REDUCING AND CONTROLLING

THE U.S. AND RUSSIAN NUCLEAR WEAPON ARSENALS

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The end of the Cold War and the commencement of serious reductions in the sizes of superpower nuclear weapon arsenals offers us the opportunity to revisit early failed arms control efforts and to salvage good initiatives that were frustrated by the Cold War. There is no better time to do this than now--at the 50th anniversary of the founding of the UN and the 25th anniversary of the NPT.

The United Nations was established at the San Francisco Conference in April-June 1945, with its primary purpose "to maintain international peace and security." With the dropping of the atomic bombs on Hiroshima and Nagasaki in August 1945, by the time of the opening of the first meeting of the General Assembly in London on January 10, 1946, nuclear disarmament had become an important concern.[1] Two months earlier, on November 15, 1945, U.S. President Harry Truman, British Prime Minister Clement Attlee, and Canadian Prime Minister Mackenzie King had called on the UN to establish a UN Atomic Energy Commission (UNAEC) to make specific proposals, including proposals:[2]

> For the elimination of national armaments of atomic weapons and of all other major weapons of mass destruction; and
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> For effective safeguards by way of inspection and other means to protect complying states against the hazards of violations and evasion.

The UNAEC was duly established by the first General Assembly on January 24, 1946. In expectation that the U.N would do this, U.S. Secretary of State James Byrnes on January 7, 1946 established a committee to formulate U.S. policy on international control of atomic energy. The committee was chaired by Undersecretary of State Dean Acheson, and it had a Board of Consultants chaired by David E. Lilienthal, with Robert Oppenheimer another of its prestigious members. The work of the committee, called the Acheson-Lilienthal Report, was released on March 28, 1946.[3] The report called for an international authority that would monopolize (own and manage) all dangerous atomic activities, while leaving safe and productive activities open to individual countries and private interests.[4]

Also in March 1946, Bernard Baruch was appointed U.S. representative to the UNAEC. Baruch and his staff made substantive modifications to the Acheson-Lilienthal proposal. The new

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[1] United Nations Special NGO Committee for Disarmament, "Disarmament," February 1995, p. 5.

[2] Lawrence Scheinman, *The International Atomic Energy Agency and World Nuclear Order*, (Washington, D.C.: Resources for the Future, 1987), p. 50. Truman, Attlee, and King also had called on the UNAEC to make specific proposals for extending between all nations the exchange of basic scientific information for peaceful ends; and for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes.

[3] Ibid., p. 51.

[4] Ibid.

Baruch Plan, presented to the UNAEC on June 14, 1946, retained the concept of an international agency with exclusive authority to conduct all atomic-energy activities potentially dangerous to world security, i.e., all military operations related to atomic energy.[5] As we all know the Baruch Plan was never adopted. In the ensuing years the superpowers built up huge nuclear weapon arsenals in almost unconstrained fashion.

In later years the UN and the international community found a greater measure of success in their efforts to curb the horizontal proliferation of nuclear weapons. President Eisenhower gave his Atoms for Peace address before the UN on December 8, 1953, and three and one-half years later, on July 29, 1957, the International Atomic Energy Agency (IAEA) came into being. The IAEA was followed in 1968 by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The NPT became the central juridical instrument of the nonproliferation regime and was extended indefinitely this year. Other elements of the nonproliferation regime include The Treaty for the Prohibition of Nuclear Weapons in Latin America (The Treaty of Tlatelolco) of 1967 and voluntary restraints by nuclear suppliers. Despite all of its shortcomings, this nonproliferation regime has had a major impact on limiting the spread of nuclear weapons to the five declared nuclear weapon states and three or so undeclared states.

Where do we stand with regard to reducing the arsenals of the weapon states? Progress by the United States and Russia has been remarkable over the past few years. We have witnessed the elimination of intermediate range nuclear missiles under the INF Treaty, the implementation of START I, the signing of START II, progress on a Comprehensive Test Ban, withdrawal of thousands of tactical nuclear weapons from active deployment, and the dismantlement of 1,500 to 2,000 warheads per year by the United States and Russia. But measured against how far we have to go, the picture is much more troubling. Today the United States retains some 14,000 intact warheads and Russia perhaps twice that many. The U.S. operational stockpile, about 8,700 warheads today, is comparable in number to U.S. arsenal in 1958; but is far more lethal today. Russia today has more nuclear warheads than were in the U.S. stockpile in roughly 1978. Even under START II, barring further arms treaties, the U.S. plans to retain about 5,000 operational warheads and another 2,000 to 2,500 inactive ''hedge'' to enable the U.S. to rapidly return if necessary to START I force levels.

Are the U.S. and Russia prepared to reconsider the Baruch Plan? Surely not. The superpowers are simply not prepared to turn over their nuclear weapons to the UN or any international agency. However, the call by Truman, Attlee, and King for specific proposals for the elimination of national armaments of atomic weapons and the establishment of effective safeguards is very much in order. In fact, these goals are embodied in Article VI of the NPT, now endorsed by almost 180 nations. Article VI provides:

> Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early

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[5] Ibid.

date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

As recognized by Truman, Attlee and King and as embodied in Article VI, the elimination of nuclear weapons--and I submit even the lesser goal of deep reductions of existing arsenals--will require strict and effective safeguards over facilities and activities within the weapon states. Moreover, to convince other weapon states to reduce their own arsenals significantly, they must be convinced that weapons retired under current and future arms agreements have been dismantled and all weapon-usable materials are accounted for. If we expect to achieve deep and meaningful reductions in the global nuclear weapon arsenals, potential adversaries must be assured that the reductions actually take place and that they cannot be quickly reversed.

A safeguards regime covering the weapon states does not now exist. It must be created. IAEA safeguards apply to non-weapon states and are designed to curb horizontal, not vertical proliferation. We need an entirely new regime. Moreover, our failure to begin immediately to build this regime may turn out to be very costly. If we fail to implement today a comprehensive verification regime over the ongoing nuclear stockpile reduction process and fissile material inventories in the U.S. and Russia, this failure may constrain in the future how far we can go in reducing global arsenals and ending further proliferation of nuclear weapons. There will be those who will argue that deep reductions will threaten national security because we can not be sure that the other parties have eliminated all their nuclear weapons and we cannot account for all the weapon-usable fissile material. It is incumbent upon us to take whatever steps are necessary now to insure that we do not introduce future obstacles to the fulfillment of our obligations under Article VI of the NPT.

Although it can play a useful limited role, the IAEA is not the appropriate institution to safeguard nuclear warhead production and dismantlement facilities. The nuclear weapon facilities were not designed with IAEA safeguards in mind, and many of the weapon facilities in the United States and Russia can not meet existing IAEA requirements. Then there is the more difficult constraint imposed by the need to protect sensitive weapon design information. In my view the design, development and demonstration of a safeguard regime for the weapon states should commence on a bilateral basis by Russia and the United States. I have a second motive for proposing this approach. Over the past three years there have been several instances where kilogram quantities of weapon-usable fissile material--highly-enriched uranium (HEU)--were stolen from institutes in Russia. In one instance the HEU was not intercepted before leaving Russian boarders. It is worth noting here that these thefts occurred at unsafeguarded facilities in a weapon state--not from facilities under IAEA safeguards.

The United States has underway several efforts designed to assist Russia in improving the physical security and fissile material control and accounting at facilities in Russia. The so-called lab-to-lab program launched by the Department of Energy in April 1994 has shown early, remarkable success. It is called lab-to-lab because it is a cooperative effort by the weapon laboratories in the United States and Russia. Unfortunately, this lab-to-lab effort is limited in its

scope and funding. Access by U.S. experts to sensitive Russian nuclear weapon facilities is limited, in large measure because the program mission--U.S. aid to Russia--is one sided.

I believe the lab-to-lab program could be made far more effective if Presidents Clinton and Yeltsin were to jointly announce that they are directing their respective nuclear weapon laboratories to work together to research, develop, and demonstrate, on a bilateral basis, a monitoring and safeguards regime that covers *all nuclear weapons and weapon-usable fissile materials* in the weapon states. This would become a new mainline mission of the weapon laboratories on both countries. U.S. and Russian specialists would have access where appropriate to each other's facilities--complete reciprocity. By covering *all weapon-usable fissile materials and nuclear weapons*, special interests, e.g., Minatom in Russia and the U.S. Navy, would not be able to exclude coverage of selected facilities and materials on the basis that they are too sensitive to warrant efforts to resolve the difficult problems posed by the requirement to protect sensitive information.

In sum, we need a safeguards regime for the weapon states. This was recognized by the U.S., British and Canadians 50 years ago--immediately after the atomic bombs were dropped on Japan. Research, development and demonstration on such a safeguards regime should begin immediately--initially on a bilateral basis with Russia in order to move more quickly and aggressively to improve the physical security and fissile material control and accounting in Russia. If we fail to implement today a comprehensive verification regime over the nuclear stockpile reduction process and fissile material inventories in the U.S. and Russia, this failure may constrain in the future how far we can go in reducing global arsenals and ending further proliferation of nuclear weapons.