

S. HRG. 103-870

BRIEFING ON RESULTS OF THE NUCLEAR POSTURE REVIEW

HEARING BEFORE THE COMMITTEE ON ARMED SERVICES UNITED STATES SENATE ONE HUNDRED THIRD CONGRESS SECOND SESSION

SEPTEMBER 22, 1994

Printed for the use of the Committee on Armed Services



U.S. GOVERNMENT PRINTING OFFICE

84-481 CC

WASHINGTON : 1994

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-046373-4

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(II)

BRIEFING ON RESULTS OF THE NUCLEAR POSTURE REVIEW

THURSDAY, SEPTEMBER 22, 1994

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee was convened in executive session at the Secret level, pursuant to notice, at 9:47 a.m. in SR-222, Russell Senate Office Building, Senator Sam Nunn (chairman) presiding.

Committee members present: Senators Nunn, Exon, Levin, Lieberman, Warner, and Smith.

Committee staff members present: David S. Lyles, deputy staff director; Andrew S. Effron, general counsel; and Madelyn R. Creedon, counsel.

Professional staff members present: Lucia M. Chavez, Richard E. Combs, Jr., Creighton Greene, Patrick T. Henry, William E. Hoehn, Jr., Julie W. Kemp, and Michael J. McCord.

Minority staff members present: Richard L. Reynard, minority staff director; Romie L. Brownlee, deputy staff director for the minority; George W. Lauffer and Steven C. Saulnier, professional staff members.

Staff assistants present: Kathleen M. Paralusz, Cindy Pearson, and Mickie Jan Wise.

Committee members' assistants present: Andrew W. Johnson, assistant to Senator Exon; Richard W. Fieldhouse and David A. Lewis, assistants to Senator Levin; Suzanne M. McKenna and Randy J. Rydell, assistants to Senator Glenn; Terence M. Lynch, assistant to Senator Shelby; Lisa W. Tuite, assistant to Senator Byrd; John F. Lilley, assistant to Senator Lieberman; Randall A. Schieber, assistant to Senator Bryan; James M. Bodner, assistant to Senator Cohen; Ann E. Sauer, assistant to Senator McCain; Richard F. Schwab, assistant to Senator Coats; Thomas L. Lankford, assistant to Senator Smith; Glen E. Tait, assistant to Senator Kempthorne; George K. Johnson, Jr., assistant to Senator Hutchison.

Other Senators' assistants present: Eric Thoemmes, assistant to Senator Wallop.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman NUNN. The committee will come to order.

The Department of Defense has advised us that the briefing we will receive today includes classified information. I will entertain a motion under Rule 4 of the committee rules to close this meeting

on the grounds that we will consider matters necessary to be kept secret in the interest of national defense.

Is there a motion?

Senator WARNER. So move.

Chairman NUNN. Is there a second?

Senator LEVIN. Reluctantly, I will second it, because even though we obviously have to keep this closed, we were looking forward to an open hearing on this subject, and hope that that can be done in the near future.

Senator WARNER. Certainly the Washington Post was open today. Chairman NUNN. There may be a part of it we can have open. I do not know what the witnesses believe we can do here.

Dr. DEUTCH. Mr. Chairman, we have only a few slides which we think give you a picture of what was in our reasoning, which have numbers on them. If I had known that there was this interest in an open hearing, we could do it without the numbers. It may be a little late to do it now.

Senator LEVIN. All I am suggesting is it has been said it was a closed hearing, and the press would not know about it anyway, is that we just declassify as much immediately after the hearing.

Chairman NUNN. After the hearing maybe you could go through it and scrub it and declassify everything we possibly can.

Dr. DEUTCH. Yes, sir.

Senator LEVIN. And then hopefully we will have open hearings with other witnesses with other perspectives, because I think Senator Exon, at least at the subcommittee level, was looking forward to that.

Chairman NUNN. Right. Without objection, we will be in closed session.

We meet today to receive a briefing on the results of the administration's Nuclear Posture Review (NPR). The NPR is one of several supplemental analyses that DOD decided to undertake upon conclusion of the Bottom-Up Review last year to look at details and look at certain specific issues.

The results of the NPR will be important inputs to a wide range of future force structure, basing, and infrastructure issues in both DOD and DOE. Our committee has a special interest in the results, in light of previous testimony earlier this year that bomber force levels could be definitively established only after the NPR considered the requirement for bombers to fulfill the nuclear deterrence needs.

Thus, we will look forward with keen interest to today's briefing. Our witnesses this morning are familiar faces to the committee—the Honorable John Deutch, Deputy Secretary of Defense, and Admiral William Owens, Vice Chairman of the Joint Chiefs of Staff. We welcome both of you and look forward to your testimony.

We recognize that major portions of both the analysis and the results of the NPR are highly classified. However, it is likely that members of this committee will face media questions once this hearing is concluded, and we understand you will be making a public release either today or tomorrow.

Therefore, at the conclusion of today's session we will want to consult with both of you as to what each of us can and cannot say to the media and the public about the results of the NPR, if ques-

tioned. So I would ask you, Secretary Deutch and Admiral Owens, when we finish this hearing or at junctures that you deem appropriate, if you could tell us which parts of it are classified, that would be helpful. Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Mr. Chairman, I regret that in about 2 minutes I must depart. In my capacity as Vice Chairman of the Intelligence Committee, we have our first conference this morning with the House.

Mr. Chairman, I would like to place into the record statements prepared by the ranking member, Senator Thurmond and also Senator Kempthorne dealing with the subject that is before us today.

I would like to add my own thoughts that I am very reassured that the Clinton administration, by and with the advice, presumably, of the Secretary and Deputy Secretary and the Chairman and Vice Chairman of the Joint Staff, will continue on a program which I think is very prudent, given the worldwide situation and, most particularly that as it relates to elements of the former Soviet Union, particularly Russia.

Also, Mr. Chairman, I ask at this time that I hand to the witnesses a letter prepared by a number of us with regard to the short-range systems, the theater systems. A group of us here in the Senate, and although this is basically a Republican letter, I am sure there is bipartisan support—we simply did not have time to circulate it—are deeply concerned that the forthcoming discussions on the ABM Treaty could result in limitations which would not be in our national interest on the short-range systems.

I hope the President and the Secretary of Defense, Secretary of State, and others, will take this into consideration in the forthcoming visit of President Yeltsin.

Thank you, Mr. Chairman.

[The prepared statements of Senator Thurmond and Senator Kempthorne follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Thank you, Mr. Chairman. I join you in welcoming Deputy Secretary Deutch and Admiral Owens, the Vice Chairman.

Mr. Secretary, I am very glad that you have taken time from your busy schedule to brief the committee on the findings and recommendations of the administration's Nuclear Posture Review (NPR). Your conclusions will have a major impact on several programmatic and budgetary issues that the committee will be dealing with in the near future. Equally important, these decisions will shape and guide U.S. policy on a number of critical national security and foreign policy topics.

I do not want to delay or prejudice your presentation, but would like to make a few brief observations before you get started.

First, I am anxious to learn as much as possible about the philosophical and strategic underpinnings that guided your review. Our policy of deterrence based on a highly capable and survivable Triad of strategic nuclear forces has been a tremendous success. Any decision to modify this policy must be made with great care and only if it can be demonstrated that such a change will positively affect U.S. national security and strategic stability.

Second, given the magnitude of the reductions in strategic forces that have already taken place or are currently planned, the United States needs to approach additional reductions with caution. When the United States signed the START I Treaty in July 1991, it declared 10,500 accountable warheads. With the START II agreement, the United States is headed to a level below 3,500 warheads by the year 2003. In my view, it would be unwise to consider additional reductions until those on the books have been totally implemented and we can clearly judge the impact of further steps.

I would remind everyone that, in September 1992, when the Armed Services Committee concluded that START I and START II were in the national security interest of the United States, it predicated this conclusion on "the committee's assumption that the United States will fully exercise its rights under both treaties, including in particular, its rights with regard to verification, inspections, modernization, and the maximum deployment levels permitted under the various START I and START II ceilings."

As we speak today, the START I Treaty has not yet entered into force and the START II treaty has not been ratified. It remains to be seen whether the former Soviet Union will be willing and able to fully implement these two agreements. Under these circumstances, it is all the more important for the United States to reaffirm its commitment to the strategic Triad and to a force level that does not go below the START II limits.

On April 20, 1994, when Admiral Chiles and General Horner appeared before the committee, I expressed deep concern about reports that the administration was considering elimination of the ICBM leg of the Triad. I understand that this proposal has been rejected but that the level of ICBMs to be retained has not been finalized. In my judgment, it would be foolish for the United States to make further significant cuts to our ICBM inventory until we have a better understanding of what other nations are doing to their stockpile. Therefore, I urge the administration to follow the recommendation of Admiral Chiles, the Commander in Chief of Strategic Command, by retaining 500 Minuteman III ICBMs.

My third area of concern has to do with our nuclear weapons complex. It does the United States no good to maintain a modern and capable Triad of strategic delivery systems if we allow our nuclear weapons infrastructure to be neglected. As I have said before, if we do not reestablish a reliable source of tritium production and if we do not seek to preserve a core cadre of skilled nuclear weapons experts, we will not be able to maintain even a START II stockpile. This is not just a Department of Energy problem. It is a national emergency that demands immediate attention. Thank you Mr. Chairman, I look forward to the presentations and to working with the Department to ensure that we maintain a secure and adequately supported strategic Triad.

PREPARED STATEMENT BY SENATOR DIRK KEMPTHORNE

Mr. Chairman, I want to thank our distinguished witnesses for providing us with this important briefing. Since its inception, I have followed with interest the workings of the Nuclear Posture Review. I strongly support the administration's effort to re-examine future requirements for strategic nuclear forces because I believe these forces continue to represent a crucial component of our Nation's defense capabilities.

At the same time, I am concerned that the United States may be moving too fast toward nuclear dismantlement before Russia has lived up to its obligations under the START agreement. As I understand it, the United States is well along in the dismantlement of nuclear weapons as called for by the START I agreement. Conversely, Russia and the other former Soviet states are moving much slower to reduce their nuclear weapons as called for by the treaty. I continue to believe that reductions must be reciprocal and I want to maintain pressure on Russia to live up to its treaty obligations.

I have seen some reports about the conclusions of the NPR and I am pleased to say I find these recommendations fairly modest. Nonetheless, based upon my discussions with members of the Russian Duma, I am not certain that the Russian Parliament will ratify the START II agreement and I do not believe that we should be cutting our nuclear forces beyond the START II levels until Russia has ratified, and fully implemented, that important accord. I will support mutual reductions between the United States and Russia but I will not support unilateral reductions by the United States which lessen any incentive for Russia to live up to its treaty obligations.

Mr. Chairman, I also want to make another point that greatly impacts the recommendations of the Nuclear Posture Review. In order to maintain a strong nuclear deterrent, the United States must revive our nuclear weapons complex. Unless we have facilities and people for the production and monitoring of nuclear weapons, we will find ourselves with an unsafe stockpile. This situation will lead to unilateral disarmament and that clearly is not in our national interest. Senator Thurmond and a number of senior DOD and military officials have expressed concern with the Department of Energy's stockpile stewardship program. I agree with those who say

DOE needs to do more to safeguard our nuclear stockpile and I will do whatever I can to help promote this process.

Thank you Mr. Chairman.

Chairman NUNN. Thank you, Senator Warner. Senator Levin, do you have anything you would like to add?

Senator LEVIN. Not at this time, thank you.

Chairman NUNN. Mr. Secretary?

STATEMENT OF HON. JOHN M. DEUTCH, DEPUTY SECRETARY OF DEFENSE

Dr. DEUTCH. Thank you very much. Mr. Chairman, I would like to stand up to do this. I will try to get through this as rapidly as possible, and I welcome interruptions and questions at any time. Senator LEVIN. We always like you standing up when you address us, so this is a good precedent, Mr. Secretary. [Laughter.] Dr. DEUTCH. We would like constructive questions, if possible.

Nuclear Posture Review

SASC/HASC Version

We are talking about the Nuclear Posture Review.

Overview

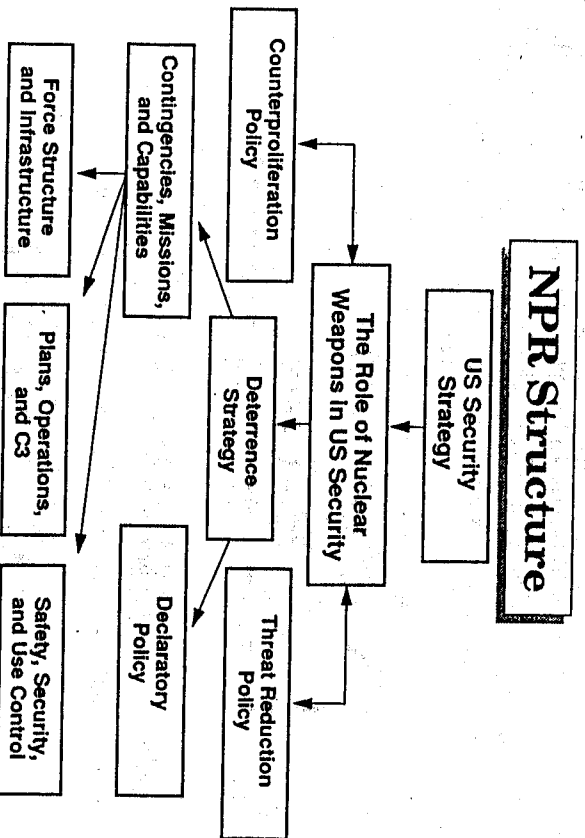
- ☐ NPR Process
- ☐ Perspective
- ☐ Strategic Forces
- ☐ Non-Strategic Forces
- ☐ C3I
- ☐ Infrastructure
- ☐ Safety, Security, and Use Control
- ☐ Initiatives
- ☐ Summary

Here are the subjects we will review for you very briefly. The point I want to make is that this was a comprehensive review of all aspects of our nuclear force structure and support infrastructure. As you mentioned, Mr. Chairman, it is consistent with our in-

tion of the Bottom-Up Review to take an in-depth look, as Secretary Aspin said at the time, in this important area of our forces.

Part I: NPR Process

Let me begin by saying a few words about the process.



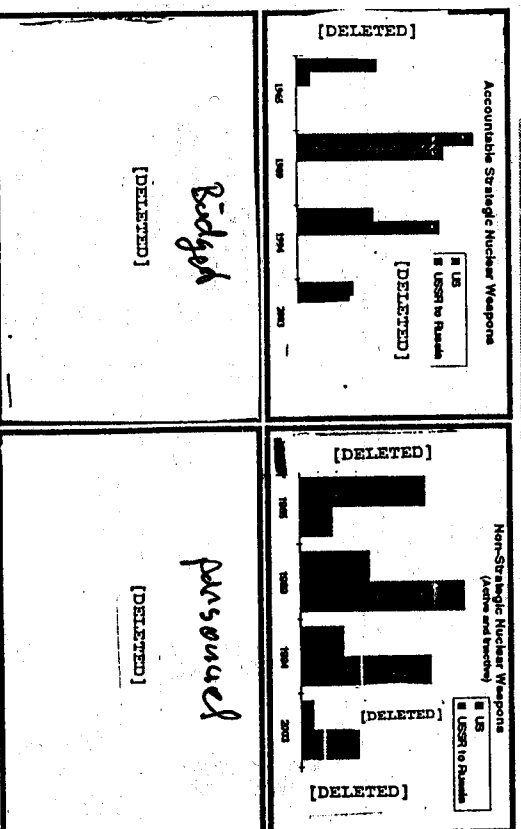
This was a very elaborate process which looked at these different aspects of the nuclear posture, policy, forces and infrastructure of the United States. I want to emphasize this was done collaboratively with the Joint Chiefs of Staff, not only with Bill Owens being the top of this structure, but also with respect to Admiral Chiles. All the different services participated, and so the product you see here, as in the case of the Bottom-Up Review, reflects an organized effort to involve all the different parts of the Department and has been reviewed by both the military and civilian side.

I know that Admiral Owens will want to say some words at the end about his perspective on certain aspects of the NPR. Let me just say this could not have been done without the support of Admiral Owens personally, and it also could not have been done without the hard work of Ash Carter and General Wes Clark, who really marshaled the day-to-day activities.

Part II: Perspective

Let me begin by giving a couple of perspectives which show what are the trends in our nuclear force structure.

A Historical Perspective



This I think is perhaps one of the most important slides that I will be sharing with you. First, I want to call to your attention the enormous decline in countable strategic nuclear weapons, the enormous decline that began in 1989 and is continuing today, and when we get to the situation where START II has entered into force there will have been a significant and dramatic decline in countable nuclear warheads, making the world a safer place.

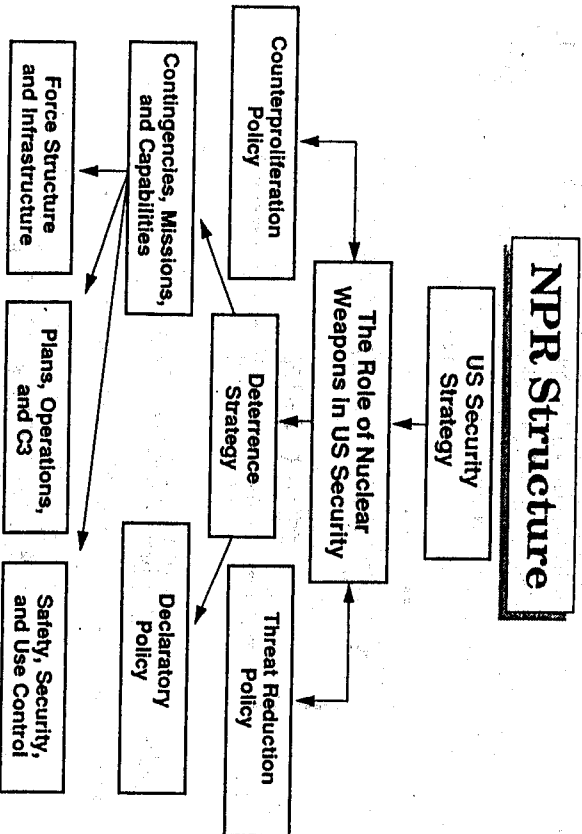
By comparison to the U.S. and Russian inventories at that time, you see an example of what the inventories are projected to be for other countries around the world.

A second important point that I want to make now, and now I am not talking about accountable strategic nuclear warheads, but non-strategic nuclear warheads, is that here the situation is dramatically different. What we have is a situation where the disparity between U.S. and Russian stockpiles is getting larger and larger.

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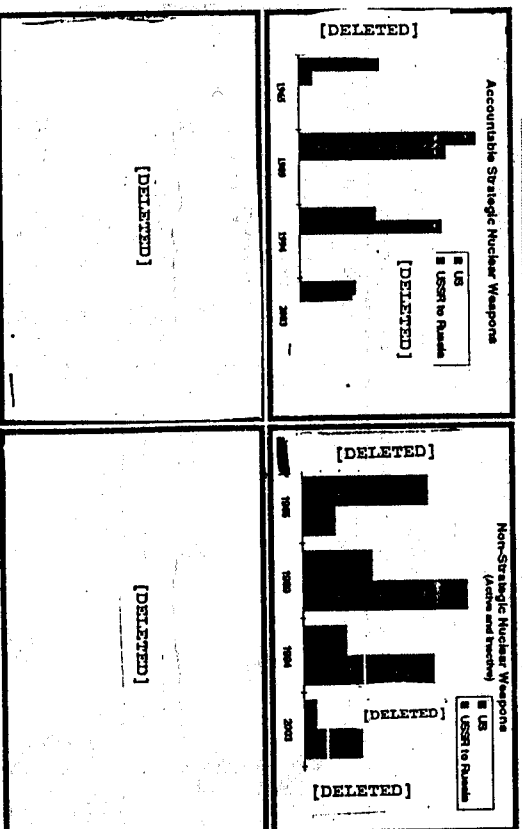
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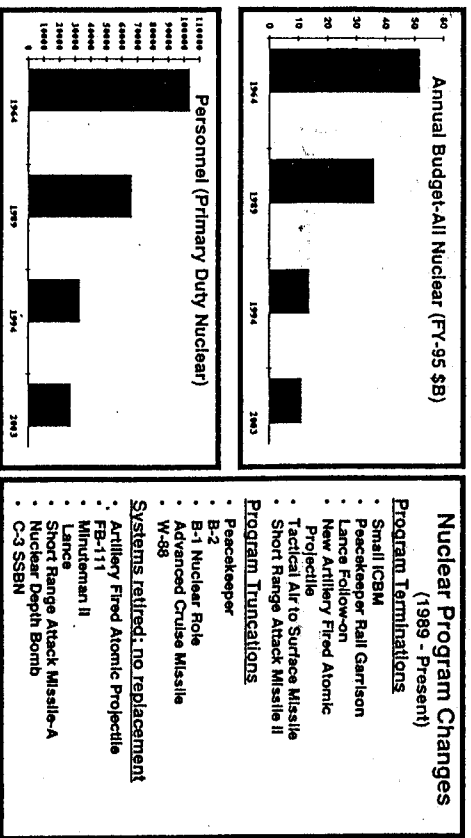
and indeed today the Russians have between [deleted] non-strategic nuclear warheads, while we are on a path bringing these down dramatically in our force structure.

So what we have here is two points. The first point is accountable warheads have gone down, strategic warheads. The second is non-strategic nuclear warheads remain an area where there is a disparity and the disparity is one of the principal points of concern out of the NPR.

I also want to point out a reduction in the target base. In the target base that is used in Omaha for our strategic nuclear weapons, there was a time when this target base was—and this is not noted here—it was in [deleted] and a significant reduction has occurred in that target base as a result of the changed circumstances since the end of the Cold War.

The most important intellectual work for the reduction in the target base occurred under Secretary Cheney. There has been subsequent reduction of that target base and careful analysis of it, but the point I am trying to make is that the target base that this country faces has reduced significantly as a result of the change in the circumstances after the Cold War.

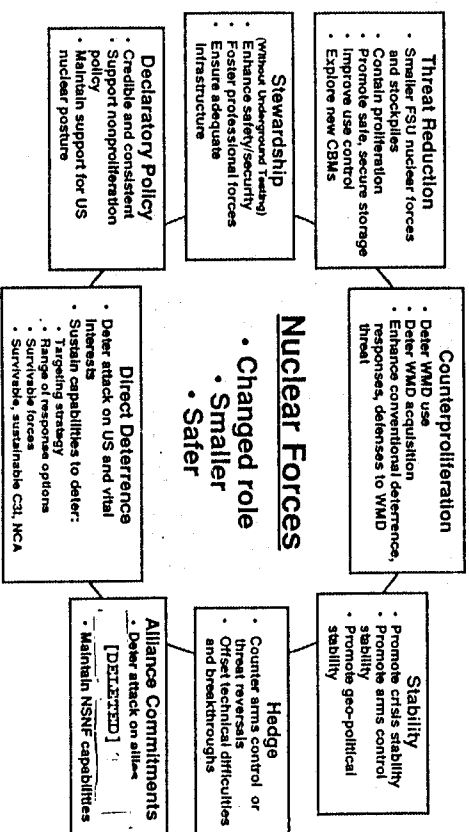
A Historical Perspective



Here we also note the enormous reduction in the budgets, the people assigned to our nuclear forces, the enormous change in the number of program cancellations, truncations, retirements, the Department has adapted its forces over time to the changed circumstances of a different Soviet Union and the introduction of START II and other arms control treaties.

So there has been a continuing sensible adjustment to the changed nuclear environment. More remains to be done, and we are telling you what the NPR is proposing to do in many different areas. But we do want to put the changes being put before you today in perspective.

Adjusted Nuclear Posture



In considering the changes in nuclear forces, these are the different considerations that were put into place. Some of them are very quantitative, like what is the effect of the changing force structure on stability? How can you change your forces so in the future you are able to make adjustments?

Some of these considerations are quite qualitative, such as the important issues of direct deterrence, of the nuclear forces and declaratory policy, what that does both directly and indirectly in slowing the spread of nuclear weapons or the desire for nuclear weapons to other countries.

All of these issues that we took up in the NPR, all of these qualitative features go into the recommendations and the decisions that are being presented to you today. It describes the changed role for the nuclear forces. It describes the smaller nuclear forces. And, very importantly, it describes the offer nuclear arsenal in this country.

Why We Have Nuclear Weapons

"Even with the Cold War over, our nation must maintain military forces that are sufficient to deter diverse threats."

"We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore we will continue to maintain nuclear forces of sufficient size and capability to hold at risk a broad range of assets valued by such political and military leaders."

"A critical priority for the United States is to stem the proliferation of nuclear weapons and other weapons of mass destruction and their missile delivery systems."

President William J. Clinton
NSS July 1994

Here is a statement by President Clinton recognizing that nuclear weapons are going to be with us for a long period of time. It is important that we have stewardship of these weapons and that we responsibly guard our ability to have nuclear forces which are sufficient to deter any possible use in the future.

Declaratory Policy

Policy

- | | | |
|---|--|--|
| <input type="checkbox"/> Credible, consistent | <input type="checkbox"/> Support nonproliferation policy | <input type="checkbox"/> Adversary uncertain of risk |
| <input type="checkbox"/> Deter nuclear attack | <input type="checkbox"/> Deter WMD acquisition/use | <input type="checkbox"/> Unpredictable response |

Negative Security Assurances (NSAs)

[DELETED]

"The United States will not use nuclear weapons against any non-nuclear weapons state party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices except in the case of attack on the United States, its territories or armed forces, or its allies, by such a state allied to a nuclear weapons state, or associated with a nuclear weapons state in carrying out or sustaining the attack."

[DELETED]

An important matter which I want to begin with is our declaratory policy. For many years we have had a declaratory policy which is called a negative security assurance. That basically says if you are a country who is a member of the NPT and you do not possess nuclear weapons and you do not attack the United States or its al-

lies or ally yourself with a nuclear power in an attack, under no circumstances will we use nuclear weapons against you.

So the issue is, if countries adhere to the Nuclear Nonproliferation Treaty and if they do not attack the United States or its allies, then they have an assurance that we will not use nuclear weapons against them. We are proposing that this remains the policy of the United States [deleted].

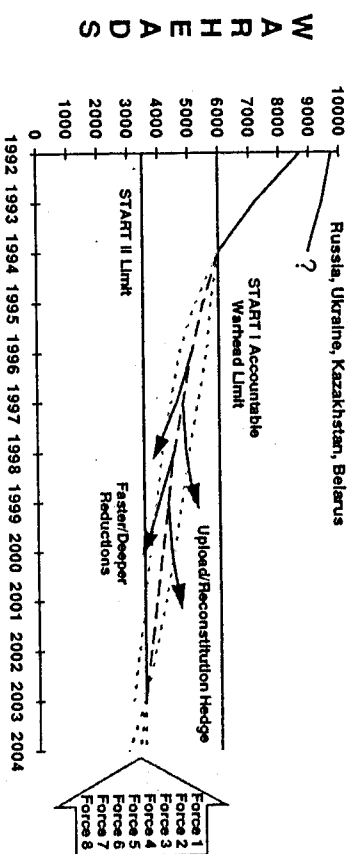
In addition, we have not adopted a no-first-use pledge. [deleted].

Part III: Strategic Forces

Let me now quickly go to the issue of the modifications we are proposing to the strategic forces. This is the major force structure implication, which came from an analysis of many, many alternatives done, as I mentioned earlier, in collaboration with the Joint Staff and done in collaboration with Admiral Chiles, our CINCSSTRAT.

What I would like to do is present you the outcome of the recommendations we are making for changes in the strategic forces.

Force Structure Paths: A Range of Alternatives



Before doing that, I think it is important to give you again a little context about what has happened to the warheads, what we are doing as we are bringing our strategic warhead totals down, first in compliance with START I, and then we are on a path which will bring our strategic warheads down to compliance with START II.

We may go deeper, but the current situation is that we are on a path to go here.

When you look at actual warheads in Russia, they are drawing back at a much slower rate. We do not know whether the reason that rate is slower is because they intend perhaps to maintain a capacity to go back up, or because they do not have the capacity and the capability to come down faster, or because they have focused on retiring and eliminating older, single warhead systems. But as long as we have a situation where our trend line in warheads is going down very sharply and their trend line in warheads is going down more slowly, it is extremely important for the security of this country to maintain a hedge which would allow you to recover, should matters not develop in the states of the former Soviet Union, and Russia in particular, as we currently hope and expect.

So an important part of our force structure recommendations recognizes that we have to hedge. We have to hedge against the situation where Russia will not develop as we would hope and indeed will maintain its weapons arsenal at a much higher level than has been agreed to in START II, which, of course, has not yet been ratified and the central limits of which do not come into force until 2003.

This is a central reason why we do not commit today to sharper reductions in our own nuclear forces and force structure, because Russia has not pulled down as far as we have. And let me remind you that if the Russians ever wanted to go back to a much more aggressive posture because of the collapse of their economy and their political system, it is much cheaper and accessible for them to rebuild their nuclear arsenal than it is for them to rebuild their conventional forces that were such a matter of concern during the Cold War.

So we believe that prudence requires that, while we lead in our determination to reduce warheads, it is equally important to hedge. If there is one message, it is that we are trying to lead and maintain our ability to hedge at the same time in these areas.

Military Requirement for US Strategic Nuclear Forces

- ☐ Yeltsin's government friendly and we do not target Russia today, but...
- ☐ Must be prepared, if hostile government emerges in Russia, "...to hold at risk a broad range of assets valued by such political and military leaders."

[DELETED]

This is a chart which I think speaks to, first of all, the requirements for nuclear weapons. This is a result of a great deal of analysis. It compares, as I said, the requirements for weapons in 1988 and the requirements for weapons in 1993. And you can see there is an enormous reduction during the Reagan-Bush years, and a subsequent reduction again to the level of about 3,500 deployed weapons, [deleted] all of that which calls for, if matters go as we currently project, a level of about 3,500 weapons.

As I mentioned the importance of hedging in case one needs more weapons than that, then the colors illustrate the different kinds of targets that one would be assigning these weapons to. But let me note that, for example, the large change in numbers of nuclear force targets because there will be, when START II is implemented, a drawdown in the number of nuclear force targets.

So this is how we come to a requirement of about 3,500 weapons, [deleted] if matters go as projected according to START II at its entry into force.

Nuclear Force Employment Planning

[DELETED]

We also have examined in detail—this is just one part. This is a secret chart. The last results were a secret chart—how we actually do the targeting, and a lot of work has gone in here. I will not take the time now to describe the options that exist.

This is not the massive kind of SIOP options which we are so familiar with from the Cold War, but include many options to give the President of the United States a much richer menu of options consistent with a complete change in the Cold War environment and contributing importantly to deterrence by the credibility of these options.

Of course, we are not advocating carrying out any of these options, but here is how deterrence comes in, because we can say and know that there are different kinds of attacks that could be launched, and that itself is a major element of deterrence.

Policy

- ☐ Deter nuclear attack
- ☐ Rough equivalency
- ☐ Range of options
- ☐ Targeting strategy
- ☐ Support arms control
- ☐ Survivable
- ☐ Counter arms control reversal
- ☐ Maintain alliance commitments
- ☐ Smaller force/stockpile
- ☐ Offset technical difficulties or breakthroughs

Post-START II Force Structure 2003

- ☐ SSBNS
 - ☐ 14 SSBNs
 - ☐ All with D-5 missiles
 - ☐ Retain 2 bases (Kings Bay and Bangor)
- ☐ Bombers
 - ☐ 20 B-2s
 - ☐ Non-nuclear role for B-1
 - ☐ 66 B-52s
- ☐ ICBMs
 - ☐ Maintain three wings of Minuteman ICBMs (500/450)

Here are the force structure recommendations we have made for the period out to 2003. The first is that we propose to reduce the number of SSBNs from 18 to 14. Very importantly, we see that

military effectiveness, overall costs, and industrial base reasons—all three of them—call for a retrofiting of that 14 SSBN force with D-5 missiles. And we propose to do that over time.

With respect to bombers, we maintain a 20 B-2 bomber force, which are dual-capable, of course. The 20 B-2s would have nuclear capability but we would have no nuclear capability maintained for the B-1 bomber, and we would retain a total B-52 force level of 66. There may be a period of time when that moves slightly down and back up. As you may recall, the authorization bill in this committee I think requires us to maintain 66. We will maintain nuclear-capable 66 B-52s, which of course are dual-use capable for conventional and nuclear missions. The total force TAI will be 66. Finally, with ICBMs, we would propose for the time being to maintain 500/450 ICBMs in our force structure.

Warhead Upload Hedge

Policy

- ☐ Deter attack
- ☐ Range of options
- ☐ Counter arms control reversal
- ☐ Rough equivalency
- ☐ Support arms control
- ☐ Offset technical difficulties/weaknesses

[DELETED]

- ☐ Bomber Hedge
- ☐ SLBM Hedge
- ☐ ICBM Hedge
- ☒ Accountable Weapon Base

[DELETED]

You might ask what happens if things go bad? How much of an upload hedge do you have with that force structure? If we do have a changed circumstance with Russia, if you find that START II does not enter in force, how much of an upside could you upload weapons for, a hedge against a changed world?

This slide shows the different ways that we could build up the weapons on bomber forces, SLBMs and ICBMs. That is a higher number of warheads per D-5 from five up to eight. We would also have an ICBM hedge. And so that means that we have a significant hedge for increasing our warheads, if required.

Similarly, as I will describe later, if there were new political developments, new arms control agreements, or other kinds of agreements with the Russians, we also could reduce. The point here is there is a significant amount of both upward and downward flexibility in this posture that we are proposing to you.

Options Reviewed to Achieve Faster/Deeper Reductions

Policy

- ☐ Threat reduction
- ☐ Support arms control
- ☐ Promote safe/secure storage
- ☐ Contain proliferation
- ☐ Smaller forces/backstop
- ☐ Rough equivalency
- ☐ Stability
- ☐ from within FSU

- ☐ Accelerate implementation of START I/II
 - ☐ Seek accelerated FSU warhead removals to START I levels
 - ☐ Reciprocal warhead removals to START II levels with US assistance
- ☐ Negotiate new agreement for faster and deeper reductions
- ☐ Explore sufficiency of US forces below START II levels.... Unilateral reduction

This is a point that I wanted to make. It is a very important one. As well as a hedge on uploading, we also have considered options which would result in an even sharper drawdown in the forces, and if that occurs it will have to be dovetailed not only with the START II ratification and entry into force but subsequent negotiations that could lead to faster or deeper cuts.

So we are prepared to consider those matters, and it is important not to let the arms control negotiations get in front of the actual pace of the reduction of weapons in the states of the former Soviet Union.

So the posture we are proposing to you has the ability to go up, hedge upward, for more nuclear warheads, and also make adjustments downward if the political circumstances permit.

Part IV: Non-Strategic Forces

Let me now turn to the most important—not the most, but a very important area of our deliberations, which are non-strategic forces. I remind you of the slide I showed you earlier, where it showed the Russians have somewhere between [deleted] non-strategic nuclear warheads, while our total inventory is more like [deleted].

And, of course, most of the non-strategic nuclear weapons in Russia are located at distances which can be easily delivered against European targets. So this disparity in non-strategic nuclear forces, those which are not covered by START, is a matter of considerable concern.

Considerations for NSNF

☐ Theater Presence

- ☐ Reinforce resolve, commitment through visibility
- ☐ Makes nuclear weapons role concrete
- ☐ Rapidly Deployable
- ☐ Respond to emergent crisis
- ☐ React early or late
- ☐ Support Nonproliferation Regime
- ☐ Low profile

[DELETED]

☐ Ability to Hold at Risk Key Targets

[DELETED]

☐ Proportionality of response

Here are the different considerations that occur for the non-strategic nuclear forces. I am not going to go through all of them. Let me say that the non-strategic nuclear forces we maintain have both military purposes and very important political purposes with respect to the NATO alliance.

There was a time when the military purpose of the non-strategic nuclear forces in Europe was to assure that we could blunt a conventional Russian Soviet attack, if it were to break through into Europe. That was the purpose of the tactical nuclear weapons in Europe. That need, that military requirement, has disappeared because the Soviets do not exist and the Russians no longer have the military capability to mount that kind of conventional attack.

So the military purpose of the non-strategic nuclear forces is changing. On the other hand, the political purpose of those weapons to maintain within the alliance shared responsibility for nuclear forces and make sure the Europeans know that they can rely in a serious way on our nuclear forces as well as our conventional forces is an important element in understanding what changes are possible and the pace of changes with respect to non-strategic nuclear forces.

There are a set of actions we have taken, but I want to emphasize that they do not solve the problem of our great concern about the disparity of the non-strategic nuclear forces between the Russians and ourselves. On the one hand, the Russians have not yet explored fully the changed considerations that have occurred within NATO about the role of nuclear weapons. Both of those items remain to be done.

Non-Strategic Nuclear Force Structure

Policy

- | | | |
|---|---|--|
| <input type="checkbox"/> Deter attack on allies | <input type="checkbox"/> Make risk uncertain | <input type="checkbox"/> Range of response options |
| <input type="checkbox"/> Deter WMD acquisition or use | <input type="checkbox"/> Responsive, deployable, presence | <input type="checkbox"/> Smaller forces/stockpile |

☐ USAF Dual Capable Aircraft (DCA)

- ☐ Maintain Alliance commitment
- ☐ Maintain current strength in CONUS and Europe

☐ USN Carrier DCA and nuclear TOMAHAWK (TLAM/N)

- ☐ Eliminate carrier and surface ship nuclear weapons capability
- ☐ Maintain capability to deploy TLAM/N on SSNs

There have been some significant changes proposed in the NPR with regard to non-strategic nuclear forces. First, we continue to maintain Air Force dual-capable aircraft for delivering nuclear weapons both in Europe and the United States. But important modifications would be that we will eliminate on surface ships and on carriers the ability of those ships to deliver nuclear weapons.

Now, for some years there have not been nuclear weapons on those ships, but we have paid the expense in terms of training and capacity for those vessels to put back on nuclear delivery capability. And what we are saying in the NPR is that the only naval, non-strategic nuclear force that we would maintain is the TLAM/N, the Tomahawk nuclear missile, on attack submarines. A considerable force would be maintained. So these are important adjustments in our non-strategic nuclear forces.

Part V: Command, Control, Communications and Intelligence (C3I)

Let me now talk to an equally important part of the NPR. We are not only concerned in the posture review with the decline in force structure. We are also concerned with other aspects of the stewardship and maintenance of our nuclear forces. And a very important part has to do with the command, control, communications and intelligence.

A lot of the important, although less glamorous, work of the NPR had to do with how to improve the command and control and safety of our nuclear weapons that we maintain in our arsenal, and a lot of excellent work has been done on that.

Post-Cold War C3I and Operations

Policy

- ☐ Survivable, sustainable
- ☐ Well led, trained, alerted
- ☐ Various response options
- ☐ Improved use control
- ☐ Delet WMD acquisition
- ☐ Targeting strategy
- ☐ Stability
- ☐ Confidence building measures

☐ Cold War nuclear force posture modified

- ☐ Bombers off alert
- ☐ More SSBNs patrolling on "Modified-Alert" rather than "Alert"
- ☐ ICBMs and SLBMs detargeted
- ☐ Reduced command post structure
- ☐ Reduced Airborne Command & Control Ops Tempo (NEACP, TACAMO, ABNCP)

[DELETED]

☐ Nevertheless, to maintain deterrence, must carry out key missions

- ☐ Early warning
- ☐ Threat assessment
- ☐ NCA connectivity
- ☐ EAM dissemination
- ☐ Safe, secure force management

In these two slides what I want to show you is just a list of actions related to C3I that have been taken. I am not going to go through each one. Let me just say that we have a much less hair-trigger posture for our nuclear weapons. We have done all kinds of modifications so that there is less, both on the Russian side and the U.S. side, less of a hair trigger posture for these nuclear weapons.

And we have looked at a whole series of other issues to assure the communications to these nuclear forces are adequate and reliable, and improved over what we had in the past.

Strategic C3I Requirements

☐ Continue adequate funding of critical programs

[DELETED]

☐ Correct existing/projected communication system and tactical warning/attack assessment deficiencies

[DELETED]

☐ Support intelligence systems which provide timely information and threat characterization warning indicators

There is a whole series here, which I am not going to go through, of specific measures that are proposed and will be funded in the defense 5-year plan to assure that this area of command, control and communications of these forces is strengthened from the past.

Part VI: Infrastructure

We also looked at the infrastructure underlying our nuclear forces. Let me say a few words about each of these areas.

Infrastructure Requirements

Policy

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Credible deterrent | <input type="checkbox"/> Public support | <input type="checkbox"/> Improved use control | <input type="checkbox"/> Offset technical difficulties |
| <input type="checkbox"/> Roughly equivalent forces | <input type="checkbox"/> Safe, secure storage | <input type="checkbox"/> People and technical base | <input type="checkbox"/> and breakthroughs |
- ☐ Replace guidance system and re-motor Minuteman III
 - ☐ Continue D-5 production past 1995
 - ☐ Fund sustainment of guidance and reentry vehicle base
 - ☐ No specific bomber infrastructure funding necessary

First, we think that the Minuteman force structure will require both guidance upgrades and remotoring. As I mentioned, we are proposing to retrofit the 14 remaining SSBNs with the D-5s. That means we will have an industrial base producing strategic missiles at a relatively low rate for some period of time.

We believe that some effort has to be taken to maintain the guidance infrastructure of this country. We have a modest amount of forces proposed for that purpose. We do not see a requirement for additional bomber infrastructure on the basis of the requirement for nuclear forces.

As you know, the Fiscal Year 1995 Defense Authorization Act asked us to take on a major study of bomber requirements, but this is going to be taken on with respect to the conventional needs for bombers. This slide only addresses the need for additional bombers from the point of view of nuclear delivery. So the study that we will be undertaking will be devoted to conventional bomber capability.

Senator EXON. Let me ask you—let me stop you right here if I can, Mr. Secretary—you know the concerns that this committee has expressed to you and to others in the Pentagon for a long, long time about the bomber structure. I take it from the statement you just made you are simply telling us that we need no specific bomber infrastructure funding necessary, as you see it today. You are going to do further study on that; is that what you are telling us?

Dr. DEUTCH. No. I am saying a much more narrow remark, that with respect to nuclear delivery we do not think there is a justification for doing bomber infrastructure support from the point of view of nuclear bomber delivery.

Senator EXON. What about non-nuclear?

Dr. DEUTCH. That is a different issue. As you know, you have asked us to undertake a very major study, which we are going to do, in the fiscal year 1995 authorization bill, which is going to examine the future needs for conventional capability for bombers.

Senator EXON. So are you saying, John, that you are talking about a Nuclear Posture Review today and you are saying therefore this is our feeling with regard to bombers on the NPR. We are going to do further study on the non-nuclear use of our bombers.

Dr. DEUTCH. That is right, for those who believe we should have additional bomber force structure.

Senator EXON. For what?

Dr. DEUTCH. For those that believe we need additional bomber force structure. There is no comfort to be had from nuclear deliveries. It is not the nuclear capability of these bombers that will be important; it is the conventional.

Senator EXON. And you have studied that?

Dr. DEUTCH. We have studied it a lot. But, as you know, your bill suggests we undertake a major new study of it, which is already under way.

Senator EXON. Which is what you are going to do?

Dr. DEUTCH. Absolutely.

Infrastructure Requirements (Cont)

- ☐ DoD requirements to DOE
 - ☐ Maintain nuclear weapon capability (without underground nuclear testing or fissile material production)
 - ☐ Develop stockpile surveillance engineering base
 - ☐ Demonstrate capability to refurbish and certify weapon types in enduring stockpile
 - ☐ Maintain capability to design, fabricate, and certify new warheads
 - ☐ Maintain science and technology base
- ☐ Tritium supply (as specified in annual NWSM)
 - ☐ DoD and DOE must decide on:
 - ☐ Source
 - ☐ Production program
 - ☐ Upload hedge requires prompt decision
- ☐ No new-design nuclear warhead production

We are the customer for the Department of Energy weapons. We wanted here to just remind you, to say that we have certain major overarching requirements that we see for the Department of Energy in continuing its support to the Department of Defense for weapons. They are listed here.

We have a mechanism for carrying that out which is the Nuclear Weapons Council. A particular issue has to do with tritium supply over the long run. Whether you have 3,500 deployed warheads or under hedge circumstances up to 6,000 deployed warheads, the question eventually will be tritium supply—because tritium is an absolutely continuously decaying isotope which is required for our bombs. Eventually we have to face the issue about how we replace

the tritium supply, and that is something we are going to be working on with the Department of Energy through the Nuclear Weapons Council mechanism.

But we also paid attention to the general requirements we have for the Department of Energy and also much more specific requirements that we have for them, including the process for having those take place.

Part VII: Safety, Security, and Use Control

There is no requirement currently for the design of any new warhead that we can see. I mentioned to you command, control and communications. Let me say a few words about steps we have taken which are connected, of course, to improve the safety, security and use control of these weapons.

US Nuclear Safety, Security, and Use Control: Significant Force Posture Changes Since 1988

- ☐ No nuclear weapons remain in the custody of US ground forces
- ☐ Naval NSNF no longer deployed at sea
- ☐ Strategic bombers taken off day-to-day alert
- ☐ Total active stockpile reduced by 59% (79% by 2003)
 - ☐ Strategic warheads reduced by 47% (71% by 2003)
 - ☐ NSNF warheads cut by 90%
 - ☐ NATO stockpile cut by 91%
- ☐ Storage locations reduced by over 75%
- ☐ Personnel with access to weapons or control cut by 70%

Here again this is the meat and potatoes of the work of being good stewards of nuclear weapons in today's world. It will not get you headlines, but a lot of excellent work has been undertaken here, and a lot of measures are going to take place to assure that we have better control, better security, and better safety of these weapons.

Here again is a list of measures which have been taken, which fortunately change the configuration and reduce our force structure. These are all measures which improve the use and control for our nuclear weapons.

US Nuclear Safety, Security, and Use Control Recommendations

Policy

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Improved use control | <input type="checkbox"/> Confidence building measures | <input type="checkbox"/> Responsive | <input type="checkbox"/> Enhanced safety/security |
| <input type="checkbox"/> Safe, secure storage | <input type="checkbox"/> Survivable, sustainable C3I, NCA | <input type="checkbox"/> Roughly equivalent forces | <input type="checkbox"/> Foster professional forces |
- ☐ Develop and cost a program to replace coded control device (CCD) components on the B-52 and M31 to eliminate vulnerabilities. M31 costs should be factored on the basis of replacement being done in conjunction with the PRP
[DELETED]
 - ☐ Retire MM W-62 warhead
 - ☐ Optimize number of accident/incident teams
[DELETED]
 - ☐ Continue implementation of FARR recommendations
 - ☐ Complete Trident CCD in 1997 (means system level coded control devices or PALs will be on all US nuclear weapons by 1997)
 - ☐ Seek alternatives for those recommendations that test moratorium may preclude (e.g., protection equivalent to CAT F PAL on all new weapons)
 - ☐ Implement a regular and realistic nuclear procedures exercise program with participation by senior DoD civilian and military leadership

On the next slide there are some very important technical changes which show that we are maintaining and controlling these weapons with greater safety than has been true in the past. Many of these programs have been in preparation for many years, and we are continuing the process of developing and introducing to the force these changes.

Each one of these meets a specific concern about security or safety or control of weapons in our forces, a long list of these matters which will be implemented, including the programming, and funded in our program.

Part VIII: Initiatives

Let me now talk about some initiatives, after going through the command and control and safety, the infrastructure that we speak about. Let me speak about some initiatives.

Initiatives Considered for Improving Russian Safety, Security, and Use Control

Policy

- ☐ Promote crisis stability ☐ Promote safe, secure storage ☐ Smaller forces, stockpile ☐ Increase transparency
☐ Threat reduction ☐ Counterproliferation ☐ Confidence building measures ☐ Roughly equivalent forces

Forces

- 1 Further NSNF reductions
- 2 Accelerating removal of warheads down to START II levels
- 3 Further SNF reductions beyond START II
- 4 Removing warheads from all ICBMs

Operational Practices

- 5 Cooperative warning and verification of alert status
- 6 Delaying ICBM/SLBM launch ability

Weapon Stockpile

- 7 Stockpile data exchange
- 8 Monitoring weapon dismantlement
- 9 Stockpile inventory cap
- 10 Storing weapons/material outside Russia

An important matter is to also encourage the Russians to take corresponding actions, not through formal treaty, but corresponding actions which reduce the number of nuclear weapons that they have, which improve the command and control they have over their weapons, which improve especially the safety and the security with which they maintain their weapons.

So what we did is we considered a whole series of items listed here, which we might do to encourage the Russians to take similar steps, with respect to controlling their weapons and managing them that we are proposing here. We have considered a whole series of alternatives here, many of which we will be discussing with the Russians over the coming months and period of years.

Counterproliferation Initiatives

- ☐ Develop effective theater defenses against ballistic missile and air-breathing threats
- ☐ Enhance conventional capabilities to counter the proliferation threat and support funding for principal Deutch Committee report recommendations
 - ☐ Improved real-time detection and characterization of BW/CW agents
 - ☐ Underground structures detection and characterization
 - ☐ Hard underground target defeat, including advanced non-nuclear weapons producing low collateral damage
- ☐ Provide DoD capabilities in support of UN and other international non-proliferation efforts
- ☐ Fully implement nuclear arms control agreements and support NPT, BWC, and CWC
- ☐ Continue assistance to FSU to limit potential for WMD leakage

Connected to this, of course, are counterproliferation initiatives. Here is a whole list of a series of items which are under way to continue our efforts on counterproliferation, directed here to especially the nuclear problem. We will continue to push the counterproliferation objectives with the Congress in the coming years.

Part IX: Summary

Let me summarize these results by putting up first the set of conclusions, in which I would stress that we have rebalanced the force structure. I think this is a very good thing with respect to nuclear forces, that we do not have big ups and downs with the path we are taking with respect to nuclear weapons. We have made and continue to make reductions and cost savings.

Conclusions

- ☐ Post-Cold War environment requires nuclear deterrent
 - ☐ Rebalanced Triad
 - ☐ START II levels remain in US interest until Russia nears START II levels and we're confident of Russia's future
- ☐ Major reductions and cost savings underway
 - ☐ US forces will be smaller, safer, more secure and maintained at lower alert rates
 - ☐ Reduce infrastructure, but maintain people and technical base
- ☐ US Nuclear Posture must help shape future
 - ☐ Create world in which role of nuclear weapons reduced
 - ☐ Stem proliferation
 - ☐ Preserve options if reform fails in Russia
 - ☐ Maintain good stewardship
- ☐ Difficult but vital challenge for US Posture is to both lead and hedge

We do believe that the nuclear force posture of the United States is terribly important for the future of our security, and the way I like to say this is that this is a strategy that both leads—under the expectation that we will be able to continue to reduce our reliance on nuclear weapons—but it has important elements of hedge in it, which says that we can recover to a much more aggressive posture, should that become necessary in the future.

So this is kind of a summary of the top line of our results of the NPR.

Main Results of the NPR

- ☐ Strategic Forces
 - ☐ No more than 20 B-2 bombers required for nuclear role
 - ☐ Reduce B-52 bomber force (94 to 66)
 - ☐ Reduce Trident submarine fleet size from 18 to 14; but modernize SLBM force for very long service life by equipping all submarines with D-5 missiles
 - ☐ Maintain single warhead Minuteman III ICBMs (500/450)
 - ☐ Maintain flexibility to reconstitute or reduce further
- ☐ Non-Strategic Nuclear Forces
 - ☐ Maintain European NSNF commitment at current level (9% of Cold War)
 - ☐ Eliminate nuclear weapons capability from US Navy surface ships
 - ☐ Eliminate nuclear DCA capability from aircraft carriers
 - ☐ Eliminate nuclear cruise missile capability from surface combatants
 - ☐ Retain nuclear cruise missile capability on submarines
 - ☐ Retain land-based dual-capable nuclear aircraft capability

Let me now briefly put up two charts which summarize actions that we have taken and will be proposing to the Congress in the fiscal year 1996 budget for the subsequent 5 years.

This is a summary first with respect to the strategic forces, and then a summary with respect to non-strategic forces. As I mentioned to you, in my judgment a great deal of work remains to be done in the area of non-strategic forces because of this disparity between the number of forces in Russia and the number of forces in the alliance, and, second, the need to redefine what the nuclear posture is that they took, which has a great deal of political significance.

Main Results of the NPR (Cont)

- ☐ **Safety, Security, and Use Control**
 - ☐ Equip all US nuclear weapons systems, including submarines, with coded control devices or PAL by 1997
 - ☐ Upgrade coded control locking devices on Minuteman III ICBMs and B-52 bombers
 - ☐ Increase warhead safety without nuclear testing [DELETED] W-62 retirement)
- ☐ **Infrastructure**
 - ☐ Stockpile stewardship "customer plan" for DOE
 - ☐ Sustain ballistic missile industrial base by Minuteman III sustainment and D-5 production
 - ☐ Sustain reentry vehicle and guidance system industrial base
- ☐ **Command, Control, Communications, & Intelligence and Operations**
 - ☐ Continue adjustments to post-Cold War alert/operational requirements
 - ☐ Support programs for assured NCA survivability and continuity
- ☐ [DELETED]
- ☐ **Threat Reduction and Proliferation**
 - ☐ Support Cooperative Threat Reduction program to reduce danger of unauthorized/accidental use or diversion of weapons or materials from within the FSU
 - ☐ Support counterproliferation initiative to provide conventional responses to use of WMD in regional conflict

After talking about the strategic forces and the non-strategic forces, let me briefly mention and just summarize for you the changes we propose in safety, security, and use control, and command, control, communications, and the infrastructure and define the initiatives I mentioned briefly here in counterproliferation and threat reduction.

Mr. Chairman, let me just say that this has been a massive undertaking. I want to reemphasize that it was led really by Ash Carter and by Lt. Gen. Wes Clark. We believe that it represents a lot of work and a lot of good thinking by all elements of the Department. It has both military and civilian support, and we think it results in an improved nuclear posture but maintains the emphasis both on leading and on hedging and is a step forward in the management of our nuclear forces.

With your permission, Mr. Chairman, I would like to ask my colleague and friend, Admiral Owens, whether he would have a few issues that he might address in this matter, if that is satisfactory to you, sir.

Senator EXON [presiding]. Do you wish the Admiral to proceed at this time?

Dr. DEUTCH. Yes, sir.

Senator EXON. Fine.

STATEMENT OF ADM. WILLIAM A. OWENS, USN, VICE CHAIRMAN, JOINT CHIEFS OF STAFF

Admiral OWENS. I would like to just reiterate what Secretary Deutch said concerning the involvement of the military at all levels, including the four-stars. The NPR has been briefed to each of the unified CINCs and has been carefully considered in the Joint

Chiefs with General Shali and the five of us as a part of this review.

We have been with civilian leadership throughout this evolution. We are quite satisfied with the way the results have come out.

We think that there are genuine changes that have been made as a result of this review, both in the NSNF area as well as the strategic area. But they are prudent changes, and we concur with them.

We are concerned, as Dr. Deutch mentioned, with the non-strategic nuclear force imbalance between us and the Russians, and I too believe it is one of the headlines that we must address as we proceed through this transition period with the Russians.

I think this leaves us with smaller but better nuclear forces, that it is a prudent step to take both in the NSNF and strategic nuclear force area. And that concludes my comments, sir. Thank you.

Senator EXON. Thank you. Let's proceed in this fashion. We will recognize people in the order of appearance. I would turn to Senator Levin in just a moment and then Senator Smith, and then we will proceed from there.

Let me first ask you, Dr. Deutch, what you can do to supply interested members of the committee—it may not be that all members of the committee need this, and all of these charts that you flashed up today are very interesting—is it possible for you to supply the individual offices of the interested Senators who would make the request to you, for safekeeping in a proper secured facility in our offices?

Dr. DEUTCH. Yes.

Senator EXON. It is a tremendously important proposition, and we appreciate the work that you have done on it. It is pretty hard for us to digest it by you throwing charts up that we cannot really see from here and understand.

Dr. DEUTCH. I apologize, Mr. Chairman. I know the frustration of that. We will be happy—it will take us a day or two to produce them, and we will be glad to have them up here, and any Senator on this committee who has the ability to have custody of them, we will be delighted to provide it.

Senator EXON. Does that include everything that you have put up on the screen this morning?

Dr. DEUTCH. Yes, sir.

Senator EXON. I hope that every Senator or their staff here present would so advise their Senators that that is available. It would be up to the individual Senator, as I understand it, to notify your office of our request. Is that correct?

Dr. DEUTCH. Yes. There is no problem. Yes, sir.

Senator EXON. Thank you. Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman. I thank both Secretary Deutch and Admiral Owens for the briefing.

There were a number of slides that you had up, Secretary Deutch, which suggested that what you are outlining here could be changed by future arms reductions agreements.

Dr. DEUTCH. Yes, sir.

Senator LEVIN. So what you have said is now going to be the administration's policy, in terms of numbers and all of the other ele-

ments of these charts, is not at all inconsistent with the administration negotiating further reductions, if it so chooses.

Dr. DEUTCH. The program that we have is consistent with a successful entry into force of START II, which is supposed to occur by 2003. We believe that it is flexible enough to permit adjustments, whether it is necessary to add warheads or whether, because of an agreement, it is considered desirable to reduce warheads. We can adjust in both directions.

Senator LEVIN. Now, you have put most of your emphasis on the hedge, the possible need to increase. I want to put some emphasis on the desirability of negotiating additional reductions, the impact of such negotiations on nonproliferation, because other countries are looking at us.

We have a nonproliferation treaty which we hope will be renewed, and all these other countries are saying, you folks are still relying on nuclear weapons. It is a great deterrent for you. Why isn't it a great deterrent for us? Pakistan and many other countries in the world ask us that question.

And what we are getting out of this NPR, so far, publicly is we are stopping right where we are at. But what I am getting out of this morning's briefing is that we are maintaining a hedge so if we want to increase, we can. Then, on at least two of those slides it said that this posture is not inconsistent with negotiating further reductions below the START II level, should the administration choose to do so.

Am I right? Why isn't that the emphasis?

Dr. DEUTCH. I regret very much if I placed greater emphasis on the hedge part than on the possibilities of further reductions. I think it is a little bit necessary to worry about downside rather than upside here, but there is no question that we have sized this force to the START II levels, and it maintains the flexibility to go down or, if necessary, to go up.

I would like to add one more point. I do not agree—this is a personal view—that what we do within these force levels are a major determinant to the spread of nuclear weapons to other countries. There are other things that we do which are much more urgent in reducing the spread of nuclear weapons to other countries.

Senator LEVIN. Well, I am not suggesting that there are not other things that are more important. I am saying our own policy and our own reliance on nuclear weapons is a factor in other countries' making a decision as to whether they want to rely. Is it not a factor, our own reliance level?

Dr. DEUTCH. No. The issue is whether it is a major factor. I am certain it is a factor. I do not believe it is a major factor.

Senator LEVIN. Now, since your posture review is not inconsistent with the negotiation of further reductions, my question is, did you in this posture review consider the desirability of where we go after START II in terms of reductions?

Dr. DEUTCH. I do not think that we really explored this issue in great detail, although it is easily done within the framework of the analysis; if you had further reductions you would have a smaller target set. You would then have a different mix of forces.

Senator LEVIN. That is not my question. My question is, did this review consider the desirability of negotiating reductions below the START II level?

Dr. DEUTCH. I think the review placed greater importance on making sure that START II was, first of all, ratified, and then implemented.

Senator LEVIN. Would that mean the direct answer to my questions—

Dr. DEUTCH. No.

Senator LEVIN. Now, when Secretary Aspin announced this review a year ago, he said it would "incorporate reviews of policy, doctrine, force structure, operations, safety and security, and arms control in one look." He said that the numbers of weapons would be derived from the policy, and he said it would look at "where do you go after START II."

You have changed the purpose of this review. I am not arguing that you should or should not have changed it at the moment, but I think your direct answer made it very clear that you did not look at where do you go after START II.

Dr. DEUTCH. Senator Levin, we are not the only agency that has a voice in where we go after START II. As you may know, [deleted] there is an interagency consideration of where we go possibly after START II.

We have to manage a big program. We have to be concerned with C3 of this program, and we have to be concerned with the safety and security of it, and we have to build a 5-year program. These issues were the main emphasis of our attention. We did not want to speculate on where political forces might take us, either up or down, outside of that constraint of START II.

Senator LEVIN. I can understand that decision, but I just want to make it clear. It is a change from what was stated to be the coverage of this review.

Dr. DEUTCH. I would have to go back and see Les's—

Senator LEVIN. I just quoted it.

Dr. DEUTCH. I would have to see its whole context, but I will accept your characterization, sir.

Senator LEVIN. And the upshot of it all is that you end up with headlines like this morning's Washington Post, which say that Clinton decides to retain Bush nuclear arms policy. That is basically accurate, from what we have seen here. But then it says, "balks at talks with Russia."

Dr. DEUTCH. Sir, there is one thing I do not do. I do not write headlines for the Washington Post.

Senator LEVIN. I agree with that.

Dr. DEUTCH. I find them terribly annoying.

Senator LEVIN. But what you do is say things which could lead reporters to conclusions, and all I am asking you to do is agree with me that it is a false conclusion that this review is saying we should not negotiate further reductions.

Dr. DEUTCH. That is absolutely false, and I can assure you—

Senator LEVIN. What I just said is true, then?

Dr. DEUTCH. Yes. Exactly. What you said is true, and the implication that the Department is unwilling to consider further reductions is false. We made that extremely clear in our presentation to

the President, and both Bill Perry and I are absolutely of the view that we have got to consider and welcome the possibility of considering that, especially if we see the Russians bringing down the actual numbers of warheads that they have.

It is not just an issue of an agreement. It is also to see the implementation of START I and START II at a more aggressive pace. They do have a lot more weapons out there now than we do.

Senator LEVIN. And, just to wind up this line of inquiry, any negotiated reductions could be contingent upon the Russians achieving a certain pace on what has already been negotiated, is that not true?

Dr. DEUTCH. Yes, sir.

Senator LEVIN. Thank you.

Senator EXON. Is the Chair to understand that Secretary Deutch and Senator Levin have concluded that both of them are telling the truth and the Washington Post is not? Is that what I heard?

Dr. DEUTCH. In this closed hearing, I want to say yes.

Senator LEVIN. Well, I will say yes even when you classify the record. I have no problem with that.

Senator EXON. Thank you. Senator Smith.

Chairman NUNN. There is nothing classified about that last statement by Deputy Secretary Deutch and it will be part of the declassified record.

Senator SMITH. Dr. Deutch, on the subject of the Washington Post, also in the Washington Post, in that article this morning, it indicates that the ICBM force is projected to go as low as 300. Now you are saying here today 450 to 500.

Dr. DEUTCH. It turns out to be another error in the Washington Post.

Senator SMITH. So you are standing by the 450 to 500 figure?

Dr. DEUTCH. We are standing by our testimony rather than the Washington Post, yes, sir.

Senator SMITH. So I assume when you meet with Yeltsin next week we are going to be talking to him about the 450 to 500, not 300?

Dr. DEUTCH. That is correct.

Senator SMITH. Does your review foreclose the option of ever introducing a new warhead design, even if it were only to improve, say, the reliability of the weapon?

Dr. DEUTCH. Let me be clear about it. We think it is extremely important for the country to maintain the capability to design new weapons and to manufacture new weapons, should they be needed. At the present time, we see no requirement for a new weapon.

Senator SMITH. But you do not preclude the option?

Dr. DEUTCH. That is correct.

Senator SMITH. Another area that is a little sensitive with the Russians is the area of these submarine-launched ballistic missiles. They think they gave up the crown jewels by agreeing to scrap the MIRVed ICBM force. Now, from what I hear, they are somewhat interested in some post-START II agreement that would basically place additional limits on the submarine-launched ballistic missiles.

Have you had any discussions with the Russians or do you plan to discuss this issue with the Russians in the near future or perhaps with Yeltsin when he gets here?

Dr. DEUTCH. I think the answer is no, sir.

Senator SMITH. So you are going to stand firm on the——

Dr. DEUTCH. On the 14 SSBNs.

Senator SMITH. Okay. I want to talk briefly about the strategic triad. I have always felt that it ought to be expanded to include missile defenses, because I think it is interrelated, and I have stated this before.

With the Cold War over, I believe that we ought to integrate missile defenses into our strategic plan, and I think I have said that many times here in this committee over the past couple years. But it just seems to me that you are moving in the opposite direction. The administration has tabled proposals in Geneva that would dramatically expand the ABM Treaty and restrict promising theater missile systems such as THAAD and the boost-phase interceptor. The question is, do you believe that the 1972 ABM Treaty should restrict theater missile defenses?

Dr. DEUTCH. Senator, no. I do not believe it should. And I do not believe that the positions that the administration has taken or, more precisely, the Department of Defense and the Joint Chiefs have taken, has that effect.

I believe that the positions we have taken permit full exploration of all theater ballistic missile defense technologies and provide for all possibilities of deployment within the foreseeable future, within the next 5- or 10-year period.

So I am very much of the view that we should not constrain our ability to pursue theater ballistic missile defense technologies through the ABM Treaty, sir.

Senator SMITH. I am sure you have it, but I would just call your attention to a letter which I signed, and 39 other Senators—I think it was 39—which basically takes that position. Just quoting one or two lines from that letter, "The TMD limitations now under discussion are more restrictive than the ABM system limitations already in the treaty, and, if accepted, such limitations would effectively transform the ABM Treaty into a TMD/ABM treaty," and the ABM Treaty was never meant to limit TMD systems," which you have just stated, "yet the proposals now under discussion have already taken us a considerable distance down this path."

There are many of us who believe that you have gone down that path. I have no reason to doubt what you are saying, but is your staff supportive of this position that we should not go down this path?

Dr. DEUTCH. Yes, sir. But the place where I disagreed in the remarks you just read is I do not believe that the definition that we currently have demarcating theater anti-ballistic missiles from ABM regime has indeed caused us to constrain any practical possibility in TMD for the foreseeable future, including the boost-phase intercept, I might say.

Senator SMITH. If an agreement does impose new obligations, though, on the United States, do you think that would be considered a substantive change to the existing treaty and therefore require Senate confirmation?

Dr. DEUTCH. I am not an attorney, and I do not know about that. I think it is very important that as we go through this particular matter that the Senate of the United States understands exactly what we are doing and that there is no funny business about this adjustment.

So we will be in very close consultation with you. I might add that the Congress has put on us great constraints about moving in this area without doing what I just said.

Senator SMITH. I just would close on this point and yield, Mr. Chairman, just to say that there are a lot of us who feel very strongly that we are crossing that demarcation line. I think those of us who signed the letter, I would just ask you to review it very carefully.

The technology on theater missiles now in terms of their capability, I think we are moving into an area where I believe very strongly, as the other signers of that letter apparently believe, that we may be crossing the line here and we are going to be precluding our own theater missile defenses.

I think it is an area we have to be very cautious of. I would also say that we believe if we do move across that line that it would involve the advice and consent of the Senate. So I think we have to be very careful in that regard. But I am encouraged to hear your position on it.

What I am reading does not appear to me to be supportive of the position that you have taken, the way I read it, but that is an opinion.

Thank you, Mr. Chairman.

Senator EXON. Thank you, Senator Smith.

Dr. Deutch, let me cover as many things as I can and then Senator Nunn and I will both have some additional questions for you. First, let me ask you this. The upcoming summit in the next week or 10 days, how do you feel that that summit is going to—what do you think that summit might address with regard to the NPR that was announced yesterday, according to the Washington Post, by the Secretary and then this closed briefing today?

Is anything going to come up in the upcoming summit between the leaders of Russia and the United States with regard to any particular issue in this review that we have been promised and we are receiving for the first time this morning, and I must say that I congratulate you for what you have done. I have lots of questions, but I think you have done a pretty thorough job, and I want to study it further.

Do you see any significant thing that might happen, be enhanced or not enhanced, by the upcoming summit as regards the NPR?

Dr. DEUTCH. Senator, I do not believe that a decision has been made by the President about what particular aspects of our nuclear posture will be discussed with President Yeltsin at the summit.

I do believe that Bill Perry—this I can speak to—wants to share with Grachev, the Defense Minister, and possibly with Yeltsin, where we are going so to speak, just so that our potential adversaries remain aware of the path we are taking, because regarding a lot of the steps we have outlined here today, we would encourage them to take similar steps to improve the safety the security, the command and control of their system.

So I believe there will at least be some discussion of the results of the NPR at the summit. I do not know and I cannot speak definitively because no decision has been made whether there would be any specific initiatives.

Senator EXON. Do you think the matter of testing will come up at the summit?

Dr. DEUTCH. No, not in any detail.

Senator EXON. You do not think it will?

Dr. DEUTCH. No, sir. It is not a question of this NPR either, sir.

Senator EXON. Do you think that the matter of the concern on our part about the surveillance mechanisms and lack thereof with regard to the Russian stockpile is likely to come up at the summit?

Dr. DEUTCH. I think it is likely to come up. That is likely to come up at the summit.

Senator EXON. I visited about this with Dr. Mikhailov a couple of weeks ago. He seemed to share some of the concerns that all of us have on this matter, and did not seem as touchy as I have seen him previously on the insistence of the United States of America for more transparency on their part on this particular subject.

Let me ask you this question. Do you believe that the efforts that have been advanced, I believe primarily by the Vice President, in this whole area of more transparency on the Soviets' part on what we are going to do jointly, the joint responsibility that the two superpowers have on preventing the proliferation of nuclear devices?

Dr. Mikhailov told me when I was with him 2 weeks ago that he was en route to Argentina and Brazil, and he told me that he thought he had made significant strides with those two countries to bring them into the Nonproliferation Treaty.

What do you know about that, and do you think that is a significant step in the right direction, that the Russians are working with some of our South American friends in this regard?

Dr. DEUTCH. Well, we are continuing, as a matter of highest priority, to encourage adherence to the Nonproliferation Treaty by everybody. We are certainly working with the Russians on all aspects of material accountability and control. Clearly that is of very great importance not only with Russia but with other states of the former Soviet Union.

[Deleted.]

Senator EXON. Specifically, I believe your charts indicated this morning you were going to make a reduction down to 14 Trident submarines; is that correct?

Dr. DEUTCH. Yes, sir.

Senator EXON. I do not believe you spelled out—are you in a position to spell out this morning what the nuclear warhead loading would be on those 14?

Dr. DEUTCH. We would, of course, as we said, eventually get to an all D-5 force. There is an important period of transition, and I believe the loading would be 5 warheads per Trident missile.

Senator EXON. And what role would the additional four Trident submarines that we will have by that time play?

Dr. DEUTCH. Those four Trident submarines will be decommissioned in a—

Senator EXON. You would decommission four?

Dr. DEUTCH. That is correct, sir.

Senator EXON. To talk a little bit more about the bomber situation that we have raised some questions about, you indicated 20 B-2 bombers. I assumed that you were talking about those 20 B-2 bombers would be sufficient for the needs for bombers to deliver nuclear devices. Is that correct?

Dr. DEUTCH. The B-2s would be dual-capable, and the combination of those and the B-52s would be sufficient for the nuclear role, yes, sir.

Senator EXON. With some B-52s?

Dr. DEUTCH. Correct—66.

Senator EXON. Would have a role in that also; is that right?

Dr. DEUTCH. Yes, sir.

Senator EXON. Have you made any firm determination in the Department as this time about the leeway that the Department was granted, like it or not, by the House and the Senate in the recent defense authorization bill?

What about the future base of the B-2s? Have you made a final determination on that? Are you inclined at this time to indicate to us one way or the other whether or not the leeway that we gave you in the defense authorization bill will be exercised or ignored by your Department?

Dr. DEUTCH. I am sorry, sir, I do not understand the question. Senator EXON. You do not understand the question?

Dr. DEUTCH. The leeway. I am sorry. I just do not know what leeway you are referring to—the basing of the B-2s?

Senator EXON. You are aware, are you not, Mr. Secretary, of the leeway that was worked out in the defense authorization bill between the House and the Senate with regard to saying to you as the Department of Defense, if you feel it is necessary to proceed with any possibility of any future additional B-2s beyond the 20—

Dr. DEUTCH. I see.

Senator EXON. That you have the leeway to do so the way that bill finally was passed.

My question is, have you made any determination to date whether or not you wish to consider the leeway of maintaining any of the industrial base for the B-2, or are you and the Department sticking with what your position has been in the past?

Dr. DEUTCH. Our position is we cannot afford more than 20 B-2s, as you know, but I am not in a position here today to speak to, if it is the \$150 million for the industrial base, if I have that right, I am not in a position to speak definitively to that today.

Senator EXON. Thank you. My time is up.

Chairman NUNN. Thank you, Senator Exon. I appreciate you filling in while I have been in and out this morning. It is a very important hearing, and I want to make sure that we get as much information as we can from this hearing.

Dr. Deutch, at present the START I Treaty has been ratified, but has not yet entered into force. START II has not been ratified, and will not be prior to entry into force of START I. Yet START II has tight timelines for force reductions.

At what point does the delay in entry into force of these treaties jeopardize the ability of either the United States or Russia to physically comply with the dismantlement provisions?

Dr. DEUTCH. We have organized ourselves, as I tried to indicate before, with flexibility to keep these timelines. The Russians, as you know, are reducing at a lower rate, and they may have some difficulty meeting the timelines. But we have the flexibility, we believe, to make the reductions.

Chairman NUNN. On the Trident question, as I understand our position now, it is 18 Tridents, 24 tubes, 4 warheads, and we are going to 14 Tridents, times 24 times 5; is that right?

Dr. DEUTCH. Yes, sir.

Chairman NUNN. Now, someone will rapidly ask the question on the floor of the Senate, if not here: "If we can go to 14 Tridents, 24 and 5, why not go to 12 and 6 or 7, or why not go to 8?"

What is the philosophy behind the selection of 14 boats that provides the concept that 14 boats is the right number, rather than 12?

Dr. DEUTCH. Excellent question, sir. I think what I would like to do is ask my friend Bill Owens to address that point, if it is all right with you, sir.

Chairman NUNN. The bottom line is, how are we going to avoid a slippery slope on this one?

Dr. DEUTCH. Yes, sir.

Admiral OWENS. Senator Nunn, we feel that 14 is the right number. It allows several considerations. One, two-ocean operations can be done effectively, and for the long term and for the targeting that is necessary we think that two-ocean operations are very important.

It is also an element of the percentage of the total force that is survivable, and we think the survivability of the force, as a percentage of the total number of warheads, 3,500 or whatever the number turns out to be, is going to be enormously important.

So that percentage is represented by the 14 D-5 submarines and also the upload hedge. The ability to upload those submarines is important to allow the upload hedge in the event that the situation in Russia changes and we need to institute that hedge. If you had fewer, obviously, you would not have the same degree of upload hedge available to you.

So when you see all of these elements in context, it appeared to us that the prudent number was 14. It fits all of the descriptions I have just provided, and we think that we can protect and defend that number from further erosion.

Chairman NUNN. Okay, but let us assume that we are on the floor of the Senate next year. There is an amendment that says let's go to 12 boats. We can save X dollars and it will make no difference in our security—12 times 24 times 6. You will get more warheads from that combination than you will under the proposed NPR scheme.

You have got about 2 minutes, Admiral, to convince people who are in committee meetings and coming to the Senate floor from every direction, without studying this question. What do you say to persuade them in 2 minutes?

Admiral OWENS. You do not have a sufficient upload hedge. You do not have the number of submarines at sea, survivable on a day-to-day basis to provide a prudent deterrence for our country.

Chairman NUNN. So you are saying that 12 boats does not give us the ability to build up if we need more warheads at sea?

Admiral OWENS. Yes, sir, that is right. And also this element of all the eggs in a basket kind of thing starts to become much more of a factor as you get below that number of 14.

It starts very much to look like if at one time, for example, you had a couple of those submarines in overhaul, in a long-term overhaul, and therefore not available, you had some of them in a port where they are refitting, for example, that the number of submarines you have actually at sea in a survivable condition is so low that it risks the survivability element of the equation.

So the upload part and the survivability become real elements, we think, when you go below 14.

Chairman NUNN. What are your plans in terms of allocating between Pacific basing and Atlantic basing?

Admiral OWENS. In our posture review, there was no consideration for it. I think it will depend to some degree on how the targeting is required in the future. We have considered the possibility of seven and seven inside the Navy, as an efficiency element, and also from STRATCOM's perspective seven and seven looks like it's a nice fit.

But it could be modified in the future in the event of a PRC challenge.

Chairman NUNN. So it is likely to be split down the middle, then, is what you are saying? Likely to be 50/50 right now?

Admiral OWENS. That would be my guess. That is integrating all the information we have. My guess is we are going to wind up with 50/50. But it is very important, of course, to have the two-ocean capability, the flexibility of being in two ocean areas. It dramatically enhances the survivability.

Chairman NUNN. You have 18 boats now. What are you going to do with those other four boats? Are you going to keep them in a position to bring them back? Or are they going to be chopped up and of no use? What is going to happen to them?

Admiral OWENS. Well, I think the specific decisions here, sir, will be dealt with inside the programming process inside the Pentagon, and of course you would be apprised of that year by year as those decisions are made.

When you get to the year 2003, it would be necessary to have the missile compartments cut out of them to meet the requirements of the START II provisions under this construct, and so we will have to have that in mind as we proceed down this path.

Chairman NUNN. When do you get to 14 boats under your current plans?

Dr. DEUTCH. That is exactly why we have a hedged program. The timing of that reduction depends upon events, and so we do not come forward to you with an explicit timing, which is ironclad. And even if we do, when we do we will have an ability to come back from that during this period of time.

As Admiral Owens points out, by 2003 we have to get rid of some of these submarines anyway, but in the intervening period of time we have a lot of flexibility. Moreover, the costs of decommissioning these boats also argues for pacing it. So we will maintain flexibility over the next several years.

Chairman NUNN. I think my time has expired. Thank you. Senator EXON. Thank you, Senator Nunn. Senator Smith.

Senator SMITH. Thank you, Mr. Chairman. I just want to follow up on this THAAD. Admiral, either you or the Secretary can answer.

If you could—I am not trying to pin you, but if you can give me a yes or no answer, is the THAAD program right now on hold, the testing program on hold?

Dr. DEUTCH. No.

Senator SMITH. Pending the conclusion of the ABM Treaty negotiations?

Dr. DEUTCH. No.

Senator SMITH. Okay. Would your proposal that you have outlined here include any constraints on THAAD?

Dr. DEUTCH. No.

Senator SMITH. Would you agree, Admiral, that—is it fair to say that the theater missiles that threaten us today or could threaten us today are more capable than some of the strategic missiles that threatened us in, say, 1972 when the treaty was signed?

Admiral OWENS. Well, I really think, sir, both are, of course, very threatening. The theater ballistic missile concern in the region is as great. We must respond with an effective theater ballistic missile defense capability, and it is a very great concern to our commanders in chief that we do so in a resolute and effective way.

So it is a very great concern. I would not characterize it as being more important than our strategic nuclear posture, but it is a very great concern to us and all of us in the leadership in the military think that we must proceed to do something effectively to address it.

Senator SMITH. I do not think I said in the question "more important," but what I was getting at is the theater missile threat that is emerging today from China and some of the other countries who are aggressive in this area, I think it is fair to say most people would conclude, I think, that that has at least the capability, the capacity, if it is not already there, to be more sophisticated than the initial threats that we dealt with when the treaty was ratified, the ABM Treaty.

Is that a fair statement?

Admiral OWENS. Well, there certainly is the potential, sir, that we could foresee in the future significant improvements in those theater ballistic missiles. Early release of submunitions are possible, for example, and also the kinds of warheads that they might carry in terms of BW or CW could be different kinds of threats for us.

So it is certainly true that in that regard they are different from but very threatening weapons to us. But I would also comment that we are genuinely concerned—Dr. Deutch's counterproliferation report brings attention to the threat of cruise missiles, and we are equally worried about cruise missiles and the availability of cruise missile technology.

So we must get on with programs that address the cruise missile threat. And all the four-star military with whom we have recently visited in their theaters are concerned about that cruise missile

threat, and the administration has some programs in place that would help us to address that.

So I would just say that there are several of these kinds of issues that are critical for us, TBMD and cruise missile defense being two of them.

Senator SMITH. Do you concur with the statement just made by the Secretary that we are not constraining our theater defense systems?

Admiral OWENS. We are comfortable with that, sir. We think that we have the ability remaining to do the required testing on the range of technologies that is available to us, and, should those technologies prove to be satisfactory, to make deployment decisions in that 5 to 10-year period.

Senator SMITH. Do you agree that we are not doing anything to hurt our capability to provide a follow-on to that system?

Admiral OWENS. With the range of technologies of which I am presently aware, I think that the position that has been taken, which has been blessed by General Shalikashvili, is satisfactory to allow us to do the testing of the theater ballistic missile defense systems that are available to us and can be used now.

Senator SMITH. Well, but the demarcation, doesn't that preclude effective follow-on technology that we need?

Admiral OWENS. May I ask Dr. Deutch to join in answering this? Dr. DEUTCH. The current proposal being considered has a different view with respect to land, sea, and air based demarcation. So the question you first asked—is there any constraint on THAAD deployment—the answer is no.

[Deleted.]

I want to come back to another point, but finally, with respect to the boost-phase interceptor, [deleted]. That is the current state of affairs. Each category is different, [deleted].

So we do not believe that we have put ourselves at risk with respect to what is on the table now at all from the technical point of view, Senator.

Senator SMITH. [Deleted.]

Dr. DEUTCH. [Deleted.]

Senator SMITH. [Deleted.]

Dr. DEUTCH. [Deleted.]

Senator SMITH. [Deleted.]

Dr. DEUTCH. [Deleted.]

Senator SMITH. [Deleted.]

Dr. DEUTCH. [Deleted.]

Senator SMITH. [Deleted.]

Dr. DEUTCH. [Deleted.]

Senator SMITH. All right. I am just surprised at the aggressiveness with which you say that there are no constraints. I am glad you are saying it, but I do not think that some of the decisions and some of the actions that have been taken within the administration support that conclusion.

I am glad you are saying it.

Dr. DEUTCH. I apologize. I do not mean to be aggressive about it. It is just that I share so much the concern that we not have our technology constrained by the ABM Treaty being applied in an area for which it was never intended.

Senator SMITH. I am encouraged by your aggressiveness and I welcome it, but I just am concerned that some of the information that I am getting is not backing up what you are saying. But I hope I am wrong.

Dr. DEUTCH. We are back to the Washington Post again.

Senator SMITH. No, I do not get all my information from the Washington Post. Thank you, Mr. Chairman.

Senator EXON. Senator Smith, thank you very much. I am going to recognize Senator Levin next for his second round.

Before we go any further, though, let me say that there are going to be, obviously, gentlemen, additional questions for the record that we would ask that you respond to as quickly as possible.

Dr. Deutch, please, at this time, while as many of us are here, tell us what you believe we can or should say to the media and the public. It has been well publicized that this hearing is being held. What do you want us to tell the public about this closed session on this very important matter? We are undoubtedly going to be asked individually about it.

Dr. DEUTCH. Well, I am speechless by that suggestion, sir. My own view is that we would—Bill Perry and I are planning to make a presentation to the press this afternoon at, I think, 3:30.

Senator EXON. Would you straighten us out on that? What is this now?

Dr. DEUTCH. Bill Perry and I are planning to make a presentation to the press. I believe at 3:30, along with Admiral Owens.

Senator EXON. 3:30?

Dr. DEUTCH. 4 o'clock or 3:30. So we would prefer to have an opportunity to make our unclassified presentation to the press, and then after that, whatever your judgment calls for would be our recommendation, sir.

Senator EXON. Do you have any recommendation on that, Mr. Chairman? I have inquired of Secretary Deutch as to what we should tell the press. They are out there. They know we are having this meeting. He came back with the answer that he hoped we would not say too much until after 4 o'clock this afternoon, as I understand it, when Secretary Deutch and Secretary Perry are going to brief the press on the NPR.

Is that correct?

Dr. DEUTCH. That would be my request, sir.

Chairman NUNN. I think the best advice for us—Senator Smith, let me see if you agree before you leave—is to talk in general terms and not in any detail and let the detail—because it is hard to judge what is classified and what is not—come from them.

Senator EXON. I agree. I guess that is about as far as we can go. Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

I want to just summarize a point, because I want to make sure I get the full flavor of what you have said about further reductions. Given the thrust of this article this morning, I think it creates a very damaging impression that we are unwilling to consider negotiating further reductions with the Russians.

Now those reductions could be conditioned on a certain pace in achieving the reductions already negotiated. You can put any conditions you want in those discussions. But the writers of this article

put their finger on something and then emphasized it and headlined it in a way which can be very damaging, I believe, to where we ought to be going in nonproliferation.

Frankly, I am worried about nonproliferation much more than whether we have got 3,000 or 3,200 nuclear weapons in our inventory. It is a much greater threat.

Dr. DEUTCH. So am I, incidentally, Senator. So am I. The only place you and I differ is the connection between those two.

Senator LEVIN. Oh, there is a connection. When Ukraine says "you guys are not negotiating further reductions, you are using nuclear weapons, despite General Horner's statement we ought to negotiate down to zero. General Horner made a statement we ought to negotiate down to zero, but you have decided to stop reducing." That is what they are going to read in the Post.

"And you want us to get rid of the few we've got?" Now I am just telling you there is a connection. I have been to an NPT conference. Have you ever been to one, by the way? Have you ever been to one of those renegotiating 5-year sessions? I have been to one. I know what the Third World countries throw at us. So there is a connection. I am just giving you my statement and you can disagree with it or not.

There is a connection between our nuclear policy and other countries' determination to either hang on to or obtain nuclear weapons. I will tell you that from firsthand information. I was in China, in India, in Pakistan, and Israel and other countries in the Middle East just a year ago, and they all say the same thing. You guys got them, and if we stop the path toward further and further reductions, if that is our position, if we decide that and that is what they read, that is going to chill our efforts to persuade others to either join NPT or to carry out NPT agreements.

That is my own conclusion, and you do not need to agree with it.

Dr. DEUTCH. May I say something about it?

Senator LEVIN. Sure.

Dr. DEUTCH. I believe that the number of nuclear weapons that Pakistan or India has has no connection, zero, zero connection to the number of nuclear weapons we have.

Senator LEVIN. I did not say there was a connection between numbers and numbers. I said their determination to either achieve them or hang on to what they have is affected by our nuclear weapons policy. That is all I said.

Dr. DEUTCH. Okay. Do you want me to say what I think?

Senator LEVIN. Yes.

Dr. DEUTCH. I think that there is no connection between our nuclear posture and what India and Pakistan do or what Israel does. I see a big connection, a big connection, between what we do and what Russia does. There is a very big difference to me.

The motives which drive some of these countries to nuclear weapons are not dependent upon the United States or upon Russia. They are dependent upon their own particular very serious security concerns.

Senator LEVIN. Would you agree that they use our policy in order to justify their own?

Dr. DEUTCH. Absolutely. You go to an NPT conference or an IAEA conference, they will tell you this from the beginning of the day to the end of the night. It does not make it so.

Senator LEVIN. No. You are just saying you do not believe what they are telling you in this regard, that they have other reasons for wanting nuclear weapons?

Dr. DEUTCH. That is correct.

Senator LEVIN. That is fair enough.

Dr. DEUTCH. But in the case of the Russians the connection is profound and very important, and I would say with the other states of the former Soviet Union, like Ukraine, it is too.

Senator LEVIN. All right. Let me get to my questions. I want to make clear by you this afternoon: that whether we negotiate further reductions and, if we decide to do so, when we negotiate further reductions has not been decided by this document?

Dr. DEUTCH. Exactly.

Senator LEVIN. I think it would be useful if you would make that very clear this afternoon, given what the press has obviously focused on.

Dr. DEUTCH. I will certainly—I promise you that I will make it clear, and I will promise you that Secretary Perry and I made it extremely clear on this point when we briefed the President on this last week. So there is no question about the fact that there is nothing in this document that precludes the possibility of further reductions under circumstances to be decided at a future time.

Senator LEVIN. Well, or when to do it.

Dr. DEUTCH. When, or under what time, place, or circumstance. I made it clear, I want to say it again, we have built this program under the assumption of START II implementation. We have built it under that and we are able to hedge upward or downward.

Senator LEVIN. Thank you.

Admiral Owens, there is going to be a summit next week where there are presumably going to be some discussions about the areas that you covered here today and in your review. I am going to read you just a couple of possibilities for some steps that could be taken and ask you whether you, from a military perspective, would recommend these steps.

One, a comprehensive exchange of information on the size and location of all U.S. and Russian warheads and fissile material stocks by the end of 1994 in order to support a comprehensive system of accounting and controls.

Admiral OWENS. We would agree with that, Senator. We think that the exchange of data is enormously important and we should get on with it.

Senator LEVIN. Okay. Would you support establishing a bilateral system within a couple years to monitor each other's nuclear weapons and fissile material storage sites in order to assure that warheads and weapon-usable materials are not removed from storage without authorization?

Admiral OWENS. I would support that. That is a personal position, Senator Levin. I think anything we can do to be open and to exchange those kinds of inspections are stabilizing.

Senator LEVIN. Let me ask Secretary Deutch. I would like your comment if you have a different perspective.

Dr. DEUTCH. I am sorry, sir, I did not hear the question. I apologize. Could you read it again?

Senator LEVIN. Let me read the next two, and if you have a difference on the next two if you could perhaps just chime in.

Admiral, would you support concluding an agreement to end the production of fissile materials for weapons, therefore capping the size of the U.S. and Russian nuclear arsenals?

Admiral OWENS. I am hesitant to comment on that, Senator Levin. We have not considered it in the NPR, and I would have nothing to add that would be constructive.

Senator LEVIN. Mr. Secretary, do you have a comment on that?

Dr. DEUTCH. Fissile material?

Senator LEVIN. Yes. Would you support concluding an agreement to end the production of fissile materials for weapons so as to cap the size of the U.S. and Russian nuclear arsenals?

Dr. DEUTCH. Yes.

Senator LEVIN. Finally, do you support an agreement to dismantle all warheads that are scheduled to be withdrawn from service under the START I and START II Treaties and subsequent agreements and to place the fissile materials from these warheads in storage under international monitoring? Either or both.

Dr. DEUTCH. No.

Senator LEVIN. You do not? Admiral.

Admiral OWENS. I agree with Dr. Deutch, sir.

Senator LEVIN. Okay. I am out of time. If you could tell us for the record why you do not support that, that would be useful.

Senator EXON. Well, go ahead and tell us why.

Senator LEVIN. I am already over, but I would be happy to get the answer.

Dr. DEUTCH. I will be happy to tell you. On this particular point, I am not sure there is an administration position, but I will tell you what my reasoning is.

My reasoning is that there are two kinds of nuclear materials that we have in this country. One is civilian nuclear material, materials which come from civilian nuclear operations, reactors. We do not currently have those under international safeguards. I could see a reason for putting those under safeguard.

But with respect to the materials which come from our atomic defense activities, as a nuclear weapons state we are not obligated to do that under the Nonproliferation Treaty or under any other treaty that I know about, and I would hesitate to do it because there might be a reason in the future when we would need those materials.

While we do not think we need to expand that inventory, we might need to have access to some of that inventory, and I would not want to have us bound by international inspection regimes on the rules for its withdrawal. So it is a national security reason that leads me to say you do not have to have more fissile material, but we have a standby inventory and I think our military should have access to it should they need it in the future.

Senator LEVIN. That gives up the right for us to insist that the Russians do the same thing.

Dr. DEUTCH. For other nuclear weapons states under international—

Senator LEVIN. You would give that up in order to keep our own access?

Dr. DEUTCH. On the other hand, I do think there are material accountability agreements we would have with the Russians on this subject.

Senator LEVIN. Thank you.

Senator EXON. Gentlemen, let me go into several things that I have on my mind here. First let me say that earlier in your presentation you indicated that because of the rather slow movement in Russia to dismantle their nuclear warheads we have some legitimate concerns about that. I took it that that was an important part of your posture review, which I compliment you for, Mr. Secretary. I think that is a step in the right direction.

We are in somewhat of a catch-22 here, though, I think, and that is that while the Russians obviously have been slower than we would like to have them be in dismantling, we also have important people in the Duma, including Dr. Piskunov, who wants to move even faster than START II, because he said we do not have the money to maintain the safety of these warheads and he wants to go even faster.

I do not know the answer to all of this, and I suspect that there are many heads to that monster as to why the Russians have not been moving faster than they have. It has been too slow, as far as I am concerned, too slow, I think, to show their good intent.

But, for whatever the reason, what steps do you think we should take, possibly further use of Nunn-Lugar monies, to see if we cannot in some way encourage the takedown of the nuclear weapons at least with regard to START I?

Dr. DEUTCH. Well, Senator, I appreciate your raising that point. As you know, Bill Perry is personally committed to the aggressive implementation of Nunn-Lugar not only for the strategic forces but also for the non-strategic nuclear forces.

We are concerned, as the Chairman knows, sir, that we may have constraints put on us in the appropriations bill on how this money can be used for the destruction of nuclear weapons and other weapons of mass destruction. But it is an important element of encouraging the Russians to move to dismantlement, the Nunn-Lugar program. We consider it a vital part of our defense by other means, if you like, and need help on this subject.

Senator EXON. I get the impression from some of the Russian leadership that I have talked with in this area that they seem to be off the kick that we were all on at one time of everybody looking at everybody else's pits to see how we dismantle them and what we do with it.

I hope that is not part and parcel of what I am always fearful of, the retention back to something once again that we do not see very clearly now, and that is a resurgence of some talk of nationalism and maybe imperialism. So I think we need to be ever aware of that.

Let me shift, if I can, to the matter of THAAD for a brief answer. Dr. Deutch, the program manager for THAAD has requested, as I

understand it, a \$2 billion increase for the missile defense program, and that will make its overall projected cost about \$8.5 billion.

What can you tell us about the reasons for this sizable cost increase, if you know, and what findings if any were made in the NPR about the needed scope of the missile defense, both conventional and theater and their associated costs?

Dr. DEUTCH. First, Senator, I am not familiar with the program cost changes in THAAD, and I will inform myself and provide you, if it is satisfactory, an answer for the record.

[The information follows:]

Reasons for the projected cost growth include government directed additions to increase the program scope, such as: inflight nuclear hardening, restructuring of the TMD-GBR program based on the results of DOD's Bottom-Up Review; changes in business operations to comply with congressional intent to capture total weapon system cost; projected growth due to missile design maturity, BM/C's I evolution, and launcher design maturity; and revised risk estimates.

The Strategic Systems Committee (SSC) in OSD was tasked to review the causes of the breach. The joint OSD Cost Analysis Improvement Group (CATG)/Army Cost and Economic Analysis Center (CRAC) team reviewed the total program cost estimates and found they were adequate.

Dr. DEUTCH. In fact, the NPR did not look at the ballistic missile defense program, because that was an area that was carefully and extensively studied in the Bottom-Up Review. So the NPR did not encompass ballistic missile defense.

Senator EXON. Dr. Deutch, the committee, as you know, has been concerned for a long time about the storage and the ultimately disposition of excess weapons grade plutonium. There has been no formal determination, if I understand it correctly, as to what is actually surplus, however.

Will a process for identifying surplus material be included in the NPR? What impact will the NPR have on the amount of material that is to be surprised?

Dr. DEUTCH. Well, the process for dealing with the materials inventory after weapons have been dismantled really lies with the Department of Energy. And they have a system for both taking care of that dismantled material and also for different categories of how it is held—whether it is held in a military inventory, whether it is held in a whole series of different categories.

I would have to either recall from my DOE days or, better yet, consult with them before I could give you an accurate answer to that, sir.

Senator EXON. I appreciate your getting us the answer to that. [The information follows:]

The NPR did not define a process for determining excess material. The President has tasked the Nuclear Weapons Council to define such a process, and its work currently is in progress. Further, the NPR results do not directly impact the amount of surplus material. Stockpile size, driven by START II compliance, may reduce material requirements and increase excess material, but further study would be needed to draw any such conclusions.

Senator EXON. Thank you both for being here. My time is up. Senator Nunn.

Chairman NUNN. Just one final question, and we will probably have some for the record.

The Navy has on several occasions given the committee cost estimates both for backfitting D-5 missiles in west coast subs and for

refurbishing the C-4 missiles to last for the expected lifetime of those Trident subs.

The refurbishment option has always been much less expensive than backfitting in the Navy presentations. But the Navy and the NPR seem to be heading toward the backfitting option. What is the reason for that?

Dr. DEUTCH. I do not think we agree with that. I think the Navy's presentations to us show that within the FYDP, within the 5-year defense plan, the backfitting is more expensive than the C-4 refurbishment. But over the life cycle of these missiles indeed it goes the other way. There is, as I recall, an approximately \$2 billion preference for the lower cost option, for the D-5 retrofit.

So I think we are here using very much the Navy's arguments. Chairman NUNN. Where do you save that money over the longer term? What are the factors that give you the savings as opposed to the initial 5-year cost?

Dr. DEUTCH. I think it is fundamentally the lifetime of the system or the lifetime of the motors.

Chairman NUNN. You mean they are going to last a lot longer? Dr. DEUTCH. Yes, sir.

I also want to make a remark that there is another important point, and that is by taking this road you maintain an industrial base for strategic missiles in this country. If you go to a C-4 refurbishment then after 1997 for the United States and after the UK buy of Tridents from the line, that is the end of this country's ability to produce strategic missiles.

So there is also, I think, an industrial base reason for choosing this as well. So it all matters—performance of the missile, its range, the cost, life cycle cost, if not FYDP cost, and in terms of industrial base—we think it points to the D-5, sir.

Chairman NUNN. Before we break up, on another question, Mr. Secretary, have you had a chance to talk to the appropriators about the FFRDC issue?

Dr. DEUTCH. Yes.

Chairman NUNN. Okay. I just wanted to make sure you did. We had a meeting yesterday afternoon.

Dr. DEUTCH. Was it like my meeting with them, Senator?

Chairman NUNN. I had to leave. Let us say I had to leave before a solution was achieved.

Dr. DEUTCH. I left before a solution was achieved, too, sir.

Chairman NUNN. The other question is, you have talked to them, I know, about the Nunn-Lugar funding and the effort on the House side to send a portion of that over to the State Department.

Dr. DEUTCH. Yes.

Chairman NUNN. Have you gotten State to come up on the net with Congressman Obey on that?

Dr. DEUTCH. Yes. My colleague, Deputy Secretary Talbot, and I visited for a long time with Chairman Obey, sir.

Chairman NUNN. Did you leave there with any meeting of the minds?

Dr. DEUTCH. I do not know, sir.

Chairman NUNN. Okay.

Dr. DEUTCH. This is a big deal.

Chairman NUNN. We have talked to Senators Stevens and Inouye about that also. I have.

Dr. DEUTCH. Could we schmooze a minute here after the end of this hearing, sir?

Chairman NUNN. Yes.

Admiral Owens, thank you, and Secretary Deutch, thank you, and Jim, thank you very much.

Senator EXON. Gentlemen, thank you very much. We appreciate your good 2 hours of testimony this morning. Please respond as quickly as you can to the questions we will have.

With that, we are adjourned.

[Questions for the record with answers supplied follow.]

QUESTIONS SUBMITTED BY SENATOR SAM NUNN

TANKER REQUIREMENTS FOR 66 NUCLEAR B-52s

Senator NUNN. What tanker requirements are associated with the 66 B-52s to be retained for nuclear missions? What effect would a nuclear alert for bombers have on our tanker force? How would reserving tankers for nuclear alert affect our ability to deploy to, and/or sustain operations during an MRC contingency?

Dr. DEUTCH. Approximately [deleted] tankers would be required to support alert requirements for the Single Integrated Operational Plan (SIOP). This includes tankers required to support 66 B-52Hs, 24 B-1Bs (or alternatively 20 B-2s), strategic reconnaissance aircraft, and airborne command and control assets.

The effect on the tanker force of a nuclear alert for bombers depends upon the number of bombers placed on alert. Tankers available for day-to-day training and operational missions could decrease as much as [deleted], decreasing Air Mobility Command's ability to support Major Regional Conflict (MRC) tasking.

With SIOP-tasked tankers on alert, there would be reduced capability to support deployment and sustainment of forces during a Major Regional Conflict (MRC). In order to provide adequate tanker support for an MRC, SIOP sorties may have to be degraded. The impact of any SIOP degrade would have to be weighed against the need for tanker and/or bomber support of an MRC and would be mitigated somewhat by our alert land- and sea-based missile forces. Degraded SIOP sorties would be an issue for the National Command Authorities to resolve depending upon the scenario.

MAIN OPERATING BASE ALCM STORAGE

Senator NUNN. Dr. Deutch, I am informed that, with the recent consolidation of bomber bases, weapons storage capacity is now so limited that a large number of ALCM missiles are currently in storage at an Air Force depot, rather than available at bomber main operating bases. Is this correct? Does DOD have any plans to expand storage capacity to insure that nuclear alert could be promptly resumed, if necessary?

Dr. DEUTCH. The Air Force maintains a sufficient Air Launched Cruise Missile (ALCM) and Advanced Cruise Missile (ACM) inventory at each nuclear tasked B-52H base to fully generate our nuclear committed bomber force. ALCM inventory determined as excess to the operational inventory required to support the smaller bomber force are maintained at Navajo Army Depot storage facility, near Flagstaff, AZ. This storage plan relieves operational units of the responsibility for potentially long-term inactive storage and releases existing storage to support operational commitments. These excess ALCMs are defueled and stored without the warhead. Storage in the configuration minimizes the readiness for return to the active inventory. Currently, the Air Combat Command plans to expand capacity to relieve interim compressed storage procedures at Barksdale AFB, LA. This cruise missile strategy fully supports our nuclear bomber force requirements while realizing savings in both the ALCM program and our finite weapons storage capacity.

MAXIMUM NUMERICAL UPLOAD "HEDGE"

Senator NUNN. Dr. Deutch, one of your charts provided a bar-chart analysis of our ability to "hedge" against a possible future need to increase nuclear forces. Please provide for the record the maximum numerical increases in weapons possible for each of the three nuclear force components from the level proposed under the NPR.

Dr. DEUTCH. The accountable weapon base for the START II-compliant NPR force is [deleted]. The envisioned loading of the three nuclear force components to achieve this base is as follows:

[Deleted.] Given this baseline loading, the maximum numerical increases in weapons possible for each of the three nuclear force components are as follows:

[Deleted.] This maximum loading would provide a total warhead upload hedge of [deleted] for a total warhead count of [deleted].

D-5 BACKFIT COSTS

Senator NUNN. You stated that the option to backfit four Trident submarines with D-5 missiles was less costly on a life-cycle basis than the option to refurbish enough C-4 missiles for those four Trident submarines. Please provide for the record a detailed cost comparison of the two options, both over the FYDP and over the projected system lifetime, in both constant 1995 and then-year dollars.

Dr. DEUTCH. Retention of both the C-4 and D-5 missile systems would be extremely costly due to the overhead associated with providing technical, operational, and logistic support for two separate submarine-launched ballistic missile systems. While the direct cost of refurbishing enough C-4 missiles for four Trident submarines would be less than the additional D-5 missile procurement needed to outfit those four submarines, the added ongoing support costs for the aging C-4 missile system over the remainder of the host SSBNs' lifetimes would more than offset this cost differential. A more detailed assessment of the cost and operational implications of backfitting the D-5 missile into four Trident SSBNs as opposed to retaining those SSBNs as C-4 carriers will be provided in the Cost and Operational Effectiveness Analysis (COEA) on the D-5 backfit program, to be submitted to the congressional defense committees next summer.

INDUSTRIAL BASE

Senator NUNN. One of the arguments you offered to rebut both the C-4 refurbishment option and further Trident submarine reductions was the need to preserve an SLBM production base. You argued that either the refurbishment option or a further curtailment of Trident subs would mean the shut-down of the last U.S. SLBM line. While this is true, the "industrial base" argument appears to overlook substantial missile technology and production capabilities extant in everything from BMDO programs to space boosters, all of which seem arguably more directly relevant to a future SLBM program than the commercial aircraft business is to a future stealth bomber program. Given this, please explain why preserving a specific SLBM industrial base is more important than preserving a capability for advanced technology bombers.

Dr. DEUTCH. Our evaluation of the SLBM options led us to conclude that either C-4 refurbishment or D-5 backfit would be required to keep the eight SSBN Pacific fleet viable beyond 2002. This would require that an industrial production capability be in place when the program is needed. We looked at other "related" capabilities, such as BMDO and commercial space boosters. The unique aspects of the technologies required by ballistic missiles do not permit us to rely on generic production capabilities. When we evaluated the stealth bomber industrial base question, we examined two specific areas. The first was the capability to produce bombers, and that is more than adequately covered by our commercial aircraft industry. The second area was stealth technology, and we found that the stealth work being done in other programs, like the F-22, is adequate to preserve the technology. We also found that we had no need for more than 20 B-2 bombers, thus there was no need to enter a costly industrial base sustainment program for stealth bombers. These conclusions will be examined again, however, by both the Commission on Roles and Missions and a Department of Defense bomber studies, required by the Fiscal Year 1995 Appropriations and Authorization Acts. We will report to you when the bomber study results are finalized.

The real issue is how we came to our conclusions to backfit the D-5. This decision was not made on the basis of industrial base considerations alone. Although industrial base considerations were examined, the conclusion was made on the basis of operational factors and overall cost effectiveness.

TRITIUM

Senator NUNN. Based on a stockpile assumption of 3,500 warheads, the Department of Energy has indicated that it needs to begin producing tritium by 2006. This production date anticipated a small drawdown of the tritium reserve.

a. What impact will the NPR have on tritium supply?

- b. When must new tritium production be on-line?
 - c. What is the planned annual production requirement?
 - d. What is the necessary size of the reserve?
 - e. When must DOE make technology and site selection decisions?
 - f. What are the DOE milestones to achieve production on a timely basis?
 - g. What is the estimate cost to complete fully construction of a tritium production facility?
 - h. What are the current plans to meet the tritium requirements?
- Dr. DEUTCH. a. Tritium requirements are not based on 3,500 warheads. In order to support 3,500 deployed strategic warheads under START II, additional warheads are required for logistical supply and a non-strategic weapons component of the stockpile. Therefore, tritium requirements are based on actual warheads required and not the deployed limits established by START II. Moving to START I and II strategic levels may reduce the required quantity of tritium needed for 2003 and beyond, but will not change the requirement for a new source. DOE is basing their plans on actual requirements.
- b. The new tritium production source must be on-line in [deleted] to minimize impacts on the reserve. The earlier the source is available and producing sufficient quantities of material, the less the impact on the reserve.
 - c. The planned annual production requirement depends on several factors: (1) the size of the stockpile, (2) the drawdown rate, (3) utilization of the reserve, (4) the type of weapons in the stockpile, and (5) any hedge requirement. The DOD and DOE are working together to determine the production requirement for a future tritium source. The present requirement is approximately [deleted] grams annually for the stockpile.
 - d. The reserve is defined as that quantity of tritium needed to maintain the stockpile for 5 years. This quantity includes enough tritium to compensate for losses due to the radioactive decay of tritium—50 percent of a given amount of tritium will decay away over a period of 12.5 years.
 - e. & f. The DOE has agreed to complete planning and technology selection for a new tritium source by March 1995 and to begin design, development, and site selection in fiscal year 1996. This schedule will bring a new source on line by [deleted] or earlier. This timetable meets DOE's projection of a 15-year development and construction schedule for a new facility which includes time for environmental and legislative approval.
 - g. The construction costs for a new tritium source vary with technology. For example, the construction cost of an accelerator to produce tritium is estimated to be approximately \$2 billion with full operation possibly by 2008. Reactor construction costs are estimated to be approximately \$4 billion with a tentative completion date of 2009.
 - h. DOE's current tritium source development plans include developing and recommending an approach by March 1995, and beginning implementation in fiscal year 1996 consistent with meeting tritium replenishment requirements.

EXCESS FISSILE MATERIAL

Senator NUNN. With a reduction in the number of weapons in the stockpile, the amount of excess weapons-grade fissile materials, particularly plutonium, will increase.

- a. Have DOD and DOE totally abandoned the idea of using a multi-purpose reactor to dispose of the plutonium and produce tritium and produce electric power?
- b. Has there been a cost and technical risk comparison done between a multi-purpose reactor and the other technologies considered for plutonium disposition and tritium production?

Dr. DEUTCH. a. & b. DOE is in the early stages of an on-going effort to study multi-purpose reactor technology to dispose of plutonium, produce tritium, and produce electric power. The DOE should be contacted for specifics for the evolving problems. On the other hand, the development of a plutonium burning reactor has negative implications for our non-proliferation policy goals, by encouraging other nations to seek it as a source for fuel and, at the same time, being a dangerous source of material for weapons.

NUCLEAR WEAPONS COMMITMENT

Senator NUNN. There is a tension maintaining an ability to ensure that weapons remaining in the U.S. stockpile remain safe and reliable and maintaining the ability to design a new nuclear weapon on the one hand and the desire to stop weapons development programs in non-weapon states. The argument can be made that it is discriminatory to prohibit development programs in non-weapon states

while weapons states retain the ability to continue to develop new weapons. Although there are no plans to build any new weapons, some would say that maintaining the ability to address problems and build new weapons is inappropriate. Does the NPR address this issue? Is there a commitment to maintain such a capability or is there a decision to allow the ability to atrophy over time?

Dr. DEUTCH. Let me assure you that if there is any question about our ability to maintain a safe and reliable nuclear weapons stockpile, I will immediately advise Secretary Perry and Secretary O'Leary of my concerns. I believe, however, that we can make the stewardship program work to maintain the stockpile and not allow atrophy to occur, and help the President's nonproliferation goals. With regard to the NPR, it reaffirms the requirement for DOE to maintain nuclear weapons capability necessary to find and solve stockpile problems. The DOD requirements to DOE are to develop a stockpile surveillance engineering base; to demonstrate capability to refurbish and certify weapon types in the enduring stockpile; to maintain capability to design, fabricate, and certify new warheads; and maintain the science and technology base. Additionally, the NPR states that no new-design nuclear warhead production will occur.

STOCKPILE STEWARDSHIP

Senator NUNN. Not only will there be smaller absolute numbers of weapons in the stockpile in the future, there will also be fewer types of warheads in the stockpile, thus a system problem could be very difficult to deal with.

- a. Does the NPR address and identify the mechanism necessary to deal with system failure?

b. If an older warhead should have to be remanufactured to replace one that is in the stockpile, are DOE and DOD confident in the outcome of a remanufactured weapon?

- c. How would a remanufactured weapon be certified and where would it be remanufactured?

Dr. DEUTCH. a. The NPR reaffirms the requirement for DOE to maintain nuclear weapon capability necessary to find and solve stockpile problems. The DOD requirements to DOE are to develop a stockpile surveillance engineering base; to demonstrate capability to refurbish and certify weapon types in enduring stockpile; to maintain capability to design, fabricate, and certify new replacement warheads; and maintain the science and technology base. Additionally, the NPR states that no new-design nuclear warhead production will occur.

b. DOD and DOE, through the stockpile stewardship program, are continuing to develop capabilities with new modern computer codes and enhanced above-ground experimental capabilities that provide better assessment capabilities for weapon's safety and reliability without nuclear testing. Our confidence level for remanufacturing an existing weapon will depend on the assessed problem, original warhead design, and quality and quantity of archived historical data to be used to develop and validate new analytical methods and procedures. New production techniques required by environment, health, and safety constraints may not allow identical replication of the warhead. As we deviate from the original production procedures, we will, initially, reduce the confidence in the replicated warhead. After experience is gained with the new production techniques, confidence may be restored. We are retaining and enhancing our ability to certify remanufactured units under a test moratorium.

c. The nuclear weapons program is working toward new, validated computer codes and above-ground experimental capabilities to certify remanufactured weapons. We do not have this capability yet, but we are moving toward this goal. The location for remanufacturing will depend on the weapon type and modifications required. Presently, not all weapons can be remanufactured. DOE is working toward a fabrication capability in a downsized complex, using the DOE National Laboratories to support remanufacturing and Pantex supporting the integration and assembly.

TRIDENT SUBMARINES OFF PATROL/DECOMMISSIONED

Senator NUNN. Dr. Deutch, If the NPR were implemented, on what date would each of the four "excess" Trident submarines be removed from regular patrols? Be decommissioned?

Dr. DEUTCH. Under the plan developed for the Nuclear Posture Review, the four non-backfit Trident submarines will be removed from regular patrols and support of the SIOP in a phased manner consistent with accountability rules for strategic platforms under the provisions of the START Treaties. Anticipating termination of C-4 operations, C-4 missile testing will be suspended at the [deleted]. Subsequent to the end of missile testing, C-4 operational support will be gradually reduced and

the C-4 weapon system will be removed from support of the SIOP at the [deleted]. This phased manner over several years allows the United States to retain a hedge to insure Russian compliance with START II.

The plan for disposition of these highly capable ships, after removal from strategic service, is still under consideration. Under plans the Navy has drafted, based on very tight fiscal requirements, if these ships are not used for non-strategic purposes, then inactivation of the four ships would occur with [deleted] and [deleted].

I want to emphasize that while the findings of the NPR have been announced, the Department is currently studying the precise manner by which the force structure will be implemented, as well as completing review of our fiscal year 1996 and FYDP budget prior to submission to you.

B-62s

Senator NUNN: Dr. Deutch, the NPR recommends that 66 B-52s be retained for nuclear deterrence.

— Are these *additive* to bomber requirements for conventional missions under the BUR? If not, does this presume that the United States is less likely to require a nuclear alert in the midst of an MRC action than during peacetime?

— What are the presumed weapon loadings for these 66 B-52s? How many Advanced Cruise Missiles (ACMs) and/or Air-Launched Cruise Missiles (ALCMs) would each B-52 carry? How many gravity weapons would each carry?

— If the Congress continues to convert nuclear-armed ALCMs to conventional weapons, will this action affect total bomber requirements for nuclear deterrence? [Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

START TREATIES

Senator NUNN: Dr. Deutch, at present, the START I Treaty has been ratified but has not yet entered into force. START II has not been ratified, and will not be prior to the entry into force of START I. Yet START II has tight timelines for force reductions. If Congress were to prohibit reductions substantially below the START I limits until START II is ratified, the time available between START II ratification and the 2003 deadline would be compressed. At what point between today and 2003 does the delay in entry into force of these treaties jeopardize the ability of either the United States or Russia to physically comply with the dismantlement provisions? At what point would complying with the dismantlement timetable begin to impose large additional costs on both DOD and DOE?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator NUNN: Dr. Deutch, please provide a table showing how the proposed NPR nuclear force structure would be assessed using both START I and START II counting rules. Will the proposed NPR nuclear force structure be closer to the START I and START II force limits than the nuclear posture proposed by the previous administration?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

QUESTIONS SUBMITTED BY SENATOR J. JAMES EXON

BOMBER TRAINING SORTIES

Senator EXON: All bombers, including those now to be designated for nuclear contingencies, are currently assigned to commands outside the Strategic Command. In the current fiscal year (1994), how many bomber training sorties simulating nuclear weapons delivery have these non-strategic commands conducted? How does that number compare to the number of nuclear training sorties conducted during fiscal years 1992 and 1993?

Admiral OWENS: The only command with bombers assigned is Air Combat Command (ACC). ACC does not track the number of nuclear versus conventional (non-nuclear) training sorties flown by its aircraft. Prior to fiscal year 1992 the B-1's mission was strictly nuclear, but over the past 2 years its role has changed to flying primarily a conventional mission. The B-52 has had a dual role for many years and the B-2 is not yet operational.

The level of automation in the B-1s and B-52s make the training very similar for either mission. The same crews fly the same aircraft, to the same training ranges, but use targets for nuclear or conventional depending upon the mission software loaded during preflight. The training emphasis is on the more difficult conven-

tional deliveries due to the requirement to attain more precise weapon release parameters.

For these reasons, ACC units do not see a need to track the different types of sorties. While procedures for nuclear and conventional missions are very similar, there is a requirement for radar navigators and navigators in the B-52 to complete a nuclear weapons release procedure for currency every 60 days. The B-1 crews have a requirement to complete two nuclear missions annually. In addition, crews practice nuclear procedures semi-annually in the Weapons System Trainer (WST). This is the minimum; the actual frequency of nuclear training may be higher, but again, the actual number of nuclear sorties performed is not tracked due to the many common aspects of nuclear and conventional weapons delivery training missions.

EXCESS FISSILE MATERIAL

Senator EXON: This committee has been concerned about the storage and ultimate disposition of excess weapons grade plutonium for some time. There has been no formal determination as to what is actually surplus plus however.

a. Will a process for identifying surplus material be included in the Nuclear Posture Review?

b. What impact will the NPR have on the amount of material that is to be surplus?

Dr. DEUTCH: a. The NPR does not define a process for determining excess material; however, the President has tasked the Nuclear Weapons Council to define it. This work is currently in progress.

b. The NPR results do not directly impact the amount of surplus material. Stockpile size, driven by START II compliance, may reduce material requirements and increase excess material but further study is needed to draw any such conclusions.

DISMANTLEMENT AND PANTEX

Senator EXON: What impact will the NPR have on the already tenuous relationship with the State of Texas with respect to increasing the number of pits stored at Pantex? What impact will the NPR have on the schedule and dismantlement work going on at Pantex?

Dr. DEUTCH: The Department of Energy has reached an agreement with the State of Texas on the storage limits for plutonium at Pantex. The NPR did not have any impact on the agreement or the dismantlement schedule at Pantex, which currently has a backlog of work. The NPR is a framework, not the detailed plan for the stockpile. The NPR provided guidance and direction for preparing future Nuclear Weapons plans (Nuclear Weapons Stockpile Memorandum, etc.) for the President.

PANTEX

Senator EXON: When the pits are removed from retired nuclear weapons they are now stored in drums at Pantex. The pits are intact and could be reused if necessary. Are there any plans to damage or otherwise modify the pits in any way to prevent them from being reused?

Dr. DEUTCH: There are no plans to modify or disable pits from dismantled weapons. Issues of safety and environmental hazards and risks would require detailed studies before any such proposed actions would ever be considered.

AGING OF STOCKPILE WEAPONS

Senator EXON: One of the concerns frequently raised about the remaining nuclear weapons stockpile is that it is aging. Does the NPR address what is necessary to ensure that the remaining, aging, stockpile is maintained in a safe and reliable condition?

Dr. DEUTCH: The infrastructure requirements in the NPR recommended that DOE maintain nuclear weapon capabilities without nuclear testing or fissile materials production. The NPR recommended that they develop a stockpile surveillance engineering base, demonstrate capabilities to refurbish and certify existing weapon types, maintain capability to design, fabricate, and certify new replacement warheads, and maintain a science and technology base. The NPR also states that no new design will be produced. These requirements will require DOE to establish the capabilities to ensure a safe and reliable stockpile under the conditions of extended life. DOE must incorporate in the stockpile stewardship program the ability to assess and repair aging systems.

MANUFACTURING CAPABILITY

Senator EXON. Does the NPR address what manufacturing capability the DOE must retain or recreate to meet all reasonably foreseeable circumstances? In your briefing, you indicate that DOE should retain the ability to "certify" a weapon under the NPR, how would this ability be maintained?

Dr. DEUTCH. The NPR recommends that DOE maintain critical nuclear weapon capabilities. DOE must demonstrate the ability to replicate existing weapon types and design new warheads. Under both scenarios, DOE must be able to certify these newly fabricated warheads. The certification process must be retained, and modified for the loss of nuclear testing, as part of the stockpile stewardship program. Modern computer codes, enhanced above-ground experimental capabilities, and an active data archiving program are the tools being enhanced and developed by the DOE to restore, in total, or in part the certification capability that existed prior to the test moratorium.

STOCKPILE STEWARDSHIP

Senator EXON. Key to maintaining both competent people and safe and reliable weapons is the use of simulators and other techniques in the absence of underground nuclear weapons testing. Many believe that assurances of this alternative capability is key to achieving a comprehensive test ban.

a. Some of the alternative techniques are themselves controversial, however. For instance does the NPR take a position on hydronuclear tests being permitted under a CTBT?

b. When will DOE make a decision on the National Ignition Facility?

c. Does DOD support the NIF?

d. Have the non-proliferation concerns that have been raised with respect to the NIF been addressed?

Dr. DEUTCH. a. The NPR does not directly address hydronuclear experiments, but instead supports a broad-based nuclear weapons competence, which could include hydronuclear experiments.

b. DOE announced their NIF Key Decision 1 (KDI) to proceed with the NIF design in September 1994.

c. The DOD supports capabilities and facilities needed to maintain a safe and reliable stockpile. The NIF is one of those facilities.

d. The DOE is continuing to address NIF related non-proliferation and arms control concerns.

SAFETY AND RELIABILITY

Senator EXON. What safety or reliability concerns cannot be addressed by simulator and alternative technologies?

Dr. DEUTCH. At this time, simulators and alternative above-ground technologies cannot fully assess or confirm nuclear performance or all aspects of an aging stockpile. Modern computational capabilities benchmarked with archived data and above-ground experiments add to our ability to assess both safety and reliability, but cannot directly confirm nuclear performance. Also, these analytical and experimental tools have not been demonstrated to detect or solve aging problems that may occur as the weapons age well beyond their original design lifetime. Hydronuclear experiments, if authorized, would allow direct assessment of some safety concerns, if the permitted level of experimentation is sufficient. Hydronuclear data may add value to the simulation process.

NPR FORCE LEVELS

Senator EXON. Dr. Deutch, the Nuclear Posture Review recommends building down the U.S. strategic nuclear force to a specified level by 2003? What is the projected timetable for this drawdown? Will the administration seek to reach NPR force levels prior to 2003? Is the drawdown dependent upon actions or force reductions in Russia and other formerly Soviet states? If so, what will drive the pace of the U.S. drawdown, and when will key decisions need to be made?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

BOMBERS

Senator EXON. Dr. Deutch, the NPR recommends 20 B-2 and 66 B-52 bombers to carry out required strategic missions. Are these total numbers of bombers in the inventory or deployable bombers available for action? If these numbers are necessary to carry out nuclear missions, how will these systems serve in both a nuclear

and conventional role during a major regional contingency? If bombers are being used in a conventional role, will it not preclude them from standing nuclear alert (and vice versa)?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator EXON. Dr. Deutch, bombers are projected to continue to play an important role in the nuclear triad. The NPR notes that bombers help guard against catastrophic failure of the submarine leg of the triad. Given the key role of the bombers, is it not prudent to spread these assets at more than one base to increase their security? Will the administration pursue a basing policy that provides adequate security for the strategic bomber force?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

ROBUST AND ENDURING TRIAD SUPPORT

Senator THURMOND. When we think about nuclear deterrence there is a tendency to focus on the actual delivery systems. But these are practically worthiness and deterrence is frail without a strong supporting infrastructure. I am particularly concerned about three areas: our nuclear-weapons complex, our delivery system and re-entry vehicle industrial base, and our strategic command and control. What are we doing in each of these areas to ensure robust and enduring support for the Triad?

Dr. DEUTCH. We share your concern about the infrastructure which supports the Triad. This was the subject of an entire section of the Nuclear Posture Review, and it received a great deal of attention.

The Department of Energy (DOE) is reducing its nuclear infrastructure and consolidating the nuclear weapons complex consistent with expected future requirements. Essential capabilities are being retained and transitioned to other facilities within the complex. The Department of Energy began closing production plants (Pinellas, Mound, and Rocky Flats) in fiscal year 1994 with essential production capabilities moving to other plants or to the DOE Defense National Laboratories (Lawrence Livermore, Los Alamos, and Sandia National Laboratories). Also, more emphasis is being placed on industrial capabilities to offset reduction in the complex. Wherever possible commercial manufacturing will be used to replace capabilities lost through reductions. In the future, the DOE National Laboratories will share more of the responsibility for low-volume manufacturing and production, and industry will play a bigger role in producing nuclear weapon components. In the near term, there will be some capabilities lost until new facilities are operational. Planning by DOE to minimize the effects of these reductions will hopefully bridge the gap between needs and capabilities during this difficult transition period.

We are addressing the delivery and reentry vehicle industrial bases with a significant commitment to sustain those unique technologies, and the people who make them real that are required to support existing weapon systems. After USSTRATCOM conducted an extensive study of the ballistic missile industrial base, we submitted a Reentry Vehicle Industrial Base Sustainment Program for consideration in the fiscal year 1995 budget and received authorization for the full program, but funds were appropriated with a restriction that only the current year study effort was to proceed. We are in the process of establishing a joint Air Force and Navy program office to oversee the reentry vehicle industrial base sustainment effort and plan to continue to support it in the future. We are also in the process of submitting a budget request to sustain the ballistic missile guidance industrial base with a program that will start in fiscal year 1996. The other segments of the ballistic missile and bomber industrial base are sustained by other means, but we will continue to monitor them and are prepared to initiate sustaining programs if they become required.

Finally, we have initiated a space and nuclear C3 IR study to examine that infrastructure in detail. This area needed the conclusions of the NPR before we could begin this important task. We will report our conclusions to you this spring.

TRIDENT D-5 BACKFIT

Senator THURMOND. Dr. Deutch, the NPR recommends that we retain 14 Trident submarines equipped with the D-5 missile. This will require us to backfit four older Trident boats to accommodate the D-5. I have two related questions. First, how and at what point will the remainder of the older Trident C-4 submarines be phased

out of service? Second, has the administration already budgeted for the cost associated with backfitting four C-4 boats?

Dr. DEUTCH. Under the plan developed for the Nuclear Posture Review, the four non-backfit Trident submarines will be removed from strategic service in a phased manner over several years consistent with accountability rules for strategic platforms under the provisions of the START Treaties. The plan for disposition of these highly capable ships, after removal from strategic service, is still under consideration. Under plans the Navy has drafted, based on very tight fiscal requirements, if these ships are not used for non-strategic purposes, then inactivation of the four ships would occur with [deleted] and [deleted].

With regard to the second part of your question on budgeting, the submission of the President's fiscal year 1996 budget will include funding to carry out the requirements of the D-5 backfit program.

I want to emphasize that while the findings of the NPR have been announced, the Department is currently studying the precise manner by which the force structure will be implemented.

NUCLEAR WEAPONS COMPLEX

Senator THURMOND. According to a recent article in the Los Angeles Times: "With a stockpile of 6,000 weapons, an average of 200 weapons will have to be replaced or remanufactured every year." Despite this difficult task, Vic Reis, Assistant Secretary of Energy for Weapons Programs has acknowledged "that the Energy Department does not have a comprehensive formal plan to restructure the industry." What actions are you taking to reverse DOE's neglect of our nuclear weapons complex?

Dr. DEUTCH. We have seen no credible analysis that would suggest that we must replace up to 200 warheads per year for a 6,000 warhead stockpile. Experience would indicate that some smaller number of warheads may require replacement sometime in the future. The NPR stated requirements for the DOE to retain or recreate capabilities to refurbish and certify existing warheads and to maintain the capability to design, fabricate, and certify new warheads to prepare for potential replacements. Presently, the DOE is transitioning its nuclear infrastructure into a smaller, consolidated nuclear weapons complex to handle a smaller nuclear stockpile consistent with the NPR results. The DOD is working with the DOE to identify capabilities that are essential to repair and replace components and systems in the enduring stockpile. The Nuclear Weapons Council (NWC) will provide the direction for these areas.

STRATEGIC FORCES

Senator THURMOND. To what extent does the NPR change the basic deterrence principles that guided us during the Cold War? In particular, I am anxious to find out whether the administration has sought in any way to decouple strategic deterrence from broader U.S. national security goals.

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. Since the end of World War II, we have tended to view forces in a positive way—as the ultimate guarantor peace between the major powers. To what extent does the administration want strategic forces to continue playing such a positive role in the future?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. Do you believe that there is a level of strategic forces below which the United States should not go under any circumstances?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. To what extent, if at all, does the administration accept the notion that nuclear weapons deter merely by their existence? Do you continue to believe that we must maintain credible options for employing nuclear weapons in order to maintain deterrence?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. Did the NPR deal directly or indirectly with the targeting of our strategic nuclear forces? Will this be a revised Single Integrated Operations Plan (SIOP) as a result of the NPR?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. To what extent does the administration link its plans for implementing the recommendations of the NPR to Russian implementation of START I and START II?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. Our nuclear allies, France and Great Britain, continue to view strategic nuclear forces as vital to international stability. Perhaps more important, many of our non-nuclear allies such as Germany and Japan continue to rely on the United States to provide an extended deterrent. Have you consulted with our allies on the NPR? What have you told them and what have they told you?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

ICBMs

Senator THURMOND. Admiral Chiles, Commander in Chief of STRATCOM, has argued that going below 500 ICBMs would shift the targeting burden to the bomber force in a way that would degrade their range, effectiveness, survivability, and flexibility. Admiral Chiles also cites a number of unique and positive attributes of the single warhead Minuteman III force to justify not going below 500. To what extent have you factored these issues into your calculations?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

Senator THURMOND. The NPR recommends retention of 500/450 Minuteman III ICBMs at three wings. What will determine whether we retain 500 versus 450 and when will this decision be made?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

QUESTIONS SUBMITTED BY SENATOR DIRK KEMPTHORNE

SSBN COST SAVINGS

Senator KEMPTHORNE. Dr. Deutch, what is the impact of reductions in the Trident submarine force and procurement of the D-5 missile? Are there any savings associated with this recommendation? If so, how much?

Dr. DEUTCH. Prior to the completion of the Nuclear Posture Review, the ultimate size and composition of the SSBN force under START II had not been determined. The baseline force structure under START I was 18 Trident SSBNs; the eight SSBNs that currently carry C-4 missiles would have been reconfigured to carry D-5 missiles or the C-4 missile would have undergone a comprehensive life-extension program. The Nuclear Posture Review concluded that a force of 14 SSBNs, in conjunction with the ICBM and bomber legs of the Triad, provided sufficient deterrent capability under START II limits. Additionally, the review determined that a 14-boat force would provide adequate capacity to upload additional warheads in the unlikely event of a reversal of current arms control trends.

Relative to an 18-boat SSBN force, the 14-boat force we are recommending will represent a substantial savings in operations and support costs over the lifetime of the force—for either the D-5 backfit or the C-4 life-extension option. For a 14-boat SSBN force, operating an all-D-5 force is less costly in the long run (despite the upfront expense associated with the backfits and D-5 procurement) than operating a mixed force of 10 D-5 SSBNs and four C-4 SSBNs. This is because the C-4 life-extension program is expected to be quite costly and because it is more expensive to operate two missile systems than to operate one. The backfit option also has advantages in terms of force capability, operating flexibility, and industrial base sustenance.

MILITARY IMPLICATIONS OF UNEQUAL DRAWDOWN

Senator KEMPTHORNE. Admiral Owens, has the Joint Chiefs of Staff looked at the military implications resulting from the current disparity in nuclear reductions between the United States and Russia? If so, what can you tell me about this analysis?

Admiral OWENS. The Joint Chiefs of Staff, together with the United States Strategic Command and other concerned agencies within the Department of Defense, have considered the military implications resulting from the current disparity in nuclear reductions between the United States and Russia.

The Nuclear Posture Review assumed full implementation of both START I and START II at 2003 but strongly considered the capabilities necessary to rebuild our

forces if reforms in Russia fail. Russia continues to demonstrate a commitment, in statements and deeds, to achieving full implementation of the START Treaties. At their recent Summit meeting, Presidents Clinton and Yeltsin expressed their desire to exchange START II instruments of ratification at the next U.S.-Russia Summit meeting. Although START I and the Lisbon Protocol have not yet entered into force, both the United States and Russia have begun reductions. So far, however, Russia has not been removing its strategic nuclear weapons from active service at a rate comparable to that of the United States, thus creating a disparity in force levels during this transition phase in which we both draw down toward agreed START levels. Even at this lower drawdown rate, however, we assess that Russia will achieve the required reductions and we expect the force level disparity to decrease in the near term.

The military implications of disparities in nuclear force levels and capabilities are continually evaluated in the development and maintenance of the Single Integrated Operational Plan (SIOP) and are further evaluated annually, using wargames. The ability to hold Russia's strategic nuclear forces at risk represents only a fraction of the capability considered sufficient to deter any future hostile Russian leadership from acting against our vital interests. Therefore, disparities in strategic nuclear force levels do not necessarily dominate military planning. Evaluations demonstrate our continued ability to achieve national objectives.

Political and military developments in Russia remain uncertain. As we draw down toward START levels, we should not allow disparity in strategic forces to occur such that our deterrent capability is called into question or that the United States could not reconstitute its forces in a timely fashion. The Russian leadership should never be able to conclude that Russia could hold a strategic advantage over the United States and its allies.

In implementing the recent decision of Presidents Clinton and Yeltsin to deactivate or remove from combat status those strategic nuclear delivery vehicles to be reduced under START II, in developing Cooperative Threat Reduction initiatives to assist with the dismantlement of former Soviet nuclear arsenals, and in pursuing the "Lead-Hedge" strategy resulting from the Nuclear Posture Review, the United States intends to maintain rough parity with Russia in strategic nuclear forces while preserving sufficient weapons platforms to afford us the flexibility to reconstitute forces if necessary. Such a course during this transitional period will keep us within an acceptable level of risk.

NUCLEAR REDUCTIONS BEYOND START II

Senator KEMPTHORNE. Admiral Owens, from a military perspective, should the United States make nuclear reductions beyond START II before Russia has ratified and implemented that agreement?

Admiral OWENS. Senator Kempthorne, it is my opinion that it would be a mistake for the United States to make additional, unilateral reductions in our nuclear forces before full implementation of the START I and START II Treaties. Russia still faces challenging times, a period in which their continued movement toward a market economy and a fully democratic style of government is not certain. Additionally, as the nuclear weapons successor state to the Soviet Union, Russia remains the only nation with sufficient military capability that they could threaten the existence of the United States. Maintaining a strong strategic posture during this uncertain period in Russian history remains important for the security of the United States and provides a hedge against a sudden reversal of their reform process. I am also concerned that unilateral reductions by the United States would likely remove some of Russia's incentive for ratifying the START II Treaty, which could result in an unraveling of the nuclear arms control gains made through the START Treaties at the end of the Cold War.

ADMIRAL CHILES' VIEW OF NUCLEAR POSTURE REVIEW

Senator KEMPTHORNE. Admiral Owens, what can you tell me about Admiral Chiles' view of recommendations of the Nuclear Posture Review?

Admiral OWENS. Admiral Chiles believes that the Nuclear Posture Review reaffirmed the continuing importance of nuclear deterrence as a primary building block of our national security strategy in an environment in which START II is fully implemented. He agrees that the Review's recommendations provide our Nation an adequate nuclear force plan, based on the nuclear Triad, with sufficient flexibility to respond to future force changes, assuming full implementation of START II by both Russia and the United States. The Review's recommendations strike a balance between demonstrating United States leadership in nuclear safety and security, including mutual confidence-building measures, while maintaining appropriate forces

as a hedge against the possibility that political and military developments lead Russia not to fulfill its START II obligations.

BUDGETARY SAVINGS FROM NUCLEAR POSTURE REVIEW

Senator KEMPTHORNE. Admiral Owens, are there any budgetary savings associated with the recommendations of the NPR?

Admiral OWENS. Savings associated with implementing Nuclear Posture Review recommendations are limited to the B-52H bomber and SSBN submarine force structure. The Nuclear Posture Review made no changes to current Minuteman ICBM or B-2 bomber force plans.

In reducing the B-52H force structure from 94 aircraft to 66, savings of \$1.7 billion will be realized in the fiscal years 1996-2001 FYDP. Additional savings of \$3.8 billion are estimated beyond the FYDP (fiscal years 2002-2013), for total savings of \$5.5 billion.

Reducing the SSBN force from 18 to 14 submarines will provide savings as well, but will require an initial investment for the Nuclear Posture Review force. The current budgeted SSBN force is a mixed force of 10 Trident submarines equipped with the D-5 missile system and 8 Trident submarines equipped with the C-4 missile system. The Nuclear Posture Review force consists of 14 Trident submarines equipped with the D-5 missile system, requiring a backfit of four Trident submarines and additional D-5 missile procurement. This new force will require an additional expenditure of \$2.2 billion in the fiscal years 1996-2001 FYDP, but will realize a \$3.2 billion savings beyond the FYDP (fiscal years 2002-2013) when compared to maintaining a mixed force of 10 Trident submarines equipped with the D-5 missile system and 8 Trident submarines equipped with the C-4 missile system. Total net savings through fiscal year 2013 are \$1.0 billion.

Taken together, these two Nuclear Posture Review-related changes will result in an additional cost of \$0.5 billion in the FYDP and a savings of \$7.0 billion in fiscal years 2002-2013 timeframe, for total savings of \$6.5 billion.

STOCKPILE STEWARDSHIP

Senator KEMPTHORNE. Can you comment on your concerns regarding the Department of Energy's Stockpile Stewardship program? Also, to what extent are DOD's requirements considered when DOE prepares its annual budget?

Dr. DEUTCH. There are two major concerns, one technical and one fiscal, regarding the stockpile stewardship program in DOE. The technical concern is the ability to assess and confirm nuclear performance, and detect and repair aging systems. The fiscal concern is the use of stockpile stewardship funds within DOE for other priorities. The stockpile stewardship program must continue to develop capability, simulators and enhanced computational techniques, to assess, as fully as possible, problems in the enduring stockpile.

The DOD, through the Nuclear Weapons Council (NWC) process, is working with DOE on a wide range of issues to ensure that competing budget priorities and policy initiatives do not undermine the stewardship of the nation's nuclear weapons program.

BOMBER STUDY

Senator KEMPTHORNE. Secretary Deutch, at a hearing on DOD budget problems, there was an extensive discussion of shortcomings in our bomber force. As a result of the Fiscal Year 1995 Defense Authorization Act, DOD will conduct an extensive bomber study. To what extent will the need for bombers dedicated to nuclear deterrence be evaluated in this study?

Dr. DEUTCH. The bomber study called for in both the Fiscal Year 1995 Defense Authorization and Appropriation Acts will be extensive. The study will focus on conventional missions although the affect on the nuclear deterrence mission of alternative bomber forces will also be addressed. A study plan is being developed that will address all the elements called for in both the Fiscal Year 1995 Defense Authorization and Appropriation Acts. The findings of the Nuclear Posture Review will be incorporated into the bomber study requested by Congress.

MINUTEMAN III SERVICE LIFE EXTENSION

Senator KEMPTHORNE. Will the recommendations have any impact on the program to extend the service life of our Minuteman III force? Is that service life extension program still a top priority?

Dr. DEUTCH. The recommendation to maintain a force of 450-500 Minuteman III ICBMs requires us to proceed with the Minuteman III Life Extension Program and

we continue to support this investment in the ICBM force. We are installing the REACT Launch Control Center modification at the present time, have the Guidance Replacement Program in the Engineering and Manufacturing Development phase of design, and are on-contract with the propulsion contractors to begin the Propulsion Replacement Program. The Nuclear Posture Review validated the importance of these programs to the ICBM force, and they are still a top priority.

ICBMs

Senator KEMPTHORNE. Dr. Deutch, did the Nuclear Posture Review consider the relationship between ICBM reductions and next year's base closure commission? Is it true that one of our ICBM bases will have to be closed to reach the level of 500 ICBMs?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

START II

Senator KEMPTHORNE. Dr. Deutch, earlier this year Chairman Nunn took an Armed Services Committee delegation to visit with our counterparts in the Russian Duma. During our working group discussions, we heard moderate, conservative and radical right Russian Parliamentarians complain about the cost of implementing the START II agreement. The members of the Duma that I talked with did not seem inclined to ratify START II. What is your assessment of Russia's willingness to ratify START II?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

BOMBERS

Senator KEMPTHORNE. Secretary Deutch, in a major war, almost all of our active bombers would be dedicated to the conventional war. Indeed, as you know, because of the limited number of heavy bombers in our inventory the bombers are supposed to "swing" from one conflict to the next under DOD's current plans. Are there plans to leave any bombers on nuclear alert in the event our forces are engaged in a major regional conflict?

[Dr. Deutch did not respond in time for printing. When received, the answer will be retained in committee files.]

[Whereupon, at 11:31 a.m., the committee adjourned.]



ISBN 0-16-046373-4

