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SUSTAINING NUCLEAR DETERRENCE AFTER NEW START

HEARING

BEFORE THE

SUBCOMMITTEE ON STRATEGIC FORCES

OF THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

HEARING HELD
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SUSTAINING NUCLEAR DETERRENCE AFTER NEW START

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON STRATEGIC FORCES,
Washington, DC, Wednesday, July 27, 2011.

The subcommittee met, pursuant to call, at 3:12 p.m. in room 2118, Rayburn House Office Building, Hon. Michael Turner (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. MICHAEL TURNER, A REPRESENTATIVE FROM OHIO, CHAIRMAN, SUBCOMMITTEE ON STRATEGIC FORCES

Mr. TURNER. Good afternoon. I want to welcome everyone to the Strategic Forces Subcommittee's hearing on sustaining nuclear deterrence after New START [Strategic Arms Reduction Treaty].

With the National Defense Authorization Act for fiscal year 2012 recently passed by the House, this represents our subcommittee's first non-budget-driven hearing for the 112th Congress. Our panel consists of non-governmental witnesses, three distinguished gentlemen who each have served in previous administrations in some senior capacities relating to our discussion today.

We have with us Dr. Keith Payne, a former Commissioner of the Strategic Posture Commission and Professor and Head of the Washington-based Graduate Department on Defense and Strategic Studies for Missouri State University; Dr. Morton Halperin, also a former Commissioner with the Congressional Strategic Posture Commission and a Senior Advisor to the Open Society Foundations; and finally, Franklin Miller, a Principal of the Scowcroft Group who has served in senior capacities in a number of administrations.

The witnesses have been asked to provide their assessment of post-New START U.S. nuclear posture and policy, including potential reduction of the U.S. stockpile below New START levels; the significance of nuclear modernization; considerations relating to a recently announced upcoming review of U.S. deterrence requirements; and nonstrategic nuclear weapons forward-deployed in Europe for extended deterrence and assurance.

Today's hearing is just one in an ongoing series of events by which the House Armed Services Committee will conduct oversight of these issues. On July 7th, the full Armed Services Committee received a classified briefing from the Department of Defense, the Department of State, the National Nuclear Security Administration, and STRATCOM [United States Strategic Command] on several topics being considered today.

We have also notified the Administration that we intend to hold an open hearing on these same issues again this fall with testimony by a panel of Government witnesses.

I want to thank our witnesses for appearing today and further thank them for their leadership and service to our country on these issues.

I will keep my comments brief to allow ample time for members to ask questions, but I would like to highlight four important areas I hope our witnesses and our discussion may touch upon today.

First, I want to emphasize the bipartisan consensus that has emerged on both ends of Pennsylvania Avenue about the urgent need to modernize the U.S nuclear enterprise in order to be able to create a sustainable deterrent for ourselves and for our allies.

After two decades of neglect, our nuclear enterprise has fallen into hard times. Awareness of these facts has been spurred in part by the Strategic Posture Commission created by this subcommittee under the leadership of its former chair, Ellen Tauscher, and also by the experience of the debate over the New START treaty.

Specifically, I think we have come to see a pragmatic bipartisan convergence on two basic points: One, that nuclear abolition is a long way off; and two, that we will ensure that our nuclear deterrent remains credible for the foreseeable future.

To be sure, full funding for nuclear modernization is costly and difficult in these challenging economic times, but it is necessary. Pledging $85 billion over 10 years for nuclear weapons activities, President Obama noted in December that "I recognize that nuclear modernization requires investment for the long-term, in addition to this one year budget increase. This is my commitment to Congress—that my Administration will pursue these programs and capabilities for as long as I am President."

This statement, built upon the observation of the November update to the Section 1251 Report, namely that, "given the extremely tight budget environment facing the Federal Government, these [increased budget] requests to the Congress demonstrate the priority the Administration places on maintaining the safety, security and effectiveness of the deterrent."

To be sure, we have our policy differences, but I believe that even our differences have helped spur a healthy constructive debate. In all candor, Congressional focus on these issues has languished for too many years. But I believe the events of recent years have the potential to usefully renew attention by Members of both Houses of Congress.

My second point, however, is one of concern, the ink is barely dry on New START and already senior administration officials are describing their ambitions to move to deeper nuclear reductions below the treaty levels—changes which could include cuts to our non-deployed hedge stockpile, potentially eliminating a leg of the triad, altering the long-established U.S counterforce nuclear target strategy and reducing alert postures for our forces. Administration officials have even indicated that reductions could be made unilaterally.

Premature steps to cut our nuclear force below New START levels and, in particular, cuts which outpace modernization progress

could threaten to upset some of the broad consensus which has been so carefully acquired.

My third point concerns an upcoming 90-day review of the deterrence requirements announced on March 29th by National Security Advisor Tom Donilon for the express and apparently single-minded purpose of creating options for further reductions. As we all know, strategy must drive force structure, not the other way around. But we also know that it is easy to change assumptions in order to get the answers you want.

This committee will continue to conduct oversight on this review and decisions about U.S. nuclear strategy and force structure more broadly. We also continue to monitor another study: The Deterrence and Defense Posture Review currently ongoing for NATO [North Atlantic Treaty Organization]. Which brings me to my fourth and final point: the forward deployment of U.S. nonstrategic weapons in Europe has long contributed to Alliance solidarity and the transatlantic link. NATO's new Strategic Concept reaffirms that NATO is a nuclear alliance and the importance of broadest possible participation by allies in the nuclear mission.

Some of us are concerned that the Administration potentially, in concert with some Western allies, might try to use the Defense Posture Review that is being undertaken to pressure Central and Eastern Europeans to begrudgingly accept substantial reductions or even complete withdrawal of these weapons from Europe, an act which could have untold and adverse consequences for the future of the world's oldest and most successful alliance.

This year the House acted to address each of these concerns. The House-passed NDAA [National Defense Authorization Act] included provisions which would sustain the linkage between progress in nuclear modernization to both further nuclear cuts and New START implementation; involve Congress in the long-term decisionmaking about deeper reductions; and slow down withdrawals.

The Administration expressed strong objections about some of these provisions and issued veto threats about others.

Again, I want to thank all of you for being here today, and I look forward to your testimony on these important issues. These are issues that our committee has been diligently reviewing and discussing and debating. I appreciate your attention to those issues.

And I want to recognize my ranking member, Ms. Sanchez.

[The prepared statement of Mr. Turner can be found in the Appendix on page 41.]

STATEMENT OF HON. LORETTA SANCHEZ, A REPRESENTATIVE FROM CALIFORNIA, RANKING MEMBER, SUBCOMMITTEE ON STRATEGIC FORCES

Ms. SANCHEZ. Thank you, Mr. Chairman, and I do deeply apologize for having gotten held up in my office. I try not to let that happen.

Gentlemen, thank you for being with us today. Dr. Payne, Dr. Halperin and Mr. Miller, thank you so much.

We look forward to hearing your thoughts about the future of nuclear weapons in this century, and I guess the progress of what it really takes to maintain a strong and reliable deterrent. Given everything that is going on—the New START treaty—the desire may

be to eliminate even more of nuclear weapons if we could, and how we might, and what opportunities might exist to do that and of course, other players, other than Russia and ourselves, who have nuclear weapons.

I think that the Administration has been committed to unprecedented investments in maintaining our nuclear arsenal, as my chairman here said. I think the President is leading much-needed efforts to reduce the dangers posed by nuclear weapons in a post–Cold War era. He gave us part of his vision to strengthen our national security when he included those issues in his 2009 Palm Sunday speech in Prague, including New START as being the first step for further reduction, the ratification of the Comprehensive Test Ban Treaty, reducing the role of nuclear weapons, and talking about strengthening the Nuclear Non-Proliferation Treaty.

He noted in his Prague speech the existence of thousands of nuclear weapons and the most dangerous—that it was the most dangerous legacy of the Cold War. And even considering the other players out there in the world, the fact of the matter is that about 95 percent of the nuclear weapons still exist in Russia's and our hands. So I think that is why we are so interested in New START and we are interested in other opportunities that might exist. And yeah, a little apprehensive, all of us I think, about what it would mean to go to lower levels and whether that would take away our deterrence factor or whether that would make us safer or—you know, we have a lot of questions about that.

And of course, you three, in particular, in front of us, we hope have the answers to some of that anxiety that we may have.

So in the National Defense Authorization Act-mandated Commission on the Strategic Posture for the United States, in which I know that the two doctors in front of us participated, it included by saying, "This is a moment of opportunity to revise and renew U.S. nuclear strategy." And I agree with that.

Some of our weapons are old. They may not be the most efficient, smartest way to just keep having them. Maybe we don't need all that firepower there. Maybe we are safer without them. I think it really is a good time for us to take a hard look at what we have, what others have, and also part of that whole NATO alliance and how some NATO members feel about having tactical weapons and other things on their land. So I think it is a good time to look at this.

And there are a few questions that I hope you will address today. How best do we reduce the dangers posed by nuclear weapons? And is it through implementing further reductions and how might that be? How do we decrease the risks of miscalculation if we do decide we will go lower? And adjusting alert postures and reducing the role of nuclear weapons out there: how do we do that? How can we—maybe we can even say we can get away from that, but how do we go about that?

So we have engaged in a serious debate on this committee, and I am very, very thankful that the chairman and I on this committee get along so well and that all of our members really participate in so many ways in trying to ask the right questions and get to the right answers. Sometimes, you know, there is not just one right answer. So we are really thrilled about having you before us.

There is still disagreement between us on many issues, and hopefully, you can shed some light on these very tough issues, so thank you very much. And I look forward to learning some more today and debating and continuing the debate, and I thank you.

[The prepared statement of Ms. Sanchez can be found in the Appendix on page 44.]

Mr. TURNER. Thank you.

Now we turn to our three witnesses and ask each of them to summarize their written statements in about 5 minutes. We will then proceed to members' questions.

The committee has received full written statements from each of the witnesses, and without objection, those statements will be made as part of record.

Dr. Payne, I recognize you.

STATEMENT OF DR. KEITH PAYNE, PROFESSOR AND HEAD, GRADUATE DEPARTMENT OF DEFENSE AND STRATEGIC STUDIES, MISSOURI STATE UNIVERSITY

Dr. PAYNE. Thank you, Chairman Turner and Ranking Member Sanchez, it is an honor to be here today.

The Administration recently announced that it will undertake a new review of U.S. nuclear requirements, as you noted. This review ultimately should be linked to the key goals served by U.S. nuclear forces and the number and types of forces necessary to support those key goals. The five longstanding U.S. national goals pertinent in this regard are, one, the stable deterrence of attack; two, the assurance of allies via extended deterrence; three, the dissuasion of competitive challenges; four, defense in the event of war; and five, arms control. These five goals have been longstanding U.S. goals, in fact going back approximately five decades, and a bipartisan consensus has been behind these goals.

The forces linked to these five goals overlap to some extent, but these goals also have their own individual, unique requirements that may be incompatible and therefore require tradeoffs.

The Administration has expressed a commitment to effective capabilities for deterrence, assurance and limited defense. However, it also has explicitly elevated nonproliferation and nuclear disarmament to the top of the U.S. nuclear agenda and emphasized that it sees nonproliferation and nuclear disarmament as two sides of the same coin.

This prioritization and linkage logically has led to concern that the goal of nuclear reductions will take precedence in the Administration's calculation of how much is enough. This concern was stoked by senior administration officials who stated specifically that this nuclear review is for the purpose of further U.S nuclear reductions and to facilitate the "journey" to nuclear zero.

As described, this approach to reviewing U.S. nuclear requirements appears to start with the answer that further nuclear reductions are warranted and appropriate. The risk of this approach is that further reductions taken to advance the goal of nuclear zero may be out of step with the forces necessary to deter, assure, defend and dissuade now and into the future.

The Administration's willingness to place top priority on arms reductions and subordinate these other goals may be seen in various

policies and declarations. For example, Russia has a large numeric advantage in operational nuclear weapons. And the U.S. has important unmet goals with regard to reducing Russian nuclear forces. Nevertheless, the Administration's New START Treaty requires unilateral U.S. reductions in deployed forces. The Administration has decided to reduce U.S. tactical weapons unilaterally, and senior White House officials have stated explicitly that the United States may pursue additional unilateral reductions.

There appear to be two competing dynamics within the Obama administration: One is committed to balancing the goals of arms control, extended deterrence, assurance and limited defense; the other, instead, appears to place top priority on nuclear reductions and steps toward nuclear zero.

The fundamental question with regard to the Administration's nuclear review is, Which of these two different views of U.S. priorities and requirements will govern its calculation of how much is enough? Is there room for further reductions in U.S. deployed forces below New START levels simply because some now claim that a basic retaliatory deterrence threat could be maintained at 300, 500 or 1,000 nuclear weapons? The answer must be no. The answer must be no to that question.

Recall that U.S. forces serve multiple purposes. No estimate of how much is enough for deterrence alone is an adequate measure of U.S. strategic force requirements. In addition, deterrence and assurance requirements can shift rapidly across time and place, and therefore, our forces and our force posture need to be flexible and resilient to be able to adapt to shifting and unforeseen threats and circumstances. In short, we must sustain the number and diversity of our force posture necessary for this flexibility and resilience.

Is there room in this regard for further reductions? Following comprehensive analysis, the former Commander of STRATCOM, General Chilton, recently concluded that the New START force levels would provide adequate force flexibility for deterrence under specific assumed conditions. But even with optimistic assumptions about the future, General Chilton apparently determined that New START numbers are compatible with the necessary flexibility, but no lower.

Nothing has changed over the past few months to suggest that General Chilton's caution is no longer valid. To the contrary, some recent threat developments are troubling. I will just list one, and that is that Russia now identifies the United States and NATO as its greatest threat. It frequently resorts to crude nuclear threats to U.S. allies. And it places highest defense investment priority on the modernization of its nuclear forces, including a new heavy ICBM [intercontinental ballistic missile] capable of carrying 10 to 15 nuclear warheads each. This context hardly seems ripe for further reductions, particularly U.S. unilateral reductions that could degrade the flexibility and resilience of U.S. nuclear forces.

Thank you.

[The prepared statement of Dr. Payne can be found in the Appendix on page 46.]

Mr. TURNER. Dr. Halperin.

STATEMENT OF DR. MORTON H. HALPERIN, SENIOR ADVISOR, OPEN SOCIETY FOUNDATIONS

Dr. HALPERIN. Thank you, Mr. Chairman. It is a great pleasure to be here.

I want to try to focus on what I think is the area of consensus, or potential consensus. But I do have to say that the fears that I think, Mr. Chairman, you have expressed and that the first witness expressed about where the Administration is going, are not—is not the same Administration that I talked to and listened to.

I think, if anything, I have the opposite fears: that most of the people in the Administration have decided that the START Treaty and the Nuclear Posture Review was about all they could get done in the nuclear field, and that they had passed the task of even considering further reductions to the next Administration. I think that is as likely to be the outcome of these discussions as the kinds of concerns that you have expressed.

My hope is that we will not begin by concluding either that further reductions are possible now and desirable, but also that we will not conclude that because there are a number of tasks for nuclear weapons and the Russians may occasionally say something that alarms people, that there is no possibility that we could go to lower numbers. I think we ought to treat it as an open question. I want to suggest some items that I think should be part of a consensus about how we should consider that.

First of all, I want to emphasize the importance of the agreement on modernization. And Mr. Chairman, I had the opportunity to hear you speak the other day, and I agree with you that we need to change the budgeting process. As long as you trade off nuclear modernization with water projects, we are going to lose, especially in the current climate.

I was the lone voice on the Nuclear Posture Commission urging to move the entire nuclear weapons process into the Defense department. I was for that when I was in the Government when the Atomic Energy Commission was abolished. I didn't understand then why it wasn't done, and I don't understand now why it isn't done. But I think anybody who studies the Congress knows that you can't move it to the subcommittee where it belongs unless you first move it in the Administration to where it belongs. And I think Congress ought to think about doing that.

The second area in which I think we should have a consensus is that our targeting should continue to be against military targets and not counter-value targets. It is illegal, it is immoral, it is counterproductive to base your deterrent on what is sometimes called "minimum deterrence" and the notion that you just target cities. It is, of course, the case that what we target will end up killing vast numbers of people, but we need to continue to ask ourselves the question, What military targets do we need to be able to hold at risk to provide assurance, to provide deterrence, and to continue to make clear to the military that the target set must be military targets and not cities?

Third, I hope we can get a consensus to maintain the triad, even as we go to lower levels. Now if you can imagine a world in which we are in several hundreds, we may have to reconsider that. But I share your view, and the Commission very much expressed the

review, that zero is not going to come any time soon. And moreover, in my view, it is not a good guide to where we should go now. To say, as every President—as you noted Ronald Reagan said, every President I think, but the last one said we would like a world without nuclear weapons, doesn't mean that that's guidance for what we should do today, tomorrow or the next 10 years. I believe it is not at all such guidance. We ought to ask ourselves the question of where we want to go now. And in my view, that includes saying we need to keep the triad for the foreseeable future.

I think, frankly, a lot of the objections to going lower are really from people who fear that the leg of triad that they most value, either because of a strategic analysis or, in some rare case, because the item is made in their district or in their state, leads people to object to going lower because of that fear. And I think, both from a strategic point of view, it makes sense to keep a triad, and from a political point of view, I think it helps us have a discussion that is not distorted by those kinds of concerns.

Finally, as I said, I think we need an agreement that we should not go—we should not have a predetermined answer to the question, Can we go lower? We should not start out knowing we can go lower or that we should not go lower.

Mr. Chairman, my clock is not working, so I don't know whether I have used up my time or not.

Mr. TURNER. You are doing well.

Dr. HALPERIN. So I do think that—and I would hope we get an agreement with the Administration that we are not going to read an announcement one day that they have gone beyond the START levels. I think that would be a fundamental mistake. It would break the possibility of a consensus.

On the other side, I would hope people would hold off announcing that they know before we do the study that we cannot go to lower levels.

I do think we ought to consider one change in the existing guidance as part of the study. There is, as you know, a current requirement for a prompt launch capability, even though there is also a requirement that we not rely on prompt launch for deterrence. I do not think we need a prompt launch capability, but again, I would not make that an assumption of the study, but neither do I think we should make it an assumption that we do need such a prompt launch capability. I think the military should be free to look at the question of what we need for all the purposes that Keith has laid out, but without an assumption that we need a prompt launch capability.

Now that does not mean that the military should be told to dealert the forces. I think, for lots of reasons I would be happy to go into, that is a fundamental misunderstanding, that would be a fundamental mistake. But that is different than a requirement that we have a substantial prompt launch capability.

Finally, I want to say about forward-deployed nuclear weapons, because I think this is an area in which I do disagree with you, Mr. Chairman. I think the NATO alliance will survive——

Mr. TURNER. I am sorry, your time has expired. I am just kidding, go ahead.

Dr. HALPERIN. I think the NATO alliance will survive, even if we with take our nuclear weapons out of Europe. It will continue to be a nuclear alliance. It will continue to rely, as it always has, on the credibility of our strategic deterrent to prevent our potential adversaries in Europe from using nuclear weapons.

I do think it has been as divisive as it is cohesive. For every European that desperately wants to us keep the weapons there, there is a European that wants us to take them out. My view has always been, whatever view you have on that subject, you can travel through Europe and find people who agree with you in every country and at every level, but somebody who has a different view goes and comes back and talks to a different set of people. So I think there is no easy answer to this question. Just because we are for NATO cohesion doesn't mean the answer is "don't take them out."

My own view is that it is time to further consolidate them, that they should be moved to two military bases from whatever number they are now, that those should be American military bases, and that we should not be pressuring our allies to spend the very small amounts that they spend on defense to buy new nuclear-capable aircraft or to adjust the aircraft that they do buy so that they are nuclear-capable. I think it is extremely unlikely they will ever mount those weapons. And as we learned again in Libya, we do actually fight sometimes. And I think it is more important for our allies to be able to fight. Thank you.

[The prepared statement of Dr. Halperin can be found in the Appendix on page 55.]

Mr. TURNER. Mr. Miller, as a courtesy, we will not start the clock on you, also.

And Dr. Payne, as we give you responses to questions, we will let you catch up.

This has been fascinating, though, and I did want to give the flexibility.

Mr. Miller.

STATEMENT OF THE HON. FRANKLIN C. MILLER, PRINCIPAL, THE SCOWCROFT GROUP

Mr. MILLER. Thank you, Mr. Chairman.

Mr. Chairman, Congresswoman Sanchez, it is an honor to be here.

Let me begin, because this discussion is about beyond New START, by saying I did support the New START Treaty. But I did not support it because it reduced weapons. In fact, it allows more weapons than the 2002 Bush-Putin treaty, but we won't go into that now.

I supported it because it reopened the inspections regime but, more importantly, because the Administration committed as part of the ratification process to modernize our strategic forces. And I am concerned now that I do not see that promised modernization.

The Administration owes the Congress and it owes the American people and it owes those of us who fought for New START on the promise of modernization some transparency into what it intends to do in modernizing the bomber and ICBM legs of the triad. I would note that we just lost an ICBM today. There was a failed

test launch out of Vandenberg, which tells you something about the dangers of an aging force.

With respect to the only leg of the triad to which money has been committed, the *Ohio* Program, we now read stories that this program is in question, that perhaps a modified *Virginia*-class attack submarine could be used, which is a complete nonstarter. It is very worrisome; the *Virginia*-class submarine modification could not carry the Trident II D–5 [Fleet Ballistic Missile], which is at the very heart of our deterrent program.

Additionally, the other idea of extending the *Ohio* replacement program for another several years so that we could have fewer boats and more tubes is similarly a huge mistake. It will be important for to us have more SSBNs [Ballistic Missile Submarine], not fewer SSBNs. I would note, in an alliance context, that delaying the *Ohio* replacement program could imperil—literally imperil—the U.K.'s SSBN replacement program. The U.S. Navy and the Royal Navy have a joint program to build a common missile compartment. The U.K. must absolutely begin deploying new SSBNs in the mid- to late 2020s, and a delay in our own program could pose an unacceptable risk to the U.K. deterrent, which, as members are aware, is entirely SSBN-based.

I am also concerned, as you have pointed out, Mr. Chairman, that the Administration is, before the ink is dry on New START, talking about further reductions. Why do we need further reductions? The Administration owes us—that is, the Congress and the American people—an explanation as to how additional reductions are going to create enhanced stability. What we want is a safer world. Reduced nuclear weapons levels may or may not contribute to that. We need to know what the Administration intends to do.

And the notion that this is a step toward the nuclear-free world is not an acceptable answer, because the Prague speech and the vision of a world free of nuclear weapons has, to put it mildly, not had great resonance in the capitals of the other nuclear weapon states. Not in Paris. Certainly not in Moscow and Beijing, where nuclear weapons are central to their security policies. Not in Islamabad or Tel Aviv or New Delhi or Pyongyang, or in Tehran, for that matter.

And I find it especially troubling, as you pointed out, Mr. Chairman, the National Security Advisor's statement that we are going to examine the target base in order to have additional reductions. I am very familiar with the target base; I was in charge of U.S. nuclear targeting for 16 years. I have written two Presidential Directives and at least five Secretary of Defense Nuclear Weapons Employment Plan Policies.

Deterrence since the late 1970s has focused on determining what a potential aggressor leadership values, and then holding those assets at risk. It is not about what we value; it is about what they value. Traditionally this has included military forces, military and political command and control, and the industrial potential to sustain war. We shouldn't hold at risk assets a potential aggressor leadership doesn't value.

But similarly, we shouldn't give up the opportunity and the capability to hold at risk assets which are valued. And you can't deter by holding just a portion of a potential aggressor's value structure

at risk. You must say to a potential aggressor, if you attack us, we will destroy that which you counted on to rule the post-war world.

This value structure will vary from aggressor to aggressor and even from one set of leaders to a successor set within a particular nation, but I think our current policy accounts for that.

I am sure there are efficiencies to be found in the target base, but scrubbing that base for the purpose of reducing our weapons is simply not good policy.

The call for adjusting alert rates perplexes me. The fear of accidental nuclear war was dealt with in the mid-1990s by putting broad ocean area target sets in our missiles. I am happy to engage in that debate later on.

With respect to NATO, let me simply say the following: The Strategic Concept just agreed by the Alliance last November calls for widespread basing in nuclear weapons in Europe. Some of our allies nevertheless are pursuing a cynical, beggar-thy-neighbor approach to the common good. I view this as a craven moral failure by those who once sought collective security and even asked the United States to put our very existence as a nation on the line to deter an attack on them in the 1950s, 1960s, 1970s, 1980s and 1990s. But now, feeling safer and more secure, they would deny to the new members of the Alliance the very security they once sought.

At the same time, it is extraordinarily patronizing, Mr. Chairman, for Americans, who brought these people into the Alliance, to say to the new members of NATO that, contrary to their fears, contrary to the saber-rattling threats that they have heard and Dr. Payne described, that they really don't have to worry about Russia—not their problem—and that our forces based on the United States can handle the military mission of deterring Russia.

It is not about a military mission. It is as you have indicated, Mr. Chairman, a political mission, a mission of reassurance. And as long as U.S. allies believe that those weapons need to be there, we need to make sure that we provide that security.

I think the Russian tactical nuclear arsenal is grossly obscene. I think it is inconsistent with the 21st century. I think we ought to negotiate to reduce it, but not at the cost of withdrawing all of our weapons from Europe as long as our allies want them.

The reason the Russians want to us withdraw all of our weapons from Europe is that they know precisely that that will really undercut allied confidence in the United States, and that will deeply hurt the NATO alliance.

Mr. Chairman, let me end at this point and go to your questions. Thank you.

[The prepared statement of Mr. Miller can be found in the Appendix on page 62.]

Mr. TURNER. I am going to go to Mr. Lamborn first, but before I do, Mr. Miller, I do have to correct you on one statement that you made that maybe will be helpful for the other two panelists: There is no *Ohio* replacement program. Being a native of Ohio, I think it is correctly referred to as the *Ohio*-class submarine replacement program. I just want to make it clear there is no Ohio——

Mr. MILLER. I stand corrected.

Mr. TURNER. Thank you.

Mr. Lamborn.

Mr. LAMBORN. Thank you, Mr. Chairman.

Before I say anything else, I want to congratulate the ranking member on that beautiful wedding ring on her hand.

This first question is for all of you. Earlier this year, NNSA [National Nuclear Security Administration] Administrator Tom D'Agostino testified before this subcommittee that the new plutonium and uranium facilities need to be up and running before we make substantial cuts to the nondeployed hedge force. But when the House tried to slow down cuts to the nondeployed hedge force until these new facilities were ready, the Administration issued a veto threat. And now we hear that the Administration is looking to negotiate a future agreement to cut both our nondeployed and deployed weapons. Please talk to us about why we should keep a substantial nondeployed reserve force as a hedge and how modernizing our infrastructure, as I referred to earlier, is essential before we could make any possible cuts to the nondeployed stockpile in the future?

Under current guidance, are there any risks in making further cuts to our hedge if these new uranium and plutonium facilities are not complete?

I would love to hear from all three of you.

Dr. PAYNE. I will be happy to start. The first question, as I understand it, is why have a hedge, or a large hedge, as part of your stockpile? And the policy notion—the policy rationale for that is, in response to the fact that deterrence requirements, assurance requirements, all of those goals that these forces are intended to support, the context can change dramatically for technical reasons or policy reasons, or both.

And therefore, having a hedge of forces that could be reintegrated into the force as necessary is very important to have the flexibility and resilience of a force structure to be able to accommodate dramatic changes. It was very difficult to build these systems, and they take a long time to build.

Therefore, you don't want to have to change your force structure very, very rapidly, because change can come rapidly, and you need to have the forces in being, so to speak, so that you can respond to rapid changes, because you know you are not going to be able to build those forces very rapidly in response to rapid changes.

That, essentially, is the rationale for maintaining a hedge; it is to protect our ability to deter and assure in the future in a world that can change dramatically, in some cases, even overnight.

How does modernization help reduce the need for that standing hedge? I think that was the second part of the question. Well, modernization of our infrastructure allows us to respond more rapidly and in a more agile way to these types of changes. And the greater your ability to respond in an agile way with your force infrastructure—the greater your ability to do that, the less you need standing forces.

So we have suggested that there is this inverse correlation between your ability to move agilely and quickly with your infrastructure, and your need for a large standing hedge. And that is why, I believe, Director D'Agostino said we should not move to reduce the hedge forces until we have this modernized infrastructure that

would allow us to provide new forces, in the instance that there are very dramatic and negative changes, either political or technical, coming in the future that happen quickly.

Dr. HALPERIN. I want to take the opportunity to agree with everything that Keith just said, I don't have many opportunities do that and I didn't want to pass one. I agree with all of that. The only other point I would make is, it takes a long time to build nuclear weapons, but it also takes a long time to destroy them. As I understand it, we have a large stockpile of weapons awaiting destruction.

And therefore, there isn't an opportunity to destroy more weapons now. We can change the label on some of the existing stockpile if we wanted to from hedge force to a force awaiting destruction, but almost nothing different would happen but the label on the force.

So I don't think it is a real argument; we can't really destroy many more, more quickly. And there is no particular reason to. And I think, given the concerns and given the agreement about modernization, we should take to the bank the agreement that when we have these new facilities, we will be able to reduce the force and, at that time, have a serious discussion about how much we can reduce it and how quickly we can reduce it.

Mr. MILLER. Let me associate myself with what my colleagues have said. I think this is very simple. This is a case of promises made, and then assumptions and ground rules being changed.

During the Cold War, we had active warhead production lines, and we were able to test our nuclear weapons. Neither is the case anymore. We don't have active warhead production lines, and we are abiding by our signature on the CTBT [Comprehensive Nuclear Test-Ban Treaty]; we are not testing.

The only way we can replace a failed weapon in the arsenal is to take one out of storage, and that is the so-called hedge. The Administration said it was prepared to reduce the size of that hedge force, that warhead replacement force, when we were able to start building new warheads.

I would point out by the way that the Russians have been producing new warheads on a 10-year cycle since the beginning of the Cold War.

So the deal was, we have the ability to produce new warheads to replace old ones or failed ones in the stockpile, and then you start getting rid of the hedge.

And now the idea is, oh, we are going to start getting rid of the hedge, but we are not going to be able to produce the new warheads. That is a complete change in assumptions, and it is a complete change in the logic behind the original proposition, even of the CTBT.

So I agree with my colleagues.

Mr. LAMBORN. And you feel that that would be a dangerous thing to do.

Mr. MILLER. Yes.

Mr. LAMBORN. Thank you. And on de-alerting, you made reference to it earlier, how might de-alerting some of our forces—what would that do to our strategic stability and crisis response? And can we expect Russia to do any de-alerting? And has anything

changed since the 2010 Nuclear Posture Review, which says that we should keep current alert statuses; has anything changed since then so that we can de-alert now? Once again, I would love to hear from all three of you.

Mr. MILLER. I will start. First of all, nothing has changed.

Second of all, to set the context, we are not at Cold War levels of alert. We have fewer submarines at sea. There are different alert levels. The ICBM force is still in a position where it could launch if necessary on a short notice, but the whole question of de-alerting was to avoid accidental war. And it was for that reason in the mid-1990s that these broad ocean area targets were put into the guidance systems on a day-to-day basis.

I have been listening to calls for de-alerting for 20 years. We have studied those to death. There is no way to verifiably de-alert forces on both sides, and it raises the specter that you have suggested, which is if you do some de-alerting, either one side won't have de-alerted, or there will be a race to re-alert in a crisis.

I contributed a chapter to the Strategic Posture Commission Annex. I am happy to give that to the committee.

But the real question is, why further de-alerting? What are we trying it achieve? We are not going to get the Russian ICBM force off of alert, even if he we took all of our ICBMs off of alert. And if you think that the Russians have a hair-trigger and you take some of their forces down, then the rest are on a tighter hair-trigger. So I don't understand the logic that says this is a good thing to do. And I understand the risks that are attendant with it, the whole rearming re-alerting question, so I think it is a terrible idea that we hear about a lot, but I can't find any logic to it.

Mr. LAMBORN. Dr. Halperin.

Dr. HALPERIN. I actually agree that. My view is that de-alerting is very dangerous, because it implies that in a crisis, you re-alert, and that is the last thing you want to do is have both sides looking like they are moving toward they are about to launch a strike and then you get what Tom Schelling many years ago called the reciprocal fear of surprise attack, and you make war more likely.

You want a nuclear posture, in my view, that you don't change, even if you think war is more likely.

The one area where I think we need a debate is the one I have suggested, which is the question of a requirement for a prompt launch capability. I would like us to be in a situation where the military understands that they don't have an option to come to the President and say, "Mr. President, we think the Russian missiles are on the way, and we looked at our force again, and we are not confident they can survive a Russian attack; therefore, we want you to authorize a strike before the Russian missiles land."

I want to President to say to the military now, "I am going have an alert force, and I am going to have a secure force. I am not going to be pushed into launching because somebody thinks missiles are really on the way." And if that means we have to spend more money on command and control and more money on how to get the President out of Washington quickly or figure out who is in charge if we can't get him out, we ought do that.

But we ought not to rest our deterrent on the belief that we can go to the President and say, "Fire before the Russian missiles

land." That does not mean we should change the alert posture; it does not mean we should do anything called de-alerting, but it does mean, in my view, that we ought to make it clear that a prompt launch capability is not what we rely on to deter a Russian attack.

Dr. PAYNE. I am in a position of agreeing, again, with both of my colleagues' points.

Just to, in a sense, restate the point that Mort made, which he made a long time ago—as a matter of fact, he was one of the early masters of this particular subject—and that is a re-alerting race in a crisis would be extremely dangerous, and it is what we should avoid. Taking our forces off alert or degrading alert would lead us to the potential for a re-alerting race in a crisis.

We should do nothing like that because we want postures where nothing requires Presidents to make hasty decisions. Now what we do want to do is protect and expand the decisionmaking time for the U.S. and Russian Presidents. And in fact, that is what the Congressional Strategic Posture Commission said on this subject. It said the notion of de-alerting, that the idea that our forces are on a hair-trigger alert is simply erroneous. That is how the Commission characterized that particular point. And it said "The alert postures of both countries are in fact highly stable." I believe we were right then, and I believe that's still accurate.

Mr. LAMBORN. Thank you, Mr. Chairman.

I am sorry that took a little bit longer.

I yield back. I would ask unanimous consent that the report Mr. Miller referred to would be made a part of the record.

Mr. TURNER. Excellent. Without objection.

[The information referred to can be found in the Appendix on page 77.]

Mr. TURNER. Excellent answers and great discussion. I really appreciate, as I said when we opened, both your expertise and your willingness to share with us.

Ms. Sanchez has requested that I go to Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman.

I thank the Ranking Member for yielding.

And I want to thank our panel for being here on this all-important topic. Let me start with this, how would you rank or compare our nuclear deterrent to other nuclear weapons powers, including Russia and China? And how does our nuclear deterrent compare to other nuclear powers in terms of numbers?

Mr. MILLER. We have approximate parity with Russia in strategic forces. The Russians have an arsenal of nonstrategic or tactical weapons which is 10 to 15 times ours. Both United States and Russia have significantly more strategic weapons than do China or France or the United Kingdom. Indeed, with the growth of Pakistan's arsenal, it is rapidly approaching the same level as the United Kingdom, but the short answer is the same as Russia in strategic; deep imbalance with Russia in nonstrategic; more than China; more than the rest.

Dr. HALPERIN. My understanding is that we do have a substantial advantage in numbers over the Russians in nondeployed strategic weapons which may, in fact, make the overall number of weapons that each side has much closer than we normally discuss.

I also believe that the United States' arsenal is much more sophisticated and much more effective and much more reliable than the Russian arsenal. And we continue to make improvements through the activities of our laboratories, which I think are second to none in these areas.

So I do not think there is any basis for concern that, somehow, some other nuclear power is going to overtake us in our capabilities.

Mr. LANGEVIN. And we have heard the criticism that the Russians will have to reduce their numbers of warheads and delivery vehicles to a much lesser extent than the United States. Are all delivery vehicles that the United States is dismantling or shifting to nondeployed status currently operational, or were some of these phantom delivery vehicles not being used yet still counted as deployed?

Dr. PAYNE. To meet the New START ceiling on launchers, which I think is the metric you are referring to, the United States will have to reduce approximately 180 launchers to get to the New START ceiling on deployed launchers of 700. The Russians would actually have to build up by approximately 180 launchers to get that ceiling. So the context truly is with New START ceiling on launchers, the United States will have to reduce by approximately 25 percent.

Mr. LANGEVIN. Define that term "launcher."

Dr. PAYNE. It is an ICBM, an operational in-service ICBM, SLBM [submarine-launched ballistic missile] or bomber. So to meet those ceilings, the United States will have to reduce by approximately 25 percent its number of deployed launchers.

Mr. LANGEVIN. Say that part again.

Dr. PAYNE. Approximately 25 percent its number of deployed launchers. Russia would have to increase its number of deployed launchers by approximately 35 percent to reach the New START ceilings; that is the context we are in now.

Mr. LANGEVIN. So given the perception of asymmetry in implementation obligations, what is the value of the New START limits and arms control in general?

Dr. HALPERIN. I think, as Frank suggested, the most important was to reestablish the inspection regime that we had before, and to reestablish a legally binding agreement between Russia and the United States on its nuclear forces, which sets a ceiling for both countries that each other can count on and which may provide the basis for agreed further reductions.

I am, in fact, very dubious that we will at any time soon be able to negotiate another comprehensive treaty, but I think it at least provides a framework and a basis for that. It also was, I think, part of building a national consensus on the need to modernize the forces and provided a context in which, I think, people otherwise were worried that modernization might lead to a new arms race, that you had an agreed force level which would prevent that from happening.

I do think we ought to try to find a way, if we can, to persuade the Russians that they really should not build a new large multiwarhead land-based ballistic missile. That is about the least stable

thing that either side can do, and I think it is useful to try to think about ways, if there are any, to talk them out of that.

Mr. LANGEVIN. So how does missile defense affect the numbers level and assuring confidence that we can either prevent or stop a nuclear attack, and how does this affect the limits that have been established?

Dr. HALPERIN. Mr. Chairman, while we are putting things in the record, I would ask permission to put in the record the chapter on missile defense from the nuclear commission report, because I think it is an extraordinary document.

[The information referred to can be found in the Appendix on page 82.]

Dr. HALPERIN. You had in that Commission people who have been fighting with each other about missile defense for 50 years. Many of us, the same people—I mean Johnny Foster and I have had literally had this argument for 50 years. And yet we agreed on that document and what I think that document says; it is unrealistic to think that you can build ballistic missile defense against a large, sophisticated nuclear force—read: the Russian force and the American force, with a question mark about the Chinese, but certainly those, too.

And then on the other hand it is useful to develop active missile defenses to meet regional and smaller threats, that that is not only not destabilizing, but it is in our interest, and that we have an interest in trying to persuade the Russians that the defenses that we build against small nuclear threats are not directed at them, and I think we all agreed on that and I think that is the right way to think about ballistic missiles.

Mr. LANGEVIN. Clearly, though, having a robust missile defense system undermines an aggressor's confidence in a successful first strike.

Dr. HALPERIN. No, I think it is the reverse, absolutely the reverse, because nobody believes a ballistic missile defense can work against the first strike from a sophisticated country.

Mr. LANGEVIN. But the aggressor could never be confident of which missiles were going to survive and get through, and which missiles are going to be taken out.

Dr. HALPERIN. Right, but he can hope to come to rely on the fact that he has a ballistic missile defense to destroy the incoming missiles against his cities. So I believe that if both sides, if we and the Russians both had a robust ballistic missile defense, that that would increase instability and not stability, which is why I have been for many years and continue to be a strong proponent of the ABM [Anti-Ballistic Missile] Treaty. I think it was a mistake to walk away from it, but that is done.

And I think it would be a mistake, as the Commission said, for either the United States or Russia to try to build a ballistic missile defense against the other.

Mr. MILLER. If I could just jump in. If you have a sizeable strategic arsenal—as with the United States and Russia, Congressman—you can, through your targeting policies, deal with a limited ballistic missile defense, that is really not very difficult. I would carry this discussion, though, just one step further, and that is to say that because we are working with our NATO allies to build a

phased adaptive approach in NATO, some believe that the NATO ballistic missile defenses obviate the need to have a forward-based nuclear presence, and that is not what our allies think.

And if the Alliance is all about defending all of NATO, as long as the allies believe that we need to raise the threshold of aggression by threatening unacceptable retaliation, the missile defenses in Europe would be a complement to our NATO nuclear deterrent, but they cannot be a substitute for those forward-based weapons.

Dr. HALPERIN. I would just say they can't be a substitute for an effective NATO nuclear defense, but I do not believe that that requires a forward-based force. I believe the forward-based force, even as it exists now, plays an insignificant role in the confidence of our allies in our nuclear deterrent and in the confidence that the Russians have that our nuclear deterrent protects not only us but our allies as well.

Mr. MILLER. But that is not what the NATO concept said in November. The NATO concept is very clear about the need for nuclear forces, and that is a judgment of the 28 heads of government of the alliance.

Dr. PAYNE. Might I just add on this point, I think it is important to recognize that the Russian defense professionals, who are very cognizant of missile defense and the interaction of offense and defense, frequently write—in fact, almost every article that they publish on this subject says that they recognize and acknowledge that the type of missile defenses that the United States is in the process of deploying are not going to be a threat to their strategic retaliatory capability. They say, "We understand that; others don't, but we understand that" and that, in fact, some of the articles by these folks will say this is a political issue; it is not a military technical issue.

Mr. LANGEVIN. Thank you very much.

My time is expired, but I want to thank the gentlemen for your testimony here today.

I yield back.

Mr. TURNER. Thank you, Mr. Langevin.

Well, gentlemen, thank you again so much. This has been a great discussion, and I really appreciate the opportunity to hear from each of you on these issues, and I certainly celebrate the areas where there has been agreement.

But for all of us who are engaged in this discussion and dialogue, I also want to thank you for the clarity in which you describe the issues, because in addition to your conclusions, you give us some backdrop as to how the decisions are made and the policy issues that arise from these challenges. And with that, I really thank you.

Dr. Halperin, I hope that you are correct in your assessment of this Administration's direction.

Dr. HALPERIN. I hope I am wrong.

Mr. TURNER. That is great.

You know, between us, you know, our concern obviously is that we, because of the areas that we have identified as concerns, we have placed in the National Defense Authorization Act some specific language that would, you know, provide some boundaries, in part, to get assurances from the Administration that they had no intention of going beyond those boundaries. And instead of getting

those assurances, which you are confident of, we actually got veto threats.

Dr. HALPERIN. Yeah—well, Mr. Chairman, if I may, I suspect that the veto threats came from the fact that the previous Administration educated all of us about the importance of Presidential prerogatives and that the veto threats—I haven't seen them, but my guess is that they are about Congress interfering in what the executive branch thinks of as its prerogative, not about the substance of whether they are going——

Mr. TURNER. They actually have been a little bit of both, and I certainly understand the prerogative issue and would have similarly expected some objection there. But I did expect that the Administration might come forward, as you have, and said that, you know, their lack of interest in going beyond those boundaries. So we give, everybody, again, that ability to come back and have some bipartisan support for what is going on because there is a great deal of concern.

And I would like to go to one of the areas where you said we did have some disagreement because I think there is probably still a large area in which we do have agreement with respect to NATO and our forward-deployed nuclear weapons.

We had William Perry, former Secretary of Defense and Chair of the Strategic Posture Commission, here, and I asked him, the issue of, you know, our concern that there would be unilateral withdrawal of our weapons from Europe without a corresponding concession from Russia in their tactical nukes. As you are aware, during the START negotiations, the Senate was very adamant that the Administration must look now to not reductions in U.S. weapons but look to tactical nuclear weapon reductions on the part of Russia. And Secretary Perry said he thought that would be a bad idea to have unilateral withdrawal without corresponding concessions from the Russians.

I would—and I am going to, of course, ask all of our members of the panel this, but I would suspect that we probably have an area of agreement between you, me and Secretary Perry, that the value of these weapons as a bargaining opportunity with respect to Russian tactical nukes, should not be dismissed.

Once we go through a process of, withdrawal reductions, we lose an opportunity because we don't have many other things, unless this Administration is willing to go past nuclear weapons in bargaining to gain those concessions.

And I would like your thoughts. I am assuming—perhaps you could give us your insight as to whether or not you agree with Secretary Perry that it is a bad idea.

Dr. HALPERIN. I agree that—well, I am not sure I agree with him because I have a view that is different.

I do not think we should be willing to trade our withdrawal of our nuclear weapons from Europe for some reduction, even a substantial reduction, in Russian tactical nuclear weapons because if it is the case—which I do not believe, but my colleagues do and many people do—that the credibility of the American nuclear deterrent for our NATO allies depends on the presence of nuclear weapons in Europe, that will not change if the Russians cut their tactical nuclear arsenal by two-thirds, or even eliminate it because

they will still have their strategic weapons, which, while they can't have intermediate-range missiles, they can find a way to target them on the NATO countries.

So I think we have to debate this issue on its merits. I understand that the alliance has said that. The alliance has been saying that for many, many years. It said that about 6,500. We are now down to a number, which I think none of us are allowed to say, but we all agree is lower substantially lower than 6,500.

And the same things that we were told would happen now if we go to zero. I was in the Pentagon. We were told, "If do you that, if you freeze at 6,500, all these same terrible things will happen; nobody will believe that the deterrent is credible." And of course, the Russians were then in Berlin, so it was a different situation.

My view is we ought to say to our NATO allies what our military has said publicly: We do not believe those weapons are necessary for a credible deterrent. But if you believe they are, we will leave them there. But we have to deploy them in a way that we are confident they are not subject to sabotage.

One of the issues that I think we need to worry about, and that the military certainly worries about is that, as has happened in the past, people end up on those bases and hold up a nuclear weapon and then you get a demand to take them out in a way that would be counterproductive to the Alliance. So I am not for taking them out because the United States decides.

I am for saying what our military has said: We don't think we need them for a deterrent, but if you do, we will leave them there. And if we conclude that, we should not bargain them away for any amount of reduction in the Russian——

Mr. TURNER. Well, as I turn to Mr. Miller and Dr. Payne, I will expand the question based on what Dr. Halperin has answered. In addition to the bargaining chip aspect of my question, we know that the Nuclear Posture Review states that in Europe, "The presence of U.S. nuclear weapons—combined with NATO's unique nuclear sharing arrangements under which non-nuclear members participate . . . contribute[s] to Alliance cohesion and provide[s] reassurance to allies and partners who feel exposed to regional threats." If you might comment, then, on both issues. I will go first to Dr. Payne.

Dr. PAYNE. Let me, I might mention a couple of points with regards to the unilateral reductions.

We saw unilateral reductions by the United States in both deployed launchers and warheads.

Mr. TURNER. Dr. Payne, could you move the microphone a little more in front of your——

Dr. PAYNE. Yes. The New START treaty mandates U.S. unilateral reductions in the number of deployed launchers and warheads, and we will implement that. The United States has decided to unilaterally reduce the US number of tactical nuclear weapons with the taking down of the TLAM–N [Tomahawk Land Attack Missile-Nuclear] system, and the Administration has announced the possibility of further unilateral reductions.

These are the kinds of statements that I am concerned about, and that is what I would lay on the table with regard to Mort's confidence; these are some of the reasons why I am concerned.

The problem with unilateral reductions isn't that unilateral reductions are necessarily bad, but if you have unmet negotiating goals, such as the United States has, engaging in unilateral reductions simply limits your ability to ever get to where you want to go in the area of arms control.

So there is a strange juxtaposition where we have said as a country, we want to be able to find reductions in the Russian tactical nuclear arsenal because it is so large, and yet we engage in unilateral reductions at the strategic level. We have engaged in unilateral reductions at the tactical nuclear level, and now we are talking about further unilateral reductions.

Those two positions don't make sense. If we have unmet negotiating goals, engaging in this long stream of unilateral reductions, at least in my mind, doesn't make any sense.

And, in a sense, I find Mort's comment reassuring because what I understood Mort to have said is, if the allies want U.S. nuclear weapons to stay in NATO for their assurance, then they should stay. That is, in fact, what the Commission said, the Strategic Posture Commission, and that strikes me as a fully well-thought-out position.

Mr. TURNER. For the record, Dr. Halperin nodded in the affirmative.

Dr. HALPERIN. Yes.

Dr. PAYNE. If—and one of the processes that the Commission went through was we heard from a large number of foreign representatives. And I—without breaking any confidences, I can assure you that representatives from Central European and Eastern European allies who are now in NATO were strongly opposed to the notion of the U.S. essentially withdrawing its nuclear weapons from the continent.

In fact, they made the point that one of the reasons they wanted to be NATO allies was because they came under the U.S. nuclear umbrella, and those nuclear weapons were in Europe.

Mr. TURNER. Mr. Miller.

Mr. MILLER. I agree with that.

The first point I would make is this is why most of the new allies joined the alliance, to be under the U.S. nuclear umbrella.

The presence of those weapons is highly symbolic. The new allies believe that that represents the U.S. commitment to their defense. The threat is not really just Russian tactical nuclear weapons; it is Russian local superiority in Central Europe and in the Baltics.

We hear a lot about NATO's superiority. If you lived in the Baltics or if you lived in the Slovak Republic or Czech Republic, you are not thinking that NATO has conventional superiority. And that is why they want the presence of U.S. nuclear weapons there. And that is why they have told us that, and that is why the Alliance in its policy statement of last November said that we will retain weapons there.

The notion that we can just do it all by strategic systems from the United States is something we have tried before and failed.

In the late 1970s, when the Soviets were deploying the SS–20 missile, the Pentagon's first approach was, "That is okay, we can just add more strategic warheads to Supreme Allied Commander Europe's targeting capabilities," and the allies said, "No, that is not

going to cut it; we need something on the ground that we can feel and touch and see." This is a similar situation, and I don't believe we should ever go to zero in Europe as long as the allies believe they need to be there.

If at some point the allies don't feel we need to have the weapons there anymore, we should take them home. That is what happened in South Korea in the late 1980s. It is interesting now that some South Koreans are beginning to say they want the weapons back. They are never coming back, and we know that.

So, again, if the allies believe this is important to their security and NATO is an alliance where the collective security is in everybody's interest, we need to listen to all the members of the Alliance.

Dr. HALPERIN. Mr. Chairman, may I just comment on that?

Mr. TURNER. Yes, please.

Dr. HALPERIN. The Central Europeans I talk to are much more concerned about their conventional military balance. They agree with Frank, as I do, that the real concern we have—and that we saw in Georgia—is whether the Russians can move conventionally along their borders, including against NATO countries.

I am much more interested in our building up the credibility of our military presence in that part of the world, of our conducting exercises with the Poles and others on the border, and of finding ways to redress that local, tactical, conventional military balance which the Russians have shown us they do have and are capable of using, if not in NATO countries, at least in countries that are independent.

And I think the lesson of the Cold War and of the period since the Cold War is that nuclear weapons are not a substitute for conventional military forces. They do not deter conventional action, either by nuclear powers or by non-nuclear powers, against nuclear powers, and I think we should be worried about the balance in the center of Europe.

But the answer to that is not the few nuclear weapons we have in Western Europe; the answer to that is to take seriously that concern as a conventional military concern.

Mr. TURNER. Well, I am going to take Mr. Miller's comments about South Korea and expand this in the same genre for a moment. As we talk about the issues of reducing our strategic forces or our weapons in Europe, there are—beyond just our NATO allies—implications, both with those who would have confidence of our extended deterrence but also on whether or not they independently pursue nuclear weapons programs. Saudi Arabia, Turkey, Japan, South Korea or others, may look to whether or not they feel, in the environment that they are in or with those nations that are now becoming nuclear powers, that they must independently pursue these programs.

And if you would all comment on that for one moment, and then I am going to turn it over to Ms. Sanchez, and we will go to a second round.

Dr. Payne.

Dr. PAYNE. Going back to the point that Frank made about South Korea and the call by some South Koreans for the nuclear weapons to come back, that is exactly the type of thing that we are seeing

in response to the new fears that various allies and friends have as a result of proliferation.

North Korea obviously has a nuclear capability. There are fears that Iran may soon have a nuclear weapons capability and missile systems to match that and exactly, as a result of those types of developments, we are, indeed, seeing allies who are reconsidering their past commitment to be in a non-nuclear status.

I don't want to suggest that that is about to happen or, for example, that the Japanese are about to acquire nuclear weapons. I am not saying that. But what we do see is a very heightened concern by allies—key allies—and people in serious positions of authority who will say specifically that the directions that they are seeing in their region, the direction of nonproliferation they are seeing in their region, combined with the apparent U.S. interest in pulling back nuclear weapons, is of great concern to them and, in fact, they may have to reconsider their commitment to their non-nuclear status. We are hearing that explicitly from a number of allies and implicitly from others.

Dr. HALPERIN. Again, I think we all hear from people in allied countries things that we are interested in hearing because those are the people we talk to in those countries.

One of the recommendations of the Nuclear Posture Commission was that we needed to fundamentally change the way we consulted with Japan on nuclear questions and that we should not move on the TLAM missile but, even more generally, on nuclear deterrence without genuine consultation with them.

The Administration took up that recommendation. There were more extensive and serious consultations with Japan during the Nuclear Posture Review than we ever had before.

And my reading from Japan, having visited there and talked to people in the Government and the defense establishment after the Nuclear Posture Review is that they were fully satisfied with the consultation in cooperation and were comfortable with all of the decisions that we had announced in the Nuclear Posture Review.

To be fair, they were worried, as people in this room are, about what the next phase might be and wanted to be sure that they continue to be consulted.

But I believe—and I think the European example shows it as well—that consultations with our allies about our nuclear forces, about how we plan to use those nuclear forces, about why we think they are credible, are as important to the effective credibility of our deterrent in dealing with the potential nuclear proliferation threats than the specific deployments and that we ought to continue to pursue both.

Mr. MILLER. I think that the weapons that we have in Europe are weapons of war prevention.

I obviously disagree with Mort. I think that the presence of those small number of weapons does symbolically raise the cost of a conventional attack on our NATO allies. I think that is why the allies believe they are so important.

I believe the weapons in Europe have served an anti-proliferant. It has caused nations that could develop nuclear weapons not to do so.

I think in light of what is going on in Iran, withdrawing those weapons would send a signal which would cause people to lack confidence and to consider proliferating. And I think that our Far Eastern allies, Japan and South Korea, are also watching what we do with the NATO weapons when NATO allies have expressed a strong desire and a need to have the weapons forward.

If we were to take them out, I think it would cause leaders in Tokyo and in Seoul to start questioning our commitment. And 5, 10, 15 years down the road, we could have, we could have a proliferation situation in the Far East that I think would be very, very worrisome.

Mr. TURNER. Ms. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman and, again, thank you, gentlemen.

I think Dr. Halperin is probably correct in saying, you know, it depends on who you talk to on any given day as to how people feel about having our nuclear capability and, certainly, tactical weapons within Europe.

And I just want to put for the record that, from my standpoint, one of the things that we are doing to reassure our allies within Europe is continuing as well as we can—considering we are also in two other wars, some would say three—to do forward-basing to put new bases in some of those countries in Romania, in Bulgaria, to move our troops out of the German line, if you will, and put them further south and further east in that area.

So I think we are trying to, given the constraints that we have had on our military during what has been a very costly set of wars, that we have tried to do that, too.

And given this concept that maybe what some of our NATO allies, especially the ones that used to be or were closer to the Soviet ring, that they view this whole issue of conventional warfare or somebody coming over their line—as we saw, for example, in Georgia, just a couple of years ago, that maybe that is what is making them want to hold onto this whole issue of strategic weapons.

What other things do you think we could do, aside from nuclear, to assess and reassess and to build that confidence level with these former and, particularly, former satellites of the USSR?

Dr. PAYNE. I agree with Mort in the sense that there are a number of measures that the United States can take to help reassure allies that don't necessarily have anything to do with nuclear weapons.

As a matter of fact, the Administration has talked about missile defense as helping reassure allies and, obviously, that is non-nuclear, and other non-nuclear forces and actions as well. And I agree with that.

But let me suggest that, in a sense, there is no substitute for extended nuclear deterrence to nuclear weapons. You can't provide extended nuclear deterrence with purely non-nuclear means. And so the question is, how important is the nuclear component of that? And this isn't something that we can judge usefully from here because that judgment is made in foreign capitals.

And I will respond a bit to Mort's point that you—the answer you get depends on with whom you speak and so everything is all equal: I haven't found that to be the case. I mean, what I have

found is very serious military and foreign affairs professionals who express the type of concerns that we have identified here.

So I would like to suggest that I agree with Mort that there are a number of steps that we can take—close consultations, close cooperation on the conventional forces, a whole series of actions that we should and, in some cases, are taking to help affirm the allies' confidence in the United States—but if you take the nuclear portion out of the deterrent, in a sense you are taking the pillar out from the building. I mean, the nuclear deterrent as part of extended deterrence is a key to the allied assurance with regard to U.S. commitment. This isn't my interpretation; this is what many of them say.

Ms. SANCHEZ. And, Doctor, do you think that—and I will ask you both—but do you think that the number of nuclear weapons that we have based in Europe, is there an ability to eliminate some of those and still have that capability and that assurance to our allies, or must we have all the ones that we have there? Because there are definitely countries that—whose people and whose politicians no longer are thrilled about having them there.

Dr. PAYNE. Congresswoman Sanchez, that is a great question, and I would only suggest that an answer that I might give isn't worth very much because we want to go to the allies and see how the numbers affect their feelings of assurance with regard to the U.S. commitment. And so——

Ms. SANCHEZ. But I am not talking about their feelings now. I am talking about your—your knowledge of, are there actually some that we could eliminate and still have the coverage that we need should there be somebody coming across the eastern lines?

Dr. PAYNE. Let me take the "feelings" word out this and say it depends on how the allies see it. In terms of the assurance that is provided by our nuclear weapons to our allies, the relationship between numbers and that level of assurance is all in their perceptions of the situation. So whether that number can come down and provide the same level of assurance is going to be in the perspective of our allies.

And so some allies, I believe, would say those numbers can come down. Other allies, I think, would be very wary about the United States even coming down to the numbers at this point.

And so that is why this is, in a sense, an act that is very challenging because we have a large alliance, and some allies feel very strongly about this issue. Other allies perceive the threat as being much more benign. And that is why I would put this in the context of an allied question, really not a question that we can answer here as well as we would like to.

Ms. SANCHEZ. Thank you. Doctor.

Dr. HALPERIN. Thank you. I would agree with that last sentence. The nuclear element is an important element of our deterrent and our assurance to our allies. The question is whether that requires the stationing of the weapons in the territory of the countries we are trying to defend or the alliance we are trying to defend.

We have had credible nuclear assurance with Japan from the beginning without storage of nuclear weapons in Japan, because the Japanese did not want them.

We now have no nuclear weapons in Korea. I believe the credibility of our nuclear deterrent against a North Korean attack on South Korea is every bit as strong as it was before because there are large numbers of American troops in South Korea. And the North Koreans know that if they launch an attack with chemical weapons, or conventional weapons or nuclear weapons, they are going to kill lots of Americans and there is going to be a deterrent threat.

I have always believed in Europe, the presence of American forces and the alliance conversations about both nuclear and conventional weapons were much more important than whether we had nuclear weapons here.

I do want to go back into history because it is my understanding of the history that we were the ones who came up with the idea that nuclear weapons had to be stationed in Europe.

It was not that our allies said we do not want your conventional forces unless we had nuclear weapons as well, but exactly the opposite. We said we are not sending our conventional forces unless they are accompanied with nuclear weapons. That is how it all began, and we have taught our allies to believe, because we believed, that the presence of nuclear weapons in Europe was necessary.

This same debate with the same predictions of dire consequences occurred for every reduction from 6,500 to the current number. And every one of those moments, we were told exactly the same thing, talk to the right people in Europe, they will tell you this will have disastrous consequences. And the numbers have gone down steadily and, in my view, there have been no consequences because the Russians fully understand the credibility of the nuclear deterrent.

I think it denigrates our commitment, and the understanding that our allies have of that commitment, to suggest that a few weapons in Europe somehow are an important part of the credibility of that deterrent.

They are certainly no part, and here I want to be careful not to get into areas that we should not be discussing, but they are certainly no part of what we would actually do if there was a Russian invasion across the line. The notion that we would wait until those weapons were ready to begin to launch whatever defensive attack, including, if we thought it was appropriate, nuclear weapons—I think it is just wrong.

We have weapons that are much more alert—if I can use that term—and if we decided nuclear weapons needed to be used, we would use. So this is not a matter of the operational need for those weapons in Europe because we might have some reason to want to deliver them from Europe rather than from submarines or from——

Ms. SANCHEZ. Well, I asked that in the context of, I remember last year, Joint Chiefs of Staff Vice Chairman General James Cartwright said that, from a military point, there were probably 200 U.S. tactical nuclear bombs stored in Europe that didn't serve a military function that wasn't already covered by other assets we had.

So that was in my context of the fact that we have some NATO allies that have expressed very strong, to me, at different levels of

Government, have expressed very strong desires to, you know, some of this moved out whether, in fact, we can move some and still have the effect that we need from a deterrence standpoint.

Mr. MILLER. Let me respond if I might.

The first question you asked was, are there other things we can do to reassure the allies? Absolutely, we can. There are consultations. We can develop contingency plans to defend them. We can carry out exercises to make those contingency plans real. Unfortunately, some of the older allies in the Alliance have blocked our ability until very recently to even do that contingency planning, saying that it was not allowed.

So the new allies were feeling pretty alone in that regard. We tried to do other things. We were blocked by some of the older allies.

Second, the question of numbers of weapons and Jim Cartwright's comment, I think, is not really the focus. Those weapons do not serve primarily a military purpose. They are weapons of war prevention and to reassure the allies. And I suppose it is true that you can get different views from people depending on who you talk to. You could walk through this building and get very different views.

But, again, I hate to hold this [*Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation adopted by Heads of State and Government in Lisbon*, Nov. 19, 2010] up like it is Mao's Little Red Book. But this represents not people you just talk to on the street, this represents what the NATO governments—all 28 of them, believe in. And what they said was, we will ensure that NATO will maintain an appropriate mix of nuclear and conventional forces and we will ensure the broadest possible participation of allies and collective defense planning on nuclear roles in peacetime basing of nuclear forces.

So it is not just anybody; this is what the leaders of the alliance said just last November.

I think that the situation in the Far East is different. History plays a role here. We do extended deterrence in the Far East by central systems, but there are weapons on the ground in Europe today. And if we took them out, we would be changing that situation, and the allies know it.

Starting from scratch, could we have done it with strategic systems only? Perhaps. But we are not starting from scratch, we are starting from the history of those weapons being there since the 1950s and with new allies joining the Alliance to be under their umbrella. So I think that is very important.

I was present from the late 1970s in Government through 2005. I was deeply involved in many of the reductions from 7,000 to the current level.

At no point in those did we have real allied concerns that we were going to change the situation. The allies concurred in the way we were doing it, as long as they were reassured that there was going to be some sort of a presence.

And I will say in closing, Congresswoman, to your question, I think, and I said it before, I think it is morally wrong, I think it is morally failed, for those allies who wanted those weapons there

during the Cold War, wanted the United States homeland to be at risk to help deter a Soviet conventional attack on their soil, can now say that it is okay, we are several hundred kilometers behind the lines now, we don't care what the guys who are on the line think.

I think that is a failed moral policy of some those allies, and it is a complete and total disregard of what NATO is all about, which is collective security, not an individual nation's point of view.

Ms. SANCHEZ. So let me ask you just a question for my own purposes. Do you, if you could start all over—let's say you had a blank slate and you were thinking about nuclear capability and what we wanted to see in that arena, what would you put in? And I guess I am asking this question from a sense of, Where should we think about putting funds? Where should we be accelerating what we need to do in order to not only have confidence from our allies there but, really, deter?

Mr. MILLER. I think it is pretty simple. The B–61 bomb needs to be modernized anyway. There is a program to do so. The B–61 has both tactical and strategic capabilities. It needs modernization; some money is going to that.

We are buying the Joint Strike Fighter, the F–35. That is very important, too. It is going to have a nuclear capability, and allies are going to buy that fighter aircraft.

So it is not a question of cost or buying new aircraft that they weren't going to buy anyway. It is a question of having the political will to have a couple of nuclear weapons on their soil as part of a collective defense.

The new allies would take nuclear weapons, but because we made a pledge in the late 1990s to reassure the Russians, we can't put them there. So now it is back to the collective good.

As to the numbers of weapons, it is more whether countries will stay in the basing role as to whether we can reduce the number that we have there. I personally think we can reduce the number that we have there as long as countries continue to base them.

I think the last thing we can do is to ensure that we continue to tell the old allies that we have protected their freedom for four decades or more, that they have a moral responsibility to help protect the freedom of the new allies.

Ms. SANCHEZ. Doctor.

Dr. HALPERIN. I have to say I have now reread the NATO Strategic Concept, and I don't, I didn't remember it saying and I don't find it saying that there is an agreement that there is a requirement that nuclear weapons be based in Europe. I think on the—can't turn.

Mr. MILLER. Other page. Widest possible—peacetime basing in the United States.

Dr. HALPERIN. No, it says. Frank, it says ensure the broadest possible participation, allies, in collective defense planning on nuclear forces.

Mr. MILLER. Yes.

Dr. HALPERIN. In peacetime basing of nuclear forces.

Mr. MILLER. In peacetime basing of nuclear forces—in Europe.

Dr. HALPERIN. No.

Mr. MILLER. It doesn't mean in the United States and France and——

Dr. HALPERIN. It doesn't say that. It says the broadest possible participation in collective defense planning. You know and I know there were people who want——

Mr. MILLER. Keep going.

Dr. HALPERIN. I am going to keep going. And in command and control and consultation arrangements. It is the broadest possible participation in those things.

Mr. MILLER. In peacetime basing among the three.

Mr. TURNER. Gentlemen, I think we have noted your diverging opinions.

Mr. MILLER. We disagree.

Ms. SANCHEZ. Any other thoughts, Doctor, before I go over to Dr. Payne.

Dr. HALPERIN. No.

Ms. SANCHEZ. Thank you. Dr. Payne, any finishing thoughts?

Dr. PAYNE. The question with regard to the blank slate, again, I think is a good question. To answer that question, we do need to do, I believe, what Frank was getting at, and that is to go to the allies as an Alliance and see what they see as necessary for their assurance.

Let me just add that I frequently hear it said that the credibility of our deterrent to Russia is strong without nuclear weapons in Europe, and Mort just made that point. I hear that frequently. And the implication is, therefore, we don't need weapons in Europe.

Or, I have heard the point that says that we don't need to employ nuclear weapons deployed in Europe; therefore, we can pull our nuclear weapons out of Europe. Those are the two points that are frequently made in this regard.

But let me just suggest that neither of those points are really pertinent. We don't have nuclear weapons in this case. We don't judge our nuclear weapons by how we grade their credibility to Russia for the purposes of assurance of allies and we don't grade our nuclear weapons by whether they would be useful and employed; that is war planning. We don't do war planning on this panel.

What we are looking at is, what does it take to assure the allies of our commitment to their security? That is the number one question, and that has very little to do with these other points that are often made.

And so I think this Administration has done a good job in going to allies and done serious consultations with them on this question. The only thing that I would suggest here, in conclusion, is that I would hope that once we take those consultations, we actually act upon them and don't act unilaterally in ways that these key allies who have joined NATO for this purpose or for this reason find very, very alarming—because, in a sense, it is the United States backing out of both treaty and moral commitments that we have made.

Ms. SANCHEZ. Well, certainly, I know that this Administration has worked very hard and we are very fortunate to have Ellen Tauscher over there working. She has got a very good working relationship with our European allies and they, to a large extent, trust her on a lot of these issues.

I know that this committee has worked very hard. We have made trips, even though we get slapped around for going to Europe to talk to our allies when, you know, when we are switching up or changing some ideas in particular with respect to missile defense that we have really, you know, worked hard to go and reassure and talk about what we really see. And I hope that we continue to work in a very bipartisan manner to do that.

We are—I don't think any of us are suggesting let's pull everything out of the land over there. I think we are just trying to, in a time of very limited budgets and, you know, I mean, that is why we are at a standstill right now, even in trying to raise this debt limit.

At a time of limited budget, we are trying to figure out where do we—where is the strategic place for us to be, given that we can't do everything anymore? I mean, we can't do everything. We just can't do it anymore, so we have to just be smarter and that is why we ask you, what do you think is the best way for us to move forward?

So I thank you for being before us.

Mr. TURNER. Thank you.

Mr. Franks.

Mr. FRANKS. Well, thank you, Mr. Chairman.

Thank you, gentlemen, for joining us.

Let me start with a question about the Nuclear Posture Review. In that review, the Administration mentions as a subject for study for future reductions the effort of exploring new modes of ICBM basing. When they say for possible reductions, that fascinates me. Can you tell me what in the world that means?

Dr. HALPERIN. I have been, I have been asking about that, and I am told there was one person somewhere in the Pentagon who had this, an interest in this and somehow got the sentence in when people weren't paying attention.

As far as I can tell, there is no—there is no serious interest in this. Nobody is thinking about new modes. I mean, that seems to be a reference to rail mobile——

Mr. FRANKS. Not putting on family cars, things like that?

Dr. HALPERIN. No, no. Rail mobile is something we have thought about from time to time for many years. There are many things uncertain about America, but that we will never have rail mobile ballistic missiles, I think, is a certainty. It is not going to happen. There are many statements in the Nuclear Posture Review to worry about, but I would not worry about that one. You have my assurance.

Mr. FRANKS. Well, okay. I am glad you are comforted by all of that.

Well, anyway, let me ask you about the nuclear triad. In testimony before the Senate Armed Services Committee on May 4, the Principal Deputy Secretary of Defense James Miller stated that the upcoming deterrence review would proceed consistent with what he called the "principles" of the Nuclear Posture Review.

One important conclusion of the 2010 Nuclear Posture Review was that the triad should be preserved. But in an interview published that same day, White House official Gary Samore suggested that this deterrence review would look at whether we should elimi-

nate one of the legs of the triad. And some might wonder, therefore, which of the conclusions the NPR [Nuclear Posture Review] the Administration considers definitive, and which parts of the NPR are subject to change.

The NPR reaffirms that each of the legs of the triad has unique characteristics in terms of assurance, survivability, visibility, upload potential, accuracy, and ability to penetrate defenses. And, of course, I agree with that.

So remind us if you can—and if those that are in the Administration are listening—what are some of the respective virtues of each leg of the triad, and I will kind of ask that as a broad question to each of you.

Dr. Halperin, if you want to begin.

Dr. HALPERIN. Well, let me say, I think before you came in, Mr. Franks, I said very clearly what I have always believed: It would be a mistake to open the question of whether we should move away from the triad.

I believe that for foreseeable levels of nuclear forces, we should maintain the triad and that each of them does have different characteristics.

The most important, in a way, is that what you worry about some catastrophic failure that you wake up some morning and discover, you know, three missiles exploded on the launch pad and you suddenly realize there is a technical flaw, and you have got to take them all down and fix them. Or you suddenly discover the Russians know where our submarines are, or that you conclude that their air defenses are so good that no bomber will ever get through.

The essential point is it is possible to conceive of one system having a catastrophic failure like that. If you are a real worrier, you can conceive about two systems going out simultaneously. But three cannot, you know, then we get to the law of averages. They may all go out over time, but not at the same time.

So just for that reason, it seems to me——

Mr. FRANKS. Just redundancy alone.

Dr. HALPERIN. It is redundant. It gives you flexibility on how you can use them. You may be in a situation where you don't want to fire from the land, but you feel willing to fire from the sea. You can imagine many different characteristics of the systems.

But in my view, the most important one is that unexpected vulnerabilities, if they arise, are going to arise probably in only one system. It is one of the reasons why—because the other vulnerability we are worried about is suddenly discovering none the weapons work, and it is why the modernization of our weapons infrastructure is so important and finding ways to test the systems without nuclear tests is so important, so we don't wake up one day and discover the weapons failed.

But if we have three delivery systems in several different weapons, then I think we can be pretty confident that enough of it is going to work to deter.

Mr. FRANKS. Thank you.

Mr. Miller, I might expand on that a little. All things being equal, do the virtues of a triad become more or less relevant at

lower nuclear numbers? And if you want to expand on the question that I asked Dr. Halperin, that is fine, too.

Mr. MILLER. Yes, sir. I believe that they do become more important at lower numbers. I think Mort has adequately has beautifully described the various attributes of the triad: Offsetting capabilities, offsetting vulnerabilities, offsetting failure modes, different signaling capabilities in a crisis or pre-crisis period. And as the force comes down, you absolutely want to have the capability in three legs to offset a failure mode in one leg.

So I think that is absolutely essential. It is why I think the Administration really needs to be a lot more transparent with the Congress and the American people as to what it intends to do with the air breathing leg, with the bomber force, and with the ICBM force.

I would also say that there is almost a fourth leg that is unremarked upon, and that is Prompt Global Strike. We have been talking about prompt global strike for probably 6 or 7 or 8 years, and all we have deployed are more and more PowerPoint® slides. We could break that ceiling. We could have in place a system based on Trident in about 3 years.

The Senate held that up for a long time because it argued that was destabilizing. It asked the National Academy of Sciences to do a study on that. The National Academy came back and said this isn't a problem. But we still haven't moved forward. We are still studying to find the best of the best of the best systems. So that, I think, is a fourth component to an overall strategic triad.

Mr. FRANKS. Well, not to beat the question to death but, Dr. Payne, can you give me some idea of what you think the elimination of a leg of the triad would do to strategic stability of the United States?

Dr. PAYNE. Well, to the extent that stability is based on the character of our force posture, it would ease, or potentially ease, an opponent's efforts and strategy to get around our deterrent by reducing the survivability of our forces, by reducing those characteristics that Mort and Frank so nicely described. I mean, the whole point of having those characteristics isn't just because we like to collect characteristics for forces, it is because they are extremely important because *in toto* what they do is they deny an opponent any plausible strategy for getting around our deterrent. And as you pull the legs of that triad down, you reduce that ability to deny them a theory of success, as it is called.

Mr. FRANKS. Well, of course, I couldn't agree with you more. I could try, but I couldn't agree with you more.

Then, am I to assume, essentially, that this talk of removing a leg of the triad is just some low-level person in Administration that slipped that line in there somehow, right? And the person's name is not Obama; correct?

Mr. MILLER. We are all private citizens. I don't think we can comment authoritatively.

Mr. FRANKS. I was just trying assure myself here a little bit. All right. Well, thank you, all very much, and we appreciate your service to the country.

Mr. TURNER. Gentlemen, I am going to ask you a wrap-up question that goes to the role of Congress.

Doctors Payne and Halperin, you participated in the Strategic Posture Commission, which actually called for, as a part of its recommendations, renewed congressional involvement and dialogue between the executive and legislative branches.

Now, Dr. Halperin, you noted the one source of administration angst and veto threat motivation is executive prerogative.

Mr. Miller, you said in your written testimony and in your statements here that both the Senate and House need to be more active and have deeper involvement in nuclear and strategic issues.

So I thought we would take a moment and end on your collective thoughts on how the executive and legislative branches should be working together and how the House of Representatives might reinvigorate its robust oversight of these important issues.

Mr. Miller, since it was actually in your written testimony, I will start with your thoughts.

Mr. MILLER. Thank you, sir.

I want to commend you and Ms. Sanchez for having these hearings and for doing that. I was a creature of the executive branch for 28 years. Some of my trips up here were more pleasurable than others, shall we say. But it was always important.

The Congress has to be involved in these issues because it is through the congressional involvement that, in fact, the American people see a broader picture of all of this and, therefore, I strongly support a reinvigorated series of hearings and having the Congress say that these are important issues, that nuclear weapons may have a reduced role or a smaller role in our national strategy than they have had in the past. But they are, by God, truly important subjects on which the life of the Nation could depend at some point and a vigorous public debate to put these issues out into the open and to examine the Administration's promises and its actions is terribly important.

So I would commend you for that. And as I said in my written testimony, I think the Section 1051, where you are asking the commanders, the nuclear commanders, to provide you annual reports is terribly important.

Mr. TURNER. Dr. Halperin.

Dr. HALPERIN. I have always been and remain a very strong believer in Congress' equal role in this. I noticed in your back room, you had the right section of the Constitution up on the wall.

I think Congress does have the power to make rules and regulations for the Armed Forces and that the Armed Forces cannot spend a penny that they don't get from the Congress. So I think it is clear this is and should be an equal relationship, and I would hope it would be one that was not marked by suspicion and by, in effect, a struggle to find differences or to exaggerate differences.

I think you need to understand every administration has different people in it who say different things because they are engaged in debates within the Administration about one subject or another and that they are appealing to different audiences. And so I think it is important to remain calm and to engage in a dialogue which is open in both directions.

So, as I have said, I think it is important that we not have a study which assumes the purpose of the study is to reduce the numbers, but I think it is also important to have a study in which

people are not saying in advance, but if you leave open the possibility that you are going to say a lower number is okay, that there is something wrong with that.

I think my own view is that the nuclear forces should have a very high priority within the defense budget. Put a different way, I cannot imagine the defense budget, even in the current climate, going so low that we should not spend every penny which increases the credibility and effectiveness of the nuclear force.

And so I don't think there should be a fight about funding. I think we need to fund what we say we are going to fund, and I need to—we need to honor the sequencing that we committed ourselves to when the treaty was ratified.

But I think within that, there is scope for debate about whether we should change some elements of the way we operate the force to make it more stable and more secure.

Mr. TURNER. Dr. Payne, in addition to answering that question, since the clock was running during your opening, if there are additional comments that you would like to add in closing, you may take that opportunity now.

Dr. PAYNE. Thank you, Mr. Chairman.

The first part of the question was, I think it is between the Congress and the executive branch, and I am very encouraged by the hearings that you and Ranking Member Sanchez have put together. They strike me as enormously important and, I hope, something that will be continued; particularly your willingness to ask the questions and then asking the second and third order questions, because the answers to these types of questions can get somewhat arcane. The language isn't all agreed upon. There are different buzzwords. It is not easy to have a clear understanding of this area, but I want to compliment you all on having hearings that have really brought this material out, and I would just say more of that would be great.

I think that is one area that was somewhat lacking in the past and moving on to hearings that really get into these issues. And I am not talking about nuclear employment issues. Obviously specific questions about nuclear employment aren't for public discussions. But that is not necessarily all that is important. In fact, in the types of things we are talking about, it doesn't necessarily pertain.

Being able to ask the question of what is your theory of deterrence? What do you think deters, and why do you think the forces that you have talked about that you either want or don't want, will deter or assure the allies, or provide persuasion, or any of the other number of goals that these forces are supposed to support?

And so I guess the bottom line of the comment that I am making is, more transparency in all of this is much better than the lack of transparency, and you have a prerogative with the power of the purse strings to ask these questions in very direct ways and insist on transparent answers. I think that would help, that would help enormously.

And as for maybe the last 30 seconds that you graciously offered me, I would just like to suggest that when we look at future reductions, I didn't say that there is no room for future reductions. There may well be room for future reductions.

What I did try and point out is, just because people now claim that we can have a retaliatory capability at lower numbers doesn't equate that there is room for future reductions. That is an absolute *non sequitur*. Because how we judge the value and adequacy of our forces isn't just based on whether we have the number of forces necessary to meet some targeting requirement.

Reassurance to the allies has its own set of requirements. Extended deterrence of the allied—of our allied enemies, enemies of our allies, has another set of requirements. So the set of requirements that helps us get to a real understanding of our strategic force needs is much beyond what might be considered appropriate for some employment policy. That is only one—in fact, I would say that is only one small part of the answer.

Mr. TURNER. Gentlemen, I want to thank you again. This has been a great discussion, and thank you for your important contributions to an issue that I think we all believe goes right to the heart of our national security.

So, thank you.

[Whereupon, at 5:04 p.m., the subcommittee was adjourned.]

A P P E N D I X

JULY 27, 2011

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Opening Remarks
Honorable Michael R. Turner
Chairman, Subcommittee on Strategic Forces
House Armed Services Committee

Hearing on "Sustaining Nuclear Deterrence after New START"
July 27, 2011

Good afternoon. I want to welcome everyone to the Strategic Forces Subcommittee's hearing on "Sustaining Nuclear Deterrence after New START."

With the National Defense Authorization Act for FY12 recently passed by the House, this represents our subcommittee's first non-budget-driven hearing for the 112th Congress. Our panel consists of non-governmental witnesses, three distinguished gentlemen who have each served in previous administrations in some senior capacities relating to our discussion today:

- Dr. Keith Payne, a former Commissioner of the Strategic Posture Commission, and Professor and Head of the Washington-based Graduate Department on Defense and Strategic Studies for Missouri State University.
- Dr. Morton Halperin, also a former Commissioner with Congressional Strategic Posture Commission, and a Senior Advisor to the Open Society Foundations; and finally,
- Franklin Miller, a Principal of the Scowcroft Group, who has served in senior capacities in a number of administrations.

The witnesses have been asked to provide their assessment of post-New START U.S. nuclear policy and posture, including:

- potential reduction of the U.S. stockpile below New START levels;
- the significance of nuclear modernization;
- considerations relating to a recently announced upcoming review of U.S. deterrence requirements; and
- non-strategic nuclear weapons forward-deployed in Europe for extended deterrence and assurance.

Today's hearing is just one in an ongoing series of events by which the House Armed Services Committee will conduct oversight of these issues.

On July 7th, the full Armed Services Committee received a classified briefing from the Department of Defense, the Department of State, the National Nuclear Security Administration, and STRATCOM on the several topics being considered today.

We have also notified the administration that we intend to hold an open hearing on these same issues again this Fall, with testimony by a panel of government witnesses.

I want to thank our witnesses for appearing today, and to further thank them for their leadership and service to our country on these issues.

I'll keep my comments brief to allow ample time for members to ask questions, but I would like to highlight four important areas that I hope our witnesses and our discussion may touch upon today.

First, I want to emphasize the bipartisan consensus on that has emerged on both ends of Pennsylvania Avenue about the urgent need to modernize the U.S. nuclear enterprise in order to be able to create a sustainable deterrent for ourselves and our allies. After two decades of neglect, our nuclear enterprise has fallen onto hard times. Awareness of these facts has been spurred in part by the Strategic Posture Commission (created by this subcommittee, under the leadership of its former Chair, Ellen Tauscher), and also by the experience of the debate over the New START treaty.

Specifically, I think we've come to see a pragmatic, bipartisan convergence on two basic points: 1) that nuclear abolition is a long way off, and 2) that we will ensure that our nuclear deterrent remains credible for the foreseeable future.

To be sure, full funding for nuclear modernization is costly, and difficult in these challenging economic times. But it is necessary. Pledging $85 billion over ten years for nuclear weapons activities, President Obama noted in December that,

> "I recognize that nuclear modernization requires investment for the long-term, in addition to this one year budget increase. This is my commitment to Congress—that my Administration will pursue these programs and capabilities for as long as I am President."

This statement built upon the observation of the November update to the "Section 1251 Report," namely that,

> "given the extremely tight budget environment facing the federal government, these [increased budget] requests to the Congress demonstrate the priority the Administration places on maintaining the safety, security and effectiveness of the deterrent."

To be sure, we have our policy differences, but I believe that even our differences have helped spur a healthy and constructive debate. In all candor, Congressional focus on these issues has languished for too many years—but I believe the events of recent years have the potential to usefully renew attention, by members of both houses of Congress.

My second point, however, is one of concern. The ink is barely dry on New START, and already senior administration officials are describing their ambitions to move to deeper nuclear reductions below the treaty's levels—changes which could include cuts to our non-deployed hedge stockpile, potential elimination of a leg of the triad, altering the long-established U.S. counterforce nuclear targeting strategy and reducing the alert postures for our forces. Administration officials have even indicated that reductions could be made unilaterally.

Premature steps to cut our nuclear force below New START levels, and in particular cuts which outpace modernization progress, could threaten to upset some of the broad consensus which has been so carefully acquired.

My third point concerns an upcoming 90-day review of deterrence requirements announced on March 29 by National Security Adviser Tom Donilon administration for the express and apparently single-minded purpose of creating options for further reductions. As we all know, strategy must drive force structure, not the other way around, but we also know that it is easy to change assumptions in order to get the answer you want. This committee will continue to conduct oversight on this review, and decisions about U.S. nuclear strategy and force structure more broadly.

We also continue to monitor another study, the Deterrence and Defense Posture Review (DDPR) currently ongoing for NATO. Which brings me to my fourth and final point. The forward-deployment of U.S. non-strategic weapons in Europe has long contributed to Alliance solidarity and the transatlantic link. NATO's new *Strategic Concept* reaffirms that NATO is a nuclear alliance, and the importance of broadest possible participation by allies in the nuclear mission.

Some of us are concerned that the administration, potentially in concert with some West European allies, might try to use the DDPR to pressure Central and Eastern Europeans to begrudgingly accept substantial reductions or even complete withdrawal of these weapons from Europe, an act which could have untold and adverse consequences for the future of the world's oldest and most successful alliance.

This year, the House of Representatives acted to address each of several concerns. The House-passed NDAA included provisions which would sustain the linkage between progress in nuclear modernization to both further nuclear cuts and New START implementation, involve Congress in the longer-term decision-making about deeper reductions, and slow down the withdrawals. The administration expressed strong objections about some of these provisions, and issued veto threats about others.

Again, thank you all for being with us today. I look forward to your testimony.

Opening Statement
House Armed Service Strategic Forces Subcommittee Briefing on
Sustaining Nuclear Deterrence Post-New START
Ranking Member Loretta Sanchez
July 27, 2011

I would like to join Chairman Turner in welcoming Dr. Payne, Dr. Halperin, and Mr. Miller.

We look forward to hearing your thoughts about the future of nuclear weapons in the 21st century, including progress to maintain a strong and reliable deterrent at lower levels, and what kind of arsenal we need to address current and foreseeable threats.

This Administration has committed to unprecedented investments in maintaining our nuclear arsenal safe, secure and reliable.

In parallel, the President is leading much-needed efforts to reduce the dangers posed by nuclear weapons in a post-Cold War era.

As part of this vision to strengthen our national security, he laid out a vision and plan for reducing these dangers in his April 2009 Palm Sunday speech in Prague, including:

- New START as a first step toward further reductions,
- ratification of the Comprehensive Test Ban Treaty,
- reducing the role of nuclear weapons,
- and strengthening the Nuclear Non-Proliferation Treaty.

President Obama noted in his Prague speech, "The existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War."

Even with the beneficial and considerable reductions of the past decades, it is important to remember that the United States and Russia still maintain over 95% of the nuclear weapons worldwide, and much progress remains necessary as threats and deterrence requirements have evolved.

Maintaining thousands of nuclear weapons that have ten or even a hundred times the yield of Hiroshima and Nagasaki bombs, and retaining Cold War-derived posture and policies, may no longer be appropriate or responsive to our needs.

In 2009, the National Defense Authorization Act-mandated Commission on the Strategic Posture of the United States, in which Dr. Halperin and Dr. Payne participated, concluded that "This is a moment of opportunity to revise and renew U.S. nuclear strategy."

I agree that the time is ripe for taking a hard look at what we need to meet our national and our allies' deterrence requirements in light of current and new threats.

I look forward to hearing your advice on how to best counter the most pressing threats to our national security, including the spread of nuclear weapons to terrorists or additional countries.

- How do we size our nuclear arsenal to best reflect and address these current threats?

- What further nuclear weapons reductions may be needed as a tool to strengthen U.S. and international security and stability?

- What are the benefits as well as risks and costs of retaining forward-based nuclear weapons in Europe merely as a political symbol if they are no longer a unifying and military asset...and are there other ways to maintain a strong nuclear NATO alliance?

These are a few of the questions I hope we can address today.

I know there are concerns about moving forward on many of these issues, including:

- how best to reduce the dangers posed by nuclear weapons, implementing further reductions,
- decreasing the risks of miscalculation,
- adjusting alert postures,
- and reducing the role of nuclear weapons.

We had an engaging and serious debate on the nuclear policy provisions proposed by the Chairman and my Republican colleagues in the context of the House-passed National Defense Authorization bill.

There was significant disagreement on these and on the need for legislative action that could delay or block the President's nuclear arms control efforts.

But I would like to note the value of this important public debate and I look forward to advancing this debate today.

Thank you for taking the time to be here and for your expertise.

United States House of Representatives
House Armed Services Subcommittee on Strategic Forces

July 27, 2011

Testimony Prepared By:

Dr. Keith B. Payne
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The administration recently announced that it will undertake a new review of US nuclear requirements. This examination of "how much is enough?" ultimately should be linked to the key goals served by US nuclear forces and the number and types of forces necessary to support those goals. Measuring US force requirements in this way simply follows the principle that our goals and strategies should drive numbers, not the reverse. If so, it is the combination of requirements needed to support multiple national goals that will set the standards for determining "how much is enough?" Other factors such as budget and technical realities also are important, but we should at least start by recognizing that our goals should drive requirements.

For over five decades there has been a general consensus that the key US national goals pertinent in this regard are:1) the stable deterrence of attacks; 2) assurance of allies via extended deterrence and the "nuclear umbrella"; 3) dissuasion of competitive challenges; 4) defense in the event of war; and, 5) arms control. The forces linked to these five different goals overlap to some extent, but these goals also have their own individual, unique requirements that may be incompatible and demand trade-offs.

For example, the forces that may be needed to deter attacks may not be adequate to assure allies,[1] or some arms control goals may be incompatible with the requirements for deterrence and assurance. Consequently, no single standard can set the full measure of US nuclear requirements; rather, that full measure demands the balancing of the five different sets of requirements that follow from these five different goals. For decades, Republican and Democratic administrations have balanced these goals and made the necessary trade-offs when identifying US force requirements.

[1] The different requirements for deterrence and assurance were best illustrated by Denis Healey, Britain's Defence Minister in the late 1960s, when he said that, "it takes only five per cent credibility of American retaliation to deter the Russians, but ninety-five per cent credibility to reassure the Europeans." Denis Healey, *The Time of My Life* (London: Michael Joseph, 1989), p. 243.

The administration has expressed a commitment to effective capabilities for deterrence, assurance and limited defense, and has stated that force reductions must serve the goals of deterrence and assurance.[2] However, the administration also has explicitly elevated non-proliferation and nuclear disarmament to the top of the US nuclear agenda,[3] and emphasized that it sees non-proliferation and nuclear disarmament as "two sides of the same coin."[4] This prioritization and linkage logically has led to concern that the goal of nuclear reductions will take precedence in the administration's calculation of "how much is enough?"

This concern was stoked by senior administration officials who announced the administration's nuclear review in the context of conferences and speeches devoted to the administration's arms control agenda. These officials stated specifically that this nuclear review is for the purpose of further US nuclear reductions and to facilitate the "journey" to nuclear zero.[5]

As described, this approach to reviewing US nuclear requirements appears to start with the answer that further nuclear reductions are warranted and appropriate. The risk of this approach is that further reductions and a journey to nuclear zero may be out-of-step with the forces necessary to deter, assure, defend and dissuade now and in the future. If, as the administration has stated, nuclear reductions are the top priority on its nuclear agenda and the specific purpose of this review is further reductions, the trade-offs that must be made in the definition of requirements are likely to be at the expense of the forces needed for other purposes.

The administration's willingness to place top priority on arms reductions and subordinate other goals may be seen in various policies and declarations. For example:

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[2] Department of Defense, *Nuclear Posture Review Report*, April, 2010, p. xi.

[3] *Nuclear Posture Review Report*, p. vi, see also p. v.

[4] Ellen Tauscher, Under Secretary of State for Arms Control and International Security, *European Contributions to Nuclear Disarmament and Conflict Resolution*, Remarks at the 59th Pugwash Conference on Science and World Affairs, Berlin, July 1, 2011, at, http://www.state.gov/t/us/167985.htm.

[5] See for example, *National Security Adviser Thomas E. Donilon's Remarks at the Carnegie International Nuclear Policy Conference, as Prepared for Delivery and Released by the White House*, March 29, 2011. See also, Assistant Secretary Rose Gottemoeller, *Remarks at the United States Naval Academy*, April 20, 2011 (as prepared). See also the remarks by Ellen Tauscher, Under Secretary for Arms Control and International Security, *The Global Zero "GZ/DC Convention,"* The George Washington University, Washington, D.C., April 8, 2011.

- The administration's 2010 rejection of any new US nuclear weapons to support new military missions or capabilities could easily come at the expense of US capabilities important for future deterrence and assurance goals.[6]

- The administration has initiated a move away from notions of deterrence in favor of a new approach labeled "Mutually Assured Stability" that "is underpinned by formal agreements on the limitation of arms."[7]

- The administration seeks to remove nuclear deterrence from US strategies to prevent biological and chemical attacks, despite the absolute fact that it may be critical to the prevention of some chemical and biological attacks.

- Russia has a large numeric advantage in "operational" nuclear weapons,[8] and the U.S. has important unmet goals with regard to reducing Russian nuclear forces. Nevertheless: the administration's New START Treaty requires *only US reductions* in deployed forces; the administration has decided to reduce U.S. tactical nuclear weapons *unilaterally*; and, senior White House officials have stated explicitly that the United States may pursue additional *unilateral reductions*.[9]

- Senior officials have recently cast doubt on the long-term US sustainment of the nuclear Triad of bombers, sea-based and land-based missiles,[10] despite widespread recognition that the Triad offers force characteristics potentially critical for the goals of deterrence, extended deterrence, and assurance.

There appear to be two competing dynamics within the Obama administration regarding the prioritization of US strategic goals and the related calculation of force requirements. One generally reflected in the 2010 *Nuclear Posture Review* appears committed to balancing arms control goals with the requirements for deterrence, extended deterrence, assurance and limited defense. The other instead places top priority on nuclear reductions and movement towards nuclear zero. Reconciling these two dynamics will be increasingly difficult and ultimately impossible absent the transformation of international relations.[11]

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[6] *Nuclear Posture Review Report*, p. xiv.

[7] Tauscher, *European Contributions to Nuclear Disarmament and Conflict Resolution.*

[8] William J. Perry and James R. Schlesinger, *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington, D.C.: United States Institute of Peace, 2009), p. 111.

[9] As reported in, *Arms Control Today Interviews Gary Samore*, May 4, 2011, at http://www.armscontrol.org/pressroom/GarySamoreInterview.

[10] See Julian E. Barnes, "Gates Says Cuts Would Curb Military Capacity," *Politics* (May 19, 2011), at http://online.wsj.com/article/SB10001424052748704281504576331690389093816.html; and, Elaine M. Grossman, "Top General: US Needs Fresh Look at Deterrence, Nuclear Triad," *Global Security Newswire*, July 14, 2011, at, http://www.globalsecuritynewswire.org/gsn/nw_20110714_6177.php.

[11] This point is emphasized in, *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, p. xvi.

The fundamental question with regard to the administration's forthcoming nuclear review is which of these two different views of US priorities and requirements will govern its calculation of "how much is enough?" Will this administration continue to place priority on five national goals when it measures the role and value of US forces, or will it give precedence to the goal of nuclear arms reductions?

Based on the historical record, we *know* that US nuclear weapons help to deter war and prevent conflict escalation. We *know* that US nuclear weapons help to assure allies and thereby contribute to nuclear non-proliferation. Finally, we also *know* that deterrence can fail and leave us no alternative but to defend against attack. Consequently, we should be wary of any review that does not place high priority on the goals of deterrence, assurance and defense.

Various commentators who instead place top priority on movement toward nuclear zero advocate continuing deep reductions—down to levels of 300, 500 or 1000 warheads—all well below the New START Treaty's ceiling of 1550 deployed warheads. These much-reduced force levels would be adequate, they claim, because the United States could still maintain a retaliatory deterrence threat.[12]

Perhaps so, but subordinating the requirements for deterrence and assurance to the priority goal of further nuclear reductions entails serious potential risks. Most important, the reduced flexibility and resilience of the US force posture at low numbers could undermine the US capability to adjust to surprising and dangerous political and/or technical developments as may be necessary to deter future wars, assure allies or defend if deterrence fails.

A minimum standard of force adequacy also could make US forces more vulnerable to opponents' covert or deceptive deployments and ease the technical/strategic difficulties for opponents who seek overtly to counter or get around our deterrence strategies—encouraging some to move in these directions. As such, very low numbers could work against US efforts to dissuade future nuclear arms competition with countries such as China or Russia.

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[12] See the discussion of such claims in, Keith B. Payne, "Maintaining Flexible and Resilient Capabilities for Nuclear Deterrence," *Strategic Studies Quarterly*, Vol. 5, No. 2 (Summer 2011), pp. 13-29.

In addition, at minimal force levels the reduced credibility of our extended deterrent would motivate some allies to seek their own independent nuclear capabilities; i.e., it would contribute to incentives for nuclear proliferation among some allies and friends and thus be at odds with the administration's stated top priority of non-proliferation. Secretary of Defense Gates has rightly emphasized that allied confidence in US credibility can be critical to their willingness to remain non-nuclear.[13]

Finally, minimal nuclear force standards almost inevitably lead to inflexible, minimal deterrence concepts that seek deterrent effect from narrow targeting options, often including threats to kill large numbers of civilians.[14] This is because very low numbers of nuclear weapons allow only narrow targeting options. Successive US administrations, however, have rightly rejected such concepts of deterrence as incredible, immoral and illegal.

These are the primary reasons why, for five decades, Democratic and Republican administrations have rejected minimalist standards for US force requirements and Minimum Deterrence policies—despite their possible attraction if nuclear reductions is deemed the top priority. These reasons remain sound.

Is there room for further reductions in US deployed nuclear forces below New START levels because some claim that a basic retaliatory deterrence threat could be maintained at 300, 500 or 1000 warheads? The answer *must be no* for three reasons.

First, no estimate of "how much is enough?" *for deterrence alone* is an adequate measure of US strategic force requirements. Recall that US forces also serve the purposes of extended deterrence, assurance, dissuasion and if necessary defense. Consequently, no calculation of basic

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[13] Robert Gates, "The Defense Secretary's Exit Interview," *The Daily Beast*, June 21, 2011.

[14] "Likewise, the United States needs relatively few warheads to deter China. A limited and highly accurate U.S. nuclear attack on China's 20 long-range ballistic missile silos would result in as many as 11 million casualties and scatter radioactive fallout across three Chinese provinces..." *Pentagon is Exaggerating China's Nuclear Capability to Justify Buying New Generation of U.S. Weapons, Report Finds*, Natural Resources Defense Council, Press Release, November 30, 2006. See also, Hans M. Kristensen, et al., *From Counterforce to Minimal Deterrence: A Nuclear Policy Toward Eliminating Nuclear Weapons*, Federation of American Scientists and The Natural Resources Defense Council, *Occasion Paper*, No. 7 (April 2009), pp. 2, 31.

deterrence requirements—however sophisticated--can define the adequacy of US strategic forces.

Second, the *credibility* of US strategies of deterrence and assurance is as important as is the capability of US forces. Simply because a low number of nuclear warheads might provide a narrow retaliatory capability does not mean that related deterrence or assurance strategies would be *credible*. If those strategies are incredible, they will not work. Some close US allies already are expressing concerns about the potential loss of US credibility at lower force levels.[15]

Third, future threats to us and our allies remain inherently unpredictable in important ways.[16] As Secretary Gates recently observed, "When it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect. We have never once gotten it right."[17] We surely will be confronted with unexpected threats. Consequently, there is much more to the requirements for deterrence and assurance than simply having the number of warheads deemed adequate for a retaliatory threat at some point in time. Deterrence and assurance requirements can shift rapidly across time, place and opponent, and thus particularly important is the flexibility and resilience of our force posture to adapt to shifting and unforeseen threats and circumstances.[18] These *qualitative* requirements for deterrence and assurance move the calculation of "how much is enough?" well beyond simply maintaining the number of weapons necessary to meet some retaliatory targeting plan.

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[15] See Kurt Guthe and Thomas Scheber, *Assuring South Korea and Japan as the Role and Number of U.S. Nuclear Weapons are Reduced* (Fairfax, VA: National Institute for Public Policy, January 2011).

[16] As noted recently by both James Clapper and Leon Panetta. See, Leon Panetta, testimony before the House Permanent Select Committee on Intelligence, *World Wide Threats Hearing*, February 10, 2011; and, James Clapper, testimony before the Senate Select Committee on Intelligence, Hearing, *The Worldwide Threat*, February 16, 2011. And, as former CIA Director, George Tenet said, "What we believe to be implausible often has nothing to do with how a foreign culture might act."George Tenet (with Bill Harlow), *At the Center of the Storm: My Years at the CIA* (New York: HarperCollins, 2007), p. 46.

[17] Quoted in, "Defense Secretary Warns Against Fighting More Ground Wars," February, 26, 2011, CNN.com, at http://www.cnn.com/2011/US/02/25/gates.westpoint/index.html.

[18] *Flexibility* meaning US possession of a spectrum of possible threat response options suitable for a wide range of opponents and contingencies, and *resilience* meaning the capability to adapt deterrence to changes in threats and contexts, including rapid and unanticipated changes. See, Payne, "Maintaining Flexible and Resilient Capabilities for Nuclear Deterrence," p. 13.

No one can legitimately claim to know that a much smaller nuclear force would be adequate to deter or assure in the future. Precisely because threats and the related requirements for deterrence and assurance can change so rapidly, it is critical to sustain the flexibility and resilience of our strategic forces necessary to adapt to future, surprising circumstances. Correspondingly, we must sustain the number and diversity of our force posture necessary for its flexibility and resilience—moving to lower force levels than necessary for this purpose would carry real risk.

If we posit that existing US force levels are adequate for deterrence, assurance and defense, the burden of proof must be on those who claim that moving to a dramatically different, lower level of US nuclear forces would continue to provide adequate support now and in the future for deterrence, assurance and defense. This proof, however, is nowhere to be found; such claims are inherently speculative and typically based on optimistic assumptions about future threats. The inconvenient truth is that no one knows with any level of confidence how many of what types of nuclear forces will be adequate to deter or assure in coming years because threat conditions and opponents can change rapidly. This again is why sustaining the level of US forces compatible with their flexibility and resilience is so critical

Is there room in this regard for further reductions? Following comprehensive analyses, the former Commander of STRATCOM, Gen. Kevin Chilton, recently concluded that the New START force levels would provide adequate force flexibility for deterrence under specific assumed conditions.[19] But, even with optimistic assumptions about the future, Gen. Chilton explicitly cautioned against further reductions below New START force levels.[20] It is reasonable to question how further US nuclear reductions could be deemed appropriate today when the administration's own recent nuclear review apparently determined New START numbers to be compatible with the necessary flexibility, but no lower.

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[19] Gen. Kevin Chilton, Senate Armed Services Committee, *Hearing to Receive Testimony on the Nuclear Posture Review*, April 22, 2010, pp. 8, 13, 14; and Gen. Kevin Chilton, House Armed Services Committee, Hearing, *U.S. Nuclear Weapons Policy and Force Structure*, April 15, 2010, p. 11.

[20] Gen. Kevin Chilton, Senate Foreign Relations Committee, Hearing, *The New START Treaty: Views from the Pentagon*, June 16, 2010, Federal News Service.

Nothing has changed over the past months to suggest that Gen. Chilton's caution no longer is valid. To the contrary, some recent threat developments are troubling: North Korea and Iran show no sign of moving away from nuclear weapons, with North Korea posing a direct threat to us and moving toward mobile ICBMs;[21] China shows no apparent interest in cooling its nuclear modernization programs or providing transparency into those programs; and, Russia lists the United States and NATO as its greatest threat, frequently resorts to crude nuclear threats to US allies, and places highest defense investment priority on the modernization of its nuclear forces,[22] reportedly including a new Heavy ICBM capable of carrying 10-15 nuclear warheads each.[23] This context hardly seems ripe for further reductions, particularly U.S. unilateral reductions, that could degrade the flexibility and resilience of the US nuclear force posture.

In sum, the administration has voiced commitments to US strategic forces and the goals of deterrence, assurance, and limited defense. But other recent administration policies and statements, particularly those regarding the intent behind its nuclear review, cast some doubt on those commitments. If the reduction of nuclear forces en route to zero is the operative top goal of "the US nuclear agenda," then the administration's nuclear review undoubtedly will find room for further reductions. Further deep reductions, however, could entail significant potential risks, which is why Democratic and Republican administrations for five decades have rightly rejected minimalist standards of force adequacy and related minimalist notions of deterrence as the basis for calculating US force requirements. These low standards may seem attractive if the "journey" to nuclear zero is the priority that dominates all other calculations of "how much is enough?"—but not otherwise.

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[21] Gates, "The Defense Secretary's Exit Interview."
[22] Aleksey Arbatov, "Arbatov on Need to Balance Army With Available Resources, Clearer Foreign Policy," *Voyenno-Promyshlennyy Kuryer Online*, March 30, 2011, CEP20110330358006.
[23] Denis Telmanv, "The Successor to the Satan Will Acquire 15 nuclear warheads," *Izvestiya Online*, July 18, 2011, at http://www.izvestia.ru/.

Statement of

Morton H. Halperin

before the Strategic Forces Subcommittee

of the House Armed Services Committee

on

Sustaining Nuclear Deterrence After New Start

July 27, 2011

Mr. Chairman,

It is an honor and a privilege for me to testify before this sub-committee on a subject I have worked on for the past half century. The world has gone those years without a nuclear explosion in anger. In fact, it has been nearly 66 years since the last wartime use of a nuclear weapon. Although the notion of a world without nuclear weapons is a lofty and inspiring ideal, our immediate and pressing national security interest is to maintain the legacy of non-use that is now in its seventh decade.

In the aftermath of the Senate consent to ratification of the New START Treaty and the completion of the NPR, the question we are facing is whether the United States can further reduce the size of its nuclear arsenal while meeting our national security needs.

Today, nuclear weapons play a smaller role in advancing the national security objectives of the United States than ever before. Our task is not so much reducing the role of nuclear weapons, but rather to align our policies, forces and posture with the limited role nuclear weapons currently plays. The Nuclear Posture Review is correct in observing that

"the fundamental role of nuclear weapons is … to deter nuclear attack on the United States, our allies, and our partners." I would go further and say that it is the sole purpose for which we can and should rely on nuclear weapons.

It is particularly important that the United States assure our allies and partners that we are willing and able to meet our security commitments to them and will act to preserve their security and ours. A credible nuclear deterrent is part of that assurance, but nuclear weapons are necessary but not sufficient.

What nuclear weapons cannot do for the United States, or for any other state, is to substitute for conventional military power or the will to use conventional forces to meet conventional threats. In the past, the US and some other nuclear states have tried to find a way to use nuclear weapons to make up for perceived conventional deficiencies. In my judgment, these efforts have been unsuccessful. Egypt attacked Israel in 1972 after it acquired nuclear weapons; Argentina attacked the United Kingdom, a long standing nuclear power, in 1983. The United States, Soviet Union and China have all suffered conventional defeats without resorting to the use of nuclear weapons. No state has found a way to substitute nuclear threats for effective conventional capabilities.

China is a clear example of the limited role of nuclear weapons in enabling a country to promote its interests. China was perceived by others as a major power not when it exploded a nuclear device in 1964, but rather when it became a serious economic power with significant conventional military capability in this century.

The primary questions regarding the role of nuclear weapons concern how many and what type of nuclear weapons we need to deter nuclear attacks, while also maintaining strategic stability. Perhaps the most important question in this regard is whether we need to maintain some level of numerical parity with Russia, even as our qualitative edge increases. If quantitative equivalence is an important political symbol, then we can only further reduce our nuclear stockpile in parallel with Russia. Before we face this question we need to know what forces we need for deterrence.

As far as I know, the Department of Defense has never conducted a fundamental review of what is needed to deter Russia and other adversaries from launching a nuclear attack on the United States or its allies. Despite the collapse of the Soviet Union and the unification of Germany, I believe the assumptions remain fundamentally the same as the first day in 1964 that I first went to work in the Pentagon for then-Secretary of Defense Robert McNamara. Yet, clearly the international situation is as different today from the Cold War as one can imagine. Russia remains a significant security concern for some of our allies, but the Red Army is no longer sitting in Central Europe. We are no longer ideological rivals. Most importantly, NATO enjoys a significant conventional advantage over Russia.

Yet, every administration has taken the line of least resistance, making minimal changes in existing guidance necessary to justify the reductions that it wanted to make in the nuclear arsenal.

It is time to conduct a fundamental review that revisits the assumption that we need to be able to inflict "overwhelming damage," without targeting cities. We need to ask what size and shape force we need to be able to survive a surprise nuclear attack by Russia with enough remaining capability to retaliate so that Moscow would never consider

such a step. (Every other remotely conceivable scenario is a lesser-included case for this most demanding, if unlikely, scenario.)

In doing such a study the military should not start with any assumption that it is constrained by existing "Presidential" guidance – guidance which has constrained every recent review, although I am confident in saying that none of our post-cold war Presidents was or is aware of its content. Much of the context of these directives remains classified but we do know from unclassified descriptions that they dictate a range of targets that must be destroyed and provide that at least some of them must be targeted by at least two different weapons systems. One example of long-standing guidance that ought to be scrutinized is the requirement that the military maintain the capacity for what is called "prompt" launch– which means launch no later than when missiles are suspected of being on their way to targets in the United States.

I am not seeking to suggest what the results of such a study should be nor to rule out many aspects of the current guidance. I am only suggesting that we take the opportunity for an unconstrained and fresh look.

Having said that, let me suggest some parameters that I believe would enhance stability and provide the flexibility needed to deal with uncertainty.

First, I believe that the United States should maintain the triad of offensive delivery systems even at much lower force levels. It is hard to imagine how the Russians could hope to destroy any single leg of the triad and even harder to imagine how they might have any confidence that they could neutralize two of the legs, but, in my view, it is impossible to conceive how they could conclude with any confidence that all three had suddenly become vulnerable.

Maintaining three systems provides a form of resilience in the nuclear force that cannot be replaced by sheer numbers. Moreover, the barriers to consensus for further reductions are probably less about overall numbers than the fear that another reduction will threaten the leg of the triad that each participant in the process believes has a unique capability that must be preserved. I would like to see a bipartisan consensus, similar to the consensus on stockpile modernization, on maintaining the triad even if we were to reduce to much lower numbers.

If these two understandings were firmly rooted in a bipartisan consensus we could consider going to lower numbers of both delivery systems and deployed and non-deployed warheads without any risk to the deterrent.

Second, I believe it is sensible to rule out so-called "countervalue" targeting. Although the military should take a fresh look at what is necessary to deter our adversaries, nuclear weapons should only be considered for use against legitimate military targets. As with the issue of the triad, I do not believe that further reductions require a move away from traditional target sets. Indeed, the number of targets that can only be held at risk with nuclear weapons is probably very small.

Finally, I believe it would be helpful for the President to make clear that rather than a requirement for prompt launch, which is necessarily met with pre-planned options, what he most requires is a force that allows him to respond to a nuclear attack in the time and manner of his choosing. I want to be very clear: it is neither possible nor desirable to eliminate the physical capability for some degree of prompt launch capability. Such a capability will continue to exist no matter what the guidance dictates. But relying on pre-planned options that must be used promptly would tie the President's hands in a crisis. Serious consideration should be given to eliminating the requirement for prompt launch and, instead investing in the modernization of command and

control capabilities that would increase the President's decision-time in a crisis.

At the end of a fundamental study of the requirements for deterrence in the current era, I believe we would find consensus that we can accomplish the core deterrent mission at lower levels of forces with a reduced target set. This would likely involve the modernization of not only the forces themselves, but also our command and control capabilities. We would still need to decide whether we could assure our allies with nuclear forces that were qualitatively superior to, but smaller in number than, Russian forces.

Even if we conclude that numerical parity with Russia is a political requirement, the exercise I suggest would be important for several reasons. First we would be able to make changes in our posture to increase the President's decision-time, which could matter a great deal to stability in a future crisis with Russia. Second, we may find ways to reduce costs. Vice Chairman of the Joint Chiefs of Staff Gen. James Cartwright recently stated that current plans to recapitalize all three legs of the nuclear triad might be unaffordable. If we are forced to reduce spending on the force, the worst way to do so would be to arbitrarily single out a leg of the triad. Finally, we may be able to negotiate additional reductions with the Russians. We might well be able to move more quickly than required to the New START numbers.

Mr. Chairman, as you know, I was privileged to serve on the Congressional Commission on the Strategic Posture of the United States. There were people on that Commission with whom I have argued about these issues for all of the past 50 years. All of tbe members of the Commission struggled hard to reach a consensus and did so, on every issue but the test ban treaty. I regret that failure but I am proud of the final report and of our ability to reach consensus not by using words that

hid real differences, but by arguing our way through to agreement. That consensus helped to pave the way for the agreement on the modernization of the stockpile and the ratification of the New START Treaty. I hope my statement today offers some routes to build on that consensus for the difficult decisions that lay ahead.

I would, of course, be pleased to respond to your questions.

Sustaining Nuclear Deterrence After New START

The Hon. Franklin C. Miller

Testimony before the House Armed Services Committee, Subcommittee on Strategic Forces

July 27, 2011

Mr. Chairman and Members of the Subcommittee,

It is an honor and a privilege to testify before you this afternoon.

Background:

I feel particularly qualified to speak on the subject of nuclear deterrence policy. I was deeply involved in formulating and implementing U.S. nuclear deterrence policy for all of my 28 years of Executive Branch service. Beginning in October 1981 I became responsible, as head of the OSD's Strategic Forces Policy office, for DoD policy relating to declaratory policy, forces modernization, and the US-UK nuclear deterrent relationship. In 1985 I also assumed responsibility for formulating and implementing U.S. nuclear targeting policy. In 1989, promoted to Deputy Assistant Secretary of Defense for Nuclear Forces and Arms Control Policy, I led for then-Secretary of Defense Dick Cheney an unprecedented 18 month DoD-wide total overhaul of the SIOP, the nation's nuclear war plan. I was deeply involved in the START 1 endgame, and in the creation of both the 1991

Presidential Nuclear Initiatives and the START 2 Treaty. Although promoted in the subsequent Administration to the more senior positions of Principal Deputy Assistant Secretary of Defense and Acting Assistant Secretary of Defense, I nevertheless maintained direct control of DoD nuclear policy. During my service as Special Assistant to President George W. Bush from January 2001 to March 2005, I was similarly directly involved in creating the Administration's nuclear deterrence and nuclear arms control policies. Over the course of my career I was the principal author of at least five Secretary of Defense "Nuclear Employment Policy" (NUWEP) editions and multiple Presidential Directives. I also served, as a collateral duty, as the Chairman of NATO's senior nuclear policy body, the High Level Group (HLG), from September 1996 to January 2001. So I sit before you as an individual with unique perspectives and experience on the subject you have chosen for today's hearing.

Beyond New START

I supported the New START treaty, and both testified on its behalf and worked for its ratification. I did so not because it promised additional reductions of strategic nuclear forces (indeed, because of its arcane "bomber counting rules", New START actually permits each side to deploy more

weapons than the 1700-2200 permitted by the 2002 Treaty of Moscow signed by Presidents Bush and Putin). I supported New START for two reasons:

- first, because it resumed the mutual verification and inspection regime which had been in place since the original START treaty went into effect in December 1994 (and which lapsed when START 1 expired in December 2009). I believe strongly in inspections because they improve mutual transparency. Transparency enhances predictability; predictability enhances stability.
- Second, I supported New START because the Obama Administration committed to modernize both our nuclear forces and the DoE nuclear weapons infrastructure if the treaty entered into force.

I am quite concerned, however, that the promised modernization programs have yet to appear. Of the three legs of the Triad, the Administration has only committed funding to the Ohio SSBN replacement program, and even that is now open to question according to press accounts. The Administration owes the Congress, the American people, and those of us it promised modernization, transparency into what it intends to do with respect to modernizing the bomber and ICBM forces. With respect to the Ohio SSBN replacement program, any

attempt to re-define the program to base it on a Virginia class SSN hull or to delay the program of record for several years would be a serious and highly worrisome mistake. An SSBN based on the Virginia SSN design could not carry the Trident II/D-5 SLBM which is the heart of America's nuclear deterrent; a completely new smaller missile, with a smaller payload and a shorter range (itself dangerous for a deterrent) would have to be built to fit the Virginia. Such a program would be extremely expensive -- much more costly than the current program of record -- and time-consuming; it could threaten the viability, if not the existence, of the submarine leg of the Triad. Another suggestion, to delay the program of record for several years in order to re-design the baseline Ohio replacement SSBN to carry more tubes – and therefore to build fewer SSBNs – seems to me to be equally perilous. The strength of our deterrent rests in part on its survivability, which in turn is a function of the number of boats. More SSBNs is better than fewer SSBNs. Additionally, delaying the Ohio replacement program could imperil the SSBN replacement program of our closest ally, the United Kingdom. The US Navy and Royal Navy have a joint program to build a "common missile compartment" which will form the missile tube section of both navies' new SSBNs. The UK absolutely must begin deploying new

SSBNs in the mid-to-late 2020's. Any delay in the US program could pose an unacceptable risk to the UK deterrent, which, as Members are aware, is entirely SSBN-based.

What is also troubling is that the Administration is apparently pursuing how it might negotiate an agreement with Russia to reduce even further nuclear force levels, but it has yet to explain to the Congress or to the American people how and why additional reductions are in our national interest. Nuclear reductions *per se* do not make the world safer. We should be seeking a safer, more stable world. Additional reductions might be able to help achieve this; equally, nuclear reductions can produce greater instability. It is easy to imagine a nuclear force at 1000 warheads or less which is less stable, less reliable, less flexible, less secure, and less survivable than the current force or even the force which would be deployed under the terms of New START. The Administration needs to explain what it is seeking, and why, in terms of new reductions … and how these could contribute to increased strategic stability. An unacceptable explanation would be that additional reductions are another step towards a nuclear-free world, which some believe is "a universal goal". We are guilty of an enormous conceit and of intellectual

arrogance when we assert that because *some Americans* believe a policy is desirable, other governments, particularly those with fundamentally different views and outlooks, also embrace that policy. Political scientists call it "mirror imaging"; less erudite individuals call it "drinking our own bath water". However one describes it, it is dangerous and self-deceiving.

Despite what some may say, President Obama's Prague speech and vision of a world free of nuclear weapons has, to put it mildly, not had great resonance in the capitals of other nuclear weapons states. Not in Paris. Certainly not in Moscow or Beijing, where nuclear weapons have become central to their security policies. Not in Islamabad, or Tel Aviv, or New Delhi. And definitely not in Pyongyang – or in Tehran for that matter. So justifying additional reductions as another step on the road to zero is simply unacceptable.

In this regard, the idea that the Administration is seeking, according to the President's National Security Adviser in April 2011, "to develop … options for further reductions … such as potential changes in targeting requirements and alert postures that are required for effective deterrence" is profoundly troubling to me. "Targeting requirements" are derived from national deterrence policy. U.S. national policy, since the

late 1970s, has focused on determining what potential aggressor leaderships value and then holding those valued assets at risk. (Most importantly, it is *not* about mirror-imaging what we value.) Traditionally, these have included military forces, political and military command and control, and the industrial potential to sustain war. We should not hold at risk assets which are not valued by a potential aggressor leadership; similarly, we should not relinquish the ability to hold at risk those assets we believe they do value. You cannot deter by holding just a portion of a potential aggressor's value structure at risk: you must confront a potential aggressor with the certain prospect that if we are attacked we can destroy the entire asset base he would rely upon to rule his own country and on which he had hoped to rely upon to dominate a post-war world. This value structure may vary from potential aggressor to potential aggressor, and even from one set of leaders to a successor set within a particular nation, but I believe current policy accounts for this. I am relatively confident that, based on proper policy and military criteria, there are some efficiencies to be found in our current targeting policy, and those efficiencies ought to be pursued on sound policy grounds. But scrubbing the target base for the purpose of reducing U.S. weapons is not a sound basis for national policy.

Similarly, the call for adjusting alert rates perplexes me. We have heard these siren songs for almost two decades. But the proponents of relaxing alert rates have been unable to explain what they seek to accomplish and how we would be safer and more secure if we did what they proposed. The idea that forces on alert pose a threat of accidental nuclear war was dealt with in the mid-1990s when the major nuclear powers placed a "broad ocean target" in the peacetime guidance computers of their ballistic missile systems; an accidental launch, an extraordinarily unlikely event in itself, would head towards the open ocean, not a place on land. The purposes behind additional de-alerting measures are not obvious and therefore are not compelling; indeed, additional de-alerting, which is unverifiable, would create significant instability in a crisis and could offer an aggressor a temptation for launching a pre-emptive attack. If we are to consider changes in alert posture, the benefits, if they exist at all, need to be explained fully…as, equally, do the very serious risks. This has not yet occurred. We have not yet had that debate. And, therefore, any consideration of changing alert rates is premature in the extreme.

Extended Deterrence and NATO

NATO is currently conducting a "Deterrence and Defense Posture Review (DDPR) as a follow-up to the new Strategic Concept issued by the Alliance last November. Although the Strategic Concept explicitly endorsed "the broadest possible participation ... in [the] peacetime basing of nuclear forces", some allies are seeking the removal of all U.S. nuclear weapons which are deployed in Europe. Such an approach, in the face of a clearly expressed preference by the newer members of NATO for the continued presence of those U.S. weapons, represents a cynical and beggar-thy-neighbor approach to the collective good, a re-emergence if you will of the self-centered nationalistic politics and policies of the Europe of the 19th and early 20th centuries rather than dedication to the idea of collective security which has always been at the heart of the NATO Alliance. It represents a craven moral failure by those who once sought collective security -- and even asked the US to put its very existence at risk to deter a Soviet attack on their countries. Now, however, feeling safer and more secure, they would deny to the newer members of the Alliance the very security they once so desperately sought...and are prepared to shift to the

United States the full burden of protecting them from nuclear and conventional attack. By seeking to force the removal of nuclear weapons from NATO Europe, they would remove from the new members the symbolic security they once so deeply believed they themselves needed. By shirking the responsibility for nuclear risk sharing and burden sharing – but not the need for nuclear deterrence – they are asking the American people to put the US homeland at risk while they get a free ride.

Equally, those Americans who sought and wooed the nations of Eastern Europe to join the Alliance now have a responsibility, both political and indeed moral, to listen to and understand and appreciate those new Allies' concern about their security. It is extraordinarily patronizing for Americans in both official and private positions to tell the new members of the Alliance that, contrary to their fears, contrary to the saber-rattling threats they have heard and the exercises they have observed, contrary to the 2008 land-grab in Georgia, and contrary to their history that they really need not worry about Russia. And it is outlandishly arrogant and patronizing to tell the new members, most of whom joined the Alliance to be able to be under the nuclear umbrella, that the withdrawal of US nuclear weapons from Europe wouldn't have a bearing on their security because we can perform

the *military mission* of our forward based forces in Europe with central strategic systems based in the United States. The role of our forward based nuclear forces is largely *political*: to reassure the allies that we are in fact committed completely to their defense. That is why the idea of negotiating the total withdrawal of US nuclear weapons from Europe in the context of a US-Russian arms control agreement is a non-starter for NATO solidarity. Because the threat perceived by the new members is not confined to Russian nuclear weapons but is also driven by Russian conventional forces, some forward deployments will continue to be necessary to provide substance to the NATO's Article V guarantee until the new allies perceive that the Russian threat, not just the Russian weapons, is gone. It was for this reason that in February 2010, when former NATO Secretary General Lord Robertson, Dr. Kori Schake and I advanced the notion of a US-Russian arms reduction treaty for tactical nuclear weapons we advocated a non-zero solution. The size of the Russian non-strategic nuclear arsenal is obscenely large and is utterly inconsistent with 21st century realities. We should seek an agreement which eliminates a sizeable proportion of that arsenal. But we should not do so if the cost is the total withdrawal of U.S. weapons from NATO because that would cause NATO's Central European and Baltic members to doubt our commitment to them and undermine NATO solidarity

(which is precisely why the Russian Government, like its Soviet predecessor, has sought such an outcome). Neither should we accept as a goal the "relocation" Russian non-strategic nuclear warheads away from areas bordering NATO to storage sites further in the interior of Russia. Such a move is entirely cosmetic and entirely reversible … and our allies understand that. Furthermore, we need to address and reduce all of Russia's nonstrategic warheads, including those in the Far East. We cannot ignore our Japanese allies concerns about Russia's nuclear holdings.

The Role of Congress

In closing, please permit to say how much I welcome this hearing. I believe Congress should be more involved in the national debate over nuclear policy, nuclear posture, and nuclear arms reductions. These issues are still critically important to our national security and to the security of our allies. That being said, there is scarcely any discussion of them on the Hill. Congress has a clear role to play here, just as it does with respect to the size and composition of our conventional forces. Congress was much more active on nuclear issues in the 1970s, 1980s, and 1990s. It is time for that to happen again. Congress --- and by "Congress" I mean both the Senate and the House --- should be deeply involved in the future of the strategic triad, in

the modernization of our forces and of the supporting DoE infrastructure, and in understanding what U.S. nuclear policy seeks to achieve and why. In this regard, and in the spirit of total transparency to minimize risk, I fully support the proposed language in Section 1051 of the House version of the NDAA that will require direct reporting from Commands who are accountable to execute the Strategic Nuclear mission. I urge the House to continue to support this language in Conference.

Mr. Chairman, this concludes my testimony and I look forward to your questions.

DOCUMENTS SUBMITTED FOR THE RECORD

JULY 27, 2011

In the Eyes of the Experts

Analysis and Comments on America's Strategic Posture

Selected Contributions by the Experts of the Congressional Commission on the Strategic Posture of the United States

Taylor Bolz, editor

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De-alerting Strategic Missile Forces

Franklin C. Miller

The so-called de-alerting debate has been with us for well over two decades. The "failure" of the U.S. and Russian governments "to solve the problem" has been attributed to bureaucratic resistance on both sides. Some authors today continue to insist "quick-use forces could exacerbate instability in a crisis and are vulnerable to inadvertent use." It is certainly correct that officials in both Moscow and Washington have resisted appeals to take their respective missile forces off alert; that this is true underscores three underlying realities: (1) the alert posture of both sides nuclear force is in fact highly stable and subject to multiple layers of controls, *i.e, neither side is on a "hair trigger alert"*; (2) there is confusion about what the ultimate goal of de-alerting is; and (3) given this uncertainty, it is far more difficult to prescribe corrective action that does not contain within it the seeds of crisis instability.

Are we on "hair trigger alert" today?

Both U.S. and Russian strategic nuclear missile forces (i.e., land-based missiles {ICBMs} and submarine launched missiles {i.e., SLBM}) can only be launched if the proper codes are provided to the launch crews by the respective national leaderships. These codes are needed to unlock electromechanical devices which otherwise would prevent missile system launch. Access to the codes is highly restricted, and the codes are not maintained at the ICBM launch sites or onboard the strategic missile submarines (SSBNs). In the United States, only the President has the authority to release the codes to the forces, thereby enabling the launch of a nuclear-armed system. It is generally believed that the Russian President holds the same

nuclear-launch authority as well. All of this said, there was concern in some quarters during the Cold War that the inherent vulnerability of ICBMs to pre-emptive attack would cause a U.S. President or the Soviet leadership to order the launch of their ICBMs if early warning information received from infra-red sensing satellites and long-range ground-based radars suggested that the other side had initiated such a pre-emptive attack. This Cold War situation has changed significantly since the early 1990s. As both sides gradually reduce the warhead loadings on their ICBMs to meet the limits of the START treaty and the Moscow Treaty, the military value of a pre-emptive strike on the other side's ICBMs is greatly reduced; attacking an ICBM armed with a single nuclear warhead is generally considered to be of no interest to nuclear planners on either side. Moreover, by fielding mobile ICBMs which can be dispersed in a crisis, Russia has taken further steps to insure the survivability of its nuclear deterrent and to reduce the pressure to make an early decision to launch its nuclear forces. And, in fact, since the end of the Cold War, Russian strategic forces have been operated in a manner which suggests the Kremlin does not fear a bolt out of the blue attack: the majority of their SSBNs have been kept in port and their mobile ICBMs have remained inside their bases.

All of this said, some believe that false indications of an attack could cause the President or the Soviet leadership to order an all-out launch by mistake. Recognizing this, U.S. national policy stressed for decades that our deterrent should not rely on such a "launch under attack" capability and, in fact, U.S. retaliatory plans were built in a manner to insure that this was so...thereby increasing stability. According to some commentators, however, the Soviet leadership created a "doomsday system" which could, under certain circumstances (total loss of communications with the Soviet leadership, confirmed detection of nuclear detonations on Russian soil, etc.) bypass the electro-mechanical interlocks and launch Russian ICBMs; these commentators believe the Russian Government has retained this doomsday system and that it could be activated accidently. The U.S. intelligence community has never verified the accuracy of these reports.

Would taking strategic missile forces off of alert increase stability?

Despite a general belief in both the U.S. and Soviet/Russian governments that maintaining missiles in an alert status did not create instabilities, for more than twenty years an element of the arms control community has worried about alert intercontinental ballistic missiles (ICBMs), and in particular Russian ICBMs standing day-to-day alert, concerned that they are particularly susceptible to accidental or inadvertent launch. An often-voiced argu-

ment is that the Russian military is concerned to the degree of paranoia about a U.S. surprise attack and that it is predisposed to call for a rapid launch of its ICBMs if indications of a U.S. attack were received; these fears are compounded by the fact that the Russian missile early warning system has deteriorated since the Cold War and that major gaps in coverage exist. They have led to calls for taking steps to disable the U.S. Minuteman force in the hope that Russia would follow suit with its ICBMs—thereby increasing strategic stability. The de-alerting proponents allow that if a crisis developed the systems could be returned to alert status in order to deter attack. In the abstract, all of this sounds reasonable. The rationale, however, begins to unravel when it confronts reality.

Russia has far more warheads on its ICBMs than the United States has in its Minuteman force (because Russian strategic culture places far more confidence in its land-based forces than it does in its submarine-based forces). As a result, even if the United States were to eliminate its entire ICBM force, Russia would probably still maintain ICBMs on alert. Put another way, if all U.S. ICBMs were disabled, Russia might arguably be willing to take a number of ICBMs carrying warheads equal to the U.S. ICBM force off alert...but this would still leave a sizable portion of the Russian ICBM force on alert. And, to the degree one worries about Russian paranoia leading to "hair-trigger" responses, the prospect of taking only a portion of the Russian ICBM force off alert should raise major worries, because the remaining alert forces would logically be placed on an even higher alert status than is the case today (because the prospect of the loss of these remaining alert missiles would be absolutely unacceptable in Russian eyes). *If, therefore, the goal of a de-alerting policy is to decrease Russian reliance on quick launch, this step would fail to meet that goal.* Nothing short of removing all Russian ICBMs from alert would do—and the prospect for this is highly unlikely.

Furthermore, the idea of disabling U.S. ICBMs is premised on the view of some Americans that the threat the Russian General Staff fears is a preemptive strike carried out by U.S. ICBMs. Various Soviet and Russian officials over the years, however, have pointed more often to the U.S. SLBM force as the source of a U.S. first strike. *From an American standpoint, however, it is difficult to conceive of a more destabilizing action than that of disabling the ability of our ballistic missile submarines to launch their missiles—and therefore to be able to deter under all possible circumstances.*

Finally, even if both sides were able to muster the political will to take the great step into the unknown by de-alerting/disabling some or all of the ICBMs and/or SLBMs, no verification scheme has yet been devised to provide confidence that a missile, land- or sea-based, either has been taken off alert or returned to alert status. Should a crisis develop, moves by each side to return disabled nuclear forces to an alert status would further heighten

tensions and raise the specter of one side launching first in the belief that the other side had not completed its re-alerting activities.

If we disable our missile forces, can we return them to alert status safely?

If there is one lesson to be learned from the recent December 2008 report by the Secretary of Defense Task Force on Nuclear Weapons Management (also known as the Schlesinger Task Force), it is that once crews stop believing their mission is real they cease to pay attention to their responsibilities and lose competency; de-alerting would create such attitudes (as an example, examine the challenges of maintaining morale of the Minuteman II launch crews who continued to carry out their functions once their systems were deactivated in the fall of 1991). We should be quick, therefore, to note the dangers which would arise from using badly motivated and incompetent forces to return systems to alert status in a crisis.

If we are concerned that false warning information could create pressures for a launch decision, are there other steps we can take?

To the degree that one worries about launch based on faulty information, the best answer has always been to improve Russian warning systems to make an accidental launch impossible; the moribund U.S. effort to establish a Joint Warning Center with Russia attempted to help fill this need.

1. The term "de-alerting" has many interpretations. A de minimis approach to de-alerting would be to remove target coordinates from a missile's guidance computer; if somehow launched by accident, the missile would head for the open ocean rather than any land mass. **This action was taken by the U.S., Russia, UK, France and China in the mid-1990s.** Another approach would call for removing a component necessary to launch the system from the launch control complex; in the U.S. this might be removing the firing keys and storing them off-site. In a building crisis, the keys, it is argued by proponents, always could be returned to the launch complexes. (Obviously, it is much more difficult to do something similar with SSBNs.) Verifying that a second set of launch-critical components had not been hidden on-site would be a daunting task, however. A less reversible and more dramatic approach would call for the removal of warheads from the missiles; this could be verified with higher confidence, but re-arming the missiles could take a year or more; in a crisis, the side that re-armed first would have an obvious advantage. The conundrum here is that the more dramatic and verifiable steps make it impossible to fire a missile in peacetime (when there is no need to deter another state) but create circumstances where, in a crisis, when a deterrent is necessary to help manage and de-escalate the situation, there could be both a rush to re-arm and a premium for pre-emption. I have used the term"disable" in this paragraph to indicate that the steps being recommended would not be reversible in a matter of minutes.

America's Strategic Posture

The Final Report of the Congressional Commission on the Strategic Posture of the United States

Advance Copy

William J. Perry, Chairman

James R. Schlesinger, Vice-Chairman

Harry Cartland
John Foster
John Glenn
Morton Halperin
Lee Hamilton
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Keith Payne
Bruce Tarter
Ellen Williams
James Woolsey

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On Missile Defense

Missile defenses are an integral part of the strategic posture of the United States after the Cold War. Such defenses were essentially impractical before, given the massive arsenal of multi-range Soviet missiles. In the past, they have also been counterproductive in that they drove the expansion of offensive capabilities. Today, the missile threats of most immediate concern originate from countries such as North Korea and Iran which have deployed short- to medium-range ballistic missiles, and are developing long-range missiles. For example, Iran has several hundred mobile short and medium-range missiles that could threaten U.S. allies and bases, and the recent launch of its Safir-2 Space Launch Vehicle demonstrated some technologies necessary for the development of a crude long-range missile. North Korea has hundreds of mobile short- and medium-range ballistic missiles, and has under development liquid-fueled rockets that could serve as a space launch vehicle for a satellite or as a first-generation long-range missile.

Ballistic missile defense capabilities can play a useful role in support of the basic objectives of deterrence, broadly defined, and damage limitation against limited threats, as set out in the previous chapter. These capabilities may contribute to deterrence by raising doubts in a potential aggressor's mind about the prospects of success in attempts to coerce or attack others. They may contribute to assurance of allies, by increasing their protection and also reducing the risks that the United States would face in protecting them against a regional aggressor. Defenses against short- and medium-range ballistic missiles are seen by some U.S. allies as increasingly important to their security. Israel and Japan have demonstrated the value they ascribe to missile defense by joining in cooperative programs with the United States. The Commission strongly supports continued missile defense cooperation with allies. It lowers costs for all and strengthens the potential for collective defense.

The United States has fielded a ballistic missile defense system capable of defending against these short- to medium-range missiles. U.S. missile defense systems in development and deployment, including the Terminal

High Altitude Area Defense (THAAD) system, Patriot Advanced Capability (PAC) 3, and the Aegis Combat System, have had numerous successful flight tests. The United States currently plans to complete deployment of 96 THAAD and 133 Standard Missile 3 interceptors. These numbers should be reviewed if the threat from North Korean or Iranian missiles increases.

The United States has also fielded a ground-based system intended to defend against small numbers of long-range missiles. This system has demonstrated some capability against unsophisticated threats and should undergo additional system testing to determine its effectiveness against more complex threats that include technologies intended to help in-coming missiles penetrate the defense (so-called penetration aids). Further development and deployment of these long-range defense interceptors should depend on results of these tests and on developments in the ICBM threats facing the United States and its allies. Research and development should continue on responses to counter limited but more complex threats.

For more than a decade the development of U.S. ballistic missile defenses has been guided by the principles of (1) protecting against limited strikes while (2) taking into account the legitimate concerns of Russia and China about strategic stability. These remain sound guiding principles. Defenses sufficient to sow doubts in Moscow or Beijing about the viability of their deterrents could lead them to take actions that increase the threat to the United States and its allies and friends. Both Russia and China have expressed concerns. Current U.S. plans for missile defense should not call into question the viability of Russia's nuclear deterrent. China sees its concerns as more immediate, given the much smaller size of its nuclear force. U.S. assessments indicate that a significant operational impact on the Chinese deterrent would require a larger and more capable defense than the United States has plans to construct, but China may already be increasing the size of its ICBM force in response to its assessment of the U.S. missile defense program.

For more than a decade the development of U.S. ballistic missile defenses has been guided by the principles of (1) protecting against limited strikes while (2) taking into account the legitimate concerns of Russia and China about strategic stability. These remain sound guiding principles.

The Commission supports a substantial role for defenses against short- to medium-range missiles. Defenses against longer range missiles should be based on their demonstrated effectiveness and the projected threat from North Korea and Iran. Defenses against these limited threats should be designed to avoid giving Russia or China a reason to increase their strategic threat to the United States or its allies. But these defenses should become ca-

pable against more complex limited threats as they mature. As noted above, this long-range missile defense system is now incapable of defending against complex threats.

The Commission recommends that the United States strengthen cooperation with Russia and China to restrict transfers to others of advanced missile technology, including the countermeasures to such defenses. Cooperative missile defense efforts with allies should be strengthened and opportunities for missile defense cooperation with Russia should be further explored.

Finding

1. Missile defenses effective against regional nuclear aggressors, including against limited long-range threats, are a valuable component of the U.S. strategic posture.

Recommendations

1. The United States should develop and, where appropriate, deploy missile defenses against regional nuclear aggressors, including against limited long-range threats. It should also develop effective capabilities to defend against increasingly complex missile threats.
2. While the missile threats posed by potential regional aggressors are countered, the United States should ensure that its actions do not lead Russia or China to take actions that increase the threat to the United States and its allies and friends.
3. The United States should strengthen international cooperation for missile defense, including with allies, but also with Russia.
4. The United States should also work with Russia and China to control advanced missile technology transfer.

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

JULY 27, 2011

QUESTIONS SUBMITTED BY MS. SANCHEZ

Ms. SANCHEZ. What do you think should be the appropriate level of our nuclear arsenal to meet our requirements for deterrence and nuclear defense?

How should the Executive Branch determine "how much is enough" to deter a nuclear attack on the homeland or against our allies, what are the assumptions upon which those judgments are made, and how, if at all, should we adjust nuclear deterrence requirements to reflect 21st century realities?

Have we ever had a fresh look that was not tied to simply reducing the number of weapons from Cold War levels, but rather based on what we really need to deter our adversaries?

Dr. PAYNE. "How much is enough" for deterrence depends on the opponents, threats and circumstances US deterrence strategies are intended to address. These factors are not fixed and can change rapidly. Correspondingly, the answer to the question "how much is enough" also is subject to frequent and rapid change—there can be no enduring, fixed answer in terms of the number of warheads and launchers. In general, because US deterrence requirements can change as rapidly as the threat conditions and circumstances, the most important characteristic of the US arsenal for deterrence purposes is its ability to adapt rapidly to changing requirements across the spectrum of pertinent opponents and contingencies. Consequently, the number and qualities of the US arsenal for deterrence purposes should be shaped by the requirement that the US force structure be sufficiently flexible and resilient to adapt to a wide-range of plausible threats. This suggests the need for a diverse force of sufficient size to be so flexible and resilient.

There have been several official reviews of US nuclear requirements that do not appear to have been so tied to simply reducing the number of weapons from Cold War levels. These reviews include the 1994, 2001 and 2010 Nuclear Posture Reviews. In addition, the 2009 report of the bipartisan Congressional Strategic Posture Commission on which I served made numerous recommendations regarding arms control, but was not simply tied to reducing force numbers.

Ms. SANCHEZ. As we modernize the nuclear weapons complex and build new billion dollar facilities for producing new plutonium pits and uranium secondaries for nuclear weapons, should we be thinking about how to incorporate verification capability in the event nuclear weapons capabilities are ever subject to arms control agreements? Why/why not?

Dr. PAYNE. Yes. For the purposes of transparency we should think about the potential benefits, costs and risks of incorporating such verification measures, as well as the prospects for strict reciprocity by at least Russia and China in doing so. Thinking about this issue now could help US negotiators to understand the implications of moving in this direction before they engage in discussions of the subject.

Ms. SANCHEZ. We learned earlier this year that Russia already has met most of its arsenal reduction obligations under New START. The State Dept. reported June 1 that Moscow was below the treaty's limits of 1,550 deployed strategic warheads and 700 deployed delivery vehicles and close to the 800 limit on launchers. The United States does not currently plan to reach these limits until 2018.

In addition, Russian nuclear policy expert Alexei Arbatov has warned that Russian nuclear weapons might fall well below New START levels in the next few years, potentially to 1100 or 1000 warheads, and that Russia is designing a new heavy ICBM with MIRV capability to build back up to New START levels.

How would this affect strategic stability? How might US nuclear posture and signals affect this decision?

Would you agree that rather than induce Russia to build up, it is in the security and financial interests of both countries to pursue further, parallel reductions in their strategic nuclear forces and to cut the size of their non-deployed reserve stockpiles?

Dr. PAYNE. Prior to the ratification of the New START Treaty, it was obvious from the open Russian press that the number of Russian deployed warheads and launchers would not be reduced by the Treaty ceilings. Russian forces already were moving to lower numbers due to natural aging and withdrawal of the systems. This is why

Treaty skeptics rightly argued that the treaty effectively requires unilateral warhead and launcher reductions by the United States.

It also is clear from the open Russian press that Russia has robust nuclear modernization programs that will lead to the deployment of a variety of new Russian nuclear weapons later in this decade, primarily after the term of the New START Treaty. It appears that this Russian nuclear buildup has been in process for years and that even the recent US unilateral reduction in tactical nuclear weapons and the US unilateral reductions called for by the New START Treaty have not dampened Russia's nuclear modernization programs. This Russian nuclear buildup is not induced by US behavior, but by Russia's felt-need to meet its many and varied security requirements via heavy reliance on modern nuclear capabilities, including vis-à-vis China.

It certainly is in US and Russian interests to have the lowest number of forces compatible with each country's respective security requirements. And, it is my hope that Russia will reduce the size of its very large tactical nuclear arsenal—an arsenal that is approximately 10 times the size of the comparable US arsenal. However, because Russia has significantly different security requirements than does the United States, and sees great value in its continuing nuclear modernization programs, the prospects for Russian acceptance of further deep parallel reductions are limited, as is the prospect for Russian acceptance of negotiated deep reductions in the number of Russian deployed warheads or in the reduction of tactical nuclear weapons.

Ms. SANCHEZ. Last year, Joint Chiefs of Staff Vice Chairman Gen. James Cartwright has acknowledged, that the approximately 200 U.S. tactical nuclear bombs stored in Europe do not serve a military function not already addressed by other U.S. military assets. Do you agree/disagree? Is there any contribution to nuclear deterrence that could not be achieved by our strategic weapons?

Dr. PAYNE. I have no reason to disagree with Gen. Cartwright's statement. However, the lack of an immediate military function for US nuclear forces in Europe has little to do with the value of these forces for extended deterrence and the assurance of allies. Deterrence and assurance are political and psychological functions—the value of nuclear weapons for these missions is largely in their non-use, not their military employment per se. In this regard, US nuclear forces located in Europe certainly appear to be important for the continued assurance of some key NATO allies and the continued presence of US nuclear forces in Europe may contribute uniquely to the credibility of deterrence in plausible scenarios.

Ms. SANCHEZ. Under what likely scenarios would the US tactical nuclear weapons in Europe be used, and in what situations would they be preferable over other existing weapons, including conventional and strategic nuclear weapons?

Dr. PAYNE. I would prefer not to speculate about actual nuclear employment options or to compare those options to the employment of non-nuclear forces. My focus is on the deterrence of war. Whether or how nuclear forces would be employed for military purposes may have little direct relevance to their potential value for the deterrence of war and the assurance of allies.

Ms. SANCHEZ. How relevant are the U.S. tactical nuclear weapons to Russia's security calculations? To what extent might the Russians see the presence of the tactical nuclear weapons in Europe as an excuse for inaction on addressing their own tactical nuclear arsenal?

Dr. PAYNE. Russia's requirement for tactical nuclear weapons clearly is not driven by the number or presence of US tactical nuclear weapons in Europe. According to numerous open Russian discussions of tactical nuclear weapons, Russia's conventional forces are far from adequate to defend Russia's extensive borders, including against conventional attacks. Russia essentially has chosen to rely on tactical nuclear weapons to compensate for the inadequacies in its conventional forces to defend its borders. Russian doctrine specifically leaves open the option of using tactical nuclear weapons to defend Russia's borders against conventional attack. Consequently, I do not believe the removal of the relatively small number of remaining US nuclear weapons in Europe would have any effect on Russia's felt-need to maintain a large number of modern tactical nuclear weapons.

Ms. SANCHEZ. In 2008, the Air Force conducted a Blue Ribbon Review and found security to be insufficient around some of the sites where U.S. tactical nuclear weapons are likely based in Europe. Allies apparently made security adjustments. Since then, protestors breached security at Klein Brogel Airbase, where some of these weapons are thought to be stored. To what extent should nuclear security and terrorism be considered in a decision to remove or reduce the tactical nukes?

Dr. PAYNE. Maintaining the security of US nuclear forces should be a priority consideration at all times and circumstances.

Ms. SANCHEZ. What do you think should be the appropriate level of our nuclear arsenal to meet our requirements for deterrence and nuclear defense?

How should the Executive Branch determine "how much is enough" to deter a nuclear attack on the homeland or against our allies, what are the assumptions upon which those judgments are made, and how, if at all, should we adjust nuclear deterrence requirements to reflect 21st century realities?

Have we ever had a fresh look that was not tied to simply reducing the number of weapons from Cold War levels, but rather based on what we really need to deter our adversaries?

Dr. HALPERIN. We have not had a fresh look at the requirements for deterrence since the end of the cold war. We need such a review asking for each potential adversary what forces are necessary to deter nuclear attacks on the United States or other countries that we protect from nuclear attack with our forces. We need to understand that a major part of the deterrent of such attacks is our capacity and will to respond promptly with conventional forces. Our nuclear forces should be seen as a backup. The level of nuclear forces that are needed is difficult to specify in advance. I am confident that the number we need for this purpose is well below 1,000 total weapons both deployed and non-deployed. Whether we can go to such numbers would depend on whether the Russians would agree to the numbers and whether we can reach some agreement with China.

Ms. SANCHEZ. Could you explain the link between nuclear non-proliferation and progress on nuclear arms control?

Dr. HALPERIN. I believe that over time there is a direct link between nuclear non-proliferation and arms control. Unless the US and Russia (who still possess more than 90% of the world's nuclear weapons) continue to reduce their forces and decrease their reliance on nuclear weapons the non-proliferation regime could come apart. The most important step we could take now would be to ratify the CTBT and bring it into existence.

Ms. SANCHEZ. As we modernize the nuclear weapons complex and build new billion dollar facilities for producing new plutonium pits and uranium secondaries for nuclear weapons, should we be thinking about how to incorporate verification capability in the event nuclear weapons capabilities are ever subject to arms control agreements? Why/why not?

Dr. HALPERIN. We need to be thinking hard about how to verify existing stockpiles and production facilities both in the US and Russia as well as new facilities which we are building. If we are to get to agreements on total stockpile levels below 1,000 we will need new ideas for verification.

Ms. SANCHEZ. We learned earlier this year that Russia already has met most of its arsenal reduction obligations under New START. The State Dept. reported June 1 that Moscow was below the treaty's limits of 1,550 deployed strategic warheads and 700 deployed delivery vehicles and close to the 800 limit on launchers. The United States does not currently plan to reach these limits until 2018.

In addition, Russian nuclear policy expert Alexei Arbatov has warned that Russian nuclear weapons might fall well below New START levels in the next few years, potentially to 1100 or 1000 warheads, and that Russia is designing a new heavy ICBM with MIRV capability to build back up to New START levels.

How would this affect strategic stability? How might US nuclear posture and signals affect this decision?

Would you agree that rather than induce Russia to build up, it is in the security and financial interests of both countries to pursue further, parallel reductions in their strategic nuclear forces and to cut the size of their non-deployed reserve stockpiles?

Dr. HALPERIN. A Russian decision to build a new heavy ICBM would reduce strategic stability. To ward this off the United States should announce that it will meet the START levels as soon as possible and give a timetable for that. We should also consider proposing an amendment to the START Treaty to provide for lower levels of deployed warheads and delivery systems leaving all other aspects of the treaty in place. Alternatively we should propose to the Russians that we each go to a lower level by mutual restraint without amending the treaty.

Ms. SANCHEZ. Last year, Joint Chiefs of Staff Vice Chairman Gen. James Cartwright has acknowledged, that the approximately 200 U.S. tactical nuclear bombs stored in Europe do not serve a military function not already addressed by other U.S. military assets. Do you agree/disagree? Is there any contribution to nuclear deterrence that could not be achieved by our strategic weapons?

Dr. HALPERIN. I agree with Gen. Cartwright. The weapons deployed in Europe do not, in my view, make any contribution to deterrence not achieved by our strategic forces. The decision to remove the remaining weapons should be made by the NATO

alliance by consensus but the USG should state this conclusion as the official position of the American government.

Ms. SANCHEZ. Affirming that "As long as nuclear weapons exist, NATO will remain a nuclear alliance," and that "The supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States," the November 2010 NATO Strategic Concept, unlike its 1999 predecessor, made no mention of non-strategic weapons forward deployed in Europe. In addition, German, Dutch and Belgian government officials have called for the removal of forward-based tactical nuclear weapons at bases in these countries.

With tactical nuclear weapons no longer appearing to be a unifying, but rather a divisive, element within NATO, what alternatives are there to demonstrate US resolve to defend European allies that could replace the political value of tactical nuclear weapons in Europe?

Dr. HALPERIN. We need to discuss what we should do if a decision is made to remove the remaining nuclear weapons. We should commit to continuing close consultations on our nuclear posture and to maintaining a significant conventional military presence in Europe.

Ms. SANCHEZ. Under what likely scenarios would the US tactical nuclear weapons in Europe be used, and in what situations would they be preferable over other existing weapons, including conventional and strategic nuclear weapons?

Dr. HALPERIN. There are no conceivable scenarios in which the weapons now in Europe would actually be used. They are not available for immediate use as are our strategic weapons and our conventional forces. They have no operational role.

Ms. SANCHEZ. How relevant are the U.S. tactical nuclear weapons to Russia's security calculations? To what extent might the Russians see the presence of the tactical nuclear weapons in Europe as an excuse for inaction on addressing their own tactical nuclear arsenal?

Dr. HALPERIN. I do not think our tactical nuclear weapons in Europe play any significant role in Russian security calculations. I also do not think that removing them would have any significant impact on the Russian tactical nuclear arsenal.

Ms. SANCHEZ. In 2008, the Air Force conducted a Blue Ribbon Review and found security to be insufficient around some of the sites where U.S. tactical nuclear weapons are likely based in Europe. Allies apparently made security adjustments. Since then, protestors breached security at Klein Brogel Airbase, where some of these weapons are thought to be stored. To what extent should nuclear security and terrorism be considered in a decision to remove or reduce the tactical nukes?

Dr. HALPERIN. Concerns about nuclear security and terrorism as well as the costs of guarding against them should be primary considerations in deciding whether to remove the weapons. A successful penetration by a protest group could generate strong public demands to remove the weapons.

Ms. SANCHEZ. There have been some criticisms that the US decision to retire the TLAM–N (Nuclear Tomahawk) prompted concern in Japan. Can you shed more light on this and how would this inform the process and consultations with our NATO allies and East Asian allies on extended deterrence?

Dr. HALPERIN. I visited Japan both during and after the NPR. I am very confident that the Japanese government and private analysts understood the rationale for the USG decision to retire the TLAM–N and that it did not prompt any concern in the context of exceptional consultation between the two governments. The lesson is to fully consult and to explain the options we are considering and listen carefully to the responses of other governments.

Ms. SANCHEZ. What do you think should be the appropriate level of our nuclear arsenal to meet our requirements for deterrence and nuclear defense?

Mr. MILLER. U.S. deterrence policy must be based on assessing the goals and valued assets of our potential adversaries. We must threaten to destroy, if attacked, the assets which a potential enemy leadership would rely on to dominate a postwar world. In the case of authoritarian states, this often includes military forces, the ability to control their own country (thus including leadership, intelligence, and internal security forces), and the industrial potential to sustain war. This intellectual template must be fleshed out by continued and focused intelligence and scholarship on the value structure of every potential enemy leadership which would threaten nuclear attack or major aggression against the United States or our allies.

Ms. SANCHEZ. How should the Executive Branch determine "how much is enough" to deter a nuclear attack on the homeland or against our allies, what are the assumptions upon which those judgments are made, and how, if at all, should we adjust nuclear deterrence requirements to reflect 21st century realities?

Mr. MILLER. As noted above, we must determine "how much is enough" by understanding what assets potential enemy leaderships value and then holding those as-

sets at risk. This construct is as true in the 21st century as it was in the 20th century, although the specific assets to be held at risk may differ from historical models.

Ms. SANCHEZ. Have we ever had a fresh look that was not tied to simply reducing the number of weapons from Cold War levels, but rather based on what we really need to deter our adversaries?

Mr. MILLER. The major review of U.S. nuclear war plans carried out by the George H. W. Bush administration and the Nuclear Posture Review conducted by the George W. Bush administration both focused on what was needed to deter potential adversaries.

Ms. SANCHEZ. As we modernize the nuclear weapons complex and build new billion dollar facilities for producing new plutonium pits and uranium secondaries for nuclear weapons, should we be thinking about how to incorporate verification capability in the event nuclear weapons capabilities are ever subject to arms control agreements? Why/why not?

Mr. MILLER. I am no longer sufficiently well versed in nuclear weapons production techniques to be able to provide the sub-Committee with a useful answer in this regard.

Ms. SANCHEZ. We learned earlier this year that Russia already has met most of its arsenal reduction obligations under New START. The State Dept. reported June 1 that Moscow was below the treaty's limits of 1,550 deployed strategic warheads and 700 deployed delivery vehicles and close to the 800 limit on launchers. The United States does not currently plan to reach these limits until 2018.

In addition, Russian nuclear policy expert Alexei Arbatov has warned that Russian nuclear weapons might fall well below New START levels in the next few years, potentially to 1100 or 1000 warheads, and that Russia is designing a new heavy ICBM with MIRV capability to build back up to New START levels. How would this affect strategic stability?

Mr. MILLER. The Russian government is evidently content that strategic stability is not endangered, from its standpoint, by having reached the New START levels well before the United States. We should not try to second-guess their judgment as regards the sufficiency of Russian strategic nuclear force levels. From an American perspective, I cannot believe Russia's having reached the New START levels before we have poses any issue for strategic stability. I would, however, regard Russian development and deployment of a new heavy ICBM as a destabilizing act and I would urge the Russian government not to do so. As for Mr. Arbatov's assertion, this could either be a ploy to frighten American policy makers into further reductions they may not deem in America's interest or another example of heavy-handed Russian bluster. If it in fact turns out to be true that Russia builds a new heavy ICBM it will tell us that Russia places little regard on U.S. views of strategic stability.

Ms. SANCHEZ. How might US nuclear posture and signals affect this decision? Would you agree that rather than induce Russia to build up, it is in the security and financial interests of both countries to pursue further, parallel reductions in their strategic nuclear forces and to cut the size of their non-deployed reserve stockpiles?

Mr. MILLER. No. I believe we need to continue to deploy whatever sized nuclear deterrent meets US national security objectives as described above in my answer to question 1. If the New START levels exceed those U.S. requirements we should consider negotiations to pursue additional reductions. If our requirements cannot be met below New START levels we should not pursue further reductions as those would endanger our national security. The Russian government is perfectly capable of determining for itself whether its nation requirements are met by the level of forces it currently fields. Strategic stability is a far more important goal than lower numbers.

Ms. SANCHEZ. Last year, Joint Chiefs of Staff Vice Chairman Gen. James Cartwright has acknowledged, that the approximately 200 U.S. tactical nuclear bombs stored in Europe do not serve a military function not already addressed by other U.S. military assets. Do you agree/disagree? Is there any contribution to nuclear deterrence that could not be achieved by our strategic weapons?

Mr. MILLER. I have enormous respect for my friend Jim Cartwright. I believe he meant only to indicate that the *military* task assigned to U.S. nuclear weapons based in NATO can be met by other U.S. systems. Of course nuclear weapons are different from any other type of weapon and have primarily a *political* role. The political roles of our NATO-based weapons—reassurance of allies and deterrence of potential adversaries from "limited aggression" against NATO—cannot be fulfilled by U.S. strategic weapons. Those political roles—influenced deeply by the long and

unique history of NATO nuclear policy and politics—can only be achieved through the continued deployment of U.S. nuclear weapons ion NATO soil.

Ms. SANCHEZ. Under what likely scenarios would the US tactical nuclear weapons in Europe be used, and in what situations would they be preferable over other existing weapons, including conventional and strategic nuclear weapons?

Mr. MILLER. The assurance and deterrent values of our nuclear weapons in Europe are used every day.

Ms. SANCHEZ. How relevant are the U.S. tactical nuclear weapons to Russia's security calculations? To what extent might the Russians see the presence of the tactical nuclear weapons in Europe as an excuse for inaction on addressing their own tactical nuclear arsenal?

Mr. MILLER. The obscenely bloated size of the Russian tactical nuclear arsenal cannot be justified in the 21st century in any way. It is risible to state or conclude that the small U.S. NATO-based nuclear stockpile threatens Russian security in any way, much less that it is an excuse for Russia to deploy today a tactical nuclear arsenal at least 10 times the size of NATO's. The intent of Russian policy—which seeks the total eviction of U.S. nuclear weapons from NATO soil—is to undermine and destroy NATO allies confidence in the U.S. security guarantee to the Alliance and to increase their own ability to intimidate NATO members with the nuclear saber-rattling the Russian government has repeatedly indulged in over the last several years.

Ms. SANCHEZ. In 2008, the Air Force conducted a Blue Ribbon Review and found security to be insufficient around some of the sites where U.S. tactical nuclear weapons are likely based in Europe. Allies apparently made security adjustments. Since then, protestors breached security at Klein Brogel Airbase, where some of these weapons are thought to be stored. To what extent should nuclear security and terrorism be considered in a decision to remove or reduce the tactical nukes?

Mr. MILLER. The 2008 Air Force study was intended to bolster the view of those elements in the U.S. Air Force who sought the return of all U.S. nuclear weapons from Europe. The subsequent 2008 Secretary of Defense Task Force on DoD Nuclear Weapons Management (also known as "the Schlesinger Task Force") reviewed the security of U.S. nuclear weapons in Europe from an objective perspective and concluded that security at our nuclear sites in NATO Europe was adequate as of that time but urged that improvements be made when and if required by new threats. I believe the Air Force is taking those recommendations seriously and acting on them.

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