

NON-PROLIFERATION AND ARMS CONTROL:

ISSUES AND OPTIONS

FOR

THE CLINTON ADMINISTRATION

Ad Hoc Working Group on Non-Proliferation and Arms Control

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INTRODUCTION AND OVERVIEW

The following set of papers was prepared by an ad hoc working group of non-proliferation and arms control specialists to highlight some of the major issues in these fields that will confront the Clinton Administration during its first six months in office -- and in many cases during its first 100 days.¹

The papers represent the work of many participants, including coordinators, who assembled the ad hoc working group and edited this volume; principal contributors, who prepared drafts of the individual papers; and additional reviewers, whose comments are also reflected in the final product. The names and roles of those involved are listed at the beginning of this volume.

Because of the diversity of views among these various participants, it was agreed that the ad hoc working group as a whole would not endorse specific policy positions, but would attempt to identify a realistic range of options available to the Clinton Administration in addressing specific issues of concern. Not all papers were reviewed by all participants. *The recommendations at the conclusion of each individual paper are those of its principal contributors. Thus, while supported by many in the ad hoc working group, these recommendations should not be attributed to all participants.*

Whatever the views of participants with respect to particular recommendations, one point that is beyond dispute emerges from the papers taken as a whole: virtually from the day he takes office, President Clinton will need to make major substantive decisions on non-proliferation and arms control policy.

Key organizational decisions will include:

- Whether to make important organizational changes within the National Security Council, Department of State, Department of Energy, Department of Commerce, and Department of Defense to elevate the importance of non-proliferation and arms control in these departments and agencies.
- Whether to appoint a senior official to oversee all non-proliferation matters, including those involving the former Soviet Union, and where to locate such a figure within the government.

¹ The information in the following papers is current as of January 12, 1993.

- Whether to reinvigorate, reorganize, or, perhaps, phase out the Arms Control and Disarmament Agency (ACDA), a decision that will have to be discussed with the person to be named ACDA director, and that will be reflected in the prominence of the individual who is appointed to the post.

Key policy decisions in the first months of the new Administration will include:

- How to obtain Ukraine's ratification of the Strategic Arms Reduction Treaty (START) and its adherence to the Nuclear Non-Proliferation Treaty (NPT). Ukraine's position with respect to these agreements is the principal obstacle to bringing both START and START II into force.
- Whether to undertake further nuclear testing under the Hatfield-Exon-Mitchell amendment -- an issue that will have to be addressed in preparing the FY94 Department of Energy budget and in drafting the March 1, 1993, report to Congress mandated by this legislation.
- How best to pursue negotiations toward a comprehensive nuclear test ban (CTB). The Administration's plan for CTB talks must be presented to Congress by March 1, 1993.
- How to meet Iraq's growing opposition to United Nations inspections and to planned long-term monitoring of its nuclear, chemical, biological, and missile programs.
- Whether to proceed with the joint "Team Spirit" military exercise with South Korea, scheduled for April 1993, which is threatening ongoing negotiations between the two Koreas on bilateral nuclear inspections.
- Whether and how to discourage the United Kingdom and France from commencing to operate new civilian plutonium extraction plants, expected to come on line in early 1993.

- How to ensure China's compliance with its pledges to restrict nuclear and missile exports.
- How to proceed with ratification of the newly completed Chemical Weapons Convention, which will be opened for signature on January 13, 1993.
- Whether to support the negotiation of a verification protocol for the Biological Weapons Convention.
- Whether and how to proceed with the talks among the "P-5" -- the five largest suppliers of arms, which also happen to be permanent members of the U.N. Security Council -- on regulating arms transfers, in view of China's announced boycott following the Bush Administration's decision to sell F-16s to Taiwan.
- Whether to announce a new policy on U.S. arms sales, signaling Administration intent to restrain the proliferation of conventional weapons.

Even as it comes to grips with these pressing matters, the Clinton Administration will also have to begin active efforts to address a series of longer term issues of at least equal importance. Among the numerous issues in this category examined in the following papers are implementation of U.S./Russian denuclearization agreements, review of the alert status of U.S. nuclear forces, preparation for the critical 1995 NPT Extension Conference, implementation of the Chemical Weapons Convention, assistance to the countries of the former Soviet Union in establishing effective export controls, and creation of multilateral limitations on arms transfers to the Middle East and the Persian Gulf.

In sum, the Clinton Administration will inherit a demanding agenda of non-proliferation and arms control issues of great complexity -- and of great importance to U.S. security.

It is hoped that the following papers will help to crystallize understanding of many of these questions and highlight constructive and practical initiatives for addressing them.



I. THE POST COLD WAR AGENDA

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RATIFICATION OF THE STRATEGIC ARMS REDUCTION TREATY

Issue (January/March 1993):

If required, what steps should be taken to achieve the early entry into force of the Strategic Arms Reduction Treaty (START) and adherence to the Nuclear Non-Proliferation Treaty (NPT) by Ukraine, Belarus, and Kazakhstan?

Options:

- (A) The Administration of President-elect Bill Clinton should continue the present policy on Ukraine by making explicit that U.S. assistance, including additional assistance under the Soviet Nuclear Threat Reduction Act of 1991, and the Former Soviet Union Demilitarization Act of 1992 (referred to here jointly as Nunn-Lugar), credit and trade benefits, and some form of security guarantee involving the United States and Russia or Western nuclear-armed states, is dependent on Ukraine's ratification of START and accession to the NPT.
- (B) If **Option (A)** is unsuccessful, the Administration should consider leading a denial of Western financial assistance to Ukraine and explore additional mechanisms for exerting international pressure.

Background/Discussion:

START is a bilateral treaty signed by Presidents George Bush and Mikhail Gorbachev in July 1991. It calls for about a one-third reduction in strategic launchers (for inter-continental ballistic missiles [ICBMs], submarine-launched ballistic missiles [SLBMs], and heavy bombers), a step that would produce about a one-third reduction in deployed strategic warheads. The May 1992 Lisbon Protocol makes START a five-party treaty and requires Belarus, Kazakhstan, and Ukraine to adhere to the NPT as non-nuclear-weapon states "in the shortest possible time." Legally binding letters accompanying the Protocol commit Belarus, Ukraine, and Kazakhstan to remove all the nuclear weapons on their territory within the START's seven-year period for reduction. Thus, the success of U.S. non-proliferation policy depends in significant measure on early entry into force of START.

Ratification of START is an executive act, following the necessary legislative approvals.¹ The Lisbon Protocol provides that START shall enter into force upon the exchange of ratification instruments by Belarus, Kazakhstan, Russia, and Ukraine with the United States.

Kazakhstan's legislature has approved START without conditions but has not voted on the NPT. There is concern that Kazakhstan is quietly hiding behind Ukraine, where some officials have publicly opposed the NPT, and there is talk of Ukraine's "owning" the nuclear weapons on its territory and exerting "administrative control" over them. The U.S. Senate has given its advice and consent to START on the condition that the Lisbon Protocol and the associated letters are legally binding obligations of the same force and effect as provisions of the treaty, and that the executive branch "seek an appropriate arrangement" for reciprocal monitoring of stockpiles of nuclear warheads and fissile material "in connection" with further agreements reducing strategic arms.

In approving START, the Russian Supreme Soviet requires *prior* adherence of Belarus, Kazakhstan, and Ukraine to the NPT as non-nuclear-weapon states and *prior* agreement of each with Russia on implementation of START. Neither has been achieved to date. The Parliaments of Belarus, Ukraine, and Kazakhstan were in session until mid-December 1992. Normally they adjourn until April 1993. However, the Ukrainian Rada has scheduled a special session beginning January 16, 1993, and expects to complete ratification of START "some time in February," according to the Deputy Chairman of the Rada, V. B. Gryniiov (legislative approval of the implementation agreement is not necessary). Belarus officials have given credible assurances that their legislature would approve START and the NPT as soon as Ukraine acts.

Optimists believe the Ukrainian Rada will approve START and agree to adhere to the NPT as a non-nuclear-weapon state, perhaps induced by an aid package that includes: U.S. payments for START dismantlements and inspections using Nunn-Lugar funds; a requirement that Russia share the proceeds from sales of highly-enriched uranium (HEU) to the United States and possibly other countries; and new U.S.-Russian or purely Western security assurances being offered to Belarus, Kazakhstan, and Ukraine. Another meaningful political step would be a resolution by the Security Council of the United Nations on security assurances and the non-use of nuclear weapons that builds upon Resolution 255, adopted in June 1968.

Pessimists believe President Leonid Kravchuk may not want, or believes he will not be able, to obtain swift approval by the Rada, particularly if he can get a significantly better deal from the new Administration. Since

¹ In Russia, the Supreme Soviet ratifies treaties, not the president.

the Rada did not act in 1992, the necessary legislative approvals still needed from Belarus and Kazakhstan will likely be delayed until the spring of 1993 at the earliest.

Option (A) suggests that a continuation of the Bush Administration's current policy might be successful shortly after Inauguration Day, particularly if beefed up with some new inducements, such as assurances from Western lending institutions that Ukraine's share of the sales of HEU could be used as collateral for near-term loans. As Senators Sam Nunn and Richard Lugar have suggested, it is urgent that the outgoing Administration continue to press the issue, coordinating closely with the Clinton team and making use of the full range of monetary and diplomatic inducements. The key to **Option (A)** -- and early approval this year -- is that the new Administration not be perceived as being prepared to offer a significantly different package of inducements than its predecessor.

Option (B) reflects a new, explicit stick if the carrots of **Option (A)** prove insufficient. The essence would be a denial of Western financial assistance to Ukraine, in recognition that its continuing claims of "ownership" of the nuclear weapons, attempts to exert "administrative control," and related moves would fundamentally undermine non-proliferation policy. Under this option, the United States must make it clear to Ukraine that failure to ratify START and accede to the NPT as a non-nuclear-weapon state will alienate the United States, Russia, and the European Community (EC), leaving Ukraine isolated in the international community. However, the use of Western economic leverage could lead to significant increases in tension in the area over the near term.

If all five parties to START ratify the treaty, exchange instruments of ratification, and the pact enters into force, the Clinton Administration should encourage accelerated denuclearization by urging and assisting Ukraine, Belarus, and Kazakhstan to compress START's seven-year timetable for the removal of warheads to Russia for elimination.

Recommendation:

Option (A) should be pursued for the first month or so. Then **Option (B)** should be considered based on circumstances and time. **Options (A)** and **(B)** require close consultation with the Congress; **Option (B)** would involve intense diplomatic efforts.

BEYOND THE STRATEGIC ARMS REDUCTION TREATY: NUCLEAR ALERT LEVELS

Issue:

Should the alert levels of nuclear forces be lowered further to alleviate the danger of their accidental or unauthorized use?

Option:

- (A) No. Make no further changes in alert levels other than those already ordered pursuant to implementation of START.
- (B) Yes. Initiate a study to define the options for further reducing the alert levels of strategic forces in stages. This study might evaluate a three-stage plan of implementation:

First Stage. Remove from alert status all U.S. and Commonwealth of Independent States (CIS) nuclear forces slated for elimination under START and the agreement between Presidents Bush and Boris Yeltsin, possibly including removal of the warheads from ICBMs and SLBMs and their placement in jointly monitored storage in the country where the weapons are deployed. The study should evaluate the merits of taking this step immediately on a reciprocal basis, with no verification stipulations beyond the verification regime established to enforce the START agreement(s).

Second Stage. Remove from alert status all U.S. and CIS land-based nuclear forces (ICBMs and bombers) and place all SLBMs on a "modified alert."

Third Stage. Remove from alert status all nuclear forces. This step entails reciprocal reductions by all the declared nuclear-weapon states, including France, Britain, and China. The study would define the options for multilateral cooperation on reducing the alert rates and the verification requirements that a comprehensive agreement would impose.

Background/Discussion:

For the first time since the advent of nuclear weapons, an incoming Administration faces no major decisions on nuclear force modernization. The existing U.S. arsenal, as modified by acquisitions in the pipeline such as the

Trident submarine and the B-2 bomber, provides ample means to support any reasonable nuclear deterrent policy into the next century. Force structure and modernization issues involve secondary concerns such as downloading the payloads on Minuteman III and Trident missiles and deciding which delivery systems to retire or modernize as ongoing arms negotiations lower the ceilings on deployments.

The changing international situation, however, raises many important questions about the operational posture of the nuclear forces. The ascendant concerns of nuclear proliferation and accidental or illicit use of weapons raise doubt about the wisdom of keeping thousands of widely dispersed nuclear weapons in a launch-ready configuration. Thousands of combat-ready forces projecting draconian threats of rapid destruction not only exceeds the reasonable requirements of deterrence and sustains nuclear tensions that are incompatible with the new U.S.-Russian political relationship, but it also needlessly courts a nuclear accident. Operating the forces continuously in peacetime on so short a fuse, as is the current practice, entails a higher than necessary risk of unauthorized use and also places them on a hair trigger that is susceptible to discharge on false warning.

The operational risks of accidental or unauthorized use posed by nuclear postures molded by the Cold War can be minimized without risk to deterrence. Deterrence is adequately served by much smaller arsenals of 1,000 warheads or less under increasingly strict operational control. Ensuring strict control through stronger safeguards should take precedence today over preparation to perform wartime missions.

Reducing the combat readiness of nuclear forces is an effective safeguard. Land-based ballistic missiles can be taken off combat alert in the way that the 450 U.S. Minuteman II and 503 Soviet ICBMs were stood down in accordance with the Bush-Gorbachev initiatives of the fall of 1991. The United States, for instance, took the following steps: manually pinned the missiles in their silos by inserting safety lockpins in the ignition system; scrambled the computer launch codes in the electronic apparatus of the flight launch control centers; and removed the launch keys and sealed authenticators used to verify launch authorization from the centers. Returning these forces back to combat status (before the launchers are actually destroyed under START) would involve procedures that would take approximately 24 hours or more to complete.

As for the submarine forces, combat readiness can be lowered by adopting a "modified" alert status. Submarines leaving port on a "modified" alert, which is the normal alert status for half the U.S. missile submarine force at sea at any given time in peacetime, require a minimum of 18 hours after leaving port to complete the complex procedures -- for instance, the removal of the flood plates from the launch tubes and the installation of vital electronic components into the fire control system -- that enable them to assume a

launch-ready disposition. Submarines on a "modified" alert would remain invulnerable to attack, but they could not mount a strike for at least 18 hours if the preparatory procedures had not been accomplished. For SSBNs on a permanent "modified" alert with warheads on board, verification would be facilitated by cutting back to a single crew concept and operating the SSBNs similar to the way in which attack submarines (SSNs) are operated -- that is, making numerous port calls and reducing the percentage of the fleet at sea from two-thirds to one-third.

The warheads from the ICBMs and heavy bombers could also be removed and placed in jointly monitored storage in the states where they are deployed. Since all of the ICBMs based in the Ukraine and Kazakhstan are slated for elimination under START, this approach would involve disarming these ICBMs and providing Ukraine and Kazakhstan with the ability to detect and possibly halt any attempt to reload the warheads on the missiles. This condition would provide them with a potential veto over the use of these weapons until they are eliminated under START. For the weapons remaining under exclusive Russian control, as long as the warheads could be protected from attack, the launchers and missiles could remain viable if the other parties complied with this approach. The reason is that each side's prompt counter-strategic threat to the other side's silos and submarine launch tubes would also be removed.

Recommendation:

Option (B). The various options for reducing alert levels require further study, particularly proposals such as the one made in February 1992 by Russian Foreign Minister Andrei Kozyrev to move to a global "zero alert level." Verification of this approach would have to be quite intrusive, and multilateral negotiation and verification of severe operational restrictions on nuclear postures would be a major departure in arms control. However, the potential benefits are large enough to merit serious consideration.

NUCLEAR NON-PROLIFERATION AND THE FORMER SOVIET UNION

Issue:

What steps should be taken to reduce the threat of nuclear weapon proliferation emanating from the new states formed by the break-up of the former Soviet Union (FSU)?

Option:

- (A) Maintain current policy.
- (B) Pursue a high priority denuclearization strategy that promises prompt, tangible rewards for adoption of prudent non-proliferation policies by Belarus, Kazakhstan, and Ukraine, and economic penalties for failure to do so.
- (C) Irrespective of the parliamentary timetables for START ratification and NPT accession, maintain a "constructive engagement" policy with respect to technical/financial assistance and training for implementing national systems for nuclear materials accounting and export control.

Background/Discussion:

The break-up of the Soviet Union and the emergence of successor states with various claims to its nuclear assets raise serious proliferation problems. The principal threats are: (1) potential Ukrainian and Kazakh claims to nuclear weapons; (2) unregulated exports of nuclear materials, information, and technology; and (3) unsafeguarded nuclear material and facilities. Whether or not the Ukrainian Parliament ratifies START and the Lisbon Protocol, it still may decline or delay accession to the NPT as a non-nuclear-weapon state, presenting an early foreign policy challenge for the Clinton Administration. Should this occur, there may be strong pressure on Kazakhstan to follow Ukraine's example. (For further background and recommendations, see the paper, "Ratification of the Strategic Arms Reduction Treaty," earlier in this section.)

While there is no hard evidence of the export of nuclear weapons, nuclear weapon components, or militarily significant quantities of weapons-grade material from the FSU, the potential for unregulated nuclear exports remains great because of economic conditions that encourage the sale of

anything to anyone for the right price. The problem is especially acute outside of Russia because of the lack of meaningful export control structures and expertise, the significant quantity of unsafeguarded nuclear material and dual-use nuclear production facilities, and the conflict of interest on the part of the individuals who head state export control bodies.

Option (A) continues the current, flexible policy that seeks to balance non-proliferation aims with those of fostering Soviet successor state support for other U.S. foreign policy objectives, such as continued progress toward democratization and economic conversion. Primary attention would be directed toward Ukraine and an effort made to meet its demands for economic assistance and security guarantees in return for ratification of START, the Lisbon Protocol, and the NPT. Work would be carried out with Russia to provide more technical assistance and training in export controls and international safeguards to personnel in Belarus, Kazakhstan, and Ukraine.

An extension of current policy, which does not place the highest priority on non-proliferation objectives, has the virtue of preserving reasonably good U.S. relations with the present governments in Ukraine and Kazakhstan. Over time, it might also lead to the development of improved export control procedures. Current policy, however, has been inconsistently applied. Promises of financial assistance for good non-proliferation behavior have yet to be fulfilled. In addition, both threats and promises may be increasingly irrelevant to the domestic political debate shaping nuclear policies in the successor states, which is driven by personalities and organizational politics.

Option (B) is a long-term denuclearization strategy that explicitly links economic assistance and security assurances to progress on denuclearization. Various amounts of aid would be released to Belarus, Kazakhstan, and Ukraine upon completion of each of the following steps: (1) withdrawal of strategic nuclear warheads to Russia; (2) accession to the NPT and completion of safeguard agreements with the International Atomic Energy Agency (IAEA); and (3) creation of effective nuclear export control systems. It would also accelerate the pace with which financial assistance, which already has been allocated, is actually spent.

As part of **Option (B)**, the United States could seize upon the likely ratification by Belarus of the Lisbon Protocol and the NPT this winter to provide Minsk with immediate and tangible rewards, while making it clear to Ukraine and Kazakhstan that speedy NPT accession and conclusion of safeguards agreements with the IAEA are the sine qua non for economic assistance.

To address the possibility that the Ukraine Parliament may already have hardened to a point where U.S. promises of assistance will have little effect, **Option (B)** would pursue a coordinated, multilateral approach involving the EC and the United Nations Security Council. A Security Council resolution

on security assurances and the non-use of nuclear weapons that builds upon one adopted in June 1968 (Resolution 255) could be especially useful as a means of alleviating Kazakh and Ukrainian concerns about nuclear threats. Extra efforts also would be made to encourage Ukraine and Kazakhstan and other successor states with a major nuclear and dual-use export capability to join the Nuclear Suppliers Group.

Cooperative programs rather than direct hand-outs are more likely to be received positively in Ukraine and Kazakhstan. For example, a cooperative nuclear waste management and environmental clean-up program could gain employment for people in proliferation-sensitive professions, while simultaneously refining clean-up technologies for use in the West.

Consistent with a policy of sanctions for imprudent export behavior, the Clinton Administration could support pending legislation in Congress, or adopt an executive order, that would impose stiff penalties for nuclear export control violations by individuals and companies and sanctions against non-compliant countries. An effective denuclearization program will require the appointment of a senior coordinator with broad authority to implement policy.

Option (C) proposes, in the event that Ukraine refused to adhere or postpones adherence to START and/or the NPT, a "constructive engagement" alternative to cut-offs of aid and to sanctions. It entails maintaining technical assistance programs for nuclear materials accounting, security, and export controls, and continuing to press for NPT adherence. Such a policy, however, runs the risk of appearing to reward nuclear proliferation and would probably prompt Kazakhstan to reassess its nuclear stance. Acceptance of Ukraine's claim to nuclear weapons also would scuttle START, encourage the revival of Russian militarism, and jeopardize the future of the NPT.

Recommendation:

Option (B). A high priority denuclearization strategy is required to assure the elimination of nuclear weapons on the territories of Ukraine, Belarus, and Kazakhstan, to establish IAEA safeguards on nuclear power facilities, to implement the NPT, and to create effective nuclear export and dual-use export control regimes.

NUCLEAR TESTING

Issue:

How and when should the Clinton Administration seek to achieve a Comprehensive Test Ban (CTB) Treaty? (Early action is needed because of a March 1 Congressional report deadline and because President Yeltsin will probably raise the issue with President Clinton at the earliest opportunity.)

Options:

- (A) As a matter of unilateral national security policy, plan for and execute the maximum 15-test program permitted under current law before ending all testing.
- (B) Before submitting a safety upgrade test program for Congressional approval, seek an early joint understanding with the other four declared nuclear weapon powers on a timetable for phasing out all nuclear tests, and weigh further near-term warhead safety benefits obtainable from continued testing against alternative means of reducing the public's risk of cancer exposure, and against the political costs of continuing to test during and after the 1995 conference to extend the NPT.
- (C) Assign the highest priority to completing a multilateral Comprehensive Test Ban (CTB) Treaty by 1995, and forego a resumption of testing if it would jeopardize achievement of this goal.

Background/Discussion:

The Hatfield-Exon-Mitchell amendment, attached to the FY93 Energy and Water Appropriations Bill signed into law by President Bush, allows the president the option of a carefully circumscribed resumption of testing for the purpose of incorporating into existing weapons additional safety features that are deemed cost-effective after review by the president and relevant Congressional committees. The key provisions of this legislation are as follows:

- Minimum 9-month moratorium expiring July 1, 1993, or 90 days of continuous session after Congress has received the first of three annual Presidential reports on testing.
- First annual report, due March 1, must outline a plan for resuming negotiations and achieving a multilateral CTB by

September 30, 1996, and describe the specific safety or other objectives of each test proposed to be conducted under the annual quota established by the amendment.

- Up to five tests may be conducted in each of three "report periods" (4th quarter FY93-94, FY95, and FY96) for the primary purpose of adding one or more specified safety features -- insensitive high-explosive (IHE), fire-resistant pits (FRPs), and enhanced nuclear detonation safety (ENDS) -- to existing weapon designs that will be retained in the stockpile.
- *Exceptions.* Of the maximum 15 tests conditionally permitted by the amendment, 3 need not involve certification of added safety features and may be conducted to confirm the reliability of unmodified weapons, and 3 may be conducted jointly with the United Kingdom. No tests may be conducted after September 30, 1996, "unless a foreign state conducts a nuclear test after this date."

The Clinton Administration will likely want to build on this historic bipartisan compromise. Then-Governor Clinton endorsed the general outlines of this approach in a widely reported roundtable discussion with Sandia National Laboratories employees in Albuquerque, New Mexico, on September 18, 1992.

Option (A) would use the Hatfield-Exon-Mitchell compromise as the basis for administration policy. On or before March 1, the Administration would submit a three-and-one-quarter year plan for safety/reliability and joint U.S.-U.K. testing that allocates the full quota of 15 permitted tests. Testing for safety improvements would be resumed as soon as the moratorium on testing expires, and the program would be completed by September 30, 1996, as required by Congress.

The departing Bush team at the Department of Energy can be expected to propose a safety-modification test program that uses the full quota of 15 tests. It may argue that even more tests are needed. Opponents of this option note that: (1) all weapons planned for retention in the stockpile already have ENDS, and all air-delivered weapons (that is, those with the highest accident risk) already have IHE and will not be deployed on aircraft in peacetime; (2) the Department of Defense, the Air Force, and the Navy have all maintained that the weapons they plan to retain in the stockpile are adequately safe and that additional safety features for air-delivered weapons (FRPs) or submarine-launched weapons (IHE/FRPs) are not required; and (3) replacement of the current stockpile with entirely new warhead designs that ensure an even higher level of safety, by physically separating the plutonium from the high explosive until immediately prior to detonation, cannot be accomplished within the quota of 15 tests and could delay a test ban by a decade or more.

The Congressional cut-off date for testing (September 30, 1996) extends 18 months beyond the anticipated March 1995 opening of the critical conference to extend the NPT. Proponents of the test ban and some supporters of the NPT therefore argue that strict adherence by the Administration to the Congressional timetable could deprive the United States of the moral and political leverage needed to gain an indefinite extension or to strengthen the NPT.

As to **Option (B)**, before deciding on the scope and duration of a safety upgrade program, the marginal benefits of conducting all 15 tests should be weighed against the political costs of unilateral U.S. resumption of testing, and other nuclear-weapon state testing, during and after the 1995 NPT Extension Conference. These apparent conflicts between objectives could be resolved by one or more of the following steps:

- (1) Seek an early joint understanding with the other nuclear weapon powers on a deadline for ending all tests before resuming U.S. testing.
- (2) Curtail and/or accelerate the maximum permitted program of up to 15 tests so that it terminates before the NPT Extension Conference.
- (3) Complete a draft treaty before the opening date of the NPT conference but delay the effective date of the treaty by 12-18 months (such a delay may be implicit in any case because multilateral treaties usually do not enter into force until some significant number of parties, for example, 40-65, "collectively" ratify the agreement).

This option also would rigorously screen any proposals to upgrade weapon safety for cost-effectiveness in comparison with other forms of public expenditures to reduce public health risks. If public safety is the criterion by which further nuclear testing should be judged, then, in light of possible alternative programs for reducing more prevalent and likely sources of cancer risk (such as cadmium, lead, benzene, and smoking), further reduction of the public's already low risk of plutonium inhalation from an accident during the transport of a nuclear weapon does not appear to be a particularly effective means of lowering the overall risk of exposure to cancer-causing agents.

With respect to **Option (C)**, many observers believe that simple resumption of the trilateral test ban talks with Russia and the United Kingdom will no longer suffice, as the test ban is now firmly entrenched as a multilateral issue with political implications for non-proliferation. In the event that early diplomatic consultations reveal that indefinite extension of the current moratorium is critical to achieving U.S. non-proliferation goals for the 1995 NPT Extension Conference, this option would dictate that, barring the appearance of some imminently dangerous safety problem affecting a significant percentage of the U.S. nuclear stockpile, the perceived trade-off between continued testing for improved safety and extension of the current test

moratorium to further U.S. non-proliferation objectives should be resolved in favor of advancing those objectives.

Recommendation:

Option (B). However, irrespective of which option is pursued, the following are suggested as guidelines for successful negotiation of a CTB:

- (1) Appoint a chief test ban negotiator soon after the Clinton Administration takes office and begin confidential exploratory discussions with the dozen or so governments that are likely to play key roles in realizing a CTB: the four other declared nuclear-weapon states, the undeclared nuclear powers, and the non-weapon states active in international diplomacy on a CTB Treaty.
- (2) Seek early agreement among the five declared nuclear weapon powers on:
 - (a) A target date on or before September 30, 1996, for phasing out all nuclear weapons test explosions;
 - (b) Restraint in any interim testing that may be conducted;
 - (c) The forum(s) and timetable for completing a draft CTB Treaty and any accompanying verification protocols.
- (3) By means of a national security decision directive, establish early and firm White House control over two key "land mine" issues that, if not handled properly, could undermine the Administration's ability to deliver a test ban. One is the definition of a "nuclear weapons test explosion." The second is the performance objectives of a U.S. global seismic monitoring capability. It could prove difficult, if not impossible, to conduct successful CTB Treaty negotiations if these two issues are not firmly resolved internally at the outset.
- (4) Respect the views and previous efforts of other nations by making use of existing multilateral forums to conclude the final CTB Treaty and accompanying verification protocol. While much can be accomplished by the nuclear weapon powers operating as a subcommittee, they should be seen as being responsible to some larger multilateral body, such as the Conference on Disarmament in Geneva or the Partial Test Ban Treaty (PTBT) Amendment Conference, rather than simply presenting a take-it-or-leave-it treaty to the rest of the world.

VERIFYING THE ELIMINATION OF NUCLEAR WARHEADS AND INVENTORIES OF WEAPONS-USABLE FISSILE MATERIALS

Issue (1993):

How can the United States best achieve an accurate accounting of the elimination of former Soviet nuclear weapons and of the storage and disposition of the highly-enriched uranium (HEU) and plutonium from those weapons?

Options:

- (A) Continue the Bush Administration policy of assisting Russia in the development of material accounting and control measures to be used at a central storage facility (for fissile material components removed from weapons), which may be constructed using Nunn-Lugar funds. Accept whatever U.S. or international verification measures Russia agrees to for this facility, but continue the current policy of not allowing reciprocal verification of U.S. weapons or materials.
- (B) Same as **Option (A)**, but also conclude an agreement with Russia to exchange data on the stockpiles of nuclear warheads and the inventories of weapons-usable fissile material in each country.
- (C) Same as **Option (B)**, except change current policy and seek an agreement with Russia to accept reciprocal inspections and other cooperative measures that would permit verification of the elimination of nuclear warheads and the disposition of fissile material removed from weapons.
- (D) Same as **Options (B)** or **(C)**, but also seek agreement to put inventories of fissile material world-wide under international accounting and inspection.
- (E) Same as **Options (B)**, **(C)** or **(D)**, but also propose the creation of multinational machinery, perhaps through the United Nations, to verify the elimination of nuclear warheads by all declared and undeclared nuclear-weapon states.

Background/Discussion:

During the next decade, Russia is scheduled to dismantle more than 25,000 nuclear warheads. The actual number is not known because the current uncertainty over the size of the FSU's nuclear weapons stockpile is several thousand warheads. About 500 metric tons (MT) of HEU and about 100 MT of plutonium will be recovered from dismantled warheads in the FSU, although, here too, the amounts are not well-known. (Similar quantities will be recovered from U.S. warheads.) Russia has requested U.S. assistance for the construction of a massive central storage facility at Tomsk to hold the surplus plutonium and HEU recovered from its warheads. The U.S. Government has committed \$15 million of Nunn-Lugar funding for a cooperative study on the design of such a facility and is also expected to fund the facility's \$150-200 million construction cost with Nunn-Lugar funds. The facility would be designed to incorporate modern materials accounting technologies to keep track of the plutonium and HEU. Construction of the storage facility is being opposed by local citizen groups and the Tomsk city and regional councils.

Agreements to store and dispose of the Russian materials under bilateral control or IAEA safeguards, and not to produce replacement materials for weapons, would lock in both mutually agreed and unilateral reductions in warheads, help protect against the proliferation of CIS nuclear weapons materials, and meet some Ukrainian preconditions for giving up the weapons now on Ukrainian territory.

Option (A) is based on the judgment that a reciprocal U.S. commitment to put its surplus weapons materials under bilateral or IAEA controls is not needed to achieve some level of safeguards at the central storage facility to be constructed at Tomsk. Refusal to permit verification of materials from U.S. weapons declared surplus would preserve the option of using them for weapon purposes in the future and possibly avoid complex procedures at U.S. facilities. However, this option will not provide a comprehensive accounting of former Soviet nuclear warheads and weapons-usable fissile materials, which many view as important to the achievement of both non-proliferation and future arms reduction objectives.

Option (B) would extend **Option (A)** to include the exchange of data to enable the United States to determine the size, and to some extent the composition, of the CIS nuclear weapons stockpile and inventories of weapons-usable fissile material. This approach is consistent with the data exchange requirement under the Biden Condition to the Senate's ratification of START, which requires that the President "seek appropriate arrangements" for monitoring warheads and fissile materials "in connection with" a START II agreement. A data exchange can likely be constructed that would not reveal genuinely sensitive information on the design of nuclear weapons. The

secretary of energy has the authority under the Atomic Energy Act to declassify the information needed for such an exchange.

The ostensible objections to this and subsequent options are, on the one hand, that unless accompanied by intrusive inspections, the validity of the data exchanged cannot be confirmed, and, on the other hand, that such inspections could compromise sensitive U.S. facilities and information and excessively complicate day-to-day operations of the U.S. nuclear weapons complex. A more fundamental objection is that such data exchanges and inspections threaten to envelop the future U.S. nuclear deterrent in a web of restrictions that could impair the ability of the United States to exert global military power by building up its nuclear forces.

Option (C) would extend **Option (B)** to include reciprocal inspections and other cooperative measures for probing and confirming the data exchange on the elimination of nuclear warheads and the disposition of the fissile material removed from weapons. This option would fully satisfy the requirements of the Biden Condition. Further study is required to determine the kinds of inspections and cooperative measures that would be acceptable to the United States, and consultation with Russia is necessary to determine the measures that would be acceptable on a reciprocal basis. A commitment by the United States to reciprocal safeguards would facilitate more comprehensive safeguards over weapons-usable materials in Russia and provide a basis for a universal non-discriminatory regime covering unsafeguarded weapons-usable materials in other declared nuclear-weapon states (the concern here is China, but Great Britain and France would be similarly affected) and in the "threshold states," such as Israel, India, and Pakistan.

Option (D) would involve agreements to place all non-weapon inventories of fissile materials, particularly plutonium, in national repositories under international control. Such deposits of excess weapon materials for peaceful uses were contemplated by President Dwight D. Eisenhower in his Atoms for Peace proposal, and the IAEA already has the statutory authority to supervise such repositories. Because plutonium -- unlike HEU -- has marginal (some would argue negative) market value as a civil fuel, financial assistance may be desirable to encourage the dismantlement of warheads and transfer of plutonium to exclusively peaceful purposes (see the paper, "Disposition of Plutonium and Highly-Enriched Uranium from Weapons," in this section).

Option (E) is intended to extend the elimination of verified nuclear warheads to all nuclear powers, declared and undeclared, including China, Israel, India, and Pakistan.

Recommendation:

Immediately implement **Option (B)** and issue a decision directive to prepare for the implementation of **Option (C)**. Proceed with a comprehensive data exchange on nuclear stockpiles and inventories of fissile material, task the relevant agencies (the Departments of Energy and Defense) to prepare options for reciprocal inspections and other cooperative measures required under **Option (C)** to meet the monitoring objectives of the Biden Condition to START, and study alternative proposals for moving to **Option (D)**.

Option (A) is unacceptable, in that it leaves the United States without an ability to track the number of nuclear warheads remaining in the CIS stockpile, the number that have been retired and/or eliminated, and how much weapons-usable fissile material is outside the scope of the safeguards applied to the central storage facility.

Option (E) is desirable as a mid- to long-term objective, but its implementation logically awaits major progress on the objectives of **Options (B-D)**.

CUT-OFF OF PRODUCTION OF FISSILE MATERIAL FOR WEAPONS

Issues (1993):

How should the United States move to implement and verify a global cut-off of the production of fissile material (plutonium and HEU) for weapons?

Options:

- (A) Continue the Bush policy of refraining from further production of plutonium and HEU for weapons as a matter of unilateral U.S. policy, while avoiding formal agreements that require international inspection measures or that limit future U.S. nuclear force options.
- (B) As an urgent priority, move to accelerate and lock in the promised Russian -- and existing U.S. -- halt to the production of fissile material for weapons, proposing bilateral or international controls on uranium enrichment and plutonium-producing facilities and fissile material stocks in the two countries. A multilateral halt would be a second priority.
- (C) In addition to **Option (B)**, begin confidential bilateral discussions with relevant governments (including the four other declared nuclear-weapon states plus other countries with fissile material production capabilities) regarding implementation of a global ban on the enrichment of uranium for weapons and the production, chemical separation, and isotopic enrichment of plutonium for weapons. The discussions with Russia would consider what could be done bilaterally to further a global ban.
- (D) In addition to **Option (C)**, announce that it is U.S. policy to cap and draw down the world inventories of weapons-usable fissile materials, both military and civil. The United States would encourage a voluntary deferral of the production and use for civil purposes of uranium with concentrations of U-235 greater than 20 percent and of the commercial separation of plutonium world-wide.
- (E) Take a strong, direct approach to the proliferation issue by advocating a world-wide verified cut-off of the production of all inherently weapons-usable fissile materials, irrespective of their nominal designation as "military" or "civil" (that is, a global ban on the enrichment of uranium to greater than 20 percent U-235 and on the production, chemical separation, and isotopic enrichment of plutonium).

Background/Discussion:

The United States has not produced HEU for weapons since 1964 or plutonium since 1988, and in July 1992 President Bush announced that the United States was unilaterally halting any future production of weapons materials. Russia also has halted HEU production for weapons and has shut down 10 of 13 plutonium production reactors. The remaining reactors are being operated principally to provide heat and electricity to associated towns, and the operators have expressed a willingness to place their fuel cycles under safeguards. President Yeltsin has reconfirmed a 1989 commitment by President Gorbachev that all Russian military plutonium production will be ended by the year 2000.

It is widely accepted that U.S. and international security interests would be served by ending further production world-wide of weapons-usable fissile material for both civil and military purposes. Large surpluses of both types weaken the effect of deep reductions in nuclear weapon stockpiles, are themselves proliferation risks, or else serve to undermine efforts to prevent the production of weapons-usable material in countries of proliferation concern. Thus it is in the U.S. and global security interest to draw down the existing stocks of weapons-usable fissile material.

A verified U.S.-Soviet cut-off of the production of fissile materials for weapons was an expressed goal of the Administrations of Presidents Eisenhower, John F. Kennedy, and Lyndon B. Johnson but was opposed at that time by the Soviet Union, which had a smaller nuclear arsenal and rejected the intrusive inspections proposed by the United States. Since 1989, however, the USSR/Russia have both supported a fissile cut-off and demonstrated a willingness to accept intrusive reciprocal inspection measures.

A cut-off in the production of fissile material for weapons is discussed below. How the Administration should address the surplus of separated civil plutonium is also discussed in the paper, "Civil Use of Fissile Material," in Section II.

Option (A), which calls for a continuation of the Bush policy, would avoid international and/or bilateral inspection of U.S. nuclear facilities but provides little leverage to achieve a shutdown of Russian production and separation of plutonium for weapons. It also deprives U.S. non-proliferation policy of a significant new tool for controlling the spread of weapons-usable fissile materials.

Under **Option (B)**, a bilateral cut-off would mostly formalize and add verification arrangements to the present or anticipated state of affairs in the United States and Russia. Verification of a halt to the production of fissile materials for weapons would require that operating U.S. enrichment and reprocessing plants be placed under international safeguards. There might be

opposition to this option (and additional ones below) within the defense communities of the United States and North Atlantic Treaty Organization (NATO), primarily on the grounds that such a policy could reduce future nuclear force options, particularly for the United Kingdom and France. The application of safeguards would not be onerous for the United States, however, because all reprocessing facilities dedicated to weapons production are to be shut down, and the two operating uranium enrichment facilities are used only to produce low-enriched non-weapons-usable fuel for civil power reactors. (U.S. naval reactors are fueled with HEU, but current planning calls for this requirement to be met with a small portion of the weapons-grade uranium that will be released by dismantling surplus U.S. warheads.)

With respect to **Option (C)**, a U.S.-Russian agreement not to produce additional fissile materials for weapons could be opened for signature by other nations, a step that would put pressure on other declared nuclear-weapon states (the principal concern is China) and on the threshold states to follow suit. Adding the requirement that the cut-off be verified would establish a standard that would assure that no production takes place in the countries of greatest proliferation concern. The Bush Administration has already been pressing the threshold states in the Middle East and South Asia to agree to a verified production cut-off. They would probably be more responsive if the weapons states joined in, making the cut-off non-discriminatory. Non-nuclear-weapon states that are signatories of the NPT -- most of the countries of the world -- are already subject to certain verification ("safeguards") requirements, but only at the point at which a facility actually contains fissile material.

Option (D) seeks to close the "loophole" in **Options (B)** and **(C)** that permits production of weapons-usable fissile material for peaceful civil energy programs. It proposes doing so through informal diplomacy and economic incentives to persuade other countries to defer production of HEU and chemical separation of plutonium until world inventories of these materials are substantially reduced. The principle targets of this option are the civil plutonium programs in Russia, Japan, France, and the United Kingdom, where technical, economic, and political problems have delayed plutonium utilization programs (breeders and mixed-oxide [MOX] fuel use in conventional reactors), a situation that has resulted in the creation of large stocks of civil plutonium. Deferral of further chemical separation until the weapon stocks are substantially consumed provides a face-saving means for these countries to reconsider their commitment to a closed fuel cycle. This option is likely to be opposed by elements within the governments and civil nuclear industries of the target countries and the United States.

Option (E) addresses the weakness shared by all the preceding options -- none of them explicitly bans the acquisition and/or production of weapons-usable fissile material by nuclear threshold and non-nuclear-weapon states -- activities that are now legal under the NPT as long as they are carried out under safeguards for peaceful purposes. Under this option, the Clinton

Administration could, for example, seek agreement at the 1995 NPT Extension Conference on an amendment or protocol banning the production, acquisition, or transfer by any party of weapons-usable fissile material in, to, or from any other state. Given the continuing (but commercially non-viable) civil plutonium programs in a number of key states, such an initiative would likely encounter strong resistance in some quarters, but the mounting evidence of commercial non-viability strengthens the case for making proliferation factors the paramount concern.

Recommendation:

Immediately implement **Option (B)**, offering technical assistance to affected Russian communities to develop non-nuclear replacement power or higher burn-up zircalloy-clad fuel for the remaining dual-purpose reactors in Siberia that would cease to produce weapons-grade plutonium. Then pursue **Option (C)** -- signing up other countries for the ban -- in cooperation with Russia; and pursue **Option (D)** -- deferring civil plutonium programs -- in connection with a broad U.S. non-proliferation policy shift toward capping and reducing the global inventory of separated plutonium. If political success is encountered with **Option (D)**, **Option (E)**, which now appears remote, could be feasible by 1995.

The most urgent problem is South Asia. A bilateral arrangement with Russia, while important in itself, has even more importance if it can be used to leverage a global ban. The most effective form of a global ban would be a prohibition on the production of all weapons-usable fissile materials, rather than on the production of fissile materials specifically for weapons. As noted, the latter leaves open the possibility of producing weapons-usable nuclear materials under the aegis of the "civil" nuclear fuel cycle. However, obtaining the former would require a halt, or at least a deferral, of the civil programs in Europe, Russia, Japan, and India that separate plutonium from spent nuclear fuel and that have substantial institutional momentum. The quicker option might therefore be to start with a ban on the production of fissile materials for weapons and build toward a global halt -- at least until current excess stockpiles are depleted -- in production of all weapons-usable fissile materials.

DISPOSITION OF PLUTONIUM AND HIGHLY-ENRICHED URANIUM FROM WEAPONS

Issue (1993):

What should be the U.S. policy toward the long-term disposition of the HEU and plutonium from weapons, particularly as it applies to Russia?

Options:

- (A) Give high priority to resolving the problems associated with the implementation of the agreement in principle between the United States and Russia that provides for purchase by the United States of 500 MT of HEU from retired Russian weapons.
- (B) Begin confidential bilateral exploratory discussions with Japan, the United Kingdom, France, and Russia on whether agreement can be obtained to reduce the surpluses of separated military plutonium through a cooperative program to fabricate weapons plutonium into MOX fuel, burn it in qualified civil power reactors, and directly dispose of the MOX spent fuel as waste. The utility and desirability of this option are contingent on all parties agreeing to defer further chemical separation of plutonium for any purpose until the surplus military stocks are eliminated.
- (C) Initiate a research and development (R&D) program to identify the preferred method(s) for direct disposal of plutonium as waste.

Background/Discussion:

Long-term storage of large quantities of weapons-usable material in Russia is not in the U.S. national security interest. The HEU can be blended down into low-enriched uranium (LEU) -- which cannot be used for weapons -- and used as fuel for civil power reactors. In September 1992, the United States and Russia agreed in principle that the United States would purchase up to 500 MT of Russian HEU over the next 20 years for use in civil reactors (after blending it into LEU), but with price and other matters left unresolved. There is a world-wide surplus of uranium ore and uranium enrichment capacity. In a uranium dumping case brought against Russia by U.S. uranium miners and processors, a preliminary ruling by the Commerce Department effectively prohibits import of Russian LEU for at least one year. The Russian Ministry of Atomic Energy has linked the sale of HEU from weapons to a favorable resolution of the dumping case.

Unlike HEU, plutonium cannot be denatured by blending; there are no self-evident solutions to its disposition. The principal near-term options are to: (1) dispose of it directly as nuclear waste, using "glassification" or some other technique for long-term immobilization; or (2) mix it with uranium and fabricate it into MOX fuel, burn it in civil reactors, and then bury the resulting spent fuel. Both the National Academy of Sciences and the Office of Technology Assessment have studies underway that are examining the disposition of weapons plutonium.

With **Option (A)**, U.S. diplomacy is required to resolve the HEU disposition issue, including agreement on the sales price and the shares of the revenue from such sales that the Ukraine and possibly other CIS states would receive. Swift appointment of a capable interim director (until July 1, 1993) for the new autonomous enrichment corporation, as specified in the recently passed energy bill, could be an important step in getting the U.S.-Russian HEU deal back on track.

As to **Option (B)**, neither the United States nor Russia currently has in operation large commercial facilities for fabricating MOX fuel. Despite its higher cost, a few civil power reactors in Europe and Japan are using, or are planning to use, MOX fuel. However, Europe and Japan are accumulating a surplus of plutonium separated from spent civilian reactor fuel, and contracts have been signed to separate far more than the projected demand. While plutonium could also in principle be irradiated in so-called "fast" reactors, which can be operated either as "burners," which consume plutonium, or as "breeders," which produce more plutonium than they burn, there is very limited fast-reactor capacity currently deployed world-wide -- the equivalent of two large traditional power reactors. The construction of additional special fast reactors would be very expensive, and the time required to burn the plutonium would be at least several decades.

If plutonium from weapons is to be used as MOX, it is essential that this process not serve to subsidize the commercial development of a plutonium fuel industry or add to the world surplus of separated plutonium. There are proposals designed to meet these criteria that involve agreements by Russia, Japan, the United Kingdom, and France to defer further separation of commercial plutonium and substitute weapons plutonium in MOX fuel.

With respect to **Option (C)**, even if plutonium is treated as a free good, it is still less costly to use LEU as a fuel in conventional reactors. In this sense, plutonium has a negative market value. Plutonium could be blended with the high-level radioactive waste (HLW) from which it was originally separated, when the HLW is immobilized in glass for subsequent geologic disposal, or the plutonium could be immobilized separately. Some experts favor these options on non-proliferation, security, and cost grounds, but the Russian Ministry of Atomic Energy has not been supportive, preferring to retain the plutonium for use as a nuclear fuel.

Recommendation:

Options (A), (B), and (C). **Option (A)** is of the highest priority. After consultations under **Option (B)**, decide whether the United States will encourage the MOX option for the disposal of Russian plutonium, perhaps in parallel with the option of direct disposal of the plutonium as waste.

NON-STRATEGIC NUCLEAR FORCES

Issue (first half of 1993):

Should the United States attempt to codify unilateral Russian and American undertakings with respect to the partial elimination of their non-strategic nuclear forces (NSNF)?

Options:

- (A) Continue to eliminate all U.S. and Russian ground-based, and half of their sea-based and air-delivered, NSNF on an informal basis, providing technical and financial assistance to Russia where necessary and feasible. Continue to rely on informal exchanges of information and Russian openness to confirm the implementation of unilateral undertakings.
- (B) On the basis of the Biden Condition to START, institute both reciprocal exchanges of data on stockpiles and inspections covering NSNF in connection with implementation of the START II agreement reducing strategic forces.
- (C) Seek to negotiate the complete elimination of all NSNF in a legally binding agreement and institute an effective and reciprocal monitoring regime for on-site inspections.

Background/Discussion:

The collapse of the Soviet Union in the fall of 1991 generated justifiable concern about control over its nuclear weapons, especially some 25,000 tactical weapons that were deployed throughout Soviet territory. A major initiative by President Bush in September 1991 sought to deal with the threat of loose Soviet nuclear weapons by providing Moscow with an incentive to consolidate and reduce its NSNF inventory. The incentive consisted of a U.S. decision to eliminate unilaterally all ground-based tactical nuclear weapons, remove from surface ships, submarines, and land-based naval aircraft all naval NSNF during normal peacetime operations, and reduce air-delivered weapons in Europe by 50 percent.

Within a week, then-Soviet President Gorbachev responded positively to the Bush initiative. Gorbachev announced that the Soviet Union would destroy all its ground-based NSNF and remove all nuclear warheads for air-defense missiles from deployment areas. Gorbachev also announced the

removal of all naval NSNF from surface ships, "multi-purpose" submarines, and land-based naval aircraft, destroying some and placing the rest in central storage.

Following the dissolution of the Soviet Union later that year, Russian President Yeltsin announced that Russia intended to abide by Gorbachev's earlier commitments. He also stated that the warheads for air-defense missiles, naval weapons removed from sea, and air-delivered weapons would be reduced by 50 percent. In addition, Yeltsin reaffirmed the commitments made by the newly independent states that all non-strategic nuclear weapons would be transferred to Russia by July 1, 1992.

In the months since these initiatives, the United States and Russia have proceeded to implement these unilateral steps. All U.S. ground-based nuclear weapons have been removed from Europe, as have half the air-delivered weapons, and all non-strategic weapons have been removed from sea-based platforms. Those weapons slated for elimination are being dismantled at the Pantex facility in Texas. The withdrawal of all former Soviet NSNF from the non-Russian republics was completed in May 1992, and the dismantlement of those slated for elimination is continuing.

The United States has assisted Russia in transporting and storing nuclear weapons and materials. As part of the original Nunn-Lugar legislation of November 1991, \$400 million in DOD funds were allocated to assist Russia in destroying its weapons of mass destruction. The 1992 Former Soviet Union Demilitarization Act allocates a further \$400 million to this and other tasks. Only a small fraction of the Nunn-Lugar assistance actually has been delivered to date.

Option (A) -- which is current policy -- seeks to contain the threat of loose Soviet nuclear weapons in the aftermath of the failed Moscow coup. Weapons are being consolidated at central storage sites inside Russia (and the United States), and the dismantlement is continuing. The current safety, security, and dismantlement (SSD) talks are designed to provide American assistance for the safe transportation, secure storage, and environmentally sound dismantlement of nuclear weapons and materials. The Bush Administration is confident that Russia is implementing its commitments and believes that new funds available under the Freedom Support Act will accelerate the dismantlement. There are no guarantees, however, that the process cannot be reversed in the future.

Option (B) -- instituting both reciprocal exchanges of data on stockpiles and inspections -- would enhance mutual confidence that unilateral undertakings were being implemented, reinforce Russian openness, and reassure non-Russian republics that weapons withdrawn from their territories were in fact being eliminated. Under the Biden Condition, the United States

must implement these measures "in connection with" any further agreements reducing strategic arms.

Option (C) -- negotiate a ban on NSNF -- would extend the unilateral reductions to all NSNF, including those currently stored in Russia and the United States at central sites, as well as similar weapons in the French, British, and Chinese nuclear forces. A multilateral agreement would bring the other declared nuclear powers into the disarmament process. It would also lay the basis for an effective and reciprocal monitoring regime, including on-site inspections.

Recommendation:

Option (B). A thorough data exchange and reciprocal inspections of U.S. and Russian NSNF would enhance mutual confidence that unilateral undertakings are being implemented. The United States should also begin to explore the possibility of negotiating a multilateral agreement eliminating all NSNF.

Special Budgetary/Congressional/Diplomatic Considerations:

Inspections would involve limited expenditures that Congress is likely to accept as part of U.S. implementation of the Biden Condition to START.



II. NON-PROLIFERATION: NUCLEAR WEAPONS

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NUCLEAR NON-PROLIFERATION TREATY EXTENSION CONFERENCE

Issue (January/February 1993):

Should the Administration of President Bill Clinton give high priority to extending the Nuclear Non-Proliferation Treaty (NPT) and prepare for talks as soon as possible with the other four declared nuclear-weapon states (Britain, China, France, and Russia) to achieve a common position?

Options:

- (A) Emphasize Strategic Arms Reduction Treaty (START) and NPT negotiations with Russia and the other nations of the former Soviet Union (FSU) before holding talks with France, the United Kingdom, and China on the NPT.
- (B) Add Britain, China, and France as negotiating partners, but only after a thorough inter-agency review of U.S. positions on the NPT and on negotiating a comprehensive test ban (CTB), which has become a closely related issue.
- (C) Begin bilateral talks with the United Kingdom, China, and France immediately; give high priority to the preparations for the NPT Extension Conference.

Background/Discussion:

With over 150 members, the NPT is the most widely accepted arms control agreement in history. While its limitations have been dramatically illustrated in Iraq, the NPT remains an essential framework for self-restraint, legal obligations, supplier export controls, and international inspections around the globe. Recent adherence by France and China, and movement in that direction by Belarus, Kazakhstan, and, haltingly, Ukraine, underscores its importance.

The Administration of President George Bush has stated that it supports extending the NPT indefinitely when the NPT Extension Conference is held in 1995, a stand supported by the other members of the G-7 (Canada, France, Germany, Italy, Japan, and the United Kingdom). It has not, however, given high-level attention to what needs to be done to achieve a long extension. It has made a major effort -- with some help from the Senate, particularly

Senators Sam Nunn and Richard Lugar -- to secure ratification of START and adherence to the NPT by Belarus, Kazakhstan, and Ukraine. These steps are essential to preventing those countries from retaining their nuclear weapons indefinitely and thereby beginning the disintegration of the NPT regime.

The single most important additional step to achieving enough votes from NPT members for a lengthy extension of the treaty is successful negotiation of a CTB. (See the paper, "Nuclear Testing," in Section I.) The fiscal year 1993 (FY93) energy and water appropriations bill (containing the Hatfield-Exon-Mitchell amendment that then-Governor Bill Clinton supported) clearly contemplates negotiations to halt the testing of nuclear weapons by at least the five nuclear-weapon states and requires submission to Congress of a plan for such negotiations by March 1993 (together with the specifics of the tests to be conducted from July 1993 to October 1996). Shortly after this legislation was signed, the French proposed that the five nuclear-weapon states begin CTB negotiations. The Chinese agreed but suggested that the talks also include the other countries participating in the Geneva Disarmament Conference. Thus, decisions about CTB negotiations are needed very soon.

A preparatory committee for the 1995 NPT Extension Conference is scheduled to begin meeting May 10, 1993. Before that committee meeting, negotiations with the other four nuclear-weapon states and with the U.S. allies are essential to providing a consensus for joint leadership of the committee's efforts. A large part of the negotiation over extending the NPT will be among the five nuclear-weapon states and other industrialized countries on the one side, and the non-aligned developing non-nuclear-weapon state NPT members on the other.

Based on what these non-nuclear-weapon states have said at past NPT review and related conferences, they will raise primarily the following issues: (1) the failure to conclude a CTB, a verified agreement ending the production of nuclear explosive materials for weapons, safeguards on nuclear-weapon state nuclear activities, and a verified dismantlement of long-range nuclear warheads to levels below those of 1970 when the United States, the United Kingdom, and the USSR first became obligated under Article VI of the NPT to "pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament..."; (2) the lack of effective "security assurances" for non-nuclear-weapon state members of the NPT that the nuclear-weapon states would not threaten or attack them with nuclear weapons and that assistance would be available to them in the event of nuclear threat or attack; and (3) their need for more help in acquiring nuclear technology and materials for peaceful purposes.

With respect to **Option (A)**, which is current policy, the Bush Administration has declined so far to open negotiations among the five nuclear-weapon states other than Russia and has refused to initiate negotiations

toward a CTB. While an approach to the former republics of the Soviet Union should be the first priority, the Hatfield-Exon-Mitchell amendment and the forthcoming preparatory meeting on extending the NPT suggest the need for opening discussions with the other nuclear-weapon states.

Option (B) suggests a thorough inter-agency study before beginning high-level planning for the NPT Extension Conference and talks with the other nuclear-weapon states. Such a study will be required before decisions can be made about which nuclear weapon tests to plan.

Option (C) gives high priority to beginning talks with the other nuclear-weapon states soon, without awaiting final decisions on which tests to plan. Assuming the Hatfield-Exon-Mitchell amendment and a long extension of the NPT reflect Clinton Administration policy, why await the testing decisions?

Recommendation:

Option (C). Give high priority to extending the NPT; open bilateral talks with other nuclear-weapon states on a CTB and the NPT extension.

Special Budgetary/Congressional/Diplomatic Considerations:

Dealing with China on arms control has been more difficult since the announcement of the sale of F-16s to Taiwan. However, in the case of United Nations Security Council actions such as the one in Somalia, recent discussions with China have been helpful. The recommendation is to begin the discussion with China in New York on (1) the preparatory committee for the NPT Extension Conference, which will meet there in May, and (2) a possible Security Council resolution on security assurances about which Chinese officials have expressed interest.

INTERNATIONAL ATOMIC ENERGY AGENCY REFORMS

Issue:

How should the United States deal with the International Atomic Energy Agency (IAEA) and the problem of prompt detection of illicit clandestine nuclear activities?

Options:

- (A) Reinforce the safeguards system of the IAEA, which is responsible under the NPT for implementing verification safeguards, so that the agency can act more effectively in dealing with situations involving undeclared or clandestine nuclear activities.
- (B) Support the creation of a special organization under the direction of the United Nations Security Council to receive and evaluate information from national intelligence sources and to direct the IAEA and other resources to follow up if circumstances require.
- (C) Encourage bilateral or regional-level verification arrangements in regions characterized by instability and political tension, ideally under the IAEA umbrella.

Background/Discussion:

The revelation after the Gulf War of an extensive, secret Iraqi nuclear weapons program illuminated weaknesses in the non-proliferation regime, including IAEA safeguards. In particular, the Iraqi case showed that safeguards, as traditionally applied, did not necessarily reveal violations and that some forms of violation -- primarily a secret state program decoupled from declared nuclear activities, materials, and facilities -- could not be detected or deterred by a system focused on accounting for all *declared* material.

After the revelations of *large-scale* Iraqi clandestine nuclear activity -- the first known instance of this type -- the IAEA Board of Governors reaffirmed the IAEA's verification role, even at undeclared sites, through its authority to conduct special inspections whenever there is plausible evidence that undeclared material may exist.

The IAEA's experience in implementing the far-reaching verification responsibilities under United Nations Security Council Resolution 687 -- to

identify, locate, take custody of, and remove, destroy, or render harmless all nuclear weapons, weapons material, and facilities, subsystems, and components -- demonstrates that the agency can carry out thorough verification activities when given substantial political support by the Security Council. It also demonstrates how important access to information about clandestine nuclear activity is to successful, comprehensive verification.

Such information is essential to IAEA success in similar future special inspections. It is not realistic, however, to expect that the most sensitive information in this category would be shared *routinely* with the IAEA. The Iraqi experience also clarified the importance of the political backing of the Security Council to assure access to designated locations.

Some experts see the IAEA experience in post-war Iraq as demonstrating the agency's potential for dealing with clandestine nuclear activities when it has adequate information and the necessary political support. Other experts believe that the IAEA may be reluctant to take tough action against member states, especially in situations that are less clear than that in Iraq. These experts cite accounts by high officials of the IAEA and the United Nations Special Commission (UNSCOM) that there were occasions when the IAEA felt there was no need to go further in Iraq and had to be told by the Special Commission to keep investigating.

The IAEA plays an invaluable role in the verification of non-proliferation. Steps to reinforce the agency technically, politically, and financially are important if the world is to have an institution in which it can maintain confidence. These steps include greater transparency in international nuclear commerce, improved IAEA access to nuclear facilities, and redefinition of the term "significant quantities" of materials.

To carry out its mission, the IAEA should receive adequate funding on a timely basis. The United States has a special responsibility to play a leadership role in the agency. In particular, it should make its annual contribution to the IAEA on time. (It currently pays almost a year late.)

It also is clear that the agency, like similar international institutions, has inherent limitations. In certain circumstances a more political body such as the Security Council may have to take the initiative in ferreting out clandestine activities, either by using the IAEA -- as was done in the case of Iraq -- or directly. Exploring other means of enhancing the international capability to deal with the risk of clandestine activity is in order. The same observation probably applies to regimes developed to control the risk of proliferation of chemical or biological weapons and missiles.

Finally, no international institution at any level may be able to provide the assurance necessary to satisfy regional protagonists. Attention should therefore be given to encouraging parallel regional or bilateral verification

arrangements, such as the recent agreement between Argentina and Brazil for mutual inspections supplemented by IAEA safeguards. However, such arrangements should not be entered into at the cost of IAEA verification, which is essential if the international community at large is to have confidence that proliferation is not taking place under these regional or bilateral arrangements.

Recommendation:

Option (A) should be pursued immediately and to the fullest extent possible, but **Option (B)** should be explored simultaneously to deal with special situations of illicit clandestine nuclear activities. **Option (C)** is a useful supplement.

Special Budgetary/Congressional/Diplomatic Considerations:

Option (A) will require a gradual increase in the U.S. contribution to the IAEA. **Option (B)** would in addition require an increased United Nations contribution to fund the new specialized agency. The Clinton Administration should work closely with the authorizing and appropriating committees in Congress to develop a multi-year program to implement this objective.

SANCTIONS AND EXPORT CONTROLS

Issue (103rd Congress, First Session):

Should the statutory non-proliferation controls and sanctions embodied in the Nuclear Non-Proliferation Act of 1978 (NNPA), the Foreign Assistance Act (FAA), and the Export Administration Act (EAA) be strengthened?

Options:

- (A) Rely on existing statutory authority but strengthen the export controls, as deemed necessary, through executive branch policy-making, including executive orders and agency rule-making.
- (B) Support legislative initiatives aimed at comprehensive improvement of the statutory regime of export controls and sanctions.
- (C) Follow a dual track approach of early enactment of legislation imposing sanctions on companies and countries that directly assist proliferators while working separately at a later time to enact statutory upgrades that require uniformly strict controls on U.S. nuclear exports.

Background/Discussion:

The regime of nuclear export controls and sanctions, as provided for under the NNPA, EAA, and FAA, was enacted in the late 1970s. Since then, Congress has enacted only limited legislation (the Solarz, Pressler, Wolpe, and Schumer amendments) to improve the pertinent statutes during the Administrations of Presidents Ronald Reagan and George Bush. However, the non-proliferation benefits of these amendments were far outweighed by the Reagan and Bush Administrations' policies that permit nuclear exports to non-NPT nations, such as India, and to NPT members who are suspect, such as Iraq, and that acquiesce in civil uses of weapons-usable plutonium and uranium in Western Europe and Japan.

Under the existing regime, nuclear exports and retransfers were approved in the early 1980s to countries that at the time posed a risk of proliferation, including Argentina and South Africa. Later in the decade, dual-use items (that is, items with nuclear and non-nuclear uses) were exported to Iraq and found their way into the Iraqi weapons program. Such items also have been, and continue to be, approved for other countries posing a risk of proliferation.

The regime has been criticized on a number of grounds:

- While nuclear fuel and facilities can only be exported to countries that subscribe to full-scope IAEA safeguards and that have an umbrella nuclear cooperation agreement with the United States, no such requirements apply to critical nuclear components, nuclear technology, and dual-use items intended for nuclear applications. As a result, a country such as Iraq (which did not have a nuclear cooperation agreement with the United States) was able to receive U.S. nuclear assistance.
- There is now only a limited statutory prohibition (the Schumer amendment) on the export of directly weapons-usable highly-enriched uranium (HEU) and none on the approval of so-called "subsequent arrangements" permitting reprocessing of fuel originating in the United States and eventual use of separated plutonium derived from such fuel.
- Key agencies such as the Department of Defense, as well as the public, have not had an adequate role in decisions on licensing of components, technologies, and dual-use items, nor is information about such decisions publicly available. In the five years before the Gulf War, for example, more than \$1.5 billion worth of sensitive dual-use items were licensed for export to Iraq without any public notice or process.
- The regime has few credible or effective sanctions against foreign and domestic suppliers, or against renegade countries, that violate basic non-proliferation norms.

The last Congress made a significant effort to pass non-proliferation legislation. The House passed an export control and sanctions package, offered by Congressmen Howard Wolpe and Edward Markey as part of the amendments to the Export Administration Act (H.R. 3489, Title III), as well as a separate import-sanctions package offered by Congressman Pete Stark as an amendment to the Trade Expansion Act (H.R. 5100). The Senate passed sanctions legislation (S. 1128) offered by Senator John Glenn but did not act on export controls.

While attempts were made to meld the various approaches, Congress ultimately failed to adopt any new legislation because of continuing concerns about unilateral export controls and because of efforts to exempt certain countries from the export controls and sanctions.

Option (A) -- maintaining the present statutory scheme -- could be pursued if it were determined that an upgrade of export controls could be achieved simply by changes in policy and regulations and by more detailed

scrutiny of proposed exports that entail significant proliferation risks. However, there would still be no meaningful statutory authority for the imposition of sanctions against either suppliers or renegade countries.

Option (B) -- supporting comprehensive statutory change -- would send a signal that non-proliferation policy is a high U.S. priority and that fundamental controls and sanctions will transcend changes in the presidency. There may be only one opportunity to pass non-proliferation legislation in the next Congress, but it may take time to resolve differences, even among advocates of enhanced export controls, on how to craft the legislation most effectively.

Option (C) -- following a dual track approach -- would likely lead to quick adoption of a sanctions package, since there is little opposition to such a package in Congress. However, once the sanctions package is passed, Congress may rest on its laurels and be disinclined to pursue legislative upgrades of export controls.

Recommendation:

Option (B). This option is the only one likely to provide a lasting improvement in export controls. There probably will be few opportunities, especially after the initial aura of the Clinton Administration wears off, to obtain a comprehensive overhaul of the statutory non-proliferation framework. If the Administration cannot win support for such legislation early in the session, the White House could signal the importance it attaches to the matter by directing the agencies to strengthen export controls, pledging to introduce a legislative package in 1994 to codify the changes, and supporting sanctions legislation as described in **Option (C)**. Regardless of the option chosen, the administration should undertake a diplomatic effort to multilateralize both export controls and sanctions.

Special Budgetary/Congressional/Diplomatic Considerations:

Some key Democrats (including Senator Glenn and Congressman Sam Gejdenson) may favor a dual track approach. The Europeans and Japanese may react negatively to unilateral U.S. action, particularly on sanctions; an appropriate diplomatic initiative to achieve a multilateral regime of export controls and sanctions should be a central part of overall U.S. policy.

Appendix

Issue:

Should decisions on exports of dual-use items and nuclear components and technology be made public?

Option:

- (A) Require the Commerce and Energy Departments to provide public notice of export actions, both approvals and denials, on dual-use items and nuclear components and technology. The United States also should urge other countries to do the same and should help establish an international registry on such exporting decisions.

Background/Discussion:

This process is now secret. Executive branch officials are barred from revealing any information about pending export applications or about export licenses that have been granted. This policy pertains even though the exports are for peaceful, civilian uses. This secrecy is defended on the grounds that it protects proprietary interests.

The effect, however, is to insulate strategically important government decisions from public accountability. In the case of Iraq, as noted, more than \$1.5 billion worth of sensitive dual-use equipment were approved for export during the five years before the Gulf War, often for direct delivery to Iraqi nuclear and missile sites. If the media and interested members of the public and their representatives had known about these exports, the negative publicity might have stopped this dangerous and mistaken practice. Pushing such exports into the light of day is the surest way to prevent this situation from happening again. At the same time that the United States opens its exporting process to the public, it should urge other countries to do the same.

Recommendation:

Option (A).

CIVIL USE OF FISSILE MATERIAL

Issue (January/February 1993):

Should the U.S. government seek to head off a large, global plutonium surplus by influencing Europe and Japan to suspend or defer the impending expansion of their civilian plutonium programs?

Options:

- (A) *Wait-and-see.* Maintain the current plutonium-use policy of not interfering with European and Japanese plutonium/breeder programs and thereby avoid political friction with U.S. allies in the hopes that the increasing domestic opposition in those countries as well as a growing international outcry will cause the eventual shutdown of these programs.
- (B) *Quiet diplomacy.* Rely on diplomacy to influence Europe and Japan to move away from these programs without public confrontation or change in stated U.S. policy.
- (C) *Assertive diplomacy.* Make selective changes in the stated policy. While making it clear that the United States will honor agreements now in place to implement the previous policy, press to discourage plutonium programs and to encourage alternatives in the interest of avoiding the regional and global risks associated with large plutonium surpluses.

Background/Discussion:

In July 1981, President Reagan scrapped a central element of the non-proliferation policy of Presidents Gerald Ford and Jimmy Carter by pledging not to interfere with the civilian use of plutonium recovered from U.S.-supplied nuclear fuel by nations "with advanced nuclear power programs where it does not constitute a proliferation risk" (that is, the EC and Japan).

Even though reprocessing programs no longer make economic sense, they have proceeded in Western Europe and Japan on the basis of institutional momentum. In fact, the programs are now about to undergo a major expansion under umbrella nuclear cooperation agreements with the United States that were negotiated or sustained by the Reagan and Bush Administrations. These agreements give long-term U.S. approval to reprocessing of U.S.-supplied fuel and to plutonium use even though the

United States abandoned such programs in the early 1980s. The United States supplies much of the power reactor fuel from which foreign plutonium is separated.

Today, plutonium programs around the world are at a critical juncture. England's THORP and France's UP2-800 reprocessing plants are scheduled to start up in the next few months, largely to extract plutonium for Japan. Construction is about to begin on Japan's Rokkasho-mura reprocessing plant. Continuation of these programs as planned will have environmental and proliferation consequences: once these plants start up and become contaminated by radiation, the environmental difficulties of shutdown and clean-up increase dramatically; and their operation will put far more separated plutonium into commerce than now exists in weapons.

Two decades after their inception, these plutonium programs are experiencing growing resistance at home and from the world community. The most notable case is Japan's, where the government is facing strong international criticism for a shipment by sea of 1.5 metric tons (MT) of plutonium from France because of the safety risks posed by plutonium and its weapons potential. This was the first of 30 planned shipments. There are a number of reasons for the growing criticism:

- Uranium, once thought to be scarce, is now abundant and cheap and makes plutonium unnecessary and expensive by comparison. The Japanese government is split over future plutonium shipments in comparison with such alternatives as using uranium from dismantled U.S. and Russian warheads, which – in low-enriched, non-weapons-usable form – represents a potential 50-year reserve for all of Japan's power reactors now operating and under construction.
- As noted, reprocessing, once regarded as an economic and efficient approach to fuel recycling and waste management, is now recognized as extremely costly and as posing major environmental problems.
- Fast breeder reactors have encountered major financial and safety problems and recently have been abandoned or shut down in Germany, France, and Britain, while Japan's program has suffered major delays.
- Reprocessing programs that will produce large stockpiles of weapons-usable plutonium in "safe" countries such as Japan may encourage or be used to justify similar programs in "dangerous" areas, such as the Korean peninsula.

- The deputy director of the IAEA recently warned that the vast prospective surplus of weapons-usable plutonium poses a "major political and security problem worldwide."
- This surplus is further aggravated by the large quantity of weapons plutonium soon to be recovered from dismantled U.S. and Russian warheads.

Important policy decisions, if made promptly, can capitalize on the present opportunity to avert a global plutonium surplus. Excess civil and military plutonium could be disposed of directly as waste. If the plutonium is instead "burned" as fuel in modified breeders or conventional reactors, it could stimulate civilian plutonium and breeder industries that might otherwise be forced to close because of the growing domestic and international opposition.

Efforts to avoid the use of plutonium can be combined with renewed U.S. efforts to eliminate commerce in the other nuclear explosive material, HEU. Key initiatives include completing development of alternate, low-enriched fuels for research reactors (so-called RERTR fuels¹) and enforcing the Schumer amendment's phase-out of exports of HEU as RERTR fuels are developed for the few remaining foreign reactors for which they are not yet available. Renegotiation of the U.S.-EURATOM nuclear cooperation agreement, which expires in 1995, provides an important opportunity to re-address the lack of U.S. control over U.S.-origin plutonium and HEU in Western Europe.

Option (A) -- wait and see -- avoids diplomatic difficulties but risks advancing a world plutonium surplus. **Option (B)** -- quiet diplomacy -- also avoids friction but might not be swift and effective enough to prevent impending start-up of new British and French reprocessing plants or to influence the ongoing Japanese plutonium policy review. **Option (C)** -- assertive diplomacy -- risks creating friction, especially with Japan, but a public change in U.S. policy is needed to tilt the domestic and international debates in time to head off new British, French, and Japanese reprocessing capacity, as well as potentially destabilizing plutonium programs on the Korean peninsula.

Recommendation:

Options (B) and (C). Since there is little time left before the scheduled start-up of the French and British reprocessing plants, the United States cannot afford to wait and see (**Option [A]**). A judicious combination of **Options (B) and (C)** should be used as circumstances dictate.

¹ Reduced enrichment for research and test reactors.

Special Budgetary/Congressional/Diplomatic Considerations:

Congressional action is not required, but close consultation with Congress is desirable. Overly assertive U.S. diplomacy toward Japan could hinder Japanese cooperation in this and other policy areas, but U.S. acquiescence in the Japanese plutonium program almost certainly will damage U.S. efforts to make and keep the Korean peninsula free of nuclear explosive materials.

IRAQ

Issue:

What change, if any, should there be in U.S. policy toward Iraq concerning its weapons of mass destruction?

Options:

- (A) Continue the present policy, which is to: support United Nations inspections and weapons disposal, while urging that the inspections be increased in intensity; maintain a residual threat to use force as an inducement to cooperation; and oppose lifting the embargo until all of Iraq's programs of mass destruction are rooted out and President Saddam Hussein leaves power.
- (B) Same as **Option (A)**, except with no requirement that Saddam leave power.
- (C) Work out a compromise with Iraq in which inspections and the embargo are eased in return for greater Iraqi compliance with United Nations resolutions.

Background/Discussion:

The UNSCOM has conducted 47 inspections in Iraq, designed to find and destroy Iraq's nuclear, chemical, and biological weapons programs and its missile program. Although the inspectors have made significant progress toward nullifying the Iraqi chemical and missile threat, questions remain about its suspected biological weapons program and about certain elements of its nuclear program. Saddam Hussein has specifically refused to reveal his network of foreign suppliers and has refused to supply other information required by the United Nations resolutions. In addition, the Iraqis are subjecting the United Nations inspectors to a rising level of harassment, and they have not yet accepted the United Nation's plan for long-term monitoring of Iraq's industrial base.

Because of their high profile, unprecedented tactics, and ambitious objective, the United Nations inspections in Iraq have become a test case for stopping nuclear arms proliferation.

Option (A) -- continuing the present policy -- keeps the embargo in effect until Iraq complies fully with all United Nations resolutions. This

policy includes logistics and intelligence support for the United Nations inspections by U.S. government agencies. It also includes an effort, which has not yet succeeded, to persuade the UNSCOM to increase the intensity of the inspections by basing inspectors permanently in Iraq. However, this option links the lifting of sanctions to Saddam Hussein's ouster, for which there is no basis in the United Nations resolutions. Moreover, it does not appear that the United States currently has the ability to force him from power. This requirement also gives Iraq an excuse for not cooperating with the inspections, since the United States would still favor the embargo even if Iraq does comply with the United Nations resolutions.

As to **Option (B)**, which may appear to be "softer" on Iraq than **Option (A)**, it in fact deprives Iraq of an excuse for not cooperating with the United Nations inspections, and thus it is in fact tougher. It does not detract from the overall U.S. policy, pursued in parallel with the embargo, of trying to remove Saddam Hussein from power, nor does it diminish the arms embargo on Iraq, which would remain in effect.

Option (C) would establish the principle of progressivity: the embargo would be relaxed progressively in return for Iraq's decision progressively to raise its level of cooperation with the UNSCOM. This approach differs from the current policy, which is that Iraq must comply fully with all United Nations resolutions before the embargo is lifted in any respect. Progressivity could require that the United Nations Security Council act several times to approve a series of compromises instead of making one decision on compliance and one decision on whether the entire embargo would remain in effect. It might appear, under this option, that the resolve of the United Nations was weakening by indicating that Security Council resolutions were negotiable if challenged by a recalcitrant target state.

Recommendation:

Option (B), which strikes a balance by embodying the toughest policy that is likely to garner wide international support.

ISRAEL

Issue (spring 1993):

Should the United States press for early consideration of the issue of nuclear weapons in the Middle East during future meetings of the multilateral working group on regional security and arms control in the Middle East? (The next meeting is tentatively scheduled for February/March 1993.)

Options:

- (A) *Nuclear activist.* Press the states represented at the multilateral arms control meeting -- which do not include Syria, Iran, and Iraq -- to agree first to an agenda in which the nuclear issue is taken up on a separate track, parallel with discussions on conventional arms, missiles, chemical/biological weapons, and other topics. Then push the nuclear subgroup at the multilateral talks for early consideration of the U.S. proposal of May 30, 1991, that would mandate no future production of enriched uranium and separated plutonium in the Middle East.
- (B) *Nuclear backburner.* Let "the sleeping nuclear dog lie" -- specifically, discourage Arab attempts to wake it in the multilateral talks until there is concrete progress in the Israeli-Palestinian and Israeli-Syrian negotiations, and then pursue **Option (A)**.
- (C) *Nuclear middle ground.* Encourage discussions of the nuclear issue by Americans, Arabs, and Israelis at the margins of the official meetings and at meetings arranged by non-governmental organizations. The purpose of such discussions would be to foster mutual understanding of the Israeli and Arab perceptions of the nuclear threat in the Middle East and to devise a mutually acceptable, realistic formula for dealing with the issue.

Background/Discussion:

The U.S. proposal of May 30, 1991, was artfully crafted to limit the further growth of Israel's nuclear arsenal while avoiding mention of actual weapons, which Israel does not officially acknowledge. Neither the Israeli nor the Arab response to the proposal was enthusiastic. The Israelis prefer to keep the proliferation issue focused on Arab "bad actors," especially Iran, while the Arab states officially demand that Israel sign the NPT and accept IAEA inspection of all its nuclear facilities. However, there is good reason to

believe there is flexibility on both sides. After the Gulf War, both Israel and the moderate Arab states have a mutual fear of a resurgent Iraq or a fundamentalist Iran armed with nuclear weapons. Moreover, Israel is feeling increasing pressure to do something to lessen the opprobrium of remaining outside the NPT consensus.

Option (A) calls on the United States to exercise global leadership in dealing with the proliferation threat in the post-Cold War era. Continuing to ignore Israel's nuclear weapons will cause increasing problems for the United States in its attempt to bolster the non-proliferation regime, especially in the Arab world.

As to **Option (B)**, current emphasis in the Middle East negotiations is rightly placed on getting agreements on Palestinian autonomy and on Israel's returning the Golan Heights in exchange for peace with Syria. Still, the revelations of Mordechai Vanunu and Seymour Hersh about Israel's nuclear activities have made it difficult for the United States to continue to ignore Israel's nuclear weapons. This option avoids disrupting the negotiations over primary U.S. objectives in the region but continues the pressure for acceptance of U.S. nuclear proposals, as soon as progress on the former objectives allows.

With **Option (C)**, the focus should be on avoiding official rhetoric, especially over the idea of a nuclear weapons free zone in the Middle East. (Israel is unlikely to get rid of its weapons any sooner than the declared nuclear-weapon states are.) Some security analysts have expressed concern -- based on the Vanunu and Hersh disclosures -- that Israel has moved beyond a strategy of "last resort" to nuclear war fighting and compellence strategies. Israel should reassure the Arabs on this point *without* openly acknowledging its nuclear status, an admission that would be a bad idea at this time. Arabs should acknowledge that they understand Israel's motivation for going nuclear.

Recommendation:

Options (B) and (C). Israel's nuclear weapons have always been a very difficult problem for the United States. The U.S. government should maintain steady momentum and also encourage dialogue by non-governmental organizations on this issue; if there is progress in the political negotiations, a nuclear compromise is within reach.

NORTH KOREA

Issue (January/February 1993):

Should the United States cancel the planned April 1993 Team Spirit military exercises with South Korea or otherwise alter its strategy for gaining North Korean acceptance of mutual nuclear inspections with South Korea, intended to supplement IAEA inspections?¹

Options:

- (A) Continue putting strong pressure on North Korea, making bilateral inspections of nuclear facilities in North and South Korea a precondition for: U.S. high-level meetings with North Korea; diplomatic recognition and economic aid from Japan and the EC; and expanded economic and cultural openings by South Korea. Proceed with the Team Spirit exercise in the spring of 1993 unless North Korea agrees to bilateral inspections, despite North Korea's threat to suspend nuclear talks if the exercise takes place.
- (B) Continue current policy but cancel Team Spirit to ensure a continued North-South Korean nuclear dialogue and to show a readiness to improve ties if the nuclear issue is resolved.
- (C) Cancel Team Spirit and improve U.S., South Korean, EC, and Japanese relations with North Korea, without requiring prior implementation of North-South Korean inspections, and draw North Korea into a network of economic and diplomatic relations to reduce its motivation for nuclear arms, ease its fears of bilateral inspections, and reduce the risks of possible economic collapse.

Background/Discussion:

North Korea ratified the NPT in December 1985 but until April 1992 refused to allow IAEA inspections of all its nuclear installations as required by the treaty. In the interim it built a number of nuclear facilities, including a reactor and what appeared to be a sizable, nearly complete "reprocessing"

¹ The Team Spirit issue may be decided before January 20, 1993. It is representative, however, of the type of near-term decisions concerning the nuclear program of North Korea that will confront the Clinton Administration.

(plutonium extraction) plant at Yongbyon, which the United States feared might soon allow North Korea to manufacture a nuclear device.

With the close cooperation of South Korea and Japan, in 1991 the United States intensified pressure on North Korea to accept IAEA inspections. After the United States withdrew its nuclear weapons from South Korea in late 1991, North and South Korea signed a December 1991 nuclear accord providing for bilateral nuclear inspections and other restraints. In April 1992, North Korea allowed the IAEA to begin inspections. North Korean objections to "challenge" inspections, however, stalled bilateral talks on implementing the North-South Korean nuclear monitoring pact. To maintain the positive momentum of early 1992, the United States and South Korea canceled the Team Spirit exercise for that year.

Although North Korea opened all its nuclear plants to the IAEA during four ad hoc inspections, serious questions remain. They concern the future of the still-incomplete reprocessing plant at Yongbyon, a possible secret pilot-scale reprocessing plant, and possible stocks of previously produced plutonium-bearing spent fuel from the Yongbyon reactor.

Throughout 1992, the United States, South Korea, and Japan demanded bilateral inspections to supplement the more cumbersome IAEA monitoring. With the North-South Korean nuclear talks stalled, the United States and South Korea (at South Korea's urging) declared they would reinstate the Team Spirit exercise for 1993. North Korea then countered that it would suspend further nuclear talks if the exercise proceeded. It could also restrict IAEA inspections. Continued withholding of aid and economic ties could, moreover, lead to a chaotic economic collapse in North Korea in the next few years, which South Korea gravely fears.

Option (A) -- maintaining current policy, including Team Spirit -- intensifies the pressure on North Korea. Continuity of overall U.S. policy will reassure South Korea and Japan of U.S. steadfastness. Reinstatement of Team Spirit could backfire, however, further delaying North-South talks and risking restrictions on IAEA activities; North Korea canceled the prime ministers' talks, scheduled for December 1992, for this reason. Non-proliferation gains from eventual bilateral inspections must be weighed against the risk that continued withholding of Japanese and EC aid could cause economic collapse, although this eventuality does not appear imminent.

Option (B) -- maintaining current policy, except that Team Spirit would be canceled -- continues the pressure for North-South Korean inspections, without jeopardizing current nuclear dialogue. Continuity of overall U.S. policy will reassure South Korea and Japan. Continued suspension of U.S. troop withdrawals would provide strong military assurances to South Korea that would leave little reason for the costly Team Spirit exercise, whose cancellation could be presented as a goodwill gesture by the

new leaders in South Korea (Kim Yong Sam was elected President on December 18, 1992) and the United States. Reversal of the decision to hold the exercise without North Korean concessions, however, would undercut South Korea's strategy and appear as caving into the North's threat. Possible non-proliferation gains from the overall policy must be weighed against the risk of triggering economic collapse in North Korea (a possibility that does not appear imminent).

Option (C) -- canceling Team Spirit and modifying current policy -- would lead to better relations with North Korea that could, in principle, reduce its interest in nuclear arms and make North-South inspections less threatening. North Korea, however, could fail to reciprocate beyond continuing the talks and permitting the IAEA to function. Moreover, this option would abandon a policy to which the United States, Japan, and South Korea have devoted much political capital and would undercut South Korea's bargaining position. An abrupt change in the U.S. course could open broad doubts about U.S. commitments in the region. This option would greatly reduce the threat of economic collapse in North Korea.

Recommendation:

Option (A). More active bargaining by North Korea suggests that the current policy is working. Prepare contingency plans for canceling or scaling back Team Spirit under **Option (B)** if circumstances change.

Special Budgetary/Congressional/Diplomatic Considerations:

Cancellation of Team Spirit would yield possible budgetary savings.

ARGENTINA/BRAZIL

Issue (January/February 1993):

How can the United States best support recent progress by Argentina and Brazil toward a permanent non-proliferation status and the completion of the Tlatelolco Treaty establishing a Latin American nuclear weapon free zone?

Options:

- (A) Through economic incentives and quiet, high-level diplomacy, the United States should strongly encourage Argentina and Brazil to consolidate their non-proliferation status by ratifying and implementing the agreement for full-scope IAEA safeguards and the Treaty of Tlatelolco.
- (B) As Argentina, Brazil, and the rest of Latin America have achieved significant non-proliferation gains, the United States should monitor the situation and provide low-key support as needed, but should focus its principal attention on other regions where the proliferation threat is greater.

Background/Discussion:

The two South American states with the most advanced nuclear programs have achieved dramatic progress toward a complete non-proliferation status. The principal evidence is a bilateral nuclear inspection agreement, signed and ratified in 1991, and an agreement with the IAEA for full-scope safeguards, signed in 1991 and currently pending before the legislatures of both nations. The bilateral agreement established a Joint System for Accounting and Control of Nuclear Materials (SCCC), to be administered by a new bilateral agency, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), now headquartered in Rio de Janeiro. Under the IAEA agreement, the agency will apply its safeguards to verify the findings of ABACC in its implementation of the SCCC and, as deemed necessary, will undertake independent measurements and inspections to verify that nuclear materials are not diverted to nuclear weapons or explosive devices.

Further evidence of the significant non-proliferation gains by Argentina and Brazil includes disavowal of peaceful nuclear explosives, progress toward strict domestic nuclear export controls, and restraint in the development and

export of missiles. (Argentina has agreed to abide by the Missile Technology Control Regime [MTCR], and Brazil expects to adhere to it in the future.)

The recent acceptance by Latin American parties to the Tlatelolco Treaty of several amendments (proposed by Argentina, Brazil, and Chile) is an important step toward full implementation of the nuclear weapon free zone. These amendments, which all Latin American nations must ratify, transfer inspection authority from the treaty's implementing organization, Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL), to the IAEA. Cuba, which along with Argentina, Brazil, and Chile, has held aloof from the treaty, recently stated it will soon join the agreement.

Indigenous unsafeguarded enrichment facilities and preparations for a possible nuclear testing program in the mid- to late 1980s fueled concern about Argentina and Brazil's nuclear intentions. Several factors, which have direct policy implications for the Clinton Administration, led Argentina and Brazil to accept a policy of nuclear restraint. (1) The enormous economic problems confronting the two nations provided the United States with leverage over nuclear policy. The Bush Administration's constructive policy of economic support and rewards for non-proliferation progress should be continued. (2) Cooperation between the United States and other advanced nuclear-exporting nations (especially Germany and Canada) contributed to Argentina and Brazil's nuclear forbearance. Argentina and Brazil should be encouraged to complete their own nuclear export control regulations and should be welcomed as full partners in nuclear supplier activities. (3) Quiet diplomacy at the highest levels by the Bush Administration significantly contributed to the commitment by Presidents Carlos Menem and then-President Fernando Collor de Mello to deepen their non-proliferation commitment.

With respect to **Option (A)**, the United States should strongly encourage Argentina and Brazil to complete ratification of the IAEA agreement and the Tlatelolco Treaty. However, without a personal commitment by President Menem and Itamar Franco, now President of Brazil, these actions could be undercut, especially in Brazil, where elements in the Congress and the military have questioned these initiatives. The Clinton Administration should therefore offer early and visible evidence of support and approval (perhaps in the context of head-of-state visits) for the completion of the Latin American non-proliferation regime.

As to **Option (B)**, limited human and financial resources argue for concentrating U.S. non-proliferation policy on areas where there is a growing proliferation threat and where U.S. interests are directly threatened. Latin America's non-proliferation progress has reached a point where the United States can safely turn its attention elsewhere.

Recommendation:

Option (A). Through active diplomacy and economic support, encourage consolidation of non-proliferation in Latin America.

PROBLEM NPT STATES

Issue (continuing):

In the face of credible evidence that certain parties to the NPT may be violating their treaty commitments, how should the United States respond?

Options:

- (A) Return to the the 1980s U.S. policy of pursuing the matter exclusively through behind-the-scenes diplomatic channels, to avoid damaging the credibility of the NPT and/or injuring relations with target states.
- (B) Continue current policy of gradually escalating pressure on the offending state by such steps as publicizing apparent violations, intensifying IAEA inspections to expose prohibited activities, and applying U.S. sanctions, while seeking parallel sanctions by other concerned states.
- (C) Seek a multilateral response through the United Nations Security Council.

Background/Discussion:

The 1970 NPT, which now has 155 parties, forms the foundation of the nuclear non-proliferation regime. The treaty requires non-nuclear-weapon state parties to accept IAEA inspections on all of their nuclear activities and requires all parties to ensure that nuclear exports are placed under IAEA inspection in the recipient country (whether or not it is a party to the pact).

The NPT alone, however, is not sufficient to halt proliferation by its non-nuclear-weapon state parties: it permits such parties to accumulate weapons-grade nuclear materials under IAEA inspection, thereby coming dangerously close to nuclear arms; it has been interpreted as allowing such parties to conduct research on nuclear weapons and to fabricate the non-nuclear components for such arms; and it permits such parties to withdraw on 90-days' notice. Moreover, the treaty has been rejected by a number of regional powers, most notably Pakistan, India, and Israel.

Nevertheless, the NPT is a critical element of global efforts to curb the spread of nuclear arms, and the United States strongly supports the renewal of the treaty in 1995 for an indefinite period. Any sign that the U.S. or other

NPT parties were unwilling to enforce the treaty would weaken the legitimacy of the pact and encourage further violations.

Confidence in the global regime has already been eroded by past and continuing reports that certain NPT parties -- both suppliers and consumers of nuclear technology -- have not lived up to the spirit or the letter of their NPT commitments:

- During the 1980s, Iraq repeatedly violated the treaty to pursue a multi-pronged clandestine nuclear weapons program based on nuclear facilities that it did not declare to the IAEA.
- Also during this period, firms in NPT parties Austria, Belgium, France, Great Britain, Italy, the Netherlands, Norway, Romania, Switzerland, Turkey, the USSR, and the Federal Republic of Germany supplied sensitive nuclear or dual-use goods to nations widely known to be seeking nuclear arms;¹ and China is now providing nuclear assistance to Pakistan, Iran, Algeria, and other nations with dubious non-proliferation credentials. In some cases, supplier-government laxity or collaboration in such exports may have amounted to a violation of the NPT.
- In the Middle East, NPT party Iran continues to engage in clandestine efforts to acquire nuclear-weapons technology, and NPT parties Syria and Libya continue to harbor nuclear-weapon ambitions.
- Because of past unmonitored nuclear activities in North Korea and South Africa and persisting regional and internal instabilities, there are continuing concerns about whether these two NPT states have submitted all of their nuclear materials for IAEA inspection.
- Doubts also remain as to whether some of the states that have emerged from the FSU (especially Ukraine) will join the NPT as they have pledged, and, once they join, questions could emerge as to whether they have placed all their nuclear assets under IAEA monitoring, as the treaty requires.

Option (A) offers quiet diplomatic consultation as the appropriate response to evidence of an NPT violation in the first instance, because it is unlikely to damage relations with the target state, allows sensitive information

¹ The United States has also provided dual-use technology to a number of states in this category, most notably, Iraq.

confirming the violation to be protected, and permits the suspected party to take corrective actions without public loss of face. Too often in the past, however, such secret, behind-the-scenes efforts have proven ineffective in influencing the behavior of suspect NPT parties.

As to **Option (B)**, since the late 1980s, gradual escalation of pressure has placed significant new constraints on suspect nuclear activities in a number of NPT states, including North Korea and Iran, and has led Germany to adopt tougher export control laws. This strategy may lead to the disclosure of sensitive intelligence data, however, and, if pressed too aggressively, may seriously damage U.S. relations with the suspected NPT violator and could conceivably lead such state to withdraw from the NPT.

With respect to **Option (C)**, the United Nations Charter and the IAEA statute provide for the Security Council to act in response to violations of IAEA safeguards. Furthermore, the declaration by Council members on January 31, 1992, that the proliferation of weapons of mass destruction constitutes a "threat to international peace and security" opened the door to the imposition of sanctions in appropriate cases. Such action, however, requires a degree of Security Council consensus that could prove elusive -- and failure to take such action once it has been publicly proposed could seriously weaken the NPT.

Recommendation:

Tailor the response to the reliability of the evidence and the nature of the violation in specific cases. Keep **Option (B)** as the basic U.S. strategy, holding **Option (C)** in reserve for the most flagrant NPT violations.

INDIA/PAKISTAN

Issue (January/February 1993):

Should the United States make near-term personnel and organizational decisions that will enable it to initiate a major multinational effort to contain and then reverse nuclear proliferation in South Asia?

Options:

- (A) Expand the current effort to encourage confidence-building measures (CBMs) and participation in five-party talks as a first step toward adherence by India and Pakistan to the NPT, full-scope safeguards, and a CTB.
- (B) Give up on the NPT and full-scope safeguards in South Asia in favor of a freeze on the production of weapons-grade material, a CTB, and limitations on the deployment of India's intermediate-range ballistic missile (IRBM).
- (C) Develop a new anti-proliferation policy that reflects regional realities and insures against overt weaponization but that also provides incentives for both countries to "roll back" their nuclear-weapon capabilities over a 10-year period.
- (D) Adopt a containment approach that accepts overt nuclear weaponization, focuses on nuclear weapon safety issues, and encourages India and Pakistan to adhere informally to international norms regarding nuclear and missile exports and technology transfer.

Background/Discussion:

In terms of current nuclear weapons capabilities, India and Pakistan represent the most potent region in the world outside of the FSU. Finding a solution to the proliferation problem in the region will require cooperation from China and policy changes from a number of other nations, including the United States. This situation makes South Asia the most difficult proliferation challenge both conceptually and organizationally.

Analysts in and out of government believe there is a two to three year window of opportunity for the United States to encourage nuclear restraint in South Asia. However, a number of factors – Indian production and deployment of its IRBM, the return of General Mirza Aslam Beg to Pakistani

politics, and the strengthening of the Bharatiya Janata Party (BJP) in India -- suggest that the situation could get much worse after a few years. Possibilities include a nuclear test, covert but large-scale weaponization, overt nuclear weaponization, or threatened use of nuclear weapons. Unfortunately, events in 1990 showed that the use of nuclear weapons in South Asia cannot be considered impossible. Any of these situations would have dramatic and costly implications for U.S. national security policy both in the region and around the world.

While U.S. non-proliferation policy since the 1974 Indian nuclear test has been well-intended, it has been a rather mid-level effort that has failed to halt Indian or Pakistani nuclear advances. There is virtually no chance India or Pakistan will become parties to the NPT or will adopt full-scope safeguards in the near term. Since 1987, the U.S. government has spent considerable diplomatic effort attempting to get India and Pakistan to adopt a series of CBMs. However, India has persisted in its rigid position and "old-think" disarmament rhetoric, particularly in its public statements. While China has indicated it would attend a five-power conference (proposed by Pakistan and supported by the United States), it has taken no unilateral action to help create the political space for Indian leaders to be able to attend such talks. Since India and China will have to initiate steps toward a "grand compromise," this unhelpful Indian posture has halted progress on serious confidence-building or arms control.

Option (A) would expand current policy. While most observers have concluded that efforts to get India and Pakistan to sign the NPT and adopt full-scope safeguards are hopeless, there is substantial evidence that a U.S.-led effort to encourage CBMs is the best policy for South Asia. The positions of India, Pakistan, and China on a variety of non-proliferation treaties are fixed and unlikely to change, even given a maximum U.S.-led multilateral diplomatic effort. Additional CBMs can be added to the list, such as providing India and Pakistan with a (surplus) Landsat 7. At the same time, it must be asked whether Indian or Pakistani leaders would use CBMs to work toward solving their fundamental security problems or whether they are just trying to get the United States off their backs.

Continuing current policy is a low-cost approach that could be carried out with the current staffing levels, organization, and personnel.

A version of **Option (B)** -- which involves a production cut-off, test bans, pledges of no weaponization, and bans on the deployment of missiles -- has been advocated by a Carnegie Endowment Study Group on U.S.-India Relations. It is favored by regional specialists. Supporters of the proposal argue that the past U.S. approach to non-proliferation has been both a failure and counterproductive to encouraging long-term restraint by India. The proposal also supports the five-power talks, although it provides no suggestions on what would be needed to get India to participate in them.

Option (B) is the next least expensive option in terms of the time of high-level officials. It does suggest a presidential visit to India in 1994.

Option (C) -- a new multi-phased anti-proliferation policy, to be implemented over a 10-year period -- would require bipartisan agreement in the United States. Phase one would be designed to stabilize the current, fragile, non-weaponized deterrent relationship between India and Pakistan and would emphasize economic sanctions to insure that India does not go farther down the path of nuclear weaponization. Phase two would put into place a variety of incentives and disincentives to encourage China, India, and Pakistan to exercise nuclear restraint. This step is similar in many ways to **Option (B)** but requires some changes in U.S. defense and arms control policies. Phase three would plant seeds to make it possible to roll back India and Pakistan's de facto nuclear weapons programs if future political changes in the region make this objective conceivable.

This option would require a commitment by President Clinton to appoint a senior U.S. non-proliferation official who would put South Asia and the Middle East at the top of his/her agenda. It would also require close communication between the government and various non-government organizations that are in a position to float creative solutions when diplomatic initiatives stall. The major problem with this option is that the regional bureaus in the State Department and non-proliferation specialists would have to work as part of the same team, rather than continue the polite bureaucratic warfare that has dominated U.S. government initiatives for 20 years.

Option (D), which entails a containment strategy for South Asia, assumes that nuclear weapons have proliferated in the region so that a roll-back is impossible. As a result, the United States should encourage India and Pakistan to refrain from exporting sensitive nuclear technology, place safeguards on all exports that fall under the Nuclear Suppliers Group (NSG) guidelines, and pay particular attention to nuclear weapons safety issues.

This option would make the Departments of Defense and State equal players in terms of U.S. nuclear proliferation policy for South Asia. Its major limitation is that it would preclude any possibility of a roll-back and might, in itself, encourage India and Pakistan to move from a de facto bomb in the basement to an overt nuclear weapons capacity.

Recommendation:

Option (C).

Special Budgetary/Congressional/Diplomatic Considerations:

Option (C) would be the most expensive in terms of staff time, but it provides the cheapest option in terms of budgetary outlays over the first four years of the Administration. It will require flexibility from Congress that is only likely if the legislature believes the U.S. government will undertake a major initiative in the region.

CHINA

Issue:

Should the Clinton Administration directly link China's adoption of strict non-proliferation policies to the decision on whether to grant China most favored nation (MFN) trading status, which the president makes annually in June?

Options:

- (A) Maintain the Bush Administration policy of encouraging China to restrain its nuclear, chemical weapons-related, and missile exports by means other than explicitly threatening to withdraw MFN status.
- (B) In addition to **Option (A)**, declare that China will lose its MFN status if it does not restrict its nuclear, chemical weapons-related, and missile exports in accordance with international non-proliferation norms.
- (C) In addition to **Option (A)**, and in addition to or in lieu of **Option (B)**, support legislation conditioning the continuation of China's MFN status on its adherence to international norms in making nuclear, chemical weapons-related, and missile exports.

Background/Discussion:

Over the last decade, China has been a principal source of weapons of mass destruction, ballistic missiles, and key technology for states seeking to acquire such arms, including countries that have flouted international standards on human rights, supported terrorism, and rejected other international norms of behavior. China has: provided Pakistan with critical nuclear weapons technology; sold ballistic missiles or critical missile technology to Pakistan, Iran, Syria, Saudi Arabia, and others; assisted Iran's burgeoning effort to develop nuclear weapons; and sold chemical weapon precursor chemicals to Libya, Syria, and other rogue nations. Most recently, press reports have charged that China has gone forward with its sale of M-11 missiles to Pakistan, despite its pledge not to transfer this system.

In view of this history, if non-proliferation is to be a top national security priority for the Clinton Administration, Chinese proliferation practices must be placed at or near the top of any agenda for action.

The Bush Administration has sought to promote improved Chinese behavior in the area of non-proliferation through a series of incentives and disincentives. It has supported, for example, some sales of U.S. high technology items sought by the Chinese, including advanced computer systems and satellites. At the same time, the Administration has accepted, albeit reluctantly, the use of sanctions against specific Chinese companies that engage in proliferation of technology controlled by the MTCR and other supplier regimes for weapons of mass destruction. The Administration has been successful in obtaining China's pledge to adhere to the guidelines and parameters of the MTCR and in gaining China's accession to the NPT -- two considerable accomplishments. Nonetheless, Secretary of State James Baker has had to underscore both that if China sells M-11 or M-9 missiles to Pakistan, Syria, or Iran, such action would have a profoundly negative impact on U.S.-China relations, and that Chinese nuclear links with Iran remain a source of considerable concern.

In addressing these questions, the Administration has steadfastly refused to link China's proliferation practices with China's MFN trading status. Among the Administration's concerns are that denying MFN would mean slowing economic reform in China, foregoing cheaper goods in the United States, and losing some high-technology exports to China.

Under current law, the president can grant China MFN status by executive order, and, although Congress can disapprove this decision by a joint resolution, it would be required to muster a two-thirds majority of each house to make its reversal of the president veto-proof. In addition, under current law, such a resolution can only approve or reject MFN status for China; it cannot set new conditions for MFN.

For the last two years, the Congress has sought to enact a new law setting forth conditions, including those relating to non-proliferation, for granting China MFN status. Most recently, the legislation failed to pass by only six votes when Congress was unable to override a veto by President Bush. The new law, proposed by Senators George Mitchell, Lloyd Bentsen, Joe Biden, and others, would establish standards on human rights, trade, and non-proliferation that China must meet to qualify for MFN each year. On human rights and trade, this law lays out very specific actions that must occur. On proliferation, the law requires overall progress by China in meeting the export control guidelines and parameters of the MTCR, the NSG, and the Australia Group on Chemical and Biological Arms.

Although the Bush Administration has had a number of successes in following the policy reflected in **Option (A)** -- for example, China has indicated that it will cancel the M-9 missile deal with Syria and has joined the NPT -- it is widely believed that China made these decisions to prevent the passage of the Mitchell-Bentsen-Biden bill.

Option (B) would allow the president to exercise the leverage inherent in the grant of MFN status without the need to rely on Congressional threats to withhold such status and without the constraints of binding legislation. This option could be implemented through a deliberate vague declaration at the time of the next presidential MFN finding in June 1993 that future decisions to grant MFN will "take into account" China's actions on non-proliferation. Such a declaration would intensify pressure on China to conform to international non-proliferation norms, but would retain considerable diplomatic flexibility and avoid undue damage to broader U.S.-Chinese relations.

Option (C), which calls for legislation expressly conditioning China's MFN status on export restraint, would send an unambiguous message about U.S. concerns, further intensifying pressure on China to adhere to international non-proliferation norms, and would enhance the constancy of U.S. policy. To allow the President to maintain a measure of discretion, the legislation, if necessary, could permit him to waive the MFN conditions if he certified that to do so was in the national security interest. With or without the waiver, codifying these conditions for MFN status would be seen by China as an undue intrusion on its sovereignty and stature, thereby damaging overall U.S.-China relations.

Recommendation:

Augment **Option (A)** by implementing **Option (B)** immediately, while holding **Option (C)** in reserve.

III. NON-PROLIFERATION: CHEMICAL AND BIOLOGICAL WEAPONS

Coordinator

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RATIFYING THE CHEMICAL WEAPONS CONVENTION

Issue (January/February 1993):

What position should the Clinton Administration take on ratification of the newly completed Chemical Weapons Convention (CWC)?

Options:

- (A) Abandon the new treaty or seek a significant renegotiation of its provisions.
- (B) Immediately seek Senate advice and consent to ratification by submitting the treaty to the Senate and scheduling hearings as early as possible.
- (C) Stagger the interaction between the executive and legislative branches over the coming year, with submission in the spring and hearings in the summer or autumn.
- (D) Delay ratification until 1994 or later.

Background/Discussion:

The CWC was completed in the summer of 1992 after more than two decades of work by the 39-member Conference on Disarmament in Geneva. The United Nations endorsed the treaty in the autumn. It will be opened for signature at a ceremony in Paris beginning January 13, 1993.

As a ban on the production, stockpiling, transfer, and use of chemical weapons, the CWC will go well beyond the only multilateral treaty in this area, the Geneva Protocol of 1925, which bans the use in war of chemical and biological weapons.¹ The United States deserves a significant measure of credit for the completion of the negotiations, not least because of the outspoken commitment of President Bush to the goal, although the positions espoused by the United States on issues such as verification and compliance have sometimes been criticized.

After January 20, the new Administration must decide on the value of the treaty, how quickly to move toward ratification, and where it fits in the

¹ Many parties to the protocol have, however, reserved the right to use such weapons against non-parties or in retaliation.

larger legislative agenda. The treaty will also require implementing legislation, which both the Senate and the House must pass.

A bilateral chemical weapons reduction treaty with Russia may also be ready in early 1993. Originally agreed to in the summer of 1990, it has awaited protocols on the destruction of Soviet and now Russian chemical weapons and on inspection procedures.

Option (A) entails a decision that the CWC as written does not serve U.S. interests. Such a dramatic decision would reflect a fundamental departure from a long tradition of bipartisan thinking about the virtue of a chemical ban (in June 1989, 75 senators went on record in favor of chemical disarmament in a letter to President Bush). CWC opponents are few in number since the end of the Cold War and tend to be people who are generally suspicious of arms control. Embracing **Option (A)** could conflict with the Clinton Administration's commitment to non-proliferation, multilateralism, and international law, raise questions about its desire to exert international leadership, and harm U.S. negotiating credibility.

Option (B) entails submitting the CWC and the U.S.-Russian treaty, if ready, to the Congress immediately. This step would signal a continuity of the commitment of senior U.S. leadership to the treaties and would put them high on the legislative agenda. However, it might also suggest a hasty Administration effort to dispense with the agenda of its predecessor without serious consideration of the issues. It might also conflict with a Clinton Administration commitment to move quickly on the domestic legislative agenda. In any event, preparation of the detailed supporting documentation necessary before formal submission may make this option unfeasible.

Option (C) entails sending the treaties to the Senate relatively quickly but working toward ratification later in the year. Transmission of the CWC in the early spring would signal that the Clinton Administration embraces the treaty as part of its own foreign policy agenda, a perception that would provide a positive signal overseas. Scheduling a vote in the summer or autumn would have a number of benefits. It would allow time to build a consensus for the vote and the implementing legislation, a desirable step given Congress's unfamiliarity with the treaties and the trade-offs made in the negotiations. The additional time would also be useful in clarifying the issues likely to be of concern to the Senate, such as the prospects for Russian implementation (for which the bilateral treaty will be relevant) and the cost and credibility of the new Organization for the Prohibition of Chemical Weapons (OPCW). Some preliminary answers to these questions will be provided by the CWC Preparatory Commission, which will begin work after the signing ceremony. A vote in the summer or autumn might also help the Administration signal that foreign affairs remain on its agenda despite the early focus on domestic issues.

Option (D) entails waiting until 1994 for legislative action. By then, the OPCW will have come into sharper focus, as will the number and identity of the states that will be parties to the treaty. In addition, the larger strategy for the Administration's legislative agenda will have been implemented. These advantages would, however, come at some cost. The United States would have lost leverage over other non-ratifiers. Old questions about its real commitment to chemical disarmament would be raised -- few states have forgotten that the United States did not ratify the Geneva Protocol until half a century after it was written (1925 to 1975). It would also stoke old fears about a fickle U.S. government that periodically negotiates treaties only to abandon them, a perception that would cast a larger shadow over the world role of the United States at this time of change.

Recommendation:

Option (C), which gives the strongest boost to the treaty internationally and in the Congress while also serving the political priorities and needs of the Clinton Administration.

THE CHEMICAL WEAPONS CONVENTION: THE PROBLEM OF HOLD-OUT COUNTRIES

Issue (ongoing):

How can the United States best encourage Middle Eastern countries to join the CWC, which is being opened for signature in Paris in January 1993?

Options:

- (A) Pressure Israel to curtail its nuclear weapons program to meet Arab demands for Israeli nuclear disarmament as a necessary condition for Arab acceptance of the CWC.
- (B) Reject the Arab demand linking Israel's nuclear program to Arab acceptance of the CWC and pressure the Arab countries to join Israel in signing the CWC.
- (C) Reject the nuclear-chemical linkage but seek to (1) encourage Israeli steps to reassure the Arab countries regarding its nuclear program and (2) convince the Arab countries that signing the CWC is in their national interests.

Background/Discussion:

The recently completed CWC is the product of a negotiation that U.S. administrations have pursued for more than 20 years. If widely adhered to, the convention will achieve the long-held objective of totally prohibiting all activities related to the possession and use of chemical weapons. It deserves the full support of the Clinton Administration.

Well over 100 countries are expected to sign the CWC at a ceremony in Paris in mid-January. The Middle East, however, remains a serious problem. In recent years, many Middle Eastern countries have acquired the capacity to produce chemical weapons. This region is the only one where chemical weapons have been used since 1945. Israel co-sponsored the United Nations resolution commending the CWC and is expected to sign in Paris, but the Arab countries have indicated they will not sign so long as Israel fails to move on its nuclear weapons program.

Although signature is not ratification, it is an important commitment to the goals of the CWC. Some Arab states, therefore, eventually may sign

while continuing to press Israel on the nuclear issue. Their decisions whether to sign could be affected by the attitudes they encounter within the Clinton Administration. Countries such as Egypt might also be encouraged to sign by a high-level declaration on arms control that Israel is rumored to be considering. Getting the Arab countries on board will be a major challenge to the Clinton Administration and of utmost importance to the success of the convention.

The Bush Administration addressed the problem of nuclear-chemical linkage in its May 1991 arms control proposal for the region, albeit in rather sketchy form. That proposal would deal with the nuclear problem by encouraging an immediate cut-off of the production of fissile material as a step toward a Middle East nuclear weapon free zone. Both Israel and the Arab countries have long endorsed such a zone, at least in principle. The Bush proposal also called on all states to join the CWC and the 1972 Biological Weapons Convention, a step that would make the Middle East free of all weapons of mass destruction. The United States, however, has long discouraged linkages that would hold up progress in one area pending progress in others.

Option (A) calls for U.S. pressure on Israel to curtail its nuclear program in some way that would secure Arab endorsement of the CWC. Adoption of this option would entail a major shift in U.S. policy, both on the issue of linkage and with respect to Israel's nuclear program, which the United States has long tolerated with little opposition. However, to strengthen the likelihood of success at the 1995 NPT Extension Conference and to enhance the prospects of full adherence to the CWC, the Clinton Administration could use its leverage with Israel to encourage major changes in that country's nuclear program, while securing Arab agreement to sign and eventually to ratify the CWC.

Option (B) rejects the Arab linkage between chemical and nuclear weapons and calls for pressure on the Arab countries to sign the CWC. The United States could point out that the presence of chemical weapons is a threat to all countries in the region, even apart from the Arab-Israeli conflict. The use of chemical weapons in the 1960s and 1980s never involved Israel and instead affected Arabs, Kurds, and Iranians. The United States could further argue that chemical weapons have only modest military utility and, like biological weapons, are primarily weapons of terror. Their elimination from the region would therefore benefit Arab security as much as that of any other country, including Israel.

Option (C) provides for a more balanced approach aimed at (1) convincing Arab countries of the importance of signing the CWC and (2) encouraging Israel to take steps in the nuclear area. The latter might include a commitment not to conduct a nuclear test, a unilateral cut-off of the production of fissile material, and even opening the Dimona reactor for international

inspection. At the same time, Arab countries could be told that signing the CWC is in their own security interests and that holding out until Israel joins the NPT as a non-nuclear-weapon state will produce no results. Instead, Arab signatures of the CWC will build confidence and nudge Israel toward limiting its nuclear program as one element in the overall peace process.

Recommendation:

Option (C), which embodies a subtle approach that encourages Arab participation in the CWC while pointing to the security benefits of Israeli steps to constrain its nuclear capability. This option is most likely to produce success in both the chemical and nuclear area. Neither **Option (A)** nor **Option (B)** will work, and both risk damaging the peace process.