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THE WHITE HOUSE

WASHINGTON

March 21, 1996

PRESIDENTIAL DECISION DIRECTIVE/NSC-47

MEMORANDUM FOR THE VICE PRESIDENT THE SECRETARY OF STATE THE SECRETARY OF DEFENSE THE SECRETARY OF ENERGY CHIEF OF STAFF TO THE PRESIDENT DIRECTOR OF CENTRAL INTELLIGENCE ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS DIRECTOR OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY DIRECTOR OF THE ARMS CONTROL AND DISARMAMENT AGENCY CHAIRMAN OF THE JOINT CHIEFS OF STAFF

SUBJECT: Nuclear Scientific and Technical Cooperation with Russia Related to Stockpile Safety and Security and Comprehensive Test Ban Treaty (CTBT) Monitoring and Verification (CT)

This Presidential Decision Directive (PDD) establishes and directs the implementation of U.S. policy on nuclear scientific and technical cooperation with Russia related to stockpile safety and security and Comprehensive Test Ban Treaty (CTBT) monitoring and verification.

I. Background

Recent political dialogue on nuclear scientific and technical cooperation related to stockpile safety and security and CTBT monitoring and verification. On August 11, 1995, I wrote President Yeltsin regarding my decision to seek to negotiate a true, zero-yield CTBT. In that letter, I told President Yeltsin that: "We (the United States) are also interested in expanding scientific and technical cooperation with Russia, including labto-lab contacts and collaboration on verification technologies."

On October 15, 1995, the United States provided the Russian Federation with a diplomatic non-paper entitled "U.S.-Russian Scientific and Technical Cooperation." That paper outlined five

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Reason: 1.5(a) Declassify on: 2/11/2006 DECLASSIFIED PER E.O. 12958, AS AMENDED 2004 - Ollo-M \$/25/04 ms

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specific areas where unclassified activities could be conducted primarily in the areas of stockpile safety and security, including:

- Fundamental physics processes important to stockpile stewardship.
- The utilization of facilities for physics experiments.
- Technologies and systematic approaches to assure safety and security in the nuclear weapon stockpile and in nuclear forces operations.
- Techniques for monitoring a CTBT.
- Materials science, technologies and development. (U)

The October 15 non-paper also specified that if in the future it is agreed that classified discussions are warranted, an appropriate agreement for cooperation will have to be concluded (consistent with the authorities set forth in the Atomic Energy Act). (U)

II. Purpose and Limits of the Program

U.S.-Russian nuclear scientific and technical cooperation related to stockpile safety and security and CTBT monitoring and verification is in the U.S. national interest in that it can:

- Contribute to greater transparency and to the safe and secure maintenance and drawdown of the Russian nuclear stockpile during a period of political and economic transition in Russia, as well as the U.S. nuclear stockpile.
- Sustain the scientific competence of individuals responsible for ensuring confidence in the Russian and U.S. nuclear stockpiles.
- Facilitate achievement of other U.S. policy objectives, such as Russian agreement to and compliance with a true zero yield CTBT.
- Further our understanding of Russia's nuclear weapons program.

While I have determined that a program of nuclear scientific and technical cooperation with Russia related to stockpile safety and



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security and CTBT monitoring and verification is in the United States national interest, nevertheless, such a program with Russia can only take place in the overall context of positive United States-Russian relations and should be conducted consistent with other U.S. assistance and cooperative programs to maximize U.S. influence and support U.S. interests. Therefore, the pace and scope of U.S. cooperation will continue to be governed by our ongoing evaluation of the evolution of Russian foreign and defense policy.

U.S. cooperation in this area will be limited to those items that the Secretary of Energy (and, as appropriate, the Secretary of Defense and Secretary of State) determine will not jeopardize the security of our own nuclear systems and weapons, enhance military performance of Russian nuclear weapons capabilities or increase the risk of nuclear weapons proliferation. U.S. cooperation will be undertaken in accordance with U.S. domestic laws and international obligations. Specific nuclear scientific and technical cooperation guidance is contained in Section III of this PDD.

III. Areas Approved for Nuclear Scientific and Technical Cooperation

Guidelines for U.S.-Russian Scientific and Technical Cooperation Related to Stockpile Safety and Security and CTBT Monitoring and Verification. The following guidelines will serve as policy guidance for discussions and activities in this area:

- While we are prepared to engage Russia now in "technical talks" on cooperation and to reach agreement on specific activities in the areas outlined below, actual cooperation would begin only after USG approval. Once agreed, the United States will be prepared to make the "fact of" this program public.
- 2. Discussion and activities would be conducted only at the unclassified level and shall be consistent with the Atomic Energy Act and subject to U.S. classification procedures. A subsequent decision by me would be required to go beyond this. If in the future it is agreed that classified discussions are warranted and an appropriate agreement for cooperation has been concluded, specific elements of the program will remain classified at the appropriate level.
- 3. Discussions and cooperative activities would focus on stockpile safety and security and fundamental physics issues with a goal of sustaining the scientific competence of individuals responsible for ensuring confidence in the U.S. and Russian stockpiles. Activities that have direct



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applications to nuclear weapons design or military performance enhancements of nuclear weapons shall be prohibited. A subsequent decision by me would be required to go beyond this. (U)

The restrictions in paragraphs 1 and 2 above shall not apply to activities now ongoing or planned under the Agreement for Cooperation now being negotiated with Russia as part of the Safety, Transparency and Irreversibility (STI) initiative. (U)

Subject to the guidelines above and the procedural limitations set forth in Section V, the following areas of cooperation and assistance are approved:

- Computations, experiments and materials. This would include: models of physical processes and mathematical algorithms for new, highly parallel computers, including standard test problems for assessing computer performance; theoretical and experimental studies of the fundamental properties of matter including atomic and molecular physics, nuclear physics, hydrodynamics and properties of substance, physics of plasmas and energy transport and solid state physics; laser technologies related to NIF and other ICF driver applications; pulsed power systems, high magnetic fields and studies of the properties of magnetized plasmas; studies of the fundamental properties of high explosives; methods of hydrodynamics research, including detection, diagnostics and x-ray sources; diagnostics associated with high energy density physics; experiments on U.S. and Russian laser, pulsed power and hydrodynamics facilities; theoretical and experimental studies of material aging; theoretical and experimental studies of material response to various environmental conditions; and environmentally benign processing of nuclear materials.
- <u>Nuclear warhead safety and security</u>. This would include: safety issues associated with the aging of high explosives; combining existing data bases related to safety and security and to develop scenarios and computer models to understand mechanisms to mitigate or respond to related incidents; and exchanges of Russian and U.S. data on past accidents and nearaccidents involving weapons.
- CTBT monitoring and verification. This would include: seismic, hydroacoustics, radionuclide and infrasound monitoring systems; possible examination of national monitoring systems; on-site inspection technologies; using ground-based electromagnetic pulse technology for detection of covert underground nuclear explosions that are masked by chemical explosions; techniques for detecting decoupled explosions; modeling of network capabilities for sensor

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systems; and systems integration of monitoring technologies. (U)

IV. Additional Areas

Areas in nuclear and scientific and technical cooperation related to stockpile safety and security and CTBT monitoring and verification not referred to in this PDD, in which cooperation is proposed by either country, shall be referred to me for decision. Pending a decision by me, discussions in these areas shall be limited to those necessary to ensure that the Russian desires are fully understood.

V. Authority and Management

Executive and technical management of the program will be the responsibility of the Secretary of Energy, in coordination with the Secretary of Defense as required. The Secretary of Energy shall establish internal guidelines and review procedures within the Department of Energy to ensure that individual projects and activities within the framework of this PDD are consistent with the guidelines set forth in Section III. A single point of coordination will be designated within the Department of Energy; all Russian proposals for cooperation and U.S. responses will be coordinated through this office.

To ensure that cooperation furnished under this program is properly coordinated with other U.S. diplomatic efforts and is consistent with the overall state of U.S.-Russian relations, the following mechanisms will apply:

- For ongoing areas of cooperation the Secretary of Energy, in coordination with the Secretary of Defense as required, shall ensure that periodic briefings (i.e., at least once every year) are provided to the Deputies Committee. These briefings shall update information concerning the status of the program since the last briefing and include an assessment of the technical value of these exchanges.
- The Secretary of Energy and Secretary of Defense shall similarly ensure that the Deputies Committee is briefed on any significant expansion or contraction of ongoing programs. Should there be a disagreement with any proposed contraction or expansion on national security and/or foreign policy grounds, the issue will be referred to me for decision and the proposed action held in abeyance.

All information learned as a result of our cooperative efforts shall be provided to relevant agencies. Additional security guidance as necessary will be promulgated by the Secretary of Energy and, where appropriate, the Secretary of Defense.

Winam J. Cinton

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THE PRESIDENT HAS SEEN 3/21/96

DECLASSIFIED PER E.O. 12958.

AS AMENDED

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THE WHITE HOUSE WASHINGTON March 20, 1996

MR. PRESIDENT:

Tony Lake recommends that you issue the attached PDD that establishes and directs the implementation of a cooperative program with Russia in the areas of nuclear stockpile safety, security and CTBT monitoring and verification.

The PDD is a follow-up to your August letter to Yeltsin, in which you expressed U.S. interest in expanding this type of cooperation, and to subsequent work in October and December between U.S. and Russian experts.

U.S. cooperation will be limited to issues that will not jeopardize the security of our own nuclear systems, enhance the performance of Russian nuclear weapons capabilities or increase the risk of nuclear proliferation.

In brief, the PDD will, (a) define the purpose and limit of the program (e.g., contribute to safe and secure maintenance and drawdown of Russian stockpile; facilitate Russian agreement to U.S. objectives like zero-yield CTBT; further understanding of Russia's nuclear weapons program); (b) establish guidelines for program classification and specific areas of discussion (only unclassified activities will be discussed with a focus on stockpile safety and fundamental physics issues); (c) establishes procedures for management of the program (by Sec. of Energy in consultation with Sec. of Defense)

If you approve, please sign the PDD where indicated.

Todd Stern 1/

Phil Caplan

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THE WHITE HOUSE

THE PRESIDENT HAS SEEN 3/21/96

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WASHINGTON March 1, 1996

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MEMORANDUM FOR THE PRESIDENT

FROM:

ANTHONY LAKE

SUBJECT:

Proposed PDD on Nuclear Scientific and Technical Cooperation with Russia Related to Stockpile Safety and Security and CTBT Monitoring and Verification

Purpose

To submit for your approval a proposed Presidential Decision Directive (PDD) establishing and directing the implementation of U.S. policy on nuclear scientific and technical cooperation with Russia related to stockpile safety and security and Comprehensive Test Ban Treaty (CTBT) monitoring and verification.

Background

On August 11, 1995, you wrote President Yeltsin regarding your decision to seek to negotiate a true, zero-yield CTBT. In that letter, you told Yeltsin that: "We (the United States) are also interested in expanding scientific and technical cooperation with Russia, including lab-to-lab contacts and collaboration on verification technologies."

On October 15, 1995, the United States provided the Russian Federation with a diplomatic non-paper outlining five specific areas where unclassified cooperation could be conducted in the areas of stockpile safety and security and CTBT monitoring and verification. On December 13-14, 1995, U.S. and Russian experts met in London and agreed on topics for potential cooperative activities.

The proposed PDD at Tab A establishes and directs the implementation of a cooperative program with Russia in the area of stockpile safety and security and CTBT monitoring and verification. Specifically, the proposed PDD:

Defines the purpose and limits of the program;

DECLASSIFIED PER E.O. 12958. AS AMENDED • Establishes guidelines for program classification; 7.009-0110-1 8/25/01 MS

cc: Vice President Chief of Staff

Reason: 1.5(a) Declassify On:

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- Establishes guidelines and specific areas/topics approved for nuclear scientific and technical cooperation related to stockpile safety and security and CTBT monitoring and verification; and
- Establishes procedures for the authority and management of the program.

The proposed PDD has been cleared by all relevant agencies.

RECOMMENDATION

That you sign the proposed PDD at Tab A.

Attachment Tab A Proposed PDD

OPY

NATIONAL SECURITY COUNCIL WASHINGTON, D.C. 20504

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February 12, 1996

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MEMORANDUM FOR ANTHONY LAKE

THROUGH:

STEVEN P. ANDREASEN FROM:

Proposed PDD on Nuclear Scientific and Technical SUBJECT: Cooperation with Russia Related to Stockpile Safety and Security and CTBT Monitoring and Verification

The attached PDD establishes and directs the implementation of U.S. policy on nuclear scientific and technical cooperation with Russia related to stockpile safety and security and Comprehensive Test Ban Treaty (CTBT) monitoring and verification. It has been cleared by all relevant agencies.

Concurrence by:

ROBERT G. BELL PAU

Kreczko Leary PiferSP Fairfax

RECOMMENDATION

That you sign the memorandum to the President at Tab I.

Attachment Memorandum to the President Tab I Tab A Proposed PDD

DECLASSIFIED PER E.O. 12958, AS AMENDED 7004-0110-m MS

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