MR. PETER HUESSY: I want to thank you all for being here today. We are especially honored today to have the Marshall Institute as the top sponsor of this event with two of my very good friends, Dr. Barry Blechman and Bob Butterworth, who will be talking about the role of nuclear weapons in U.S. foreign policy and national security strategy.

Just a couple of notes, tomorrow the British American Security folks will be having a breakfast here with two speakers from Europe about European nuclear weapons deterrence perspectives. That is at 8 o’clock. We can get in one or two more because we are capped at 50, but just let me know if you particularly would like to attend.

Next week, before we take the break for August, we have two wonderful speakers from NNDO who are going to talk about preventing nuclear terrorism, and then the roadmap of how to detect nuclear material around the world. And we have two great speakers, and that is on the 30th for breakfast here at this club. And then on the 31st we have General Kowalski who is, as you know, head of Global Strike Command. And it’s my understanding that General Kowalski will be going to StratCom as the deputy, shortly, because he’s been, I believe, nominated for that position.

Our two speakers, Bob Butterworth, will go first, and then Barry Blechman. Bob is President of Aries Analytic and on the board of directors of the Marshall Institute. Barry Blechman, as you know, has been a speaker in my series for probably a couple of decades. He is the founder of the Stimson Center, and now he is a, I guess, emeritus fellow –

MR. BARRY BLECHMAN: Distinguished.

MR. HUESSY: -- distinguished, of course. And he will be following Bob and talking and commenting on Bob’s remarks, as well as having some of his own. I want to also thank our friends from the embassies of Russia and Singapore and Belgium, and particularly Israel, and also our other guests that are here, our sponsors for our regular series, as well as special guests, particularly my friend Professor Curtis from the Naval Academy where he has graciously asked me to come in and teach in his class on the subject of nuclear deterrence.
So without any further ado, would you all give a very warm welcome to our friend Bob Butterworth?

(Applause).

MR. ROBERT BUTTERWORTH: Thanks very much, Peter. I’m glad to be here. I’m glad that the Marshall Institute is sponsoring this thing. And I’m glad to finally, after really a very long time, to have the chance to actually meet and shake hands with Barry Blechman, having read his stuff for quite a while. Somehow, we never came across each other.

And so as a nation now, we’re engaged once again in a very large effort to try to modernize our strategic nuclear forces. We last did this in very different circumstances toward the end of the 1970s and early 1980s. We have a very different world now and a very different future now. But we’ve lived with nukes and we’ve wrestled with these issues for over half a century, and we think we might have learned a few things.

So as we make decisions to create the nuclear force that will take us through the 2080s, do we know what we’re doing? And I’m afraid my feeling is well, not so much. And let me try to lay that out a little bit and suggest some ways we might go ahead.

All of our issues about nuclear forces, I think, at root come down to two questions. Why do we have nuclear weapons and what do we want to do with them? Well we know the answer to the first one, and I like it as formulated by Larry Welch who said, we’ve got them because we didn’t want Hitler to be the only one who had them. I think that’s an artful formulation. I think it continues to resonate.

But we don’t know the answer to the second, what do we want to do with them? The aspiration is clear enough. We don’t want to use them and we don’t want anyone else to use them, either.

But how do we get that to happen? That’s where the fun starts. How do we do deterrence?

Is it the sheer horror of these things, their power and their long lasting poisons? Is that enough to forestall any intentional use? Can nations actually threaten suicide? Can they do that credibly?

Does having more useable nuclear weapons increase or reduce stability? What do we need to know, and what can we know, about the views and the calculations about the decision-making and the policy and program execution of foreign governments? And for that matter, what can be taken as certain about American views, calculations, decision-making and execution, particularly under the stress of a nuclear crisis?
So, what happens then is that we don’t know answers to these things. We get lots of answers to them, but the usefulness of any particular answer depends on the circumstances at hand. I realize that everybody here has wrestled with these issues. I’m stating the obvious, but I just wanted to remind us again that who we want to deter, from what, and in what circumstances, by what means, all those details matter.

That means that deterrence is relational, is situational, is conditional, and is mutable. Tailored deterrence is a redundancy. And the choice of force structures and postures to give deterrence some operational significance is really discretionary. It will depend on our judgment and our feelings.

And so, our nuclear doctrine remains fundamentally ambiguous, as it must. And with each successive modernization effort, or proposed arms control treaty, we debate vigorously the same questions. And the debates often feature concepts that describe attractive aspirations, but offer very little systematic development.

There’s nothing new here. We’ve seen it always before. It’s just part of our dealing with the nuclear province.

Kissinger, for example, complained 40 years ago about slogans like “superiority,” “parity,” and “assured destruction,” that had no operational military significance or definition, and certainly no consensus on their political implications. If he were writing today, he might complain about the recent 491 report, which talks about ensuring a strong and robust deterrent in pursuit of strategic stability. And so, what do these things mean and how do we actually get there? That’s the problem.

So these arguments show that we not only don’t have a general theory of deterrence, we don’t have a general consensus about what we don’t have a theory about. We don’t really know what a war with nuclear weapons would be like, so we speculate and we build our programs accordingly. Now agreement on the speculations, whether mine or yours if you think it’s credible and all this kind of stuff, can wax and wane. But generally, I think we’ve found three contending outlooks, basically.

One believes that nuclear weapons can be used and controlled in discriminating ways to defend the United States and its allies, and those people tend to advocate a warfighting, flexible response approach to deterrence. You know, that reminds me, I suppose, of Secretary Schlesinger’s initiative on nuclear targeting, for example – a countervailing strategy.

Another view believes that any use of nuclear weapons, any use, would escalate uncontrollably, resulting in horrible damage to both sides. And so the only role for nuclear weapons is to deter the first use of nuclear weapons by an adversary. And those are the kinds
of people – those are the views that sort of lead to recommendations about minimum deterrence and so on.

And then there’s a third view that we don’t hear quite so much anymore, but it’s still around, probably associated initially with John Foster Dulles among others. And that is that it agrees that nuclear use would escalate uncontrollably, but it believes that the threat of using nuclear weapons would deter both nuclear and conventional attacks and would be much cheaper than building up conventional forces. And therefore, we should maintain the threat of early use of nuclear weapons and get those benefits.

Those different views will persist and we’ll continue to have arguments then over our force modernization, as long as we’re trying to modernize forces or conduct strategic arms limitation agreements. Notwithstanding the continuing contentions there, though, by and large we have agreed, I think, that if a president did have to use these damn things, they had better well work. We certainly didn’t want to have a president be in a position of launching some demonstration strike against some future Hitler – to impress some future Hitler – and have the sucker turn out to be a dud. At that point, Katie bar the door in terms of the threats and demands that we’d be facing.

But you know, today I’m concerned that there might be some uncertainty here as well, in addition to the uncertainties that we just talked about. And that uncertainty might actually be growing because of the policies that we’ve adopted since the end of the Cold War. We have ruled out manufacturing any new warheads. The most recent we have was built in 1991.

We have abandoned underground testing. The most recent test was in September of 1972. And we have required both presidential and Congressional authorization for the remanufacturing of components and for work on new weapons designs. And unlike the uncertainties that I talked about at the outset, these – about the warheads – are largely self-imposed. And so I’d like to take a few minutes and sort of look at the problem.

Increasingly, the weapons themselves are different from what the stockpile was in 1992. They’re being modified through life extension programs, LEPs, which replace the life limited components of certain weapons, and make other changes to correct or counteract or anticipate the effects of aging and to improve the safety and security of the weapons. With no testing, then, confidence in the reliable, effectiveness, safety and security of the weapons rests on the opinions of experts.

Those opinions are formed by various tests and analyses which include disassembly of selected weapons, inviting more detailed understanding of the physics of nuclear weapons, far more detailed actually than we ever had during the actual testing days. And so the result is, and I want to be sure to try and get this clear, that confidence and the reliable effectiveness of
the weapons therefore turns on the assumption that today’s better science can enable models and simulations that will reliably predict the performance of yesterday’s weapons that are now configured in ways that were never explosively tested. You’ve got a few steps in there, okay?

But again, it’s the assumption that today’s better science will reliably predict the performance of the weapons we’ve got. Those are yesterday’s weapons. But they don’t look like and they aren’t configured as they were, when they were actually being tested. So that’s the assumption that we depend on.

Lots of people are very comfortable with that assumption. I can list the reasons why, and I think it’s worth listening to them. One, it’s a demonstrably improved understanding of the physics involved – absolutely.

Second, the development of very large high-speed computers running highly detailed simulations, far beyond what we could have imagined even in 1990 – very helpful. Confidence is encouraged by the fact that the original configurations of the weapons in the stockpile were certified to be effective during the time when underground testing was conducted. They’re not exactly the same, but they were configured.

Comfort is encouraged by the continuing recruitment of scientists, really good ones, to the stockpile programs. And, of course, their job is to sort of look over the work that went before and try to find problems with it. Comfort is encouraged by the effort, at least so far, to replicate wherever possible the original materials and procedures when they have to replace or modify parts. It’s not always possible, but they try hard to do that.

And finally, comfort with the assumption that that approach will tell us the truth, is encouraged by the annual agreement among the leaders of scientific, technological, military and political organizations, known as the annual certification process, to certify that the stockpile is safe, secure, reliable and effective. That’s a big business, big set of activities that go on. And some members of Congress, in fact, in previous authorization reports have expressed even more confidence in this approach than they had when we actually were doing weapons testing.

Those are the people that are comfortable with the assumption. Other people are not comfortable with the assumption. Let me talk about why they have problems.

One is the lack of empirical data to validate the tools that are being used to assess and certify the stockpile. The second is that the effects of aging and the various life extension programs have changed the weapons in the stockpile somewhat from their original configurations. And that issue is whether those differences mean that test data from 20-plus years ago, from underground testing, can still validate the weapons in today’s configurations.
Some of the scientists involved raised concerns as early as 1999 about actions that had been taken to change the design of the weapons in the stockpile, and made the point that if there were no moratorium those changes would already have called for a nuclear test to confirm the validity of the actions that had been taken.

Another problem, specific non-critical tests of individual modifications – I charged the tritium, okay, did that. I put in new arming, fusing and firing sub-systems. I put in new surety features. I might have to use aluminum materials – I have to use aluminum mechanical processing device or something like that.

Specific non-critical tests of each of those things separately cannot address the possibility of interactions among them, or what gets called in the business the indeterminancy question. These things may linkup in ways that we didn’t think about. And we all have examples of this in mind.

We know about bridges that collapsed or engines that blew up or airplanes that fell out of the sky because of some interaction effect that we hadn’t really counted on. In the space business we really know that as being a problem. We don’t know the extent to which indeterminancy effects the performance of nuclear weapons.

Another problem is that testing may be required in the future even if it’s not required today. Now, there’s an oft-quoted finding from the Jason’s report, the famous scientist group. There’s an oft-quoted finding that says that the life extension programs could extend confidence in today’s nuclear warheads for decades. What is not quoted so often is that the Jason’s conditioned or put assumptions or qualifications around that statement, saying that they needed to have people pay attention to their warnings that future success is threatened by lack of program stability, placing any life extension program in the future at risk and that the program required implementation of a massively – of a (revised surveillance ?) program.

And finally, the directors of Los Alamos, of Lawrence Livermore and Sandia all agree that it can’t be assumed that with increasing insight and increasing understanding that will necessarily increase confidence in the actual performance of the stockpile. That kind of knowledge is fundamentally unknowable in advance. You’re going to have to do something. And that’s why I suspect that John Deutch was writing in Foreign Affairs two years ago and he simply pointed out that at some time we are going to have to do a test just to validate the science, to know what the links are between the tests that we’re doing and the actual performance.

So all of that is why I’m thinking we may not have the great answers that we might have thought we had to what we need to be able to do in the future. If we keep these maybes and uncertainties in mind, the question is, what nuclear force do you think you’re going to want in
20-plus years? And I’m not here to sell you on a particular number of submarines or a type of aircraft or any of that kind of stuff. But I do want to talk about some options, and I’ll make that very quick.

Let’s start with the bigger guys, because both Russia and China have got ongoing nuclear force modernization programs. There seems to be general agreement in the U.S. that neither Russia nor China should be allowed to acquire substantial or perceived nuclear force advantage.

The planned modernization of our triad as originally outlined in the 1251 Report with the new submarines, the new land-based ICBM, the new bomber and the associated weaponry for that, is intended to accomplish that goal, but it’s going to take almost 20 years for those forces to be out there. During that time we might come to prefer a different approach because there’d be changes in the composition, the size and the posture of future Russian forces. There might be new targets whose hardness or configuration will be challenging. The arms control agreements might constrain the number of weapons or other things in different ways. The Russian’s own strategic views and assessments might change significantly, prompting changes in how we would try to influence them or deter them, and so on.

And consequently, if we could approach this in a more incremental time-phased way that would have decision nodes with developmental options in the future, that would be an attractive alternative to locking us into this massive investment and the relative inflexibility of those things for the next have century or so. Now that isn’t just me talking. I think the Air Force has something like that in mind. You know, the new penetrating bomber that they’re talking about will be initially conventional, later nuclear, and probably initially human piloted and later perhaps with no human pilot.

Perhaps they could do the same with ICBM. Take a look at the energy and the GBIs for the missile defense program. They’ll fit inside the Minuteman silos, but they’re also built to be delivered by trailers and so on. That might give us some mobility options if it would turn out that we would need that at sometime in the future.

A common missile for submarines and for land-based ICBMs might be a good idea from that point of view. Technically, enormously challenging, but it would really help to rebalance the force in response to whatever threat we saw coming up in say 25 years or something, if we could do that.

The Navy, I think, plans an incremental approach because they want to buy the submarines first, the Ohio-class replacement, and then get the new Trident missiles to go with it, and so on. The problem is that the cost of the subs, of course, is enormous, and that’s been discussed extensively and I won’t spend any more time on it except to say I sure hope we can
find an alternative to getting at least some of the new subs out and then seeing what happens, without having to go at least initially to the whole hog.

And then finally, we would want to be able to extend that flexibility and development to operational matters as well. That will require a very, very big effort in new nuclear C3 in order to provide that flexibility for a future president.

With regard to the other guys, the non-big ones, do we really think we’ll actually use nuclear weapons? We haven’t. I mean yes, we did in World War II, but they’re a whole separate issue.

Since then, we haven’t. We’ve been attacked many times. We haven’t used them. We might, of course. You can’t say that we won’t.

If we got hit, if our forces got hit by a nuclear attack by North Korea or whatever it is – but if we would use a nuclear weapon from a military point of view, I’m not sure that’s the answer we come out with. See, the reason is that they really bugger up the battlefield and they present really challenging difficulties in terms of thinking about war termination and restoration of the peace and on and on, those kinds of things.

I remember serving as president in a war-game down at Maxwell at the school. And the guys came in because somebody had done something to our space things, and they said, give us permission to nuke ‘em. And I said sure, as soon as you show me the battlefield advantage I’ll sign off, no problem. Well, I had a mutiny on my hands, but we didn’t use them. So there are sort of military analyses required.

What I think instead would be really important would be for us to have the option to deal militarily with lesser nuclear powers without us using nuclear weapons, even if the other guys did. So I’m talking about general purpose forces that can operate in a nuclear and post-nuclear environment.

Secretary Aspin recognized this as a desirable goal in 1993. He pointed out that nuclear weapons can be an equalizer against superior conventional forces and that today the United States would be the equalizee. We haven’t been able to keep up with that. Minjohn (ph) and others on the Defense Science Board have been complaining about this for at least 10 years. But it seems to me quite reasonable that we should try to develop a general focused forces capability to operate in nuclear environments.

One more thing, that recognition also prompted Secretary Aspin and President Clinton to conclude that non-proliferation, a very important U.S. goal, needed to be reinforced. And that was that the United States needed to be able to roll back proliferation once it had
occurred. Aspin thus urged the creation of counter-proliferation capabilities, a term that you’ll still find today in some programs, but it doesn’t mean what he was talking about. It’s gotten smooched in with non-proliferation. He’s talking really about a program that would allow us to go and do things and take nuclear devices or a nuclear effort away from proliferants.

These uncertainties that I mentioned here: conceptual, analytical, operational, empirical; will play out in a strategic future that is itself deeply uncertain, if only because of the number and variety of actors, and both the state and non-state actors with which we have to contend. In the meantime, our posture, the U.S. nuclear posture, reflects a doctrine of unresolved ambiguities, as it must; and consists of nuclear warheads untested for two decades, that would be delivered, at least for the next decade plus, by weapons built during the Cold War, in greatly reduced numbers, as determined by agreement with Russia. How long does that posture match the weapons to the times? Well, that’s up to you. But we do need to be taking timely action and we also need to preserve options for a highly dynamic uncertain future.

Thank you.

(Appause).

MR. BARRY BLECHMAN: Well, thank you, Peter, and thank you all for coming. I think I have been coming, speaking here for decades, usually earlier in the morning.

There is much that Mr. Butterworth had to say with which I will violently agree. There is some that I’ll disagree with, but I think in conceptual terms we are in good agreement. My topic will begin with the role of nuclear weapons.

The Nuclear Posture Review, done in 2010 and repeated in the Nuclear Employment Strategy that was released last month, says the U.S. will only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States and its allies and partners. And it adds the Nuclear Employment Strategy directs the DOD to try to find ways to narrow those circumstances in which nuclear weapons use might be considered. Based on behavior in international events, with the possible recent exception of North Korea, I would say that all nuclear weapons states would agree with this statement, whether they say it or not, that they would only use nuclear weapons in extreme circumstances to defend their vital interests.

And the question is, what constitutes extreme circumstances? For the U.S., we’re in a very fortunate situation. There were no direct conventional threats to this country. And our overwhelming conventional capabilities means that the extreme circumstances are pretty much
confined to deterring or pre-empting WMD attacks on this nation or its allies. Those are the only extreme circumstances I can imagine in which the president might consider nuclear use.

And I agree very much with Bob that it would be far preferable to deal with modern nuclear attacks from minor nuclear states with conventional capabilities. It would certainly be a very strong plus for under-cutting the case for additional countries to adopt nuclear weapons, if it could be demonstrated that they could be defeated even after a nuclear attack – defeated conventionally.

China, India, the U.K., France, pretty much in the same situation as we are. Israel was an exception. In two cases that I know of: in ’73 they seemed to have made some visible demonstrations. And I don’t know what might have been said in quiet shadows to demonstrate that they had a nuclear capability during the war. And again in ’91, perhaps to deter Saddam Hussein from using chemical weapons on the missiles that he struck Israeli territory with during the First Gulf War.

Pakistan is an exception now, and probably the most important one, given its unstable internal situation. Pakistan has an explosive doctrine that it will respond to an Indian conventional attack with nuclear weapons, and is apparently developing a fairly substantial arsenal so that it could implement such a doctrine.

The final possible exception is Russia, of course, and particularly vis-à-vis what it considers its near-abroad: conflicts in countries that used to be part of the Soviet Union or were a part of the Warsaw Pact. But the Russian position, Putin’s position, his stress on nuclear weapons, reminds me very much of President’ Eisenhower’s New Look. Determined to cut U.S. defense spending, Eisenhower developed, with Dulles, the doctrine of massive retaliation and stressed our nuclear capabilities as a way of offsetting our obvious conventional inferiority to the Soviet Union, at the time.

Eisenhower himself, apparently, had no intention to use nuclear weapons except in the most extreme circumstances. And several times when Admiral Radford came to him and asked for authorization to at least begin planning to use nuclear weapons in the offshore islands crisis and to save the French at Dien Bien Phu in Vietnam, Eisenhower really kind of laughed him off and said we’re certainly not going to consider anything like that. It’s interesting that if his rival, if Adlai Stevenson had been president, he may not have been able to tell the Joint Chiefs to go back across the river and get serious about military options, as the general was able to. So nuclear weapons are deterrence weapons for us: deterrence against potential attacks with weapons of WMD either against us or our allies.

I want to agree also with Bob that nuclear weapons are not effective weapons of war. First of all, the numbers required to defeat dispersed armored formations are just very large.
General Horner, who was the air chief during the First Gulf War, was asked by Colin Powell to quietly make a calculation of what would be required to defeat a single Iraqi division with tactical nuclear weapons.

And the number was somewhere in the 40s, he reports, which is quite substantial. And the use of even a much smaller number of nuclear weapons, as Bob said, really messes up the battlefield, not only for your enemy, but for you. It plays havoc with your electronics, makes you blind, makes it difficult to operate. You have to be protected, and so forth.

What nuclear weapons are good for are killing large numbers of civilians, if they're used against populated areas. But killing civilians doesn’t win wars. We’ve seen this throughout history.

And there are many, many examples but my favorite is the U.S. Civil War where the Union occupied the Confederate capital and destroyed Atlanta. The Confederacy fought on and it was only when the Confederate army was surrounded at Appomattox and one other place that they surrendered. And there are many other examples of that.

So this means that we can size our nuclear forces on the basis of requirements for deterrence. And since Russia’s capabilities outnumber all others by an order of magnitude, and will likely continue to do so for many years, looking at the very modest pace of China’s nuclear modernization program, the requirements to deter a Russian strike on us should be the sizing principle which determines the size of our forces. But again, here, let me agree with Mr. Butterworth.

Deterrence is a very uncertain principle and certainly not a law of physics like gravity. Our ability to deter in any particular situation depends on dozens of variables, including each side’s perception of their and the other’s perception of the stakes involved. Who has more at stake here? It includes the ability to threaten things valued by the opponent and to know what it is that he or she values. It depends on the credibility of the threats we can make, on our ability to communicate those threats, on the ability of the other side to hear the threats – for the decision-makers to hear the threats – and many, many, many other variables. So it’s a very uncertain thing.

For example, apparently given the current administration’s policy that we could not live with an Iran with even a single nuclear weapon, any threat, even a threat to totally destroy the regime, to kill its leaders, its families, its cronies, to destroy the country itself, which we could easily do with only a small portion of our arsenal, would not be sufficient to deter Tehran. So what does that tell us about the theory of deterrence?
Still, we have to size our forces and structure our forces. And we do that on the basis of assumptions that we’ve made over the years on speculation about what we must be able to do to deter Russia. And this is now and always has been a matter of sophistry. Some of us have made a living off it for decades, but in the end it’s all speculation.

In the Cold War it was assumed that we needed to be able to retaliate under attack and actually to pre-empt upon warning of attack and destroy Soviet nuclear forces, or at least those that hadn’t been launched, their conventional military forces, their war supporting industries and so forth, so that we would come out the victor in a nuclear exchange at no matter what level it was escalated to. During the Carter administration, we moved away from the industries and put more focus on leadership targets, but the basic idea remained the same.

The other factor that’s important in this speculation is the confidence with which we believe we need to have that we will destroy those targets, particularly the highest value targets. So if the confidence level was set high, as it was, then we’d have to put multiple warheads on each target so that we’re sure that we’ll destroy it. And this leads to very high requirements. This is one reason why we had an arsenal on the order of 25 to 30,000 nuclear weapons at the height of the Cold War.

Following the Cold War, requirements to deter Russia, perceived requirements, were reduced. I mean, some of the targets were in Europe. They now became our allies. Some were in parts of the former Soviet Union that became independent. Some became our allies. Russian nuclear and conventional forces were reduced, again reducing the targets. But still the basic principle still remained the same. We needed to be able to launch on warning and destroy the Russian forces and come out the victor in a nuclear war.

So the question to ask is, does this make sense in 2013, given that Russia no longer espouses an expansionist global ideology, but only more modest security goals pertaining to its near neighbors, to say nothing about Russia’s relations with the U.S. and with other nations, particularly the nations in Europe? And the changes in Russian society itself, do we really need to be able to hit Russia promptly with 1,500 warheads to deter it from aggression? The administration, as you know, recently concluded its review of this question, among others, and concluded that these requirements were no longer valid, that we could deter Russian attack with one-third fewer operational long-range warheads.

Now the basis for this conclusion has not been released. It’s not in the unclassified version of the Nuclear Employment Strategy. It might have been based on a reduction in the target set or on the number of individual targets within each set. Or, it might have been reached by reducing the confidence level with which we assume we need to have so that we
can destroy these targets. Or, it might have been set by reducing the requirements for prompt response, reducing the number of warheads that needed to be at sea, for example, at any time.

And we should note, of course, that in addition to the 1,550, which may become 1,000 if we could negotiate a treaty, we have a large reserve stockpile which serves as another hedge if there is a period of crisis. And one would assume that any situation in which these kinds of assessments became realistic would be preceded by a longish period of deteriorating relations and eventually crisis. The reserve stockpile could be used to deploy additional warheads on many of our systems.

So to close, many people ask, what are the benefits of reductions? Why not just play it safe and keep what we have? Usually they will say, certainly you don’t think Iran is going to give up its weapons program if the U.S. makes reductions.

And, of course, I don’t do that. A country like Iran or North Korea which are pursuing nuclear arsenals, are doing it for their own reasons. And whether we have 5,000 or 4,000 or 2,000 weapons is not going to make a difference in their calculation.

But it does affect the diplomacy of non-proliferation and our ability to maintain a Non-Proliferation Treaty, and thereby avoid additional defections from states that are not like North Korea and Iran, but more like Brazil and Argentina, states which have technical capability to build nuclear weapons but have foregone building them for many years. But if they see nuclear weapons becoming the currency of statehood, if there are more defections from the treaty, if the nuclear weapons states are no longer making progress towards further reductions, those are the countries that I worry about defecting and the entire NPT regime deteriorating.

Additionally, if the reductions are done together with Russia – and that’s certainly not going to happen this year or next – but I believe things will change in the Russian attitude as their economic situation deteriorates, which it most certainly will and they find reasons why they’d rather not spend as much money as they’re now planning to spend on strategic forces. If we are able to reduce our operational warheads together with the Russians, it could rebuild momentum toward the so-called P-5 talks. As part of the last NPT review, the five declared nuclear weapons states agreed to begin discussions about the possibility of a disarmament treaty at some future point.

And they’ve met each year. They’ve accomplished virtually nothing. And the position of the Chinese at least, of course, is you and Russia have to come down further and then we’ll begin to get serious about these talks. So if we were able to come down to 1,000 together with the Russians, I think that would be a point at which there’d be the possibility of getting those P-5 talks moving.
And then finally, it saves money. And in this time of great pressure on the defense budget, this is something to pay serious attention to. Personally, I would much rather see us spend additional money on conventional forces, the forces that we use on a daily basis, the forces that actually assure our security against the real threats, threats that come from terrorists organizations in the Middle East or other kinds of contingencies, than spend them on nuclear weapons, at least to the degree to which we’re planning to spend on nuclear weapons for the future.

The House, in passing its appropriations yesterday, seems to have forgotten something called the Budget Control Act, which is the law of the land and which will mandate the sequester again next year in 2014 – and again in 2015 if they continue to ignore this – forcing the department to make very unwise decisions that lead to a hollowed out force and the kind of short-term things that are being done. Far better, in my mind, would be to plan a realistic budget, one which fits under the mandated caps on defense spending. And in that kind of situation, I’d rather see on the margin funds shifted from nuclear forces to the conventional forces.

And with that, let’s open it up to questions.

(Applause).

MR. JEFF KEUTER: I’m Jeff Keuter, President of the Marshall Institute. And many of you probably saw Peter, he had to dash out to another meeting so I’ll be coordinating the Q&A session here for a moment. So while you’re thinking of your first question, I’ll just ask Bob if there’s anything that Barry said that you want to reply to before we start Q&A.

MR. BUTTERWORTH: No, I’d have to say I’m just amazed at the joinery, the fine cabinetry in the two presentations, at least from what I heard and what I understood. As I said, we hadn’t met before. I didn’t really know what he was going to say, and I think the same was true on his part. But I think the message has got reinforced or echoed one to the other.

MR. BLECHMAN: I would just note I didn’t address nuclear testing.

MR. BUTTERWORTH: And I didn’t address any specific arms control.

MR. KEUTER: Alright. So if you would just wait for the microphone, because it is for the video recording. It won’t amplify your voice if you speak up.

MR. JACK MANSFIELD: Jack Mansfield, an old friend of both of you. I have to correct you on one thing, Barry. We don’t have a large reserve stockpile of weapons. We have a large reserve stockpile of warheads. We don’t have the delivery systems.
My real question is, you mentioned Russia’s enormous fascination, in addition, to tactical nuclear weapons. Surely they don’t want to fight a battle in a nuclear contaminated battlefield. Although they exercise for it, they don’t appear to be very keen on the idea.

They could be using this – fight to the last Chechen and Uzbek when the Islamic armies years from now come to rescue Chechnya. Those nuclear weapons, it appears, are going to be used to create a barrier by slaughtering the armies with radioactive (fallout ?). Could you explain why they want nuclear weapons?

MR. BLECHMAN: Well, of course you’re correct the reserve is of warheads. But we have the potential to upload existing missiles. It would take some months to do that, but the reserve – we keep the reserve for many reasons, mainly to hedge against failure in existing warheads.

As for the Russian’s fascination with tactical weapons, it is a large number. They’re of different types. Both, I believe, are irrelevant because of their effects on electronics, and counterproductive rather than irrelevant.

But I do see it very much as NATO saw tactical weapons during the ‘60s, particularly. We were unable to stop them with their conventional forces and our war plans assumed we would use tactical weapons to blow the bridges and destroy as many of the tanks as possible. I don’t think it was particularly well thought through for us then, and I don’t think it’s particularly well thought through for the Russians.

I haven’t thought of this scenario of creating a radioactive belt in the south or maybe against the Chinese. I don’t know. I just don’t know what to think about that.

MR. BUTTERWORTH: So the question is the tactical nuclear weapons and why the Russians might be interested in that. And Jack, I guess I think that Russia doesn’t have the same self-imposed restraints that we do. In particular, it’s our unilateral interpretation of the CTBT – not ratified by the Senate but signed by President Clinton – and it’s our unilateral interpretation that says you can’t go critical. And the State Department legal counsel has said that’s just our interpretation. That is not part of the treaty, and so on.

And so I think Russia might be doing something that I sort of might think be a good idea, which is to try to tailor some new weapons to the new circumstances. And so if you could make sub-kiloton weapons that were particularly clean in various ways, could be delivered terribly precisely, you might find some tactical use out of it. I quite agree with Dr. Blechman, by the way, as I mentioned before, anything that we’ve got now – you can take the smallest B-61 – that’s really big stuff compared to what I’m sort of talking about.
But it seems to me that Russia might, in fact, find an interest in doing that, Jack. And that might be – again, this doesn’t say – the only reason they would keep the old ones is because they never throw anything away. And that was true when they were doing 17s, 18s and 19s as well.

MR. : Thank you all very much. My question is Dr. Butterworth or Dr. Blechman. And I was just wondering how would we be able to go about being able to sort of – (off mic).

MR. BUTTERWORTH: The question, as I understand it, is how could we prepare the way to actually doing an underground nuclear test when we’ve had this long period of restraint and we’ve made such a BFD about not testing? That’s a technical term.

(Laughter).

The approaches that I’ve heard recommended seem to me sensible. One is to start talking a little more publicly. I don’t mean to scare anybody, I don’t think my presentation is scary, but to talk a little more publicly about the limitations on what the science-based stockpile management program can do for us and try to be a little more candid about that.

It’s very nice that we get an awful lot of Congressional support saying boy this is hot stuff and that solves the problem. But that’s not quite right. We should make sure that our overseers and our legislators and our appointees really do understand what’s going on with this. If they then make an informed decision, that’s fine. That’s one point.

Another is to try to characterize how again – I’m sorry, Barry, I’ll stop in just a minute. I’m into a rant here. But if you want the world to be safer the why, for God’s sake, don’t you make safer weapons, okay?

These kinds of restraints – and this is just a personal, emotional reaction – I understand. But we can do that. We can get rid of these big ugly mother-humpin, filthy, radioactivity, destroy the world kinds of stuff, and build things that are much cleaner and safer, that are designed to be on the shelf for 100 years without a problem. We can do that. And so if you’re serious about a safer world, why not do that?

MR. BLECHMAN: I guess I will address testing. First of all, you’d have to prepare the ground politically because there’d be such an enormous uproar in this country if we started moving in that direction. Secondly, the lab directors are required by law to certify the effectiveness of the stockpile without testing, and they have done that every year so far. If that changes, that might begin to change the political atmosphere.

But speaking diplomatically and internationally, let’s not forget that other countries have either ratified the treaty, including Russia, and they may be doing things that we won’t do
but they’re certainly not doing full-up tests of their new systems. And more importantly, to my mind, China is observing the moratorium. China has done very little nuclear testing. They can’t have much confidence in their warheads, particularly if they’re building new warheads, and particularly if they were to deploy MIRV’ed warheads. And I would hate for the U.S. to give China a green light to start developing far more sophisticated weapons by testing ourselves.

And then finally, we don’t need small nuclear weapons because we have such good conventional capabilities. You know, we have this incredible air power and naval power with very precise conventional weapons which the Russians don’t have. And so this is not a need which I see for the U.S.

MR. CARL LUNDBERG (ph): Carl Lundberg from Jonah Speaks. I was wondering on this testing issue, do we have any evidence – (off mic).

MR. BUTTERWORTH: Well we certainly have tests that didn’t work, okay? But that’s different, sir, from deployed weapons that are duds. But Jack’s the expert here.

MR. MANSFIELD: I’m not much of an expert, but the reason we did so many tests is (to see that they really work ?). (Off mic) – that’s why we tested so many weapons.

MR. : Both of you made statements based on our nuclear posture, relations to China, Russia. Current events are obviously – everybody know this – they’re a little different right now. We’re going through this environment of what are we going to do with non-state actors and how does that play out and how might we deter non-state actors? Can each of you elaborate a little bit on the United States’ nuclear posture in relation to that threat? And what does deterrence and what does that mean in the context of preventing a non-state actor from actually trying to inflict pain upon us?

MR. BLECHMAN: The question is whether nuclear deterrence is relevant to dealing with non-state actors: terrorist organizations. And I don’t see any relevance with the possible exception of deterring states from sponsoring such organizations or actually providing a WMD capability to such organizations, if we could find out about that. There’s a recent article by Keir Lieber in “National Security” which puts a lot of cold water on the possibility that states would do such a thing, which is worth reading. But I think our conventional means are more than ample and more relevant to dealing with non-state actors.

MR. KEUTER: Last question.

MR. RANDALL BORK (ph): Randall Bork with Raytheon, to go back to this testing issue again, Dr. Butterworth, don’t we get to a point where because of all these variables that you’ve suggested, as decades become more decades and we’re down 25-30 years further down the
road until we’re 50 years away from an actual test, don’t we get to a point where there are so many variables, even with peta-scale (ph) computing and (x-scale ?) computing and all the models that they exhibit, where we just simply won’t know whether we’re throwing chunks of iron at somebody or whether there’s actually going to be a detonation? And if you get to the point where you can’t have confidence approaching one, that that’s actually going to go off, what does that do to the entire nuclear deterrence theory and your strategy?

MR. BUTTERWORTH: Well, the question is, without testing do we eventually reach some point where we just will have no confidence in these weapons at all. Is that a fair summary? Personally, I think that’s correct. What we could do then, if we wanted to, is to go back to making atomic bombs. As the saying goes, if you put enough plutonium together and throw it in a corner it’s going to go off, and we’re pretty sure about that.

But the problem is, we’ve got very precisely manufactured, in the right sense of the term, delicate weapons. And those we can’t be that sure about. Is that responsive to (the question ?)? And therefore, we’re going to have to then make a decision. As John Deutch suggests, you know, do it on the basis of science just to make sure that we’ve got the right measures, the right tools that we’re doing science-based stockpile measurement with, we’d have to do a science test. But in today’s environment, I don’t see any likelihood that we can move very far in that direction.

MR. BLECHMAN: I don’t have anything (to add ?).

MR. KEUTER: Well thank you all for joining us today for this conversation. And if you would, join me in thanking the two presenters.

(Applause).