that it interpreted the law as applicable to assistance in the construction of oil refineries in Iran.

Proponents of the legislation argue that Iran’s petroleum sector is particularly susceptible to economic influence. Introducing the Senate bill April 28, Sen. Evan Bayh (D-Ind.) said Iran is in a period of “unique vulnerability,” in part because of its need to import a significant percentage of its gasoline.

During the presidential campaign, Obama endorsed the notion of targeting Iran’s refined petroleum imports. In a presidential debate last October, he said, “If we can prevent [Iran] from importing the gasoline they need and the refined petroleum products, that starts changing their cost-benefit analysis.”

Key suppliers of Iranian refined petroleum include the Swiss firms Vitol and Trafigura, France’s Total, India’s Reliance, and British Petroleum. Sen. Jon Kyl (R-Ariz.) told reporters April 28 the United States must give companies a choice: “you can do business with Iran’s $250 billion economy or our $13 trillion economy, but not both.”

Supporters of the strengthened sanctions also argue that the legislation enhances the diplomatic approach outlined by the Obama administration. Administration officials appear skeptical of that view, citing concerns about harming broader multilateral efforts on Iran.

**Multilateral Efforts Emphasized**

As the March CRS report also said that the gasoline rationing system Iran instituted in 2007 reduced its dependence on foreign oil from 40 percent to between 25 and 30 percent.

However, difficulties in securing foreign capital for its refinery projects appear likely to delay Iran’s self-sufficiency. The Iranian daily newspaper Hamshahri May 15 quoted the project manager for the construction of Iran’s Khuzestan refinery as saying the project has fallen behind schedule because of a lack of foreign financing.

Difficulties in securing foreign investment might be due to increasing international pressure in recent years. Although some firms continue to do business with Iran’s energy sector, Western governments have been pressuring their firms against making such investments. (See ACT, November 2007.)

In spite of such economic pressure, Tehran maintains that it would not reconsider its uranium-enrichment program. During a May 4 press conference, Iranian Foreign Ministry spokesman Hassan Qashqavi said “sanctions and threats will not stop Iran from continuing its nuclear work.”

—PETER CRAIL

**U.S., UAE Sign New Nuclear Cooperation Pact**

The United Arab Emirates (UAE) and the United States signed a new version of their nuclear cooperation agreement May 21, signaling President Barack Obama’s support for a pact that boosters have portrayed as a model for the development of nuclear energy in the Middle East but that critics have said does not go far enough in that regard.

The accord, known as a 123 agreement, after the section of the U.S. Atomic Energy Act that makes such pacts a prerequisite for U.S. nuclear trade with other countries, was signed by the Bush administration just before it left office in January. (See ACT, March 2009.) President George W. Bush never sent the pact to Congress, leaving that step to his successor. Obama submitted the new agreement to Congress May 21, after it was signed by U.S. Deputy Secretary of State James Steinberg and Yousef Al Otaiba, the UAE’s ambassador to the United States.

Congress does not have to vote for the agreement to bring it into force. Under the Atomic Energy Act, an agreement such as the one with the UAE can enter into force after 90 days of so-called continuous session after the president submits it unless Congress passes legislation disapproving it. During that period, Congress can also vote to approve it with or without conditions.

During a May 21 press briefing, Department of State spokesperson Ian Kelly said the signing represents “an important step in building a long and fruitful partnership to enhance nonproliferation and energy security.”

Supporters of the agreement have highlighted its provisions on uranium enrichment and spent fuel reprocessing, which are considered sensitive nuclear technologies because they can be used to
produce nuclear explosive materials. The United States and other countries have for several years been arguing for a system under which only a few countries would have enrichment facilities, while other countries would be given assurances of nuclear fuel supply to encourage them to refrain from building such facilities. In his April 5 speech in Prague, Obama endorsed that approach. (See ACT, May 2009.)

Last year, the United States concluded preliminary nuclear arrangements with Bahrain and Saudi Arabia in which those two states similarly agreed not to pursue sensitive nuclear technologies. (See ACT, May 2008.)

In the 123 agreement, the UAE says it will not pursue an indigenous enrichment or reprocessing program. The pact gives the United States the right to stop nuclear cooperation and require the return of materials or technology if the UAE changes its mind.

As the advocates note, that condition is unique in U.S. 123 agreements. Critics point out that the restriction does not apply to other potential suppliers, such as France.

According to congressional staffers, the most notable difference between the current version of the agreement and the previous one is a newly added Article 7. Under that article, the UAE “shall not possess sensitive nuclear facilities within its territory or otherwise engage in activities within its territory for, or relating to, the enrichment or reprocessing of material.” The agreement defines a “sensitive nuclear facility” as “any facility designed or used primarily for uranium enrichment, reprocessing of nuclear fuel, heavy water production, or fabrication of nuclear fuel containing plutonium.”

The agreement already contains a similar commitment, a provision in the preamble that refers to the UAE’s March 2008 policy statement renouncing enrichment and reprocessing in favor of reliance on international fuel supplies. Critics in Congress and elsewhere had argued that the pledge might not be binding because it was in the preamble rather than the body of the agreement.

In his message conveying the pact to Congress, Obama said, “Article 7 will transform the UAE policy into a legally binding obligation from the UAE to the United States upon entry into force of the Agreement.”

On another point of controversy, congressional critics of the agreement have said the UAE needs to tighten its export controls. In a May 21 press release, Rep. Brad Sherman (D-Calif.), chairman of the House Foreign Affairs Subcommittee on Terrorism, Nonproliferation, and Trade, said the United States “missed an opportunity to leverage this agreement to convince the UAE to improve its export control regime.” In particular, he cited “Iranian front companies that have used UAE territory to obtain sensitive technologies for Iran’s weapons programs.”

The UAE was one of the hubs used by the illicit nuclear export network of Pakistan’s Abdul Qadeer Khan. Sherman and others also have expressed strong concern that the UAE has served as a transshipment point for exports such as electronic components for improvised explosive devices used in Iraq and Afghanistan.

Rep. Ileana Ros-Lehtinen (R-Fla.), ranking member on the House Foreign Affairs Committee, has introduced legislation making U.S.-UAE nuclear cooperation contingent on a presidential certification that illicit exports are not taking place. —DANIEL HORNER

**Memo: An Historic Opportunity for Nuclear Disarmament**

**From:** Nuclear Age Peace Foundation

**Action:** Support U.S.-Russia Talks Now

This is the official policy of President Barack Obama and his administration:

- Seek deep, verifiable reductions in all U.S. and Russian nuclear weapons and work with other nuclear powers to reduce global stockpiles dramatically.

- Work with Russia to end dangerous Cold War policies like keeping nuclear weapons ready to launch on a moment’s notice, in a mutual and verifiable manner.

- Show the world that America believes in its existing commitment under the Nuclear Non-Proliferation Treaty to work to ultimately eliminate all nuclear weapons.

(source: www.whitehouse.gov)

Take action now on this and other issues. Join the Nuclear Age Peace Foundation’s Turn the Tide action alert network at http://capwiz.com/wagingpeace.
Nonproliferation Budget Sees Some Hikes

The Obama administration is asking Congress for significant funding increases in programs designed to secure nuclear material in Russia and detect radioactive material passing through the world’s busiest ports, according to budget documents released in May.

But the proposed budget would also reduce funding for some other nonproliferation initiatives, including the Cooperative Threat Reduction (CTR) program. The request partially reflects President Barack Obama’s pledge, made during his April 5 speech in Prague, to “set new standards, expand our cooperation with Russia, [and] pursue new partnerships” in order to “secure all vulnerable nuclear material around the world within four years.” However, Thomas D’Agostino, who heads the Department of Energy’s semiautonomous National Nuclear Security Administration (NNSA), said in congressional testimony that the fiscal year 2010 budget request is not fully representative of the president’s four-year plan because budget planning for that fiscal year already was well under way when Obama took office and spelled out his goals to the NNSA. Fiscal year 2010 begins Oct. 1, 2009.

Increases for Nonproliferation Security
The administration is asking for funding increases of 20 to 50 percent for various programs that aim to bolster nuclear security in Russia. The funds would be used to tighten security for warheads and weapons-usable material held by the Russian navy and Strategic Rocket Forces, by the state-controlled Rosatom weapons complex, and at civilian nuclear sites. The NNSA, which oversees the programs, intends to upgrade outdated security equipment at those facilities and help train Russian security personnel, according to the budget documents. All told, the programs working in Russia would have their budgets raised to a combined $279.6 million, an increase of more than $54 million.

The program that would get the largest boost under the heading of international nuclear materials protection is known as Second Line of Defense (SLD). Through the SLD program, the United States helps install radiation detection equipment at border crossings, airports, and strategic seaports around the world. The Obama administration is requesting $272.7 million for the program in fiscal year 2010, up from the $174.8 million appropriated in 2009. Most of this money would be used to install detection equipment at 15 additional seaports and to maintain existing installations elsewhere.

The proposed NNSA budget would more than triple funding for verifying declared nuclear activities and detecting clandestine nuclear programs in “countries of proliferation concern.” In fiscal year 2010, the Nuclear Nonproliferation Verification program would use part of a $56.9 million budget to assist with the dismantlement of North Korea’s nuclear program. It is unclear whether these activities will take place, given Pyongyang’s April 14 repudiation of the 2007 denuclearization agreements reached through the six-party negotiations and its announced resumption of spent fuel reprocessing. (See ACT, May 2009.)
According to D’Agostino’s May 13 testimony before the House Armed Services Strategic Forces Subcommittee, the proposed budget would also add $15 million to the Next Generation Safeguards Initiative, which aims to “strengthen the international safeguards system and the International Atomic Energy Agency.” According to the NNSA budget, the initiative is supposed to develop “advanced safeguards approaches, technologies, and equipment” and to cultivate a new generation of safeguards specialists.

**Reductions in Other Programs**

Not all nonproliferation programs would get a boost under the president’s budget. In total, the administration’s request would trim the budget for nonproliferation and verification research and development by $66 million and the budget for the Global Threat Reduction Initiative (GTRI) by $42 million, a drop of 18 percent and 11 percent, respectively. The GTRI is responsible for securing and eliminating nuclear material around the world.

The largest budgetary reductions in the NNSA’s nonproliferation efforts are due to the completion of projects. The NNSA requested only $24.5 million for a program to shut down Russian reactors that generate weapons-grade plutonium and replace them with fissile-fuel power plants. The program received $141.3 million in fiscal year 2009. Fiscal year 2010 will be the final year of funding for the program, although the last of the three reactors—the only one currently operating—will shut down in fiscal year 2011, according to NNSA budget documents.

Similarly, a program to move 13,000 kilograms of weapons-useable fissile material to secure storage from a reactor in Kazakhstan is expected to be completed this year. The program is requesting $9 million for fiscal year 2010, less than 20 percent of its fiscal year 2009 appropriation of $52.8 million.

Some ongoing nonproliferation efforts would also have their budgets trimmed. The proposed budget would cut funds for converting civilian non-power nuclear reactors to use low-enriched uranium (LEU) rather than highly enriched uranium (HEU). HEU can be used as fissile material in nuclear weapons, while LEU is suitable only for use in reactors. The administration budget would provide $71.5 million for the reactor conversion program, an $11.8 million drop. The administration would similarly allocate $97 million to a program that returns spent HEU to Russia from neighboring countries, a reduction of $33 million from fiscal year 2009 funding.

At a May 21 House Appropriations Energy and Water Development Subcommittee hearing, D’Agostino was asked to explain the proposed reductions, given Obama’s stated commitment to nuclear nonproliferation. “We recognize that President Obama has laid out a fairly aggressive goal,” D’Agostino said. “What we’re doing right now...is developing the detailed four-year plan on what it would actually take to achieve that goal,” he said, referring to the timetable Obama cited in his Prague speech.

Obama’s priorities were transmitted to the NNSA around the time of the president’s inauguration, D’Agostino said. “By then, we were [already] working the budget,” he said.

D’Agostino went on to say that subsequent budgets will more accurately reflect the president’s priorities. “My expectation is that the program that...we’re going to send to the White House in September, just a few months away from now, will be significantly different” from the current request, D’Agostino said.

Under the U.S. budget process, government agencies draft their budgets and send them to the White House’s Office of Management and Budget to vet them before the requests are submitted to Congress.

NNSA Deputy Administrator for Defense Nuclear Nonproliferation Kenneth Baker told the appropriations panel that accomplishing Obama’s goal of securing all vulnerable nuclear material within four years “will take a lot more money...and a lot more people.” D’Agostino similarly called the plan “a huge challenge.” He added that the NNSA is “in the position now of trying to knock down the details of this four-year plan and be ready to...make sure the White House is aware of the kind of work that has to happen.”

**Increase Requested for MOX Plant**

Overall, the NNSA is requesting $2.14 billion for its nonproliferation programs for fiscal year 2010, up from $1.48 billion in 2009. The bulk of the increase comes from the transfer back to the NNSA of the roughly $500 million in funding for construction of a mixed-oxide (MOX) fuel fabrication plant at the Energy Department’s Savannah River site in South Carolina. The program had historically been in the NNSA but, on the initiative of the energy subcommittee, was transferred to the Office of Nuclear Energy because the panel questioned its nonproliferation value. The Bush administration’s Nuclear Energy Department resisted the move, sparking a long-running battle with the subcommittee.

It is not clear whether the subcommittee will continue to insist that the MOX program remain in the nuclear energy office. The two main advocates of that step were Rep. Peter Visclosky (D-Ind.), who chairs the subcommittee, and Rep. David Hobson (R-Ohio). Hobson, who was the panel’s top Republican, has retired from Congress. Visclosky’s office did not respond to a request for comment, and neither he nor other members of the panel raised the point at the May 21 hearing.

The fiscal year 2010 request for MOX construction is $504 million, up from the fiscal year 2009 appropriation of $468 million. The request also includes funds for other activities related to the MOX facility.

The MOX plant, which is being built by Energy Department contractor Shaw Areva MOX Services, is the centerpiece of the NNSA’s plutonium-disposition program. Under that program, surplus U.S. weapons plutonium is to be fabricated into MOX fuel for U.S. reactors. MOX fuel is a mix of plutonium and uranium oxides. All U.S. reactors now run on fuel made from uranium oxide.

The only U.S. utility to sign up for the MOX fuel was Duke Energy, but it allowed its contract with Shaw Areva MOX Services to lapse Dec. 1, 2008. At that time and since, the two sides have said they are in negotiations to reinstate the contract.

At the May 21 hearing, the NNSA’s Baker said there are candidates besides Duke Energy to take the fuel. Areva spokesman Jarret Adams said May 26 that there have been discussions with Duke Energy and three other companies, but he declined to name the three.

The MOX program has always envisioned contracts with more than one utility. An October letter by Shaw Areva MOX Services seeking an “expression of interest” from U.S. utilities with nuclear reactors said the Duke commitment would account for 950 of the 1,700 MOX fuel assemblies that the plant is expected to produce.

According to the letter, construction is expected to be finished in April 2014, and the plant is scheduled to start producing MOX fuel in 2018.
Obama Shifts U.S. Stance on CTBTO Funding

The Obama administration’s fiscal year 2010 budget request for the Department of State includes $26 million for the U.S. contribution to the Comprehensive Test Ban Treaty Organization (CTBTO), the first request to meet or exceed the CTBTO’s assessed contribution since the Clinton administration.

But the $26 million would cover only the United States’ 2009 assessed dues and would not be adequate to meet the country’s 2010 assessment, diplomatic sources in Vienna said. Delay in the U.S. payments could create a shortfall in the CTBTO budget that could deprive the United States of its voting rights within the organization and adversely affect the monitoring and verification system, according to CTBTO officials.

In February, the United States paid $20.5 million to cover all of its outstanding arrears but still owes $24 million for its 2009 assessment. Its 2010 assessment of approximately $24 million will soon become due.

For several years in a row, the United States has had its voting rights suspended at the beginning of the calendar year because it has not fully paid its outstanding dues. Each suspension lasted a few months before the United States made a payment and had its voting rights reinstated.

Under Article II of the Comprehensive Test Ban Treaty (CTBT), a CTBTO member that is in arrears in paying its assessed contribution “shall have no vote in the Organization if the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two years.”

The CTBTO budget for 2009 is $113 million, and the United States is expected to pay approximately 22 percent of the total budget. According to a 2008 Congressional Research Service report, almost 70 percent of the CTBTO budget is directed toward the annual cost of the International Monitoring System (IMS) and its accompanying infrastructure, such as the International Data Center and the Global Communications Infrastructure.

During his April 5 speech in Prague, President Barack Obama expressed his support for the CTBT’s entry into force and said his administration would pursue
Obama Budget Seeks Rise in Tritium Capacity

The Obama administration’s fiscal year 2010 budget request includes funds to increase production capacity for tritium, a radioactive gas used to boost the explosive power of U.S. nuclear weapons, even as the U.S. government is taking steps to scale back the amount of tritium it produces.

Part of the reason is that the plans for tritium production have to be put in place more than a year ahead of time, officials from the Department of Energy’s National Nuclear Security Administration (NNSA), which is responsible for tritium production, said in interviews last month. Because tritium decays relatively rapidly, supplies of it have to be replenished periodically to maintain a nuclear arsenal of a given size.

The tritium for the U.S. arsenal is being produced by irradiating special fuel rods, known as Tritium-Producing Burnable Absorber Rods (TPBARs), in a nuclear power reactor owned and operated by the Tennessee Valley Authority (TVA), a federal corporation. Tritium is then extracted from the TPBARs in a facility at the Energy Department’s Savannah River Site in South Carolina.

The fiscal year 2010 request of $68.2 million for “Tritium Readiness” actually represents a slight decline from the $71.8 million that Congress appropriated for fiscal year 2009. But according to the NNSA budget justification—the detailed budget document that federal agencies submit to Congress—“Plans are being initiated to bring additional production capacity on line using TVA’s Sequoyah Unit #1 and #2 reactors to meet tritium production requirements, specified in the Nuclear Weapons Stockpile Plan signed annually by the President.” TPBARs were first irradiated in TVA’s Watts Bar reactor in 2003.

In a May 21 interview, Douglas Dearolph, manager of the NNSA’s Savannah River Site office, said the program had always planned to use three reactors. Adding the two Sequoyah units will not affect the “operational strategy” for the extraction facility, he said. Also, he said, although the two additional reactors will increase production capacity, they also simply provide more “flexibility.”

The TVA has successfully applied to the Nuclear Regulatory Commission “aggressively and immediately.” Secretary of State Hillary Rodham Clinton said the Obama administration “will fully support” the IMS. That system “gives the United States better capability to detect and identify very low-yield tests than we would on our own,” she said in written responses to questions from the Senate Foreign Relations Committee in January.

In its request for another international organization that has a key role in Obama’s nonproliferation policy, the State Department is asking for $65 million for the United States’ voluntary contribution to the International Atomic Energy Agency (IAEA). The U.S. contribution for fiscal year 2009 is $62.5 million; that figure includes $1.5 million in a pending supplemental appropriations bill, according to State Department budget documents.

The fiscal year 2010 request “initiates the effort to eventually double U.S. voluntary contributions” to the IAEA, the State Department said in one of the budget documents.

The U.S. contribution supports programs in nuclear safeguards, safety, and security, as well as nuclear energy and the peaceful use of nuclear science technologies, the document said. Voluntary contributions allow the U.S. government “to target programs of specific interest,” as the document put it. That is a key difference between voluntary and assessed contributions.

For the assessed contribution to the IAEA, the Obama administration is requesting $100.2 million for fiscal year 2010. That is an increase from the fiscal year 2009 expenditure of $98.0 million and the estimated fiscal year 2009 figure of $94.1 million, according to the State Department budget documents.

The increase “reflects additional verification activities the [IAEA] is undertaking in India and recosting for updated economic factors,” the State Department said.

Last year, under an initiative led by the United States, an international ban on major nuclear exports to India was lifted in return for a set of nonproliferation commitments by New Delhi. One of the main Indian commitments was to allow IAEA inspectors into some of the country’s currently unsafeguarded nuclear reactors.

—MERI LUGO and DANIEL HORNER
tritium as it had originally planned, the facility can operate on an “as-needed basis,” he said.

Everet Beckner, a former senior NNSA official, suggested going further. In testimony earlier this year to the House Appropriations Energy and Water Development Subcommittee on options for reducing costs at the NNSA, he suggested putting the extraction facility into cold standby, “with the expectation to restart it when it becomes necessary to generate new tritium, in perhaps 10 years.”

The move would be feasible, Beckner said, because reductions in the U.S. nuclear weapons stockpile, including those anticipated to be recommended in the forthcoming Nuclear Posture Review (NPR), mean that the NNSA “has adequate quantities of tritium for many years to come.”

But Dearolph and Giusti said the NNSA is not currently considering that option.

Beckner’s suggestion was predicated on a scenario that has not yet materialized, Dearolph said. Implementation of such an idea typically would follow the completion of the NPR and the establishment of new tritium requirements corresponding to any changes to the nuclear stockpile, he said. —DANIEL HORNER

### Missile Defense Programs in Fiscal Years 2009 and 2010 Budgets

The fiscal year 2010 Department of Defense budget request, released in May, provides additional detail on the Obama administration’s refocusing of U.S. missile defense efforts. Secretary of Defense Robert Gates outlined the reorientation at an April 6 press conference. (See ACT, May 2009.) The revised approach emphasizes terminal-phase missile defense programs over midcourse and boost-phase ones. The following table compares major missile defense programs in the fiscal year 2010 request with requests and appropriations from fiscal year 2009. —COLE HARVEY

<table>
<thead>
<tr>
<th>Program</th>
<th>FY 2009 Request</th>
<th>FY 2009 Appropriation</th>
<th>FY 2010 Request</th>
<th>Percent Change in Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aegis Ballistic Missile Defense</td>
<td>1,157,783</td>
<td>1,113,655</td>
<td>1,690,758</td>
<td>46</td>
</tr>
<tr>
<td>Terminal High Altitude Area Defense</td>
<td>864,899</td>
<td>753,189</td>
<td>665,455</td>
<td>-23</td>
</tr>
<tr>
<td>Ground-Based Midcourse Defense</td>
<td>2,076,662</td>
<td>1,507,481</td>
<td>982,922</td>
<td>-53</td>
</tr>
<tr>
<td>Airborne Laser</td>
<td>421,229</td>
<td>400,751</td>
<td>186,697</td>
<td>-56</td>
</tr>
<tr>
<td>Kinetic Energy Interceptor</td>
<td>386,817</td>
<td>385,493</td>
<td>0</td>
<td>-100</td>
</tr>
<tr>
<td>Multiple Kill Vehicle</td>
<td>354,455</td>
<td>283,481</td>
<td>0</td>
<td>-100</td>
</tr>
</tbody>
</table>

U.S. and Russian delegations met in Moscow May 18-20 for the first full-fledged negotiations on a successor to START and said the talks went well.

A spokesman for the U.S. Department of State called the talks in Moscow “positive” but declined to provide any substantive details on the ongoing negotiations.

The Russian Foreign Ministry similarly described the atmosphere at the negotiations as “constructive and businesslike.” During a May 20 press briefing in Moscow, ministry spokesman Andrei Nesterenko said that the two sides “discussed a broad range of issues relating to the preparation of a future agreement.”

START, which limits U.S. and Russian nuclear weapons and established extensive monitoring and verification procedures between the two countries, expires Dec. 5. At their April 1 meeting in London, President Barack Obama and Russian President Dmitry Medvedev committed to negotiating a successor agreement by the end of the year.

Speaking to reporters May 20, Russian Foreign Minister Sergey Lavrov listed some of the issues that Russia wants on the table. “The overall principle of the agreement must be equal security for the [two] sides,” Lavrov said. “Undoubtedly this cannot be ensured without taking into account the situation in the sphere of missile defense, the placement of strike systems in outer space, [and] plans to develop non-nuclear-tipped warheads.”

The three issues mentioned by Lavrov are familiar points of contention between the United States and Russia. Moscow has long objected to the Bush administration’s plan to deploy missile interceptors in Poland and a high-powered radar in the Czech Republic and also opposes a Bush-era plan to develop long-range missiles with conventional warheads. Russia is a leading proponent of a treaty that would ban the use or deployment of weapons in space. The Bush administration rejected the possibility of such an agreement.

Secretary of State Hillary Rodham Clinton addressed Russian concerns about missile defense in a May 19 interview with a Russian television network, saying that the system “was never intended to be used against Russia.” Clinton added, “We want to do research with the Russians. We want to look for sites that we can both agree on and maybe mutually construct and monitor. That has been the offer we’ve put on the table.”

The two negotiating teams are scheduled to meet during the first week of June in Geneva and report on their progress to Obama and Medvedev in July. —COLE HARVEY

German Chancellor Fellowship Program

Germany’s Alexander von Humboldt Foundation awards ten German Chancellor Fellowships annually to young professionals in the private, public, not-for-profit, cultural and academic sectors who are citizens of the United States. The program, which also includes fellowships for citizens of the Russian Federation and the People’s Republic of China, sponsors individuals who demonstrate the potential to strengthen ties between Germany and their own country through their profession or studies. The fellowship provides for a stay of one year in Germany for professional development, study, or research. Prior knowledge of German is not a prerequisite. Fellows are provided with intensive language training prior to and during the fellowship.

The program begins September 1 and lasts twelve months. It is preceded by three months of intensive language classes in Germany. Must be a U.S., Russian or Chinese citizen. Candidates must have received their bachelor’s degree after September 1, 1998. Application deadline for U.S. applicants: October 31, 2009. For applications and additional information, including frequently asked questions, visit:

www.humboldt-foundation.de (applications)
www.americanfriends-of-avh.org (alumni website)

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CD Breaks Deadlock on Work Plan

The Geneva-based Conference on Disarmament (CD) agreed on a program of work May 29, ending 12 years of deadlock. The 65-member conference, which operates by consensus, agreed to negotiate a verifiable treaty banning the production of fissile material for use in nuclear weapons, or a fissile material cutoff treaty (FMCT). The CD also agreed to enter into substantive discussions on nuclear disarmament, the prevention of an arms race in outer space, and assurances that non-nuclear-weapon states will not be attacked with nuclear weapons. The CD agreed to establish working groups to consider all four issues.

Dozens of delegations hailed the agreement. The U.S. representative, Garold Larson, said the United States looks forward to “challenging” work after “a decade of stalemate.” The Russian delegate, Victor Vasiliev, expressed hope that the agreement “would open up a new chapter for new agreements in international peace and security.”

Some delegates, while saying they were pleased that the CD had reached consensus, expressed disappointment that the program of work was not more ambitious. India’s representative, Hamid Ali Rao, said that the negotiation of an FMCT would be “a step forward” but faulted the conference for failing to agree to multilateral negotiations on nuclear disarmament. Similarly, Zamir Akram of Pakistan said the agreement was “not perfect” but joined the consensus in order to end the years of deadlock in the conference.

Idriss Jazairy of Algeria, who held the rotating presidency of the CD during the negotiation of the work program, said that the current international climate was “propitious” for agreement in the CD. He cited a growing chorus of high-level voices for nuclear arms control, including a March speech on disarmament and nonproliferation by British Prime Minister Gordon Brown and the April 1 joint declaration by President Barack Obama and Russian President Dmitry Medvedev. He also counted an EU action plan on disarmament and China’s support for a nuclear-free world among “many encouraging factors to resume the work” of the CD. —COLE HARVEY
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President Barack Obama’s enlightened statement April 5 in Prague on the future of nuclear weapons raised the possibility that we are at a turning point in our long life with the atomic bomb. What we do now will depend a great deal on how much we have learned over these years. One of the uniquely important aspects of Michael Krepon’s excellent book is that, among other things, it is a book about learning and forgetting.

Paul Nitze exemplifies the many decades we have spent on the learning curve. As Krepon notes, Nitze gave us NSC-68, the 1950 policy document that called for a long-term military buildup as a major component of the containment policy directed against the Soviet bloc. As a member of the Committee on the Present Danger, he was most critical of President Jimmy Carter’s arms control negotiations with the Soviet Union. In the end, however, Nitze came to favor abolition of nuclear weapons because he saw that a nuclear world is not in the national security interest of the United States. He was not alone, of course, as George Shultz, Henry Kissinger, William Perry, and Sam Nunn have come to a similar conclusion in their well-known Wall Street Journal articles of 2007 and 2008.

Krepon reminds us that even before the nuclear age had gathered steam, Henry Stimson anticipated the dangers of a nuclear world and pushed for weapons controls. Our collective learning at that time lacked consensus and conviction. In 1946 the United States made a stab at trying to establish international control over nuclear energy through the Baruch Plan. The proposal called for a UN agency to oversee all development and use of nuclear energy. The United States would dispose of its stockpile and stop producing nuclear weapons, and there would be punishment that could not be thwarted by a Security Council veto for states that violated the plan’s provisions. After the Soviets rejected the Baruch Plan, the United States and the world veered onto a different path.

Changes in thinking often have been propelled by specific, unsettling events. The 1949 Soviet test undoubtedly strengthened the hand of those who saw the need for large numbers of nuclear weapons, although a specific theory of deterrence was not publicly articulated until 1954. As our thinking evolved after the 1950s, our elaborate theorizing about nuclear doctrines became a type of intriguing parlor game, based not on experience but rather on an abstract, somewhat antiseptic logic that belonged more comfortably in the world of think tanks than in the real world. This is not a criticism because good and bright people did the best they could with imperfect knowledge, which always seemed to lead them to a strategy of “better safe than sorry.” Consequently, this strategy led to the production of tens of thousands of nuclear weapons that, by luck, doctrinal design, and, in several instances, timely presidential restraint, have never been used.

The Cuban missile crisis in 1962 strengthened the hand of those who saw the value of moving in the direction of arms control. Even while the Cold War was beginning to melt in the second half of the 1980s and early 1990s, the United States and the Soviet Union were reaching some sweeping agreements. In particular, START I, which was signed in 1991, was the first treaty actually to reduce strategic weapons, and the 1987 Intermediate-Range Nuclear Forces (INF) Treaty eliminated an entire class of delivery vehicles. In the story Krepon tells of our life with nuclear weapons, it is fitting that success in concluding the INF Treaty was due in large measure to Nitze’s role as negotiator in the early stage. So, at that point in time, we were learning the right lessons.

In 2001 the United States seemed to stop learning and to start forgetting. Much is often made of the impact of the September 11 attacks on our thinking, but it is good to keep in mind that the decisive shift away from arms control and non-proliferation started before September 11, 2001. For example, the refusal by the Bush administration to resubmit the Comprehensive Test Ban Treaty (CTBT) to the Senate for advice and consent, the clearly stated intention to withdraw from the Anti-Ballistic Missile Treaty, and the scuttling of the Biological Weapons Convention

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the other members of the Nuclear Suppliers Group that full-scope safeguards, under which a country opens all its nuclear facilities to international inspections, should be required for significant, new nuclear exports to non-nuclear-weapon states. For the first time since 1978, there was no presidential affirmation of U.S. negative security assurances, the commitment not to attack or threaten to attack with nuclear weapons any non-nuclear-weapon state bound by treaty not to acquire nuclear weapons. The train wreck of the 2005 NPT Review Conference was due partly to the Egyptian obstructive behavior, but also to anemic U.S. diplomacy preceding the conference and underpowered U.S. leadership during the meeting. (The U.S. delegation in 2005 was headed by an assistant secretary, the lowest-ranking official to lead any U.S. delegation in the history of the NPT.) U.S. support for the NPT had reached the level of indifference.

To be fair, the Bush administration launched a few good counterproliferation initiatives. For example, the Proliferation Security Initiative began under Bush; and more importantly, his administration pushed through UN Security Council Resolution 1540. That resolution, by invoking the UN Charter’s Chapter VII, which deals with threats to international peace and security, requires states to take measures to prevent illegal trafficking of materials related to weapons of mass destruction. The principal problem was that counterproliferation tended to be seen in the Bush administration largely as a substitute for, not a complement to, nonproliferation. After Secretary of State Condoleezza Rice regained some of her realist principles, the United States belatedly took up serious diplomacy with North Korea in the six-party talks and, as Krepon points out, made considerably more progress than it did by trying to isolate and rhetorically rough up the North Koreans. On balance, though, the mixed bag of actions from 2001 to 2009 or, in some cases, the absence of them was decidedly negative. The result was a weakening of the ‘‘load bearing walls’’ of the nonproliferation regime, to use Krepon’s term.

Now we have another chance to get it right—more than a chance, a compelling need.

Krepon defines the post-Cold War period as the ‘‘second nuclear age.’’ His nightmare list of threats in the second nuclear age, with Iran’s nuclear program at the top, is as good as any. Regardless of how one ranks them, though, the world undoubtedly is facing a host of multidimensional threats that includes both states and nonstate actors.

Krepon effectively dismisses the naive notion that the United States can achieve real nuclear security through dominance and argues persuasively for a comprehensive approach to vertical as well as horizontal proliferation. (Vertical proliferation refers to the arms race among nuclear-weapon states; horizontal proliferation refers to the spread of nuclear weapons to formerly non-nuclear-weapon states.) Krepon is quite right to use the two terms together because doing so focuses attention on the central issue of increasing numbers of nuclear weapons, whether in the hands of declared nuclear-weapon states or others.

The comprehensive approach to proliferation he recommends has five principal components: deterrence, military strength, containment, diplomatic engagement, and what he sees as a new form of arms control that stresses cooperative threat reduction. None of these components is new, and although diplomatic engagement from 2001 to 2009 was spotty at best, none entirely disappeared during the Bush years. For example, although initially underfunded in the Bush administration, cooperative
threat reduction continued in the states of the former Soviet Union. The key is balance, and in this regard, Krepon’s comprehensive approach differs markedly from the one the United States followed during the last eight years.

It would be difficult to disagree with Krepon’s argument for a broadly construed concept of arms control that emphasizes cooperative efforts, but one should not at the same time discount the importance, even urgency, of traditional disarmament negotiations. The Bush administration’s nonchalant approach to strategic arms control will, if a new agreement is not negotiated before START I expires in December, leave us with one weak agreement on the books, the Strategic Offensive Reductions Treaty, and no verification. Moreover, with 95 percent of the world’s nuclear weapons in U.S. and Russian hands, the United States and Russia have a big task ahead of them. On April 1, Obama and Russian President Dmitry Medvedev committed themselves to a strong, forward-looking agenda. Notwithstanding the desirability of a broad approach to arms control, old-fashioned negotiations on reductions are still very much needed. Also worthy of serious attention is the question of how, at an appropriate time, the other declared and de facto nuclear-weapon states can be brought into negotiations. Given the widely divergent structures of nuclear forces and strategies among the other nuclear states, this objective could be extremely challenging.

Nonproliferation is an area badly in need of repair. When the NPT parties agreed in 1995 to extend the duration of the treaty indefinitely, they also committed themselves to conclude a comprehensive test ban and negotiate a fissile material cutoff treaty (FMCT). Obama has made clear that he will seek CTBT ratification. If common sense prevails, the Senate will do what it failed to do in 1999 by voting for CTBT ratification, but the fight will probably be bruising. Now that the Obama administration has given up the laughable position adopted in 2004 by the Bush administration that an FMCT cannot and, indeed, need not be verified, there is a new opportunity to press ahead with realistic negotiations. Negotiating an FMCT, however, is likely to be a long, tough slog through the arcane complexities of the 65-state Conference on Disarmament. The final preparatory committee meet-

Books

The Tradition of Non-Use of Nuclear Weapons

Professor T.V. Paul of McGill University examines the tradition of nonuse of nuclear weapons that has been the informal global norm since the bombings of Hiroshima and Nagasaki. Paul ponders why nuclear-weapon states have refrained from using their strategic arsenals in conflicts with non-nuclear-weapon states, even when the nuclear power is faced with losing the war. He concludes that nuclear-weapon states are constrained by “reputational interests” that arise from the “destabilizing and absolute character of nuclear weapons.” Paul traces the development of the tradition of nonuse, or “self-deterrence,” in the strategic policy of the five recognized nuclear powers, as well as India, Israel, and Pakistan. In the final chapter of the book, Paul considers possible threats to the tradition in the aftermath of the September 11 attacks, in an era of asymmetric warfare and nonstate actors.

International Law and the Proliferation of Weapons of Mass Destruction

Daniel H. Joyner, an associate professor at the University of Alabama School of Law, examines the legal basis for and dynamics behind global arms control and nonproliferation efforts from international treaty regimes to the Bush doctrine of pre-emption and the use of force. He begins with an analysis of the nuclear Nonproliferation Treaty, which he characterizes as a contract between nuclear-weapon and non-nuclear-weapon states in which a violation by one set of parties could void the obligations of the other set. Joyner compares such a framework with the more universal obligations under the biological weapons and chemical weapons regimes. He then considers the UN disarmament machinery and the role of the Security Council in nonproliferation efforts, tackling the question of whether the council overstepped its bounds by setting domestic legal requirements under Resolution 1540. Finally, Joyner argues that there is a crisis in international law on the use of force law. This problem stems from the security prerogatives of powerful states to address weapons of mass destruction proliferation and is exemplified by the 2003 invasion of Iraq, he says.

The Future of Biological Disarmament: Strengthening the Treaty Ban on Weapons

Nicholas A. Sims provides an in-depth examination of the Biological Weapons Convention (BWC), and describes the events of the Sixth Review Conference of the BWC, which took place Nov. 20-Dec. 8, 2006. Sims says that the conference did not address the important issue of verification and compliance, and argues that to strengthen the regime in the near term, the BWC should take incremental steps to address “institutional deficits.” One such measure would be to establish an accountability framework for state compliance, Sims says. In the long term, the BWC needs an implementation body similar to the Organization for the Prohibition of Chemical Weapons, he says. He concludes by examining the alternative futures of the treaty: convergence or reinforcement. Under convergence, Sims sees a potential merging of the BWC with the Geneva Protocol, the Chemical Weapons Convention, or a more comprehensive disarmament treaty. But Sims sees BWC reinforcement—characterized by the steps he outlines—as the more likely scenario, at least in the near term.
For the 2010 NPT Review Conference recently concluded in a relatively positive atmosphere and with an agenda adopted for the review conference, a sharp contrast to 2004. Nonetheless, it will be necessary to launch a major campaign of diplomatic consultations with other NPT parties over the next year if there is to be a realistic hope of a successful review conference next May. The NPT cannot afford a repeat of 2005. Such a campaign would fit neatly with Krepon’s call for diplomatic engagement. With the Obama administration’s appointment of superb arms control and nonproliferation leadership in the White House and Department of State, the United States is well positioned to initiate sustained, robust diplomacy.

The agenda is daunting. There is an overflowing basket of new and old nonproliferation issues. The list includes strengthening International Atomic Energy Agency safeguards; preventing or dismantling proliferation networks, represented lately by Pakistan’s Abdul Qadeer Khan; securing fissile material; ending illicit trafficking of nuclear material; and establishing international controls on the nuclear fuel cycle. Some of these issues surfaced in the Cold War, but they are more serious today because access to sensitive technology has grown, and some of the structural characteristics of the first nuclear age that provided a degree of control are gone. As Raymond Aron once observed, the United States and the Soviet Union, “les grandes frères,” generally took decisive if sometimes heavy-handed steps to keep troublesome allies in line.2 The second nuclear age generally lacks such structures, which means that order can best come through multilateral cooperative measures advanced by patient, effective diplomacy.

There are two cautionary comments to be made on future diplomatic engagement. First, as Krepon argues persuasively, diplomatic engagement is strengthened when the actions of the United States conform to rules. During the Bush administration, rules were promoted selectively. For example, with righteous (and largely justified) fervor, the United States proclaimed a “crisis of compliance” with the NPT, focused principally on Iran’s questionable commitment to nonproliferation. At the same time, the other two pillars of the NPT—peaceful uses and disarmament—were downgraded by the Bush administration as areas of treaty obligation. It will be necessary for the United States to re-establish its commitment to all the rules of the nonproliferation regime, and the U.S. plenary statement at the recent NPT preparatory committee indicates that the U.S. government has returned to a more balanced view of treaty obligations.2 The

three pillars are back. As best it can, the United States will have to navigate around the damaging impact on the nonproliferation regime of the U.S.-Indian agreement.

Second, marshaling bureaucratic and diplomatic resources in the State Department will be a stiff challenge as a result of the ruinous 2005 reorganization of the nonproliferation and arms control bureaus. A cadre of experts, including, most importantly, physical scientists, must be built to compensate for the hemorrhaging of experienced personnel that followed reorganization.

In terms of stated intentions, the Obama presidency has redirected U.S. policy toward Krepon’s prescriptions. The president has offered vision and commitment, both of which are welcome and necessary. The opening of strategic arms negotiations with the Russians and the positive NPT preparatory committee in May together represent a good start, but it is still early to assess whether good intentions will become workable undertakings.

In brief, the arms control and nonproliferation tasks ahead are extremely difficult, and success is far from certain. Krepon rightly calls for the United States to reclaim leadership, for without it the probability of a proliferating world will surely increase. While making certain to remain on the path to a nuclear weapons-free world, the United States must also work toward realistic goals. One way to sustain progress is to heed Krepon’s advice to avoid timelines. Whether negotiating reductions of strategic nuclear weapons or strengthening a complex nonproliferation regime, it is essential to recognize that commitment, tenacity, and patience are all virtues. Krepon also relates Nitze’s wise advice: “Try to reduce the dangers of nuclear war within the relevant future time period as best you can; you just get depressed if you worry about the long-term future.” Let us not get depressed. Let us get busy making real, concrete progress.

ENDNOTES


IN MEMORIAM: Herbert York (1921-2009)

Herbert York, who began his career as a Manhattan Project nuclear physicist and later became a champion of arms control, died May 19. He was 87.

Recruited for the Manhattan Project before he was 21, York’s career in weapons research and technology advanced rapidly. He was the first director of the Lawrence Livermore National Laboratory, holding that post from 1952 to 1958. He also was the co-founder and first chief scientist of the Advanced Research Projects Agency, now the Defense Advanced Research Projects Agency, in 1958 and a member of the first President’s Science Advisory Committee from 1958 to 1961.

These early experiences convinced him that there was no technological fix to the United States’ dilemma “of steadily increasing military power and steadily decreasing national security.” As he would later write in his seminal book *Race to Oblivion: A Participant’s View of the Arms Race* (1970), “If we continue to look for solutions in the area of military science and technology only, the result will be a steady and inexorable worsening of this situation.”

York subsequently devoted himself in and out of government to the pursuit of arms control. He was particularly associated with efforts to ban nuclear weapons testing and was named by President Jimmy Carter to be ambassador and chief negotiator for the Comprehensive Test Ban Treaty (CTBT) negotiations from 1979 to 1981. The talks made considerable progress until they were scuttled by opposition from the United States and Soviet Union. York later wrote that the CTBT engendered more opposition from the nuclear weapons establishment than any other nuclear weapons issue.

York argued that the opposition to arms control and a test ban was rooted in an “over belief in technology” and a personal attachment to nuclear weapons, not the proxy issues of the day, such as verification. As the proponents of the CTBT prepare to urge U.S. Senate ratification of the treaty, negotiated and signed during the Clinton administration, then rejected by the Senate, York’s analysis is still relevant.

Neither financial interests nor strategic reasoning explained the views of proponents of the arms race, York argued, although he noted that most did derive some of their income from their involvement with nuclear weapons. Rather, “psychic and spiritual needs” motivated them because they derived “a very large part of their self-esteem from their participation in what they believe to be an essential—even a holy—cause.”

In 1961, York became the first chancellor of the University of California at San Diego. He soon found that he preferred working with students to the administrative duties of the chancellor. He taught physics, chaired the department, and in 1983 founded and directed the University of California’s Institute on Global Conflict and Cooperation, which conducts research and seminars on conflict resolution and promotes international efforts to avoid war. In 1989 he became director emeritus. He also served as adviser to the president of the University of California and to the Lawrence Livermore and Los Alamos National Laboratories on the future of the nuclear labs.

York was involved with the Pugwash movement, meeting several times with Soviet counterparts to discuss arms control issues, and served on the boards of the Federation of American Scientists and the Council for a Livable World.

York’s writings about the history and nature of the nuclear arms race are perhaps his most enduring legacy. In his six books, he fashioned such compelling concepts as the “fallacies of the last move,” in which politicians unthinkingly assumed their measures would produce no countermeasures, and the “ultimate absurdity” of relying on computers and automated steps to initiate a nuclear attack.

A man with broad interests, York will be remembered by family and friends for his conversational skills, his easy and affable manner, and a love of learning that knew no bounds. ACT

Katherine Magraw is director of the Peace and Security Funders Group. She has held positions in the Arms Control and Disarmament Agency and Department of State, where she was responsible for the test ban negotiations during the Clinton administration. She met Herbert York when she was a Massachusetts Institute of Technology graduate student studying the history of efforts to ban testing.
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With our unique access to policy makers, media savvy, and expert research and analysis, ACA will work harder than ever to help set the course for effective arms control in the next presidential administration.

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