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# National Commission on Nuclear Threat

May 13-14, 1997 Meeting
Airlie House, Virginia

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# Preparatory Meeting of the National Commission on Nuclear Threat

May 13-14, 1997
Airlie House, Virginia

*Meeting Summary*

## Background

The Keystone Center convened a preparatory meeting on May 13-14, 1997, as part of The Center's efforts to convene the National Commission on Nuclear Threat. The National Commission on Nuclear Threat will be convened in order to develop a compelling assessment of nuclear threats that face the United States and the world in the post-Cold War context. This assessment will also focus on the interrelation of many of the issues and look for ways in which to foster greater understanding of these issues by both policymakers and the public.

The Commission will be composed of approximately twenty-five nationally recognized former policymakers, corporate executives, opinion leaders, and experts who represent a cross-section of experience with, and knowledge of, international affairs, the workings of government, and issues of nuclear and security policy. While the exact agenda and work load of the Commission will be established by its members, the precis in Appendix I is the current outline of the Commission, its structure and agenda.

The agenda for the preparatory meeting was structured to allow for brief presentations followed by reactions and discussion from all the participants on the following topics: 1) The Future of Nuclear Weapons, 2) The Disposition of the Reduced Nuclear Weapons and Fissile Material, 3) The Nuclear Terrorist Threat, 4) The Status of Nuclear Proliferation, 5) The Concept of "Strategic Escrow", and 6) What Does the Country and its Leaders Need to Know and How Can the Commission Help Answer These Questions. The following meeting summary follows the order of these topics, beginning with a review of Introductory Comments. A copy of the agenda is attached in Appendix II.

## Introductory Comments

Robert W. Craig, President of The Keystone Center, welcomed the participants and provided a brief history of The Keystone Center and the range and type of projects and dialogues The Center has convened in its 22 years of experience. Craig then went on to explain that The Center was convening the National Commission at the request of former Secretary of Energy Hazel O'Leary and because of his personal belief that the range of topics proposed for discussion by the Commission are among the most pressing series of public policy problems facing the United States yet receiving dwindling government and public support. Mr. Craig ended his welcoming

comments by reflecting upon his recollections of being a junior Naval officer on the first ship to land at Nagasaki harbor after the dropping of the nuclear bomb by the United States in World War II, and visiting shortly thereafter the center of Hiroshima.

Mr. Craig then introduced Kevin Curtis, Senior Associate and Project Director for The Keystone Center and Anthony Porcaro and Rodney Jones, Senior Advisors to the project.

**The Future of Nuclear Weapons**

This topic was introduced by two presentations: the first by Dr. Michael Nacht, University of Maryland, and the second by Dr. Thomas Cochran, Natural Resources Defense Council.

Dr. Nacht provided a brief overview of the "classical threat" posed by the nuclear weapons arsenal and strategy of the five traditional nuclear powers (the United States, the United Kingdom, France, the Former Soviet Union [now Russia] and China) as well as the four reported "undeclared" nuclear powers (India, Pakistan, Israel and North Korea). Among the points Nacht made were that the U.S. current strategic arms control strategy is focused primarily on de-emphasizing the role and appeal of nuclear weapons, de-emphasizing them in the US defense posture as well, and reducing the number of nuclear warheads in the world's nuclear arsenals. This strategy is based upon an almost exclusive focus on the "downsides" of nuclear weapons and is in marked contrast to the more pragmatic view of the other nuclear powers who, at the risk of oversimplification, tend to see their nuclear weapons as simply another part of their arsenal. Nacht summarized the overall position of Russia as very unclear, noted that Russia is increasing its political reliance on nuclear weapons and is only reluctantly reducing the number of its nuclear warheads, and stated his view that in order to successfully implement the Helsinki Accord, a variety of steps need to be achieved in the near future. These steps include the codification of the Russia/NATO relationship, the conclusion of the Anti-Ballistic Missile Treaty (ABM)/TMD demonstration agreement, and the success of the G7 meeting in Denver this summer for all the participants. Nacht noted that he believes that both the U.S. and Russia are a long way from getting to low enough levels of deployed nuclear weapons to be "credible" in asking the other nuclear powers to reduce their nuclear arsenals.

In briefly covering the existing strategies of other nuclear powers and threshold states, Nacht made the following points. China, he stated, is continuing to slowly build its nuclear capabilities as part of its aspiration to become a super-power and in response to its perception of a continued threat from both the U.S. and Russia. China has made clear that it will not engage in any discussions or negotiations with the U.S. about nuclear weapons until the U.S. formally pledges to a no first-strike policy. India, he noted, appears to be hardening its stance on keeping its nuclear weapons option as does Pakistan. Israel will not give up its nuclear weapons until there is a comprehensive peace treaty in place for the Middle East while North Korea has capped, for the time being, the future growth of its nuclear weapons but has not agreed to take any steps to reduce it.

Tom Cochran focused his introductory comments on his view that the two primary issues in this area for the United States are: 1) how to speed up what he believes will be a very slow and incremental reduction of weapons, and 2) ways in which to increase the security of the fissile material produced both from the dismantlement of weapons and commercial production sources. Dr. Cochran noted that the U.S. has missed some key opportunities in the post-Cold War era to move faster in reducing both its and Russia's nuclear arsenal and that some bold steps are now needed by the U.S. to rekindle efforts to accelerate the reduction of nuclear weapons.

After these presentations, the following points were raised or discussed. The recent call for the complete elimination of nuclear weapons by retired General Lee Butler raises the possibility of garnering support from segments of the military establishment for the Clinton Administration to take some bold steps to accelerate efforts to reduce the U.S. nuclear arsenal. Another point was made however, that the Clinton Administration has a pattern of taking incremental rather than bold steps in this area.

The relative merits of a "top-down" versus "bottom-up" approach to ensuring that Russia takes the appropriate steps to reduce its nuclear arsenal and secure its fissile materials was discussed by several of the participants. Among the points stated in support of a "bottom-up" approach was the view that Russian democratic practices are simply too fragile to insist upon codified agreements that require Senate and Duma action for ratification. Rather, a focus on the lab-to-lab initiatives and the cultivation of transparency about stockpiles was much more likely to actually get Russia to reduce its nuclear arsenal. It was also noted that it was possible to follow both approaches simultaneously.

Several participants noted that both the Russian Duma and the U.S. Congress are major impediments to more substantive or dramatic steps to reduce nuclear weapons in both countries because both legislatures are preoccupied with internal economic and political issues.

Several participants pointed out that U.S. actions to reduce its nuclear arsenal are viewed much more skeptically by the rest of the world than they are by the U.S. policymakers. The reasons included the U.S. stockpile policy of 100% redundancy for its deployed nuclear weapons as well as the sheer number of U.S. and Russian nuclear weapons compared to the rest of the world. The potentially negative impact of NATO enlargement on Russia's relations with the West was also raised by several participants.

**Disposition of Reduced Nuclear Weapons and Fissile Materials**

Mr. Daniel Poneman, The Honorable Hazel R. O'Leary, and Mr. Robert Manning provided brief presentations at the beginning of this discussion.

Mr. Poneman organized his comments in chronological order and focused on the U.S.-FSU discussions and negotiations involving both highly enriched uranium (HEU) and plutonium. On the disposition of HEU, Poneman noted that the considerable progress which had been achieved

in the past half decade under both the Bush and Clinton Administrations was due, in large part, to the ability to blend-down HEU and find economic uses for the fuel in commercial reactors. (He noted that no such blending-down is possible for plutonium nor are there any safe commercial uses for plutonium.) Among the other success of the past decade are the January, 1994 trilateral agreement, the lab-to-lab agreements between U.S. and Russian weapons laboratories and the agreements reached at the Moscow nuclear summit of 1996.

For plutonium disposition, the dual-track decision (MOX and vitrification) is proving to be very difficult to implement. Among the reasons for this difficulty is that American public opinion indicates a strong unwillingness to accept plutonium from other countries for storage in the U.S. and the fact that many other countries strongly support the MOX fuel alternative as the preferred solution for disposing of plutonium recovered from dismantled weapons, and do not see the need for the U.S. to emphasize the vitrification approach (which is still not a 100% proven technology).

Mr. Poneman concluded his remarks by noting that two different scenarios were possible within the near future. The first and more rosy scenario is that policymakers will appreciate the importance of supporting and funding disposition efforts, thus allowing considerable progress to be made. The second and more likely scenario however, is that policymakers will simply allow the status-quo to continue while they focus on other issues.

Hazel O'Leary followed Poneman's presentation with a few comments on her recent experiences as Secretary of Energy in dealing with the dual-track strategy for plutonium disposal. She suggested that monitoring and "tending" this dual-track strategy could possibly be a useful role for the National Commission on Nuclear Threat.

Mr. Manning focused his comments on the nuclear threat emerging from East Asia. Among the points he made were that while China is the key factor in the region, the heavy reliance on nuclear energy by Japan, Korea, and Taiwan also contribute to nuclear issues in the region. In addition, he noted the lack of any multilateral institutions in East Asia that could serve to defuse tensions between China, Japan, Korea, and Taiwan. Among the emerging nuclear issues in East Asia are the storage of spent fuel, the reprocessing of spent fuel, and the fact that Japan expects to look for ways to recoup some of its estimated $16-$20 billion investment in the development of a breeder reactor, which could lead to Japan's production of additional plutonium from civilian reactors.

In discussion, the following points were made. At least one participant stressed the view that even in the area of HEU disposition, the political rhetoric far outdistanced the reality in terms of actual amounts of HEU blended down by Russia and shipped to the United States.

Mr. Robert Hanfling raised the concept of an "Un-Manhattan Project," in which the U.S. government would take a leadership role similar to that of the Manhattan Project but this effort would be focused on the control, safeguard, and ultimate disposal of both HEU and plutonium.

Such an approach, it was argued, would provide the contextual framework for a coherent and long-term U.S. strategy in this area that would ensure congressional support as well as allow the U.S. to take a credible world leadership position on this issue.

The most urgent need in this area, another participant expressed, was to secure the fissile material emanating from the dismantling of FSU warheads. While considerable consensus exists on the disposition of HEU materials, no such consensus exists on the disposition of plutonium and such ideas as developing a multicountry storage site on Wake Island may, in fact, be part of the ultimate solution. While several participants agreed with the view of plutonium disposition being the most pressing problem, a variety of solutions were discussed with no one idea emerging as the preferred solution.

Another participant summarized much of the discussion in the following manner:

1. There has been considerable progress in HEU disposition but there is a long way to go, particularly in the area of plutonium.
2. Both top-down and bottom-up approaches are necessary.

In going forward to address disposal issues, a broad policy look is necessary and should include: energy policy, climate change discussions and negotiations, export controls, striking the appropriate balance between access to information and secrecy, environmental impacts of a permanent disposal site(s), safety of reactors, physical security of both HEU and plutonium, other forms of terrorism including chemical and biological weapons of mass destruction, and the economic viability of the various countries.

A final point made in this segment of the discussion was that developing a thorough understanding of the important linkages between nuclear weapons, power, and the Russian hard currency needs is a critical piece of the learning curve in working with Russia to find solutions.

## The Nuclear Terrorist Threat

Dr. Zachary Davis of the Congressional Research Service and Dr. Jessica Stern, a MacArthur Foundation Grantee, provided brief presentations to begin this section of the meeting.

Dr. Davis began his presentation with an overview of the Nunn-Lugar (&Domenici) II legislation which attempts to develop a layered response to the threat from chemical and biological weapons (CBW). Specifically, the legislation mandates that the Department of Defense establish a process for establishing and training CBW "response" teams at the municipal level, as well as develop training for the first responders to such an incident (i.e., firemen and police officers).

Dr. Davis then went on to make the point that he believes the emerging threat to the U.S. in this area is more from chemical and biological weapons than it is from nuclear materials. He defined the CBW threat as "low probability but high consequence" and that the weapon(s) would be

more in the nature of a weapons of "mass disruption" rather than "mass destruction." He ended his presentation by stating that it is an open question, at best, whether the current U.S. bureaucracies are properly structured to respond to such a threat.

Jessica Stern described eroding constraints against terrorists' use of NBC (nuclear, chemical, and biological) weapons. According to Dr. Stern, four interrelated developments have increased the risk that NBC weapons will fall into terrorists' hands or will be used without government sanction:

1. Loose nukes and poisons: security for nuclear and chemical weapons and their components is inadequate at former Soviet facilities. Of particular concern is the possibility that corrupt FSU government officials and nuclear custodians could conspire with organized criminals (including criminal groups established by former KGB officials) to facilitate illicit exports on an unprecedented scale.
2. Proliferating know-how: information on how to construct NBC weapons has become more easily accessible (e.g., on the Internet and in poison manuals). Moreover, financial pressures on weapons scientists - especially in the areas of biological warfare - are creating incentives for scientists to sell their expertise to the highest bidder.
3. Changes in terrorists' objectives and tactics: a new breed of terrorists - including violent right-wing extremists, apocalyptic groups, and millenialists cults - appear to be unconstrained by traditional ethics or political pressures.
4. Weak states and atomized societies: Russia's chaotic transition from a totalitarian empire to a democracy has made that country both the primary source of stolen weapons and their components, and the most likely victim of nuclear terrorism, accident, or sabotage. Increasingly atomized societies, including the United States, are simultaneously more vulnerable to terrorist violence and more fertile ground for breeding of extremists.

Dr. Stern also noted that terrorists' use of nuclear and CB weapons would spread terror and instability within a country to an extent far greater than the actual physical damage caused by the weapons. A significant incident could lead to over-reaction ex post: civil liberties are likely to be revoked. Preventive measures are essential - both to reduce the threat and to forestall overreaction. Dr. Stern recommended improving consequence management capabilities, expanding current efforts to reduce access to weapons materials, and developing a large "Un-Manhattan" type project for employing former weapons-scientists in civilian research projects.

In response to the presentations, several participants suggested the need to distinguish between nuclear and CBW terrorist acts and to develop different strategies for the various terrorist threats. In the course of discussing the CBW threat there was widespread agreement among the participants that this is a relatively new threat for which the U.S. government and the more local and regional governments who would be called on to respond to the threat and its aftermath are poorly prepared. As an example, the lack of communication and coordination between the U.S. Center for Disease Control and the nation's law enforcement structure was noted.

In addition to elaborating on the potential range and types of threats from both nuclear and CBW weapons, the participants spent considerable time discussing whether the proposed Keystone Commission should include terrorism involving nuclear weapons on its agenda and whether, in that case, terrorism involving CBW weapons also should be included. The conclusion of this discussion was that while nuclear and CBW terrorist threats are related, the breadth of issues and expertise raised by CBW would be difficult to manage and this argued against making CBW a central element of the Commission's charter. Another conclusion was that even if the Commission focused on nuclear terrorist threats, it should expand its efforts to "bottling up" the source of these fissile materials, a more practical focus than one that tries to guard U.S. borders from such a terrorist attack. One participant pointed out that there are over 200,000 tons of fissile material that need to be monitored before they are ultimately disposed.

Several participants argued that nuclear and CBW terrorist threats are too closely inter-related to make an artificial distinction between the two. Another argument made in favor of including CBW weapons in the Commission's charter was that there is currently no high-level attention being focused on this issue and therefore the Commission could fill an important void by addressing this problem.

It was brought to the group's attention that the Nunn-Lugar-Domenici legislation called for the establishment of a new executive branch position with the responsibility of coordinating all federal activities designed to protect against a domestic terrorist attack involving either nuclear or CBW weapons. It was described as similar in concept to the anti-drug czar position currently held by General McCaffrey.

Another point of information raised in the discussion was that the Intelligence Authorization Act of Fiscal Year 1997 statute calls for the establishment of an eight-member commission designed to study and make recommendations on ways to improve the current federal government bureaucratic structure for nuclear non-proliferation issues. It will also assess the effectiveness of U.S. cooperation with foreign government with respect to nonproliferation activities.

In response to these various points of information, several participants expressed doubts about the efficacy of an inter-agency coordination or "czar" position, but tended to agree with the need for some effort at better organizing and coordinating the federal government. One participant suggested that a special assistant to the President with Ambassadorial status might be a more effective approach.

Several participants responded to Jessica Stern's presentation on the recent evolution of the terrorist groups. It was noted that there are four basic categories of terrorist groups: 1) those driven by anger and hatred, 2) those organized to retaliate for an actual or perceived U.S. action, 3) foreign state-sponsored groups, and 4) those organized for blackmail or extortion reasons.

Among the other remarks or observations in this section was the comment that terrorist threat is related to, but different than, the question of access to fissile materials, and that the proposed

Commission was better suited to deal with the access to fissile materials issue than the terrorist issues.

## Initial Reaction to the Concept of a Nuclear Threat Commission

The first day of the meeting ended with a spontaneous discussion of the potential agenda of the Commission on Nuclear Threat in which the following points were made:

According to one suggestion, the Commission should explore why the U.S. government comes away frustrated in its dealings with the Russian government on these issues. The State Department's habit of "demonizing" Viktor Mikhailov, the Minister of the Russian Department of Atomic Energy (MINATOM) was cited as an example of the current U.S. policy that needed to change in order for the U.S. Government's negotiations with Russia to progress.

Another suggestion was that the Commission should focus attention on the gap between the actions of the U.S. in the area of nuclear nonproliferation, as they are viewed by Americans and the way those actions are perceived by others.

Another participant suggested that the Commission should focus only on nuclear issues but explicitly note the CBW issue as an important and related issue. Furthermore, the Commission should have a domestic U.S. focus but again recognize that the U.S. is operating in an international context. Among the questions the Commission should address are: 1) What is the U.S. government currently doing? 2) How well is it being done? 3) How could the U.S. be better organized? 4) Does the current funding and organization structure adequately respond to the threats or is there a mismatch? and 5) What approaches should be developed, including those that are bottom-up and transactional in nature and those that are top-down and more transformational in nature? Finally, it was suggested that the Commission could develop some case studies and hypothetical situations to further flesh out these questions and issues for discussion by the members.

Several participants agreed with this approach and added minor modifications including: 1) the need to include East Asia in the assessment of international activities and efforts, 2) the Commission should build on a lot of good work that has already been done and elevate the national policy discussion to a different plane or level than it currently exists upon, 3) elevating the amount and quality of understanding of these issues by both policymakers and the public is terribly important, and 4) a real focus on results and implementation activities should be brought to the Commission.

Improving or expanding the "transparency" of the fissile material reduction efforts in both the U.S. and the FSU is a critically important issue, a participant noted. With greater transparency, greater understanding of the issues will occur which, in turn, could become the driver for more concrete actions to reduce the threat from the fissile materials.

Several participants asserted that a comprehensive "threats" assessment was very important to future U.S. policy and, accordingly, that including CBW in the charter of the Commission was critical. Such a broad-based threats assessment would be a bold and innovative step that could lay the basis for future U.S. actions.

Several participants made the point that in the area of fissile materials there is a greater need to focus on plutonium than on HEU. Once HEU is blended down with natural uranium, it is no longer usable for weapons unless re-enriched. Plutonium by contrast can easily be reseperated using ordinary chemical methods. This point had been raised earlier, but came up again in this discussion. Plutonium disposition is an expensive and very complex chore and not well understood by either the U.S. or FSU governments.

Several participants stressed the need for the Commission to be results-oriented and bring a strict focus and discipline to its activities in order to have an impact on the national debate.

**Status of Nuclear Proliferation**

Mr. Leonard (Sandy) Spector and Mr. Ken Luongo provided brief presentations to begin this session.

Mr. Spector began his presentation by providing a review of the status of nuclear weapons programs in a variety of countries starting with those that are presumed to have nuclear weapons but are undeclared.

India: While making minor improvements to its nuclear weapons production capabilities, India is currently focused upon improving its deployment capabilities. The apparent softening of India-Pakistan relationships may lessen India's drive to expand its nuclear weapons capability.

Pakistan: It appears that Pakistan is actually decreasing its nuclear weapons production capabilities. For example, it has a fissile material reactor built, but has not yet "turned it on."

Israel: At most, it appears that in recent years Israel has made only incremental improvements to its nuclear capabilities.

Mr. Spector then turned to what he termed as "threshold states."

North Korea: He agreed with the earlier assessment that North Korea's program is essentially frozen in place and that there are emerging steps to actually reduce their nuclear weapons production capability.

Iraq and Libya: Both countries appear to have stopped their prior efforts to build nuclear weapons.

Iran: While it has made no progress on the development of its nuclear capabilities, it has made considerable progress in developing CBW. Equally troubling is that Iran has a new missile under development.

Mr. Spector then made the case that for threshold and other emerging countries CBW had much greater appeal than the "traditional" route of building nuclear weapons. Among the reasons for this new trend are: 1) developing CBW is less expensive than a nuclear program, and 2) having a nuclear capability is no longer seen as a necessary ingredient of a world power.

Mr. Spector concluded his presentation by conducting a brief review of the current range of policy tools used to control or manage nuclear proliferation.

Export controls: Export controls clearly work. The debate is how much to use them and how tough they should be.

Multilateral treaties: Recent examples include the Chemical and Biological Weapons Conventions and the Nuclear Non-Proliferation Treaty. Again, much of the debate is about the finer points of the treaties, not whether they work or not.

Targeted diplomacy: This approach tends to work and much of the debate about its use focuses on the finer points of the diplomatic efforts.

Regional dispute settlement: Enjoys broader support than targeted diplomatic efforts yet has the same attributes.

Counter proliferation strategies: Recent examples include active defense programs against missiles such as Star Wars and the ICBM defense. These are very expensive.

Comprehensive Threat Reduction programs: A relatively new approach or tool. Recent examples include the Nunn-Lugar programs at DOD and DOE.

Ken Luongo used his presentation to identify what he believes to be the "four corners of the nuclear proliferation problem." (Following the meeting, Mr. Luongo drafted a summary of his presentation which is attached as Appendix III.)

The four corners include:

1. Securing existing stockpiles;
2. Limiting the production of new fissile materials;
3. Instituting irreversible reduction strategies; and
4. Strengthening non-proliferation efforts.

Among the points he made about securing existing stockpiles are that there remains considerable work to be done in the FSU with Russia needing the most attention. There are growing stockpiles in China and the other Asian countries that rely heavily on nuclear power.

Limiting the production of new fissile materials is more controversial than securing existing stockpiles because it limits the options for the civilian (energy) use of nuclear power and, as discussed several times in the meeting, there are a variety of countries who rely heavily on nuclear power. Mr. Luongo noted that both China and Japan are very interested in developing a regional reprocessing capability in East Asia.

While a continued focus on the START treaties is an important part of instituting irreversible reduction strategies, there is a need to go beyond the parameters of START.

In order to strengthen the non-proliferation efforts there are needs for stronger safeguards, for the development of better export controls, and for the current nuclear powers to make progress on actual reductions in their nuclear weapon inventories.

In addition to asking several informational questions, the participants made the following points in ensuing discussion.

It was noted that there was considerable "chipping away" at the foundation of the non-proliferation treaty and concept. Among the specific examples he noted were the lack of transparency and controls on the sales of nuclear technologies to the FSU and China, the growing popularity of nuclear deterrence strategies such as Mutually Assured Destruction (MAD) in Asia, and the lack of enforcement of current export and non-proliferation agreements.

Mr. Rodney Jones raised the issue for discussion whether resorting to policies of buying off proliferation -- what some perceive as bribing proliferators -- is a sign that perhaps the world is on the verge of "things really beginning to go wrong" in the arena on nuclear non-proliferation. This led to considerable discussion about the ways in which the U.S. needed to change its perspective and approaches to these issues in light of the fact that it was the sole remaining nuclear superpower in the world. The dichotomy facing the U.S. was presented by one participant as the choice between "effective leadership and thankless unilateralism."

Several participants expressed interest in having the Commission further explore and develop the list of policy tools that were discussed in both the presentation and ensuing discussion.

**Strategic Escrow**

Admiral Stansfield Turner presented to the group an overview of a concept entitled "Strategic Escrow." The essence of his presentation was that a new approach to reducing the threat of nuclear weapons to the world was needed because in the best of scenarios, the START treaties would leave the U.S. and Russia each with stockpiles of over 2,000 nuclear warheads each by 2011.

The goal of strategic escrow is to have no deployed nuclear warheads held by either country. The specific approach to be employed under this concept is that the President of the United States would, as commander-in-chief, move 1,000 nuclear warheads away from their launch site and store them off-site in an area fully open to inspection and monitoring by Russia. Having taken this action, the President would then ask the Russians to take the same step. Assuming Russia also moved 1,000 warheads away from their launch sites, the process could be repeated several

times thereby significantly yet equally reducing both the U.S. and Russian arsenal of deployed warheads.

The advantages of this approach are that it avoids the torturous negotiations that have characterized past nuclear weapons deliberations, it avoids the need to secure explicit congressional and Duma support, and it still allows the U.S. to re-arm itself if necessary.

Assuming this approach worked, the U.S. and Russia could then approach the rest of the nuclear powers and ask them to join in the effort to eliminate all deployed nuclear warheads.

Questions and reactions that this presentation generated included:

In response to a question, Turner noted that critics of this approach would focus on the belief that the U.S. would lose both leverage and international prestige by taking an action that could be interpreted as weakening itself. Another criticism could be that the U.S. would no longer be seen as likely to use nuclear weapons to respond to a CBW attack, terrorist or otherwise, thus increasing the risk of rogue state attacks on the assumption that it need not fear nuclear retaliation.

Another participant asked the following questions:

1. What changes to the nation's warning and intelligence apparatus would such an approach entail?
2. How would this approach deal with the issue of nuclear weapon remanufacturing?
3. What, if any, linkages would this approach have with the no first use doctrine?
4. As a former navy man, how would he convince the Navy to go along with such an approach that could be perceived as eliminating the need for the Navy's nuclear submarine program?

In response to these questions, Admiral Turner noted:

1. Increasingly intrusive on-site inspections of U.S. and Russian facilities would be a necessary part of this approach. In order to protect itself against sneak attacks, the U.S. could disperse its storage sites.
2. With regards to the issue of remanufacturing, the concept of Strategic Escrow does not address it.
3. Admiral Turner would propose expanding the Non-Proliferation Treaty to include the concept of no first use.
4. Admiral Turner would propose that the Navy keep their submarine capability but simply not have them armed. In this way, the U.S. would keep its most impressive deterrent platform but still take a leadership role in reducing the threat of nuclear weapons.

Several participants expressed support and strong interest in the idea because of its simplicity. Much of the discussion focused on how different interest groups or stakeholders would react to this proposal.

## What Does the Country and Its Leaders Need to Know?

The Honorable John Despres led off this final session of the meeting with several observations and comments. They included the need to distinguish between what is necessary and/or useful to be understood and debated by policymakers and the public, and what is not useful or necessary to be debated. A role of the Commission would be to focus on those issues meriting attention by the policymakers and the public. Among such topics are: 1) Russia and the rest of the FSU are central to the debate and the solution, 2) there is a need to test for consensus on various solutions, and 3) China is emerging as a close third in terms of being a country that needs to become more engaged in the debate on these issues.

Examples of what is not useful to debate are how to make weapons, the intelligence aspects of the country's defense capabilities, and other similar issues. Despres emphasized that these comments were not meant to be interpreted as unsupportive of more transparency and understanding of the magnitude of the threat by the policymakers and public.

Building on his presentation, the discussion that followed tended to focus on further refinements to the agenda or strategy of the Commission. Among the points that were made in this discussion was the need for the Commission to be very results-oriented, and not become yet one more high level commission that produces a report which no one reads and which has minimal, if any, impact on the national policy debate.

A matrix approach to organizing the many and complex issues that the Commission would face was proposed by several participants and one example of such a matrix is attached as Appendix IV. The vertical axis was suggested to be the types of threats, while the horizontal axis would be the types of tools or solutions that might be applied to the threat. A third dimension for the matrix was suggested to be some sort of prioritization effort to identify the most pressing issues and the best solutions.

Several participants admonished Keystone and the other conveners to both "reach for the sky" and also produce results-oriented solutions.

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# National Commission on Nuclear Threat

## A National Dialogue on Post-Cold War Nuclear Dangers

*- Precis -*

**Purpose**

The National Commission on Nuclear Threat will meet the urgent need for a comprehensive, policy-oriented and compelling public assessment of the nuclear threats that face the United States and the world in the post-Cold War context. Operating on a consensual basis, the Commission will characterize and prioritize the nuclear dangers that exist today: including unstable command and control over nuclear weapons, the diversion of such weapons or fissile material into unauthorized hands, and the spread of weapons and fissile material to other states and groups. On the basis of this assessment, the Commission will offer alternatives and possible solutions for consideration by policy makers, legislators and the public in responding to the most urgent nuclear threats.

- The Commission will convene the best minds outside of government to develop a consensus on the nature of the new nuclear dangers, where resources must be applied, and what kinds of approaches would be most effective.
- It will take up such perplexing issues of how to prevent catastrophic acts of nuclear terrorism and how to weigh the probability of these covertly inserted threats against those posed by hostile and rogue states that may overtly deploy nuclear-armed long-range missiles or engage in technology transfer that may pose risks to the U.S.
- It will offer practical guidance on the scope, relative importance and urgency of, for instance, the threats of nuclear materials smuggling and weapons acquisition, the spread of related nuclear technologies and expertise, the emergence of new nuclear powers and regional nuclear flashpoints in Asia, and the potential combination of nuclear, biological and chemical weapons of mass destruction in the arsenals of hostile states.

**Commission Approach and Composition**

The Commission will be charged with a unique task of producing a compelling assessment, outlining of priorities and reviving public commitment to effectively address post-Cold War nuclear threats and dangers—filling a critical vacuum as the nation's attention is diverted by internal political and economic issues. This is the first comprehensive effort of this kind.

- The Commission of about 25 members will be formed on a non-partisan basis and consist of nationally recognized former policy makers, corporate executives, opinion leaders and experts who represent an appropriate cross-section of experience with and knowledge of international affairs, the workings of government, and issues of nuclear and security policy.
- Commission members will be selected both for their capacity to produce a valid consensual assessment of the nuclear dangers and to achieve high-level policy consideration and media attention for their findings and recommendations. In order to provide the necessary impartiality and flexibility to make new policy recommendations, existing government officials will not serve on the Commission.
- The Commission will take into account the best research findings and proposals on international nuclear issues available in the nuclear policy research and nongovernmental sectors. It will seek to facilitate the exchange of ideas, encourage cooperation, and offer its facilities for clearing house and coordination functions, where appropriate.
- As its work evolves, the Commission will seek to stimulate or organize an international dialogue, a broader assessment of the post-Cold War nuclear dangers, and more effective means of international response.

**Convenors**

The Keystone Center, a nonprofit organization dedicated to facilitating dialogue and consensual solutions on quality of life issues of national and global import, will serve as the convening organization for the National Commission. Keystone will retain a variety of technical advisors and assemble administrative resources to assist the Commission and its members, and to perform fiduciary responsibility. Funding is being assembled from a variety of sources: foundations, government, and the private sector.

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**APPENDIX II**

# National Commission on Nuclear Threat
# Preparatory Meeting

*May 13 & 14, 1997*
*Airlie House*
***Agenda***

**Tuesday, May 13, 1997**

| | |
|---|---|
| 7:00 - 8:30 a.m. | Breakfast Available in the Main Dining Room |
| 8:30 a.m. | Introduction and Welcoming Comments<br>*Robert W. Craig, President, The Keystone Center* |
| 9:00 a.m. | Future of Nuclear Weapons<br>*Michael Nacht, University of Maryland*<br>*Tom Cochran, Natural Resources Defense Council* |
| 10:45 a.m. | Break |
| 11:00 a.m. | Disposition of Reduced Nuclear Weapons and Fissile Material<br>*Dan Poneman, Counsel, Hogan & Hartson, L.L.P.*<br>*Robert Manning, Senior Fellow, Progressive Policy Institute* |
| 12:45 p.m. | Lunch |
| 2:00 p.m. | Nuclear Terrorist Threat<br>*Zachary Davis, Specialist International Nuclear Policy, Library of Congress*<br>*Jessica Stern, MacArthur Research & Writing Grantee* |
| 6:00 p.m. | Reception |
| 6:45 p.m. | Dinner (Main Dining Room) |

**Wednesday, May 14, 1997**

| | |
|---|---|
| 7:00 - 8:30 a.m. | Breakfast Available in the Main Dining Room |
| 8:30 a.m. | Status of Nuclear Proliferation<br>*Sandy Spector, Director, Nuclear Non-Proliferation Project, Carnegie Endowment for Peace*<br>*Ken Luongo, Princeton University* |
| 10:00 a.m. | Break |
| 10:15 a.m. | Strategic Escrow<br>*Admiral Stansfield Turner, Former Director, Central Intelligence Agency* |
| 11:00 a.m. | What does the country and its leaders need to know?<br>*John Despres, President, Despres Associates*<br>*Dick Kerr, Former Deputy Director, Central Intelligence Agency* |
| 12:30 p.m. | Lunch |
| 1:45 p.m. | Next Steps<br>Agenda Issues for the National Commission on Nuclear Threat |
| 2:30 p.m. | Adjourn |

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**APPENDIX III**

# Nuclear Nonproliferation Challenges

Ken Luongo

Four major new nuclear non-proliferation challenges derived from post-Cold War realities are listed in priority order below:

- The need to secure existing stockpiles of weapon usable nuclear
- material
- The need to limit the production and use of fissile materials
- The need to institute irreversible nuclear reductions
- The need to strengthen the non-proliferation regime

## Securing Existing Stockpiles

A key danger is the greater availability of fissile material for bomb making. During the cold war there was an effective system in the Soviet Union. This has now broken down. The real barrier to the production of a nuclear weapon is the production or acquisition of sufficient amounts of fissile material. Access to ready made materials could shorten the time needed to create a bomb program. The most serious problem in this regard is the FSU. The breakup tore away the fabric of control over these materials. The U.S. has made significant progress in attempting to work with FSU states to put in plane more effective control mechanism, but much more needs to be done. We also need to look at China which has the same non-technical control system as Russia had when it was the Soviet Union. Steps need to be taken with China so that when communism collapses we do not face the same problems that we did with Russia.

## Limit Production and Use

Securing existing stockpiles of the material is important but so is ensuring that we don't produce more than is needed for legitimate purposes and also that the material is not used in a way that promotes the possibility for proliferation. We need to look at weapon usable (like reactor grade plutonium) as well as weapon grade fissile materials. This means taking a hard look at the civil nuclear fuel cycle, which will be very controversial because many countries are vested in their civil plutonium programs. These include Japan and Europeans. China is again an emerging problem in this area as are India and Pakistan. The U.S. and Russia will need to lead here before the rest of the world follows suit.

## Irreversible Nuclear Reductions

The obvious issues are START 2 & 3. Moving on the traditional arms control agenda has great importance for the non-aligned nations in the context of the NPT. It also has important symbolic value in terms of devaluing nuclear weapons which is important in showing would-be

proliferators that there is no longer great power status in having nuclear weapons. We also need to move beyond traditional arms control to the issue of verifiable nuclear warhead dismantlement. This will make the ending of the arms race irreversible. But dismantlement raises the issue of how to deal with the resulting nuclear materials. So, there has to be an effective disposition program for both HEU and plutonium.

**Strengthen the NPT and Regime**

There are three fundamental issues. First you need to strengthen the IAEA's ability to perform their work. Safeguards and detection of illicit nuclear activities are vital. But, you must also strengthen the international community's ability to act decisively when illicit activity is proven. More effectiveness in this are will lessen suspicion about the sales of some nuclear components to suspect states that are members of the NPT, like Iran. Second, export controls need to be carefully evaluated. Do we need more or just better enforcement of that which exists. Technology's march is difficult to constrain particularly in the computer area. Third, there needs to be nuclear weapon state progress on disarmament for the reasons stated above. This should include not just the U.S. and Russia but all NWS.

**APPENDIX IV**

The concept of a matrix was discussed at the meeting and the attached discussion was submitted by a participant in the interest of capturing the discussion and presenting a "straw-person" proposal for further discussions.

Structure of Matrix:

Y Axis:

This axis could be used to distinguish between the type or range of response needed. For example:

Issues for unilateral actions - In other words, unilateral actions which could be taken through U.S. leadership that would encourage similar response by other countries.

Issues for bilateral action - These would include cases where two countries (e.g., Russia and the U.S. or China and the U.S.) could, through their joint agreement, take actions that enhance nonproliferation or reduction in arms and the nuclear threat.

Issues multilateral action - These would include actions that could only be arrived at only by the mutual consensus of many countries.

X Axis:

Against this division by type of action, the other side of the matrix would list the issues proposed to be studied. They seem to be divided into six main subject areas:

1. Terrorism
   - Loose nukes - Russian weakness/Rogue officials/brain drain
   - Biological and Chemical terrorism, in addition to nukes
   - New kinds of terrorists - people who kill large numbers/religious zealots
   - More information to build bombs
   - Trade off between civil liberties and public safety

2. Securing existing stocks
   - Transparency
   - Security issues
   - Safety

3. Limiting production and use of material
   - Nuclear first strike option

4. Reversing old stocks

- The Turner "Strategic Escrow" proposal
- Start negotiation
- Stockpile reductions

5. Strengthening the nonproliferation regime

- Export controls
- Transparency
- Carrots and sticks (money incentives?)
- Disposition and destruction options
- Top down versus bottom up
- HEU disposition

6. Broader questions surrounding the nuclear threat

- Energy policy
- Climate change
- Export controls
- Environmental implications
- Closing the cycle (a repository)
- Economic considerations

The purpose of the matrix is to: 1) coherently allocate and categorize each issue and sub-issue, and 2) to create an effective discussion by establishing distinct categories for recommending specific actions (i.e., unilateral [US action], bilateral [specific country-to-country proposals] and multilateral [forums, proposals and recommendations]).

## APPENDIX IV continued

### Issues Matrix

**********Example**********

| *Action Method* | *Terrorism* | *Securing existing stocks* | *Limiting production and use of material* | *Reversing old stocks* | *Strengthening the non-proliferation regime* | *Broader questions surrounding the nuclear threat* |
|---|---|---|---|---|---|---|
| **Unilateral** | | | | "Strategic Escrow" | | |
| **Bilateral** | | Russia/U.S. Transparency | | | | |
| **Multilateral** | CWBT | IAEA Safeguard Improve | | | | |

# National Commission on Nuclear Threat
## Preparatory Meeting

*May 13 & 14, 1997*
*Airlie House*
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