

**CENTER FOR  
STRATEGIC AND INTERNATIONAL STUDIES (CSIS)**

**2010 GLOBAL SECURITY FORUM:  
THE ROLE OF NUCLEAR WEAPONS IN A PROLIFERATED WORLD**

**WELCOME/MODERATOR:  
CLARK MURDOCK,  
SENIOR ADVISOR, PROJECT ON NUCLEAR ISSUES,  
CSIS**

**SPEAKERS:  
GEN. (RET.) LARRY D. WELCH,  
FORMER CHIEF OF STAFF,  
U.S. AIR FORCE**

**HANS KRISTENSEN,  
DIRECTOR, NUCLEAR INFORMATION PROJECT,  
FEDERAL OF AMERICAN SCIENTISTS**

**MORTON H. HALPERIN,  
FORMER ASSISTANT SECRETARY,  
U.S. DEPARTMENT OF DEFENSE**

**THURSDAY, MAY 13, 2010  
9:10 A.M.  
WASHINGTON, D.C.**

*Transcript by  
Federal News Service  
Washington, D.C.*

CLARK MURDOCK: All right, I think we're ready to begin. My name is Clark Murdock. I'm a senior advisor at the Center for Strategic and International Studies and it's my great privilege to be the moderator of this panel.

The subject is "The Role of Nuclear Weapons in a Proliferated World." And we defined, as you see in the subset questions – by "a proliferated world" we mean a world of 10-plus nuclear powers, which presumably means that North Korea has not reversed course, that Iran has not stopped its forward movement towards becoming a nuclear power and that there has been further proliferation beyond that.

We're not very specific about what types of proliferation have occurred but it's undoubtedly a regional – perhaps in Northeast Asia, perhaps in the Middle East, but there has been proliferation.

So the question we're asking is a what-if question, and that is, our current policy as recently stated in the 2010 Nuclear Posture Review – which struck many delicate balances, and one of the delicate balances was struck between continuing to reduce the role of and the numbers of U.S. nuclear weapons at the same time that we maintain a safe, secure and effective nuclear arsenal for as long as nuclear weapons exist.

So that's a tension, a balance that was struck during the Nuclear Posture Review, and what we're asking in this panel is, if there is continued proliferation, should that continue to be our policy?

We've brought together a very distinguished set of panelists to address this issue. The first speaker will be Hans Kristensen, who is the director of the Nuclear Information Project at the Federation of American Scientists, and has written extensively on these matters over the last 10 years.

The second panelist will be Mort Halperin, a former colleague of mine at the Office of the Secretary of Defense, a policy planner in many different guises, at State Department and at the Department of Defense, a member of the NSC. He is now a senior advisor to the Open Society Institute and the Open Society Policy Center and will be speaking second.

The last speaker will be Gen. Larry Welch, former head of the Strategic Air Command, former chief of staff of the Air Force, longtime president of the Institute for Defense Analysis, and one of the most formidable intellects I have ever had the pleasure to meet. It scares even me.

Anyway, it's my great pleasure to introduce these and we'll begin with a statement from Hans Kristensen.

HANS KRISTENSEN: Thanks very much, Clark, and I appreciate CSIS for inviting me to come here and speak today on this issue. This is clearly something that is an issue that is coming back somewhat, I guess surprisingly, after fading at the end of the Cold War. But the question to this panel is whether the United States should, in the proliferated world, continue to reduce the role of nuclear weapons in national security strategy.

And the answer to that question I think clearly is yes, but it obviously depends on how and how much. So here I want to discuss two areas where I think reductions can happen. The first is the reach of the nuclear mission – what kinds of potential adversaries need to be covered by the nuclear mission.

The question for the panel suggests that the role of U.S. nuclear weapons depends on how many countries have dealt with WMD. In other words, if the proliferators develop WMD, then U.S. nuclear weapons almost automatically would have to be aimed at it.

We see this logic in some of the Obama administration's first major documents, including the Ballistic Missile Defense Review, and I quote, "Against nuclear arms states, regional deterrence will necessarily include a nuclear component." Why necessarily?

President Obama's Prague speech also contained some of that nuclear logic when he was saying that as long as nuclear weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary.

I assume we only need a nuclear option against those adversaries that are necessary to deter with nuclear weapons. Does the Prague language mean, for example, that if North Korea were the last nuclear adversary in the world, the United States must have at least one nuclear weapon as well? Is that the logic? Or are there levels underneath that where we can slice?

I think it's important that the United States does not have a domino policy based on the nuclear logic that if a potential adversary has a nuclear weapon, then there must be a nuclear option against it. The role ought not to depend on whether someone has WMD but to what extent the threat of nuclear retaliation is necessary against that particular adversary or can be done by other means.

So far the United States has not ventured very far down the path of reducing the role of nuclear weapons – fewer compared to the Cold War but in the last two decades – we have the Nuclear Posture Review that just came out. It changes somewhat, of course, the declaratory policy, but once I looked at the language and tried to think how that would influence what the war planners have to do and how many and what kind of adversaries are left in the nuclear crosshairs, I don't see much reduction yet.

The negative security assurance is abbreviated and made more explicitly conditional on compliance with nuclear nonproliferation obligations. But this doesn't appear to affect nuclear planning against the adversaries currently in the war plan.

Russia and China are not affected and planning appears to continue largely as before, only with fewer deployed strategic warheads because of the START agreement. North Korea and Iran are explicitly exempt from the change because they're either outside the NPT or not in compliance with it. Syria also appears to fall outside the restriction because of what appears to be clandestine nuclear work, but the demonstration has been less explicit about Syria.

Non-state actors acting alone or in collaboration with a nuclear weapons state appear to be the subject of some limited planning, but the new language does not appear to constrain this scenario either.

The nuclear role against non-nuclear weapons states has already been significantly reduced, the NPR explains, thanks to improvements in conventional capabilities, missile defense and capabilities to counter and mitigate the effects of chemical and biological weapons.

But at the same time, the NPR also states that countries not covered by the negative security assurances, countries that possess nuclear weapons and countries not in compliance with the nuclear non-proliferation obligations are still subject to, quote, "the narrow range of contingencies in which nuclear weapons may still play a role in deterring" conventional, chemical and biological attacks.

The NPR does predict that at some point in the future the United States might adopt a sole-purpose policy. Such a potential change appears to depend on acquisition and deployment of additional conventional weapons, missile defenses and counter-WMD capabilities in what is called a new, tailored regional deterrence architecture. So with not a whole lot of reduction in the role yet, the NPR comes across more as a keep-hope-alive review that leaves the option open for a possible future reduction in the role of nuclear weapons.

In defining that role, we have to be careful that we don't talk to ourselves but think clearly about how our declaratory policy and posture are interpreted by our adversaries and allies, not least to avoid creating the wrong impressions, as I experienced the other day when I was in New York at the NPT conference where I learned that some Brazilian lawmakers worried that the rewritten negative assurance meant that Brazil is now in the nuclear crosshairs because some of their uranium facilities are outside safeguards. Whether that's correct that they are in and out I don't know, but that was the perception of the lawmakers.

A decision to develop a nuclear option against the particular adversary must depend on how much more – depend much more on whether that adversary – must depend on more things than whether that adversary has WMD. It requires a careful assessment of whether a nuclear option is strictly necessary and what the net benefits of holding the nuclear sword over a regional adversary is to U.S. national security interests.

It must at least require a determination that the United States cannot sufficiently threaten the adversary with conventional weapons to deter an attack. It must also involve an assessment that the adversary's capabilities – what the adversary's capabilities actually are. Does it have the capability to destroy the United States or its allies or significantly impede our military

capabilities? Take North Korea, for example, the two nuclear tests with little to show in terms of deliverable nuclear weapons. Does that require a nuclear option?

We must also carefully examine where the threatening nuclear use against an adversary will assist you with interests in the region in the larger context. There might very well be scenarios where it is in the U.S. national interest not to put regional proliferators in the nuclear crosshairs if doing so is likely to stiffen the adversary's determination to proliferate or build up its arsenal.

In the case of regional adversaries, I don't find the nuclear option very useful and I think we would be much better off using conventional options to the extent military threats are necessary. We certainly don't need to draw up intrinsic nuclear strike plans against regional adversaries to make the point of deterrence, and flacking the nuclear option in peacetime has few real benefits, as far as I can see.

Take Iran, for example. What does a nuclear option give us? Why is the nuclear option necessary to deter Iranian use of delphium D (ph) to an extent that conventional forces cannot do? I assume it is the rubble that deters, not whether it glows in the dark. What is the evidence that holding the nuclear sword over Iran that it gives us any other – what does that give us other than excuses that the Iranian leadership can use in public to portray the United States as the aggressor and justify its own programs.

And even if Iran did attack with WMD and we retaliated with nuclear weapons, our overwhelming conventional forces could very well mean that any nuclear strike would be condemned as overkill and unnecessary. So my recommendation is to focus the nuclear mission almost exclusively on the large nuclear adversaries – Russia and China.

That brings me to the second area where I think a reduction in the role of nuclear weapons is possible: how we plan. Scholars and planners are fond of saying that we must target what an adversary values the most, but that's certainly depends. Iran values mosques very much but that doesn't mean we target them.

What is it necessary to target to deter sufficiently? The current strategic war plan known as OPLAN 8010 is said to incorporate more elements of national power than nuclear weapons compared with previous plans. The attack structure has been changed to enable less reliance on deployment of a large number of nuclear weapons, but the plan is still focused on force-on-force scenarios and holding weapons and facilities at risk across broad categories of targets: military forces, WMD infrastructure, military and national leadership and war-supporting infrastructure.

Although modified, this is surprisingly similar to how we planned during the Cold War. Russia and China are the clear focus but executable strike options against regional proliferators were added to the plan in 2003.

The major attack options that were used to dominate the Cold War SIOP war plan are gone, but for each of the six adversaries currently in the plan, a range of strike options has been

drawn up to provide the National Command Authority with responses varying in size and objectives based on the circumstances.

The nuclear options consist of emergency response options, selective attack options, basic attack options, directed/adaptive planning capability options. Those are the names. And the size of these options range from hundreds of warheads and pre-planned options that take months to modify to a few warheads and adaptive options for crisis scenarios that can be drawn up or changed within a few hours or days.

This is an option-hungry nuclear planning. Why does nuclear deterrence today still depend on planning such a wide range of options against such a wide range of targets in such a wide range of countries? I don't think it has to be that. I think we need to explore how to transition out of the highly dynamic nuclear counterforce warfighting posture to a pure secure retaliatory capability.

Nuclear deterrence in the 21<sup>st</sup> century will not be about winning nuclear wars by depleting warfighting assets but about ensuring sufficient retaliatory capability to deter nuclear attacks in the first place. That retaliation capability cannot be threatened by anything else but a large Russian nuclear attack. So how quickly and how far it is possible to move down the path of reductions obviously depends to some extent on changes in Russia's nuclear posture as well.

Moving away from a dynamic counterforce posture would challenge us to reexamine many of the core elements of the current nuclear planning and strategy arranging, from amputating one or more of the legs of the triad, adjusting and ending the practice of having forces on alert, and removing one or more target categories from the strategic war plan.

A bomber squadron focused on the nuclear mission is a squadron unavailable for conventional missions. This competes with resources that are needed elsewhere. And an 80-billion-plus (dollars) SSBN program forces us to think in new ways about the nuclear mission.

So a reduced nuclear mission would still ensure that the United States could retaliate against a nuclear attack and continue to provide a nuclear umbrella over allies, but at the same time in the dynamic planning that continues to characterize the nuclear posture. Without such changes I find it hard to see how the United States and Russia can significantly reduce the number and role of nuclear weapons and move convincingly toward deep cuts and eventually perhaps even nuclear disarmament. Thank you.

MR. MURDOCK: Thank you, Hans. Mort?

MORT HALPERIN: I learned a long time ago that the way to understand Washington is that it is a town full of people with solutions looking for problems, and that means that no matter how you change what happens, or what actually does happen, or a scenario for what might happen, everybody's answer is, that's shows even more that we need to do what we've advocated that we should do before.

And so my answer to the question, what if there is further proliferation, does that affect our view about whether we should reduce reliance on nuclear weapons is, not surprisingly, no. In fact, in my view, it underscores the importance of our reducing reliance on nuclear weapons.

But I think to deal with that question one has to deal with what I think is a fundamental question that has engaged American policymakers since the beginning of the Cold War, and that is, what is the relationship between our nuclear posture and our objectives with regard to nuclear weapons?

And you've had two fundamental views of that. One is that I think they both start with the assumption that our goal is to prevent the use of nuclear weapons, but one starts with the argument that the way to prevent use is with a very robust American nuclear posture with at least ambiguity about when we will use nuclear weapons but resistance to measures that seem to reduce our reliance on nuclear weapons or to stigmatize nuclear weapons so that it is harder for us to use them because the way to prevent use is to deter others by the threat of retaliation and the way to prevent proliferation is to seem to make it unattractive by indicating that we will have a robust nuclear force that can deal it.

The alternative view, which I share, is that our goal is to prevent the use of nuclear weapons. We need to keep our minds firmly on that goal, and then to ask the question, well, what are the threats of nuclear weapons being used, and then, what is the relationship between that and our nuclear posture, and the question of whether we should reduce or increase reliance on nuclear weapons.

And I think during the Cold War it was possible to argue that we needed a robust force; we needed a force that might in fact be used when we didn't want it to be used because we were trying to use nuclear weapons to deter both conventional attacks and nuclear attacks out of a perception that we had a conventional imbalance that could only be deterred in that way.

But as the Nuclear Posture Review indicates, we're in a very different world, and I think most of us knew that before we got the Nuclear Posture Review. The Soviet Union does not exist. Germany is united. We do not face, anywhere in the world, a conventional imbalance.

It is very hard – I would argue impossible – to conceive of a debate in the Kremlin which would lead to a decision to say let's see if some Sunday morning when the Americans are preoccupied we can launch a successful first strike against the United States, both because it is impossible to conceive of a Russian objective that would even lead them to think maybe we should plan a first strike.

Second, if you look at the Russian force, it is hard to imagine that it is geared up for such a thing. And, finally, whatever our theory of deterrence, the force that we have that would survive an attack would be capable of inflicting enormous damage on Russia.

How much is enough seems to me a question that can't be answered and is incompatible with the fact that we keep secret both how much we have and what our war plans are, and yet we argue about how much we have to be capable of doing to deter.

But the Nuclear Posture Review – and I think I probably read a different Nuclear Posture Review than other members of the panel because I thought it signaled a fundamental change because it took a position on this question of the relationship between our nuclear arsenal and preventing nuclear use, which seems to me much closer to the one I've advocated than the one that I think has dominated American official thinking since the Cold War.

That is, it said that the threat of the use of nuclear weapons is from rogue states or from terrorists. I would add to that list regional conflicts like Pakistan and India, and I would also add to the list something I think we need to pay more attention to, which is accidental launch by the Russian force.

If a weapon went off in the United States tomorrow I would still think the odds were overwhelming that it was a Russian weapon fired unauthorized or by an accident rather than a rogue state having given it to a terrorist who figured out how to deliver it to the United States.

But if you look at that range of threats, I think you have to conclude, as the Nuclear Posture Review did, that there is not much overlap between the goals that we've set out for preventing nuclear use and the nuclear posture of the United States.

Now, it is true the posture review did not change the nuclear posture, but what it did do, and what I think is the next government challenge, is it's laid out a set of studies which will, I think, finally require the government – if it takes the president's directive seriously, to confront these questions and to really ask the questions that were touched on in the first presentation, and which I think are important to deal with, which is, you know, how big a force do we need, what should it be targeted on, what is the relationship between what we target it on and how big the force has to be?

And there's a whole set of questions there which I think need to be confronted. But on the question we were asked to focus on, I would argue that the evidence has been clear from the beginning that the United States is more effective in preventing proliferation and in preventing nuclear use if it reduces its own reliance on nuclear weapons and if it depends on diplomacy and conventional military force to deal with perceived threats and to pose challenges to countries that might consider using nuclear weapons.

The first time we had this debate was in 1968 and the debate was exactly the same as the debate we're having now and had during the Bush administration. It was proposed that we negotiate a treaty under which all states but the five existing nuclear powers would commit themselves not to develop nuclear weapons, and in return, the nuclear powers would agree to facilitate nuclear energy and to reduce their reliance on nuclear weapons.

There is also a clause that says you will get rid of your nuclear weapons but that's linked to general and complete disarmament, which I think everybody understood was a code for when somehow there is a fundamental transformation in the nature of the world, that that was not really – and I would argue still is not – a serious part of the supposed agreement.

But the other side argued exactly what's argued now, namely that, no, this is the wrong way to go, that friendly countries, good countries getting nuclear weapons is good because it adds to deterrence, and bad countries getting nuclear weapons is bad but that nuclear proliferation agreements, including the NPT, have nothing to do with it because these countries will get nuclear weapons whether it's in our interest or not regardless of the treaty. President Johnson, after a very heated debate, ruled on one side of the issue, overruling the secretary of state and making the decision that I think is fundamentally correct.

I would argue that if we did not have the NPT, there would be many more countries now with nuclear weapons; that the South Koreans would have them, the Taiwanese would have them, therefore the Japanese would have them, that many other countries around the world that started nuclear programs would not have stopped them but for a growing international norm supported by the NPT and regional treaties, and that those agreements, to this day, is what enables us to get the rest of the world to cooperate with us in dealing with the North Korean problem and the Iranian problem, and will continue to be the case, that preventing countries from using nuclear weapons, if they get them, preventing other countries from getting them requires, in my view, two things.

One is a demonstration that we take our nuclear proliferation obligations seriously so that we can get the cooperation of other states in trying to rein these countries in in changing their arsenals, and second, confronting them with credible threats of response if they do use nuclear weapons.

And I think the most credible threats are conventional ones, that to say to the North Koreans or even the Iranians, the only way we would have to retaliate if you threaten to use nuclear weapons, is either to try to shoot the missiles down with a ballistic missile defense – which doesn't seem to me a very credible threat – or respond with nuclear weapons is – what's wrong with it, in my view, is it's not a credible threat, and that a much more credible threat is to say we will destroy you, and we have the capacity to do that and we demonstrated a willingness and ability to do that.

So I do not think that the negative security assurances that we've offered countries says to them that the choice is you either get nuclear weapons or you get a reprimand. I think the alternative to our using nuclear weapons is a very effective military capability, which will remove the government in power in a way that is politically possible for us to do.

Now, I do think that there is a different issue at the moment in North Korea, and I do not think we should offer the North Koreans now a nuclear security assurance because the problem we confront is a North Korea that has nuclear weapons, but we also confront a situation where Japan and South Korea are contemplating what they should do. And I think if we accept a world in which North Korea has nuclear weapons, the Japanese and the South Koreans will both get nuclear weapons and that the world will be a much more dangerous place.

So I think our diplomacy there has to be focused on, how do we prevent that? And I think the way to prevent that is to focus us on the goal of a denuclearized Korean Peninsula or even, in my view better, a denuclearized Northeast Asia.

And I think one of the levers we have to try to persuade the North Koreans that they need to reconsider their nuclear posture is to say to them, you confront a nuclear threat if you don't, but you confront the assurance that you will not be confronted with nuclear threats if you do get rid of your nuclear weapons and return to the NPT.

So I see leaving them out of the negative security assurances not as a new threat because that threat has been there for them, along with many other countries, for a long time. I see it as a promise. That is, it's saying to the North Koreans and the Iranians, if you eliminate your nuclear weapons in a credible and verifiable way and rejoin the NPT, we will then commit ourselves not to threaten you with the use of nuclear weapons. I don't think that's sufficient but I think it is an important lever in trying to persuade them that they need to move back in that direction.

So I think we need to look at these on a situation-by-situation basis, but I think the fundamental point is that trying to get a more robust nuclear posture, trying to increase our reliance on nuclear weapons, in my view is incredible, not a credible threat, and not the most effective way to focus on our primary objective, which remains trying to maintain and continue the moratorium on the use of nuclear weapons.

MR. MURDOCK: Thank you. Gen. Welch.

GEN. (RET.) LARRY WELCH: Well, thank you. You know, when I hear the phrase, "reduce the role of nuclear weapons," immediately two questions leap into my mind, and those are, reduce from what to what? And unless we can answer those two questions, then it's just a meaningless phrase, which is not unusual in Washington, D.C. (Laughter.)

So I think it's useful to just very briefly look at what have been thought of as the roles of nuclear weapons. Clearly, when Dr. Einstein wrote his letter to the president urging that we develop nuclear weapons, the role that he had in mind was ensuring that nuclear weapons would not be the exclusive capability of a murderous tyrant.

I think that's a role that continues. I don't think any of us would think it's acceptable to risk that the sole possessor of nuclear weapons would be the modern version of a murderous tyrant. With the end of that, of course, then the next perceived role was to end a very bloody and very expensive conventional war that had already claimed the lives of somewhere between 40 and 70 million human beings, depending on who is keeping track.

The viability of that particular role I think probably doesn't exist anymore in our minds, so we can dismiss that one. In the Cold War, we thought nuclear weapons and our allies fulfilled two roles. One role was to deter a massive nuclear attack against the U.S. or our allies. The second role was to redress what we thought was a serious imbalance in conventional capabilities. Now, it doesn't matter whether that imbalance existed. I'm talking about the motivation – the role that we saw for nuclear weapons.

So if we look at those two roles, the first one obviously remains valid, so as long as there exists in the world the capability to destroy the United States or our allies in the hands of

someone who is not yet a reliable, trusted ally, it's very unlikely that we will give up the deterrent role of our nuclear forces.

The second – that is, to compensate for a perceived conventional inferiority – certainly no longer applies to us but it does apply to Russia. And regardless of how arrogant we may be about thinking everything is about the United States, we can't ignore the role that other nuclear powers believe that nuclear weapons play in their strategy because that does have an impact on the nature and the size of our nuclear enterprise. But I would certainly dismiss the need for nuclear weapons to redress any kind of conventional imbalance as regards U.S. interests.

A fourth role that developed during the Cold War and remains completely valid is the role of extended deterrence; that is, the role of assuring allies that they don't need to proliferate nuclear weapons in their own defense. And there I would mention that the argument that maintaining a nuclear force in the U.S. of whatever size has some impact on the motivation of others to proliferate.

I have a simple three-question test, and that is if we drastically reduce the U.S. nuclear forces, what nation currently seeking nuclear weapons capability will cease and desist? And the answer is none. And the second question is, if we do maintain our current capability, what nation not seeking nuclear capabilities will decide to do so? And the answer is none. The third question is, what nation not now seeking nuclear capabilities will do so if they lose confidence in the U.S. extended deterrent, and that's a long list and it's a long list of people who have the capability to do so, should they decide it's in their national interest to do it.

So I would argue that extended deterrence remains a valid, credible role of nuclear weapons in this country. There was a hope at one time, short-lived – blessedly short-lived – that nuclear weapons could also deter conflict – lesser conflicts. And of course history proves that that's not true, and so for us that is clearly not a legitimate role for nuclear weapons although it would be unwise to assume the same is true for all nuclear powers but it is true for us.

And, finally, the hope that nuclear weapons would deter the use of WMD other than nuclear weapons. That is clearly unproven. I would point out there has been no such use against the U.S. or our allies proves nothing.

So I would come out of the historical look with three continuing legitimate roles of nuclear weapons. The first is to ensure that there is not some other exclusive owner of nuclear capabilities, and that will remain the legitimate role as long as anyone in the world has the capability and the motivation to own a nuclear weapon. The second one is to deter a nuclear attack against the U.S. and our allies, and that remains a valid role so long as the capability exists. And the third of course is to sustain a nuclear extended deterrent.

So the question then is, so what? What does any of that have to do with the size and the nature of our nuclear forces? And I would argue only two of those have anything to do with that, and that is the deterrent mission and the extended deterrent. So then the question is, what kind of nuclear force, what size, what composition is required to fulfill those two roles?

And the fact is, it depends more on strategy than it does anything else. And I would point out that the U.S. nuclear strategy has always been to ensure that we can hold at risk whatever the potential adversary values most. And since we can't possibly know the answer to that question because it depends on the individual leadership of the individual adversary, our approach has been to hold three or four classes, depending on how you count – three or four classes of assets at risk that ensures that we are covering whatever the adversary leadership values most.

Now, that's our strategy. I would argue – and in fact I don't have to argue; I only have to read what the Chinese write – the Chinese nuclear strategy is to hold at risk the U.S. population. So if we were to change our strategy and say, our strategy is to hold at risk adversary populations, then we could get along with a much smaller force if you believe that's a credible U.S. strategy.

I would argue that is not a credible U.S. strategy. The American people would never support such a strategy, and many of our adversaries would never believe that that's a credible strategy. Now, does that mean that we have to have 1,550 deployed strategic weapons? No, it does not.

We can modify the strategy to effect how many nuclear weapons are required to support the strategy. We could modify the strategy by eliminating one of those three classes of assets that we hold at risk and reduce it somewhat, but it wouldn't fundamentally change the nuclear posture or the nuclear issues.

Furthermore, the most difficult question to answer is, at what point is there a loss of confidence in the extended nuclear deterrent? And my question would be, how much risk are you willing to take that there will be a loss of confidence in the extended deterrent? Because I would argue that would be the greatest force for proliferation that I could imagine.

So then the issue is the nature of that force. Do we need to try it? I would point out that the French Force de Frappe was an effective triad when they had one squadron of bombers, 18 single warhead ICBMs, and a very small force of SLBMs. It was an extremely effective triad because of the impact it had on the calculations of the people that they were trying to deter.

Each leg of that triad fulfills a unique purpose that cannot be filled by any other leg of the triad. For the SLBMs, it is the assured second strike. It is the assurance that no matter what kind of force an adversary can bring to bear against the United States, they cannot escape a devastating counterattack on our part. No other leg of the triad can fulfill that role.

The single warhead ICBM force provides a stability, a guarantee against a cheap attack, a guarantee that you cannot eliminate the nuclear force by a campaign of attrition, and it is the only leg of the triad that provides that capability.

The bomber force gives you the capability for a visible demonstration of will for a visible escalation in our resolve. It was particularly effective during the Cuban crisis when the B-52s were airborne at the positive-control turnaround point, and that point was made crystal clear to the Soviet leadership. No other leg of the triad can perform that role.

Now, we have in the past mixed things up a bit. At one time we thought we needed road-mobile ICBMs in order to have a second-strike capability with ICMBs. I argue we don't need that. Each leg of the triad fulfills a unique role and the size of that leg only needs to be enough to fulfill that role.

So I think we have a very clear definition of what are the surviving roles for nuclear weapons and what does that mean to the nuclear force – the size and nature of our nuclear force? It does not settle what is the absolute number. I don't know any way to settle that.

So that's my story. Clark?

MR. MURDOCK: Thank you. As I understand the answer to the overall question – and as the chairman I'll ask another question – Gen. Welch would say that the role of nuclear weapons stays constant no matter what the state of proliferation is, as long as nuclear weapons exist, and that Mort and Hans would say that we should continue to reduce the role of nuclear weapons in U.S. national security strategy, even if proliferation continues.

And the question I would ask the panelists – and then I'll throw it open to both people attending physically and attending virtually for questions – are there circumstances under which the United States should increase its reliance upon nuclear weapons?

MR. HALPERIN: I think the answer to that is no. I did not understand – there's a fundamental difference between what Gen. Welch said and what I said. I mean, he said – and I agree – there are three purposes of nuclear weapons. One is to make sure some terrible country doesn't end up being the only one possessing nuclear weapons. In my view, that makes the notion of a world without nuclear weapons not conceivable in anybody's lifetime.

The second purpose is to deter a deliberate attack on the United States, and obviously a whole set of questions are raised about how big a force that has to be and what should be targeted and how you convey the threat, but I think we all agree that that has to be a purpose of nuclear weapons.

And the third is extended deterrence; that is, to have our nuclear forces contribute what they can to persuading our allies and friends that they don't need to develop their own nuclear weapons. I think those are exactly right. We can argue about what else we need to do and whether reductions in numbers and a more active participation in the arms control process helps or hurts our ability to perform these three functions.

But I heard at least both of us saying it isn't affected by further proliferation because there are these three functions, and what you need for these three functions is not, I think, closely tied to whether there's further proliferation or not.

GEN. WELCH: Yeah, I would agree with that completely. For example, I might also say the business of the offense-defense balance, while we're fond of talking about that, has

almost nothing to do with it either. If we had a perfect defense against North Korea, that wouldn't change anything that either Mort or I just said.

If you had 20 proliferants instead of five, I don't think that would change any of the three purposes that we've talked about. It doesn't mean it's not an important question; it just means it has almost nothing to do with what we need in the way of nuclear forces.

MR. KRISTENSEN: Yeah, I can't imagine a situation – let me put it that way – where it would be necessary for us to increase the reliance on nuclear weapons, short of a Martian attack – (laughter) – but that's pretty much as far as we can go, and perhaps even a Russian – the Russians going completely wacko might qualify as such a scenario, but I don't really see that as a credible scenario.

And, besides, I don't think really that the mission, if you will, the role, depends on the numbers of nuclear adversaries. I think it's more a question about the force that we do have – is it capable of serving the functions that we need to cover? And I don't think that requires an increase of the mission if there are more countries added to the list.

MR. MURDOCK: Well, I attempted to develop a panel of relatively disparate views on – (laughter) – the role of nuclear weapons. I seem to have failed utterly because there is a remarkable degree of consensus here, I think, in terms of what are the basic roles of nuclear weapons, and that is not conditional upon how many nuclear powers exist.

Perhaps it's time for those with greater intellectual capacities to develop conflicts among panelists to ask a question – (laughter) – of our panelists. Sharon. There are microphones and I would ask people to identify themselves as they ask a question.

Q: Thanks. Sharon Squassoni from CSIS. We often talk about extended deterrence as though it's always extended nuclear deterrence, and I would invite each of the panelists to talk a little bit about what the NPR said about conventional – you know, U.S. conventional forces providing deterrence versus nuclear deterrence, and whether we might eventually get rid of that nuclear part of the deterrence.

GEN. WELCH: Well, I'll be happy to start answering that question because here I suspect you will find some differences.

I think conventional deterrence is extremely important. Conventional deterrence has been part of our strategy for as long as I can remember. We kept forces in South Korea for years – large forces – as a conventional deterrent. We have had forces in Europe since the end of World War II as a conventional deterrent. We have 20,000 U.S. troops on Okinawa as a conventional deterrent.

So there is no argument about the value of conventional deterrent. The idea that a conventional weapon has any relationship to the deterrent power of a nuclear weapon – I think I heard it expressed once that the difference between a conventional weapon and a nuclear weapon

is not whether you can kick a field goal from the three-yard line or the 30-yard line; it's whether you can kick a field goal from the next county.

So the psychological impact as well as the destructive power of a nuclear weapon is so different from conventional weapons, and I think there is no relationship whatsoever. Now, I understand that's not a politically correct view but it is not a new view.

And, by the way, I have been one of the strongest supporters of reducing nuclear weapons for a very long time. That does not mean I can replace a nuclear weapon with a conventional capability.

MR. HALPERIN: Well, we have discovered an important area of disagreement. I am the founder of an organization called "CASMIP," which is the "committee against sports metaphors in politics." (Laughter.) I would ask –

GEN. WELCH: Guilty.

MR. HALPERIN: – Gen. Welch to reconsider his argument.

I think we need to separate two questions. One is, do we need nuclear threats to deter conventional attacks or chemical or biological attacks? My view is the answer to that question is no. I think the NPR said the answer to that question was no. I think the statement that we could live in a world without nuclear weapons if we knew how to get there implies that because it says we know how to deal with all non-nuclear threats for nuclear reasons, and therefore the fundamental purpose or reason or rationale of our nuclear force is to deter nuclear attacks.

Now, I think we've said that to all the countries in compliance with the NPT except the five nuclear powers. I don't think the British and the French are very worried about our attack. We've long said to the Russians that our mutual goal of our nuclear forces is deterrence; that we don't seek to threaten them with a nuclear strike. The Nuclear Posture Review begins to say that about the Chinese. I think we need to do more about that.

Then the second question is the role of nuclear weapons in deterring nuclear attacks, and I don't know anybody who believes that you could or should take off the table the threat of nuclear retaliation for a nuclear attack. Even the strongest advocates of "no first use" advocate no first use, not not using them or being capable of using them in retaliation.

But I think that I would argue that while you can never take that off the table, and existentially you couldn't even if you tried to, that, you know, there is no reason to, but that we need to recognize that, as a fact, if we were confronted with a limited use of nuclear weapons by North Korea or by Iran, we are probably going to want to respond to that.

First of all, we want to not respond very quickly. We want to see what happened and take our time. And then I think we almost certainly would conclude that the way to respond to that is with a conventional force which destroys the regime, which destroys its capacity to use nuclear weapons. Indeed, I think we ought to think about acting before they use the nuclear

weapon. We obviously would see preparations for it. And if we're going to preempt it, I think it has to be to be credible and effective with conventional forces.

So I think both conventional and nuclear forces play a role in deterring nuclear threats and assuring our allies that we can deter nuclear threats against them, but I think we are coming to the point where we can and should say that we are confident we can deter all other threats with conventional means.

MR. MURDOCK: In the case of nuclear weapons, however, Mort, we have demonstrated facts. We have Hiroshima and Nagasaki. We have no demonstrated facts with respect to a biological attack. Aren't there circumstances under which we become aware of what the mass destruction implications of the use of a biological attack might be that could lead you to change your mind on that?

MR. HALPERIN: Well, it would lead me maybe, as the posture review does, to say we need to treat that kind of biological attack, not chemical attacks, not the biological attacks we know about now, as the functional equivalent of a nuclear attack, which means we want to have both the possibility of a nuclear threat but also – and even in that case – a conventional response to it.

So I think – I don't think that's going to happen. I think it's – but I think we've opened the possibility, in those cases – and, in fact, you can't eliminate it. I mean, any country that figured out a way to do a biological attack on us that looked like the devastation of a nuclear attack would know that regardless of what we had said or ever what we planned, that there would be enormous pressure to respond with nuclear weapons.

GEN. WELCH: I think we're aided and abetted in this by the fact that what we think doesn't matter as much as what our potential adversaries think. And I agree with Mort that there is no possibility that the North Korean leadership or the Iranian leadership or any other will assume that we will not use nuclear capabilities, though I agree that there's probably no need for us to do so in those particular contingencies.

But I would point out that having a no-first-use policy does not mean no first use, and not having a no-first-use policy does not mean first use, nor would any adversary have simple faith that that policy does mean that.

MR. MURDOCK: Hans?

MR. KRISTENSEN: Well, I've now been effectively deterred from using sports metaphors, but short of the sort of the all or nothing end of the scales of extended deterrence issues here, of course I think also it's important that even within the yes or no there's a range of possibilities of how to alter or reduce the role.

I think it's striking to read the Nuclear Posture Review also because it makes a huge effort, I think, in communicating loud and clear that extended deterrence depends on a wide range of meshers and capabilities that have nothing to do with nuclear weapons, that may be

much more applicable to many of the scenarios we're talking about, but also that, for example in the case of Europe, that it doesn't necessarily require the forward deployment of nuclear weapons.

And I just came back from the NPT conference up in New York, and it was one of the issues that kept coming back in the debate there, you know, NATO being in the process of discussing its nuclear policy. Can it, should it, how far can it go in terms of changing the posture in Europe? Is it still required to have nuclear weapons forward deployed in Europe, or can an extended deterrence posture rely on these many other assets, as well as the U.S. long-range capability, as we have done in the Pacific for so many years?

So I think there are a number of options there that are possible short of the yes and no.

MR. MURDOCK: Sir Kevin (sp).

Q: (Inaudible, off mike.) I wonder if, in U.S. thinking there is any sensitivity toward the question – in considering posture and numbers and capability, is there a point when the U.S. is going to get to the stage where it could maybe – (inaudible) – or the U.K. and France to suspend their own deterrence. (Inaudible) – that the U.S. is essentially beginning to tug the rug. That's – (inaudible).

I mean, there is always a concern – for example, in the U.K. we say, we will not – (inaudible) – until the disparity between the super powers and other powers are less in relation to our own – (inaudible). That gets more and more difficult – (inaudible).

GEN. WELCH: I guess my experience with both our British friends and French friends is that they seem to have a somewhat clearer resolve about these matters than we do. There is no question what the policy of the French government has been through a whole series of French governments. And they have made it very clear what they see as the role of their nuclear deterrent. And I really don't see U.S. force structure decisions as having very much to do with that.

In the case of the U.K., it's somewhat more complicated in that we share designs of both weapons and weapons systems and so there is a much tighter connection. But again, even when we look at the next-generation submarine and the follow-on of the D5 and other specific nuclear force matters, we see a great deal of partnership involved, and I don't see us coming anywhere near a situation that would call that partnership into question.

If that sounds horribly optimistic, that's uncharacteristic for me.

Q: (Off mike.)

MR. MURDOCK: Please wait for the microphone.

Q: Sorry. If you like I'll read what the British government has – the new British government has just said about the British deterrent. Would that be helpful for people in the

room? I presume you may know this already, but it says – and this is from yesterday – “The government will be committed to the maintenance of Britain’s nuclear deterrent and have agreed that the renewal of Trident should be scrutinized to insure value for money.” This is the – (inaudible) – the Liberal Democrats.

“Liberal Democrats will continue to make the case for alternatives.” This is the Liberal Democrat view that you might be able to do it more cheaply by other means, which we all know is not realistic but nevertheless they’ve had to say that.

“We will immediately play a strong role in the NPT Review Conference and press for continued progress on multilateral disarmament.” In other words, I’m pleased to be able to report no change there. (Laughter.)

MR. HALPERIN: I have to confess I’m not pleased by the report of no change. I see no value to Britain, France or international stability in general of the British or French nuclear forces.

In the old days, in the Johnson administration, we thought it complicated nuclear planning and therefore secretly preferred that they be eliminated. But I really don’t see that they play any positive role. On the other hand, I don’t see U.S. and Russian forces getting to a level where it calls into question the viability of the British and French force.

My perception of the French is different. My view is that the real reason the French wanted nuclear weapons is that they believe, I think incorrectly, that somehow it makes them a great nation. And I think the U.K. has the same confused perception when in fact, as we’ve seen, no country, including those two, have been able to use nuclear weapons to prevent defeat in war or have used it to receive victory in war. It has been irrelevant to every military conflict that every military power has engaged in.

And I don’t think anybody in the world other than the British and the French governments believe that somehow Britain or France get treated better or with more prestige, or get to sit at a higher table because they waste their money on a nuclear force where they have no threat that they could conceivably use the force against, that they don’t help deter others.

And of course it continues to say to the Germans, we believe that you can’t function in the world unless you have nuclear weapons, and how many years after World War II and after Germany continues to play an important role in Europe can we say to Germany, you’re different because you lost the war so we need these weapons because we don’t feel like great countries without them, but you should continue, as should the Japanese, not to get them.

So if we could find a way to encourage the two countries to get rid of their nuclear weapons, I think it would make a modest but nevertheless, I think, useful contribution to preventing the further proliferation of nuclear weapons.

MR. KRISTENSEN: A small addition is that it’s curious to see that on the French position that – you know, up in New York at the NPT conference they are somewhat acting –

like the Chinese in a way, that they're saying, you know, we've gone as deep as we can. You know, when you come down to our level then we'll begin to talk. But they had that kind of language and a resistance to language that calls for additional reductions on their side.

So I think that's an indirect effect here of something that can actually work against the perception of involving other nuclear weapons states in the disarmament process.

MR. MURDOCK: There was a question that was asked over the Internet that I would like to pose to the panelists, in particular to Hans and to Gen. Welch. The 2010 NPR mentions that a mobile, survivable ICBM force could reduce the chance of unauthorized or accidental launch that would provide the president with more decision time in the case of a crisis. The questioner wanted to know how the panelists felt about that statement and the need for mobile ICBM.

GEN. WELCH: I'm sorry; would you repeat that again?

MR. MURDOCK: The 2010 NPR, quote, "mentions a mobile, survivable ICMB force as a possible option in the future because it would reduce the chance of unauthorized or accidental launch and would provide the president with more decision time in the case of a crisis."

GEN. WELCH: Yeah. Well, that's that old – (inaudible) – again. In the first place, the legitimate, unique role of the ICBM is to insure there can be no cheap attack and to reduce the value of any kind of a campaign against submarines or bomber capabilities.

You add not one thing to that by going mobile. In fact, what it does is attempts to duplicate the function of the SLBM force, which is totally unnecessary. Furthermore, if the concern is about the possibility of an accidental launch, the last thing you want to do is go mobile. The most secure, unshakable, unchanging command and control structure we currently have is the ICBM force.

It stays in the same posture every minute of every day. It has the same protections every minute of every day. There is absolutely no possibility of an accidental launch. They can only be launched with the approval of the president of the United States.

So the president gets to decide how much decision time he needs, and I have not yet heard a president suggest he doesn't have enough decision time. So I think – I can think of no advantage whatsoever and lots of disadvantages of moving from single warhead ICMBs in silos – and I stress single warhead. The single warhead is an extremely important feature of it in that it doesn't attract an attack. But I see no advantage whatsoever to departing from that to something that's more risky in almost every dimension.

MR. KRISTENSEN: I'll just follow up on that. Yeah, I agree that – I mean, the mobile ICMB doesn't make a whole lot of sense to me, but there is an issue, though, that's worth – the context that's worth thinking about, of course, is that if we do envision going down to very low numbers, we get to a stage where we have to make tradeoff decisions between choices of how many legs are needed in the triad.

And at that point we have to begin to think about whether the posture also of the ICBM force is the right one. Is it needed at all? If it is, what should it look like? If, in that choice, we decide in the future that we actually do not need ballistic missile submarines – very hypothetical but suppose we do, are there deployment patterns or what have you that make sense for the surviving two legs of the force, for example mobilized ICBMs?

So there are some other issues, I think, that need to be thought about as you go to low numbers – very low numbers of weapons.

MR. HALPERIN: I think there are a set of important questions which we need to answer to think about how low we can go. And I think they require us to separate the question of what the actual targeting would be from what we think is sufficient to deter and attack, and how much concern we have about the possibility of a deliberate attack.

For example, while I think it's true that no president has ever said he doesn't have enough decision time, no president maybe since Kennedy has been confronted with the military coming in and saying, we will lose a substantial portion of the force unless you authorize and attack in the next 20 minutes.

And I think we ought to think about whether the president wants to say more clearly that he doesn't want to hear that; that that is not an acceptable statement to make to him in the middle of a crisis; that the military need to have a strategic force. And this may mean, for example, spending more money on command and control systems where the military, in effect, say to the president, we can do whatever you want us to do, even if we wait to see whether this is an attack, and even if it is an attack.

A second issue has to do with the requirement for a prompt massive response. My understanding is that there is now a requirement that the military think they've gotten from the president. It's not clear to me which president this was or that any – whether any of the last several presidents have known that they have laid this requirement on the Pentagon, but there is a requirement, as I understand it, to be capable of launching a prompt massive strike.

And the rationale for that is that it complicates the planning of a surprise attack because it leaves open the option that while you are in the middle of getting ready to launch this surprise attack, the Americans will launch a counter preemptive strike on you, and therefore it adds to the risk of a surprise attack.

And I think the question that needs to be asked now is, how likely is this massive surprise attack, and therefore how important is this requirement for prompt retaliation in relation to the requirements that it puts on the force and whatever risk it increases of a crisis spinning out of control because both sides fear the other is getting ready to launch an attack?

And I think there are a whole set of questions that need to be answered so that we can answer the separate question: If you take the three purposes of nuclear weapons, what is the

force posture size, composition, declaratory policy, plans for use of the force? Do we need to deter a massive surprise Russian attack?

And I think it's important to answer that question by itself. Then you come to the separate question of, for the purpose of extended deterrence, do we need a larger force? And the answer may be yes or no. A little bit depends on what your answer to the first question is, but I think to have analytic clarity and to enable us really to come to grips with the question of what size the force needs to be, we need to say, okay, for the first purpose, you know, 300 is enough, of whatever, so that we're sure we're sure we're not confronted with somebody else saying, I have one; you don't.

The question then is what is the size of the force for the second – and I think when we answer that, then we have to ask the question, but do we need some more for extended deterrence, and does the answer to that question depend on what the Russians are doing, either by agreement or unilaterally, so that the answer to the second question I think doesn't depend on the size of the Russian force, within reasonable limits, or what they're likely to do, nor whether we have further agreements with them. So I think we answer that question. Then we have to confront the third question and try to come up with an answer.

I read the studies that are laid out in the Nuclear Posture Review as requiring the Pentagon for, as far as I can tell, the first time ever to sort of start over and try to answer those questions in a systematic way, and I think it is very important that we do so and I think it will produce important answers.

My own guess is that we come out – I would come out in the same place, that we need a triad but we have to be willing to accept, you know, French numbers of how many are effective in each leg of the triad rather than U.S. Cold War numbers.

GEN. WELCH: I would add a couple of points, which are not in disagreement but a different context, and that is there was a reason why the SAC motto was, "Peace is our profession." That wasn't some fuzzy social science thing. It was to advertise the function of the nuclear forces to insure you never have to use it.

So it wasn't – when people would talk about nuclear warfighting, I'll have to tell you it just bored the hell out of me. Nuclear warfighting is not a viable concept. So that the business of having what appeared to be a fairly automatic response to a massive attack did not have to do with responding to a massive attack; it had to do with ensuring you never had to so that if it's less than a massive attack, there is no reason for the president to make a rapid decision.

If it is a massive attack – and by "massive" we meant a thousand warheads inbound. The fate of the United States was sealed. But in that particular case, it didn't seem like a terribly difficult decision, but most important, you wanted to be certain that the adversary perceived that it was not a difficult decision; that is, that a massive retaliation was virtually an assured response to a massive attack. And I repeat, it doesn't matter whether that was the real case. All that mattered was that we conveyed that impression with such clarity that we never had to make that decision.

So I think that's an important context. It doesn't disagree with anything you've said, but the context of setting the adversaries mindset was more important than what you would actually do.

MR. MURDOCK: A question over there.

Q: David Young (sp). My question is actually a follow-up to that. What do you think about a mobile ICBM not as a replacement to the land-based, silo-based force but actually a replacement to the sea-based SSBNs, for the fact that a sea-based SSBN is basically a MIRV missile which is at tactical range to our enemies and therefore, in fact, is destabilizing. So if you were to replace that with a mobile system – which would also assure second strike but then somewhat be stabilizing due to the distance our land-based force would be from our enemies.

GEN. WELCH: Well, I guess I have a problem with the basic assumption that the sea-based force is destabilizing. I think it's enormously stabilizing and that with that force no adversary could ever assume they could get away with a first strike, regardless of the size of the first strike.

And, in fact, I believe that that force is not only the assured second strike force, and that in itself is the deterrent, that force is your assured geopolitical hedge. That is, if suddenly there is a breakout and the Russians decide to break out in a big way, my assurance against that is to insure that I have an assured second strike of adequate size so they cannot escape the consequences of a first strike.

And you can imagine that perhaps some day there is technology that reduces your confidence in that assured second strike, and if that comes to pass, then you need another option, but I wouldn't entertain another option until I got seriously worried about that possibility and I am certainly not there right now.

MR. MURDOCK: Peter.

MR. HALPERIN: Can I just say a word?

MR. MURDOCK: Oh, yes, of course.

MR. HALPERIN: I mean, I think we face an enormous bureaucratic challenge in persuading the Pentagon to look seriously at very substantial reductions. My view is that you're much more likely to get that cooperation and support if you maintain it in the context of the existing triad.

There may be some marginal theoretical advantages of some other configuration, but as compared to the likelihood that you would get the agreement that you need within the building for the United States to say, okay, we're going to 500 deployed weapons, I think you've got to find a way to do that within the triad or you make the problem of how to get it much more difficult.

Q: Peter Sharfman, MITRE Corporation. My recollection of our posture during the Cold War, when we perceived that there was a conventional imbalance, was that the big problem was to be certain that our nuclear threat was credible in the eyes of the Russians, because if they believed that we would never actually use them, then there was no protection against the conventional imbalance.

Today the show is on the other foot. The logic of the proliferators is that they need nuclear weapons in order to protect themselves against our conventional superiority, their conventional imbalance, and their problem is the same one we used to have during the Cold War, which is how can they make their threat against us appear sufficiently credible to us?

And the approach we took finally – I believe developed in the late '70s and early '80s – was to accept the fact that once an international crisis got big enough and bad enough, nobody could be certain of controlling the course of events. No one could be certain of controlling escalation.

There was a point at which I believe our declaratory policy was pretty close to the following: that should a war break out, we would attempt to control escalation but we were worried that we might fail to control escalation and our adversaries ought to worry that we might fail to control escalation.

Now, if that logic still applies but with the shoe on the other foot, then the question we face is, if a regional power got into a situation in which they believed their national existence was at stake, whether this be an India-Pakistan kind of conflict or conflict involving North Korea or Iran, there is an incentive on the part of the others to face us with a concern that things might spiral out of control.

And this raises the question of how we can or should adjust our own posture in order to get as much control as possible into the situation and ask the question of whether, through the tools of diplomacy, the tools of arms control or the tools of simply unilateral adjustment of our posture, there is anything we can do to reduce the risk of a crisis or a conflict spiraling out of control to the point that nuclear weapons are in fact used.

MR. HALPERIN: Well, I think actually a posture which – I agree essentially with how you described – it goes back much earlier to the very beginning of the deployment of American forces in Europe. Tom Schelling wrote about it long before the '80s and called it “the threat that leaves something to chance.”

And we did it by doing a series of extraordinarily expensive and dangerous things. You know, we tried to bridge the gap between strategic nukes and conventional forces by a whole range of tactical nuclear weapons, deployed at the front lines; some very small, some that would be used almost automatically like land mines. And we had U.S. forces stationed in Europe and in Berlin.

And the whole purpose of all of that was to say to the Russians, look, if you start something, you know, it is hard to imagine our deliberately using the nuclear weapons but we can show you 40 ways in which you may get out of control and so it's much too dangerous to start.

Now, whether absent that the Russians would have tried to seize Berlin, whether there really was a conventional imbalance in Europe, we don't know the answer to that, but clearly I think that was our strategy. But the problem we faced was that we were trying to deter conventional attacks not against our own territory rather than conventional attacks on us directly.

These rogue states that have the nuclear weapons are talking about their own existential survival. So I think they have a much easier problem. It is not hard to believe that if we threaten the existence of North Korea or Iran or China, that they would fire their nuclear weapons. I think that, given that what we're talking about is the survival of their own country, that it's a much more credible threat and that our ability to deal with it has to not pose a threat to their existential survival.

The problem I think we face now is that the lesson the North Koreans and the Iranians I think drew from Iraq is that we invaded Iraq and not North Korea because Iraq did not have nuclear weapons and North Korea did, and therefore they think they need nuclear weapons to deter and attack.

So the Iraqi attack, rather than helping with nuclear deterrence I think hurt because it created the notion that we were ready to invade countries out of the blue and remove their governments but would probably only do it if they didn't have nuclear weapons.

MR. MURDOCK: Mike? I'll remind everybody we have about five minutes left.

Q: Yeah, Mike Wheeler, Institute for Defense Analyses. Three very brief historical observations to preface the question.

Herman Kahn once said – and I don't know any of his colleagues that disagreed with him – to take your very best think tanks and your very best analysts and draw up all the scenarios you can think about and nature is going to deal you a scenario you haven't thought about.

The point papers that our delegation took into the United Nations Atomic Energy Commission in 1946 almost to a point would talk about weapons of mass destruction in terms not merely of chemical, biological and nuclear weapons, but other technologies adaptable – i.e. that you can't deal with a technologically uncertain future.

When Leon Sloss and I were doing the Nuclear History Project that we co-directed for many years, we had an opportunity to talk to Early American planners in Europe on what was the effect and impact of the American nuclear guarantee. And it wasn't, you know, this fine-grained analysis; it was just a sense of assurance, a sense of security. And it wasn't just, we're going to be overrun by the Russians, that we don't have to capitulate or accommodate or become – (inaudible) – that sort of a thing.

So the question I would pose to the panel is basically this: Should we disallow the possibility that we're dealing with a future where the role of nuclear weapons for the United States has an escape clause in it? It's not merely nuclear proliferation. It's not merely all the scenarios we're talking about right now.

It's that the United States can play a stabilizing role with respect to other countries who are facing a threat, an adversary, a tyrant who has developed a new weapon of mass destruction that we're not anticipating right now that can be applied very quickly, for which nuclear may be a counter – (inaudible).

GEN. WELCH: Well, can you imagine such a thing? Yes, you can imagine such a thing. Well, I have great difficulty dealing with things I can only imagine.

You know, the business of spiraling out of control for that reason or for any other reason, the history is pretty stable that the U.S., with immense nuclear superiority in this particular region, we didn't use nuclear weapons to assure victory; we didn't use nuclear weapons to avoid defeat. So we accepted a stalemate, we accepted a defeat, even though we had nuclear weapons.

So I think the U.S. has a pretty good record of being careful about control and not spiraling out of control. I think we will learn a great deal more about what happens elsewhere – Pakistan, India, et cetera – because we are not nearly as certain – we worry more about failed states.

And I can tell you that there was a time when we used to speculate – when it was clear that the Soviet Union was failing, we used to speculate about, how will it end? And there were always three possibilities. One is they will just keep muddling on in spite of the obvious failure of the economic and cultural system. The second one was that it will end with a bang, that, as governments have in history done when they're threatened with extinction, they do something desperate. And the third was it will end with a whimper.

None of us picked option three, and yet of course that's what happened. So if you ask the same set of questions about North Korea, which clearly is headed for failure, which of those three options will you choose?

So my point is I think the most difficult thing for us to deal with is how the leadership reacts when the regime is threatened, and I think that's the greatest threat of spiraling out of control, and we don't do at all well in predicting how that will turn out, whatever the cause.

MR. HALPERIN: My answer to sports metaphors is jokes, so I think the answer to your question is, two guys are talking and one says, I'm a great sailor, and the other one says, okay, well, what would you do if you're out on a boat and storm came up? And he says, I'd throw out an anchor.

And he says, well, what would you do if a second storm came up? He says, I'd throw out another anchor. He says, well, what about if a third storm came up? He said, I'd throw out a

third anchor. And the guy says, where are you getting all these anchors from? And he says, the same place you're getting the storms. (Laughter.)

MR. MURDOCK: Hans, any last word you have?

MR. KRISTENSEN: Not to that one.

MR. MURDOCK: Okay. Well, listen, let me thank our panelists for a very interesting, perhaps not as divisive a conversation as I had imagined but an extremely interesting one. Thank you very much. (Applause.)

(END)