

071317 Air Force Association, Reserve Officers Association and National Defense Industrial Association Capitol Hill Forum with Brad Roberts, Director of the Center for Global Security Research at Lawrence Livermore National Laboratory, on “Nuclear Age Theories of Victory: Red and Blue.” (For additional information on NDIA/AFA/ROA seminars contact Peter Huessy at phuessy@afa.org).

MR. PETER HUESSY: Good morning, everybody. My name is Peter Huessy and on behalf of the Mitchell Institute for Aerospace Studies and our partners NDIA and ROA, I want to thank you for being here at this next in our series of seminars on “Nuclear Deterrence, Missile Defense, Arms Control, Defense Policy and Proliferation.” Today we are honored to have Brad Roberts from Lawrence Livermore National Lab.

Before I introduce Brad let me welcome our embassy staff that are here, and my friend Jim Walters who is here from the House Armed Services Committee, and also our sponsors and supporters. Welcome also to Joe Connell (ph) who is with the Strategic Deterrent Coalition. I’m having a triad event next May in Barksdale, so you can put that on your long-term calendars. It will probably be the first week.

For our triad event in September on the 28th, we’re not booked but we do have 170 people that have already signed up. I have some room for friends and supporters, so if you need to attend please let me know.

Tomorrow we are featuring our Space breakfast with Ellen Pawlikowski, and she will be introduced by Congressman Mike Rogers. Then on July 20th we have Ron Lehman, formerly with Lawrence Livermore National Lab, and he will be speaking at the Capitol Hill Club. On the 25th is Senator Donnelly from Indiana, the ranking member of the Strategic Forces Subcommittee of the Senate Armed Services Committee.

On the 28th we have Mike Rogers, who will talk about prospects for the conference with the Senate Armed Services Committee. On the 3rd of August we have General Selma, who is the Vice Chairman of the Joint Chiefs of Staff. Then to end the summer before the August recess, Uzi Rubin will lay out the Iranian and North Korean ballistic missile threats to this country and their cooperative work, including the areas of cooperation with China, Russia and Pakistan.

He gave a brief to the South Korean government, which he has shared with us, which is pretty extraordinary given what you’ve seen in the news. If you have any question, Nikki is here and I’m here if you need to sign up for any of these events.

With that, I want to welcome Dr. Brad Roberts here, who is the Director of the Center for Global Security Research at Lawrence Livermore National Laboratory. From April 2009 to March 2013 he was Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy. He served as the policy director of the administration’s Nuclear Posture Review and Ballistic Missile Defense Review, and had lead responsibility for their implementation.

From September 2013 to December 2014, he was a consulting professor and William Perry Fellow at the Center for International Security and Cooperation at Stanford University. One of the key reasons why he's here today is his book entitled "The Case for U.S. Nuclear Weapons in the 21st Century." It came out in November of 2015 and laid out not just the case for strategic nuclear modernization, but more importantly, I think, was his understanding of the Russian strategy of nuclear deterrence and in fact using nuclear weapons in a conflict -- as Mayor Daley said about voting -- early and often.

I've asked Brad to come out here and update. He chose an interesting title about the red and blue theories of nuclear victory, so he's going to talk to us about that. With that, Brad, on behalf of General Deptula, our Dean of the Mitchell Institute, and our staff here at AFA, I want to thank you for coming all the way from California to talk with us. Would you give a warm welcome to our friend Dr. Brad Roberts?

(Applause).

MR. BRAD ROBERTS: Not too warm, thank you. It's already plenty warm. You know, in California ties are illegal. It's always a test to come back to D.C. in the summer and dress for the occasion.

I'd like to thank Peter for this opportunity and for hosting this discussion, and indeed thank Peter and the Mitchell Institute for all you do to help renew, reinvigorate and sustain leadership focus on nuclear deterrence. It wasn't all that long ago that you couldn't find only half of the people assembled here today in all of Washington DC who were interested in nuclear deterrence issues. That the community keeps growing and that the average age keeps reducing are very encouraging signs of a shift in our political orientation to these difficult questions.

Thank you for the opportunity to set out some arguments about theories of victory, red and blue. I'd like to be clear that I'm speaking for myself. I'm not here representing the views of Lawrence Livermore National Laboratory or the Department of Energy. I am drawing on arguments in the book, which I hope many of you have seen, which has been out for a couple of years and stimulated a lot of strong debate.

In my experience in the Department of Defense in trying to sustain and facilitate U.S. leadership for nuclear deterrence, my point of departure was the advice of the Strategic Posture Commission, which set out in 2009 a bipartisan approach to nuclear strategy. The Obama administration attempted to govern on the basis of the recommendations of the Strategic Posture Commission. Very often we found that there was no middle politically on which to stand when it came to nuclear deterrence questions. Very rarely was there sustained leadership focus, despite the commitment to it from a number of high level source. There was disagreement inside the community about the nature of the problem we face and the nature of the solution.

So I began a body of work in the Pentagon aimed at better understanding the problem that's hidden in the daily intelligence briefing given to Pentagon leaders – a body of work aimed at understanding not just the what but the why. That is, I sought to create a better understanding of the concepts and strategies guiding the weapons development programs of key potential U.S. adversaries. Then at Stanford, I continued that work but in an unclassified setting. Better understanding the strategies of potential U.S. adversaries is also a core objective of the center I now lead.

I subscribe to the view that, while the risks of global nuclear war have gone down substantially over the last three decades, the risk of nuclear attack on the United States or our allies has actually increased—limited attacks in the context of regional aggression. And such attack may well lead to U.S. nuclear employment (although this is not the only pathway to possible U.S. nuclear employment). This view is reflected in the nuclear employment guidance of the Obama administration. That guidance was premised on an assessment that said we should take seriously the possibility that deterrence would fail, and that the president would need options to respond to that failure and to restore deterrence.

What would that failure look like and what would the options be that we would want to have available to the president in that moment? To answer those questions requires a better understanding of the ways in which our potential adversaries have gone to school on us. I suspect that you are all familiar with Deputy Secretary of Defense Bob Work's statement in 2016 that in the period since 9/11, while we've been focused on counterinsurgency and counterterrorism as our main military problem, a variety of actors have gone to school on us, studied our way of war, tried to understand our strengths and circumvent them, and try to understand our weaknesses and exploit them.

In my view, the going-to-school part actually started earlier. Let me refer you to a statement in 1992 by the Chief of Staff of the Army of India, K. Sundarji, at a conference in Richmond hosted by the Defense Nuclear Agency. He was asked to set out his view of the lessons of the Persian Gulf War. His cryptic answer: "Don't mess with America without nukes." An interesting formulation.

The first country apparently to be directly seized with this question in a big way was China. China looked at the experience of the Persian Gulf War very closely, but considered it an abstract problem. Then came the Taiwan Straits missile crisis. Most Americans who remember the Straits crisis remember that we dispatched a carrier battle group. What impresses most Chinese who remember that experience is that we started to dispatch a second carrier battle group. That signaled that we were going beyond a display of the flag to preparation for war. If America was prepared for war with China, they concluded, China had better get ready for war with America.

But, of course, at that point military modernization was the fourth of four Chinese modernizations. So being ready for a war with America was a long-term project for China, but it could put its intellectual house in order, which is the project that they launched in 1995 and 1996. They came up with a fairly straightforward set of ideas

about what would be required to, as they described it, “deter and defeat a conventionally superior nuclear-armed major power and its allies.” Each of those words has a consequence for how they thought about their response -- deter and defeat a conventionally superior nuclear-armed major power and its allies. It is useful to think of four core concepts guiding their strategy to deter and defeat the United States and its allies.

First, if war with America appears inevitable, go for the *fait accompli*. Create a conventional set of facts on the ground in Taiwan before the fleet can arrive from Pearl Harbor, a time measured in weeks, and impress America and its allies with the cost of trying to reverse the *fait accompli*.

Second, if the United States and its allies are prepared to try to reverse the *fait accompli*, the next step is to try to separate America from its allies, or more precisely, America’s allies from America, by making them fearful, potentially by conducting limited attacks on for example Japan if it chooses to support the American war effort.

Third, if that fails to dissuade the United States from acting, then be prepared with what we have come to call anti-access area denial capabilities to raise the cost and potentially deny us the ability to project power, but certainly to raise the costs.

Finally, if the United States brings the war to the mainland, especially with nuclear weapons, threaten to bring the war to the American mainland by nuclear means.

This set of ideas was set out in the period of the 1990s and is elaborated in documents such as the Science of Military Strategy.

If China was the first potential U.S. adversary to become seized with the question of deterring and defeating the United States and its allies, Russia was the second. The Russian military launched into this project just a little bit later than the Chinese. Of course, it’s not clear that they’d ever really stopped thinking about the problem of war with the United States, but the war in Kosovo certainly brought home the possibility of military confrontation with the United States. It brought home to the Russian military America’s success in implementing the Ogarkov vision of the future of war: reconnaissance strike complexes. Here was a U.S.-led coalition fighting a war without barely putting a boot on the ground, bombing a former Soviet ally, and winning.

So the Russian military began to think about the same set of challenges. As in China, the main ideas have been set out for us to read and understand in places like *Military Thought*, the journal of the Russian General Staff. There one can read articles about, to quote, “detering and defeating a conventionally superior nuclear-armed major power and its allies” -- the same basic catechism. Why? Because Russia and China face the same basic military problem. Accordingly, the ideas that they set out in this direction are not strikingly different from China’s ideas. If you think America is going to bring war to Russia, be prepared to create a *fait accompli* on the ground and present the United States and its allies with an image of the very high cost that would go with trying to

reverse the *fait accompli*. If America and its allies choose to prosecute that conflict, then try to separate allies from the United States, from each other. Differentially target NATO countries, sparing some and attacking others. Make publics fearful. Create pressure on governments to be divided and back down. Use anti-access, area-denial strategies to raise costs and slow U.S. and NATO military action. If the war comes to the Russian homeland, be prepared to bring the war to the American homeland.

North Korea, ironically (given the long history of its illicit nuclear program), was apparently the last of the three to become seized with this particular problem. It appears that its programs for missiles and nuclear weapons were kicked into high gear in the middle of the 2000s. A decade ago there were press reports that the North Koreans gained, through cyber means, access to top secret war plans in Seoul that included the possibility of setting regime removal in Pyongyang as a wartime objective. So their nuclear strategy changed. The business of building, bargaining, pausing, and then again building, bargaining and pausing, that had defined their approach to their missiles and nuclear weapons, gave way to what we've seen for the 10 years ever since. No bargaining, no pausing, just building.

And with somewhat less fidelity than in the case of China and Russia, the same basic set of ideas have been set out about how to deter and defeat a U.S.-led war against Pyongyang. If war with America appears inevitable, seize Seoul and sue for peace. If war with America and its allies appears inevitable, put Japan in their nuclear crosshairs. How frequently do we hear Kim Jong-un say, if I ever have to use nuclear weapons my first target is going to be Tokyo? We Americans hear that and think this reflects the historic bad blood in Northeast Asia. In fact, this reflects a much more strategic calculus. The conventional defense of the Republic of Korea would be done with armed services, with the military forces of South Korea, American forces on the peninsula. But the successful conventional defense would require the use of military forces and assets sitting in bases in Japan under the United Nations flag, and whose dispatch to the defense of the Republic of Korea requires the approval of the Japanese prime minister. In the 1950s this was a no-brainer because there was no risk; today, Kim Jong-un is trying to make sure it's a brainer, that the Japanese prime minister has to calculate the possibility that if he supports the war effort there will be a terrible price to pay. So create the conventional *fait accompli*, try to separate allies from each other and the United States, be prepared with anti-access area denial strategies, and be prepared to bring the war to the American homeland if it comes to that.

From the perspective of many U.S. analysts, the threats of these potential adversaries to escalate conflicts lack credibility, given the overwhelming conventional and nuclear power of the United States. But apparently from the perspective of these adversaries, these threats do seem credible. Why? There are three different arguments in their literature and political commentary on this.

The first is about the asymmetry of geography. We can't win in Taiwan these days without striking the Chinese mainland. This opens up the credibility of China's threats to attack our homeland. Similarly in northern Europe, it would be very difficult to

protect a Baltic member of NATO from Russian military aggression without striking Russian territory. This opens up the credibility of their threats to strike deeply into NATO territory and potentially the American homeland.

The second argument is about asymmetry of stake. The best way to make this point is with a vignette from an informal nuclear dialogue with Chinese counterparts. In one exchange with a major general in the People's Liberation Army, the following argument was made. She said: "So let's compare stake in an escalating Taiwan confrontation. Your American stake would include your commitment to the people on the island of Taiwan, your defense of the democratic experiment on Taiwan, your credibility in the eyes of your East Asian allies, your credibility in the eyes of your European allies, your credibility in President Putin's eyes, and of course you Americans, your sense of what you stand for in the world. You always think you're there to do the right thing. All of those will be at stake. What's at stake for China? Only two things. One will be out success or failure in finally recovering from the 'century of humiliation' and regaining our sovereignty. The other will be regime survival: frankly, if we lose, the Communist Party may well be thrown out. So who's stake is higher? China's. You will back down, despite your superior power." That summarizes the asymmetry of stake point that experts on China, Russia, and North Korea all describe..

There is a third argument on this point about escalation credibility. It's the standard interpretation of democracies by authoritarian leaders. In their assessment, democracies are weak. We are led by weak people. We are easily divided. We are slow to act and when we act we chose the least risky course. And we can be made to be sufficiently fearful, particularly in a moment of economic weakness and political paralysis, to simply back down and not defend our interests or those of our allies.

In the Cold War there was a debate about the Soviet build up of nuclear forces. Some here will remember Harold Brown's comment about the arms race with the Soviets: "We build, they build. We stop, they build." What explains this, he asked? Was it possible that this wasn't just a system cranking out nuclear weapons like sausages, but that Soviet military and political leadership actually had a theory of victory, that once they accomplished their modernization program they would be confident that they could fight and win a nuclear war? Or fight and win a major conventional war in Europe, that they would win and it wouldn't go nuclear because of their nuclear deterrent? And further, went the argument, if they had a theory of victory, should we have a theory of victory? Should the Reagan buildup be more than just buying a larger and better triad, but something new and different in order to accomplish a particular theory of victory? This debate raged during the Cold War and the Cold War ended and the debate was never settled.

But I think the shorthand is a very nice way to think about what these three countries now have. They have a theory of victory. It's a theory of victory for deterring and defeating a conventionally superior nuclear-armed major power and its allies. But it's not a theory of victory in the sense of fighting and winning an all-out nuclear war. I don't see that any of them think there is victory down that path. It's a theory of victory

built on nuclear blackmail and brinkmanship and perhaps enough limited nuclear employment to demonstrate the existence of a stake sufficient to get the United States and its allies to back down.

To understand the character of this theory of victory, I find it useful to turn first to Clausewitz. Clausewitz thinks of war as a continuation of politics by other means. What does that imply for the meaning of the word victory? Victory is not that moment when you have vanquished your enemy on the battlefield. Rather, victory is that “culminating point” in a conflict where your adversary chooses to no longer run the costs and risks of continued conflict. It’s a political point. I think for these three actors they have put in place theories of victory in the Clausewitzian sense. This guides the development of their capabilities and it guides their understanding of conflict with the United States and its allies.

But these theories of victory are not first and foremost theories of political victory in war. None of these countries want to go to war with the United States. They’ve focused very much on how to exercise their military and political influence in their region in a manner that avoids direct military confrontation with the United States. Think the brinkmanship of gray zone conflicts in the Western Pacific, the conventional provocations of North Korea, Russia’s repeated military assertiveness but short of the conditions that create war with NATO. These are all aimed at remaking their regional security orders while avoiding war with America by deterring America and its allies. Think of this as subduing the enemy without fighting—a theory of victory embedded not in Clausewitz but in Sun Tzu.

In support of this version of their theory of victory, the leaders of these three countries are trying to convey their confidence in their ability to stand up and fight a war with America and its allies, with the ambition of over time creating the circumstances where we are subdued, restrained and deferential to their interests, and will to remake the regional orders in a manner that they would prefer.

Turning now to an even less familiar topic, what is our theory of victory? What is the blue theory of victory? Clearly the focus of our military innovation since 9/11 has been on counterterrorism and counterinsurgency. We haven’t spent 20 to 30 years thinking about the problem of being the power that they seek to deter and defeat, that’s a major power with nuclear weapons and allies. For many people in our community, the answer to my question is obvious in the question. That is, if China, Russia and North Korea worry about deterring and defeating a conventionally superior nuclear-armed major power and its allies, we must have all the solutions in being the conventionally superior nuclear-armed major power with a lot of allies. In other words, we have all of the strength that they fear, and our theory of victory should be if they bring war to us we’ll trump them, because we have all the means to do so.

That’s a very crude theory of victory, a very unreliable one, likely to be resisted by political leadership who will not readily chose to turn enemies into glass parking lots. It’s certainly unpromising in the Sun Tzu spirit. We don’t have a lot of allies who are

prepared to sign up to simply stand by while America holds the finger on the nuclear trigger in their neighborhood.

So how do we think more deeply about what is required of us in meeting the challenge presented by these red theories of victory? Our usual starting point is to go to the vocabulary of deterrence, which I think points us in the right direction but doesn't actually get us to our needed destination, which I would describe as credible and effective strategies built on a sound conceptual basis. I like the Chinese term counter-deterrence. What do they mean? China's leadership observes that we the United States have a strategy to deter them by nuclear and other means when they want to do what they consider to be the right thing. So the objective of their strategy is to counter our deterrence strategy so that they're able to do the right thing. What does that mean in this instance?

To counter the deterrence strategies of our three potential adversaries means stripping away their confidence in their ability to impose unbearable costs on us, their ability to protect themselves from unbearable costs, and their ability to understand the risks that go with conflict with the United States.

Let me illustrate that confidence with another short vignette. A year or so ago, I joined in a panel presentation (on the record) with among others Alexei Arbatov, will be known to some of you as one of the more thoughtful people in Moscow about nuclear strategy questions. We were in a debate at a workshop on the future of nuclear arms control. My view is it's too early to tell, we'll see what happens in 2021. His view was, it's done. Moscow is done with nuclear arms control. There was a third participant in the discussion, a distinguished historian of the Soviet bomb, who at one point argued that in the Cold War there was a whole lot of nuclear learning done in Moscow, such that when Gorbachev stood with Reagan at Reykjavik and said nuclear wars cannot be won and thus must not be fought, Gorbachev was actually speaking for the Soviet military and political elite. Arbatov's key response was that the nuclear learning of the past is now forgotten and a new generation is now in charge in Moscow. This new decision elite, he argued, feels no connection to the World War II devastation or to the lessons of the Cuban Missile Crisis. Rather, this small group of eight to 10 people climbed to the top of the chaotic pile in the 1990s, see themselves as highly capable and above the law, and feels rewarded by risk taking. He argued further that this elite sees Americans as feckless and potentially dangerous, but sees America as a paper tiger. In Arbatov's formulation, they are willing to accept all of the risks of nuclear war because they know you will back down.

The point is that our strategy must focus on changing the way of thinking of that elite. We should seek to strip away that confidence that they have that they can calculate and accept the costs, and that they know what the risks are and that they're bearable risks. Nuclear war should be about unbearable risk. This should be the core of our blue theory of victory.

But a blue theory of victory must also be a green theory of victory. In war-

gaming vernacular, green refers to U.S. allies. Our allies are the focus of the red theories of victory. As previously argued, China, Russia and North Korea work to impress upon our allies their vulnerability, in part with the aim of getting them to urge restraint on us. This puts extended deterrence back in the middle of this discussion in a way it hasn't been for a long time.

Thus the theory of victory the United States should develop for this problem set has to be a theory of victory that we develop together with our allies. I'd say that's actually a process quite far along. In Northeast Asia we have dialogues with our Japanese and South Korean allies on strengthening and adapting deterrence to deal with 21st century challenges. In the NATO context, since the Deterrence and Defense Posture Review of 2012 and the annexation of Crimea and the Summit in Wales that summer, there's been a significant process since then to revise and adapt and strengthen NATO's conventional and nuclear posture to deal with new problems.

Working with our allies, we can take apart the confidence of our potential adversaries at each of the four conceptual levels identified earlier. Our adversaries will attempt feats accompli only if they believe they can do so at low cost and while avoiding a quagmire. This points to the value of tripwires and tire shredders in the Baltics, for example. Secondly, we want to strip away their confidence that they can separate allies from the United States and each other; regional ballistic missile defense and some independent strike capabilities for U.S. allies can help. Thirdly, we want them to understand that their anti-access area denial strategies are going to be ineffective, that we're going to be able to penetrate through them and impose a lot of cost on them as well, if they want to go there, including by conventional means, a gap that's significant in our posture. And lastly, if they want to cross the nuclear threshold, our adversaries must understand that we're not prepared to tip toe across. We're not prepared to engage in tit for tat nuclear exchanges. We're not prepared to match Russia in providing a nuclear scalpel for every problem in Europe as they put it. Because we don't think crossing the nuclear threshold is a little deal. We think crossing the nuclear threshold is a big deal. And lastly, if they're prepared to contemplate the possibility of nuclear attack on the American homeland, and to take the level of conflict from a regional one to a strategic conflict, we are prepared to defend our interests in that realm and capable of doing so, and that capability will not be stripped away by their actions in space or cyberspace.

This brings me to a closing argument on the blue/green theory of victory. It's not just a nuclear theory of victory or a theory of nuclear victory. This must be an all domain theory -- this is the new regional strategic problem in front of us -- all domain. Our adversaries, all three of those adversaries, write about using all of the tools available to them at all stages of conflict to shape our behavior and that of our allies. We think of this more linear ladder of escalation with nuclear at the top rung. This doesn't match the way they think about it.

Recall the metaphor of the blind men and the elephant. I hope you know this metaphor—involving a group of blind men describing the animal they've touched. Depending on the part touch, the animal might be described in very different ways. Our

communities of experts on space, nuclear, missile defense, conventional prompt global strike, the regional studies experts, these are touching different parts of the elephant. But there is no common view of the elephant that has yet emerged—of the new problem of strategic conflict in the 21st century. I think our view of the elephant needs to be informed by the theories of victory that these countries have developed. We need to have our own theory of victory that guides us to acquire and demonstrate the capabilities associated with our theory of victory, and we need to do this together with our allies.

So that's the main set of arguments on theories of victory, red and blue, or red, blue and green. I find a great deal of interest in this way of thinking about this problem because it kind of breaks us out of the different toolkits and looks at the strategic problem that clearly sits in front of us. I thank you for your time and interest and engagement, and look forward to comments, questions, or comments masquerading as questions.

(Applause).

MR. HUESSY: I'm going to take the first question, Brad, if I could? I'm going to do this from a budget point of view. What would be the things you would say, don't do with respect to there are those who want to kill the long-range strike option. Some people want to get rid of the long-range strike option. Some people want to either get rid of or delay the Ground Based Strategic Deterrent. Some people want to reduce the number of subs to six. Joseph Cirincione said we don't need missile defense now in Europe because Iran doesn't have a nuclear capability. So I'm looking at not what we should do, but where are the things that if we did them it would be really the wrong things to do.

MR. ROBERTS: One of the comments in my book that has generated the least support from readers is that we have exactly the force structure we need. The constant search for more pruning flies in the face of this new problem set.

It was perfectly necessary and appropriate in the period after the Cold War to move away from Cold War vintage forces and the concepts that guided them. Three presidents came in and said, I want to move away from Cold War thinking, without being very clear about what they wanted to move toward. They wanted to move away from something, but where did they want to go? Three presidents have talked about the importance of reducing. One used the word "reliance" on nuclear weapons. One used the word "salience" of nuclear weapons. The Obama administration used "role and number."

I don't think we're going to hear this administration talk -- I don't think we would have heard a Clinton administration talk -- about further reducing nuclear roles, number, reliance, etc., because we've moved into a different security environment. In that security environment, with the degree of uncertainty that prevails in it, the triad remains of value to us because of the flexibility it provides us to deal with a variety of possible problems. The minimum capabilities now left in it are perhaps adequate for the security environment that we can conceive in which we exist today, but I think we're less

confident than ever that, if we're buying forces for 80 years, exactly the mix and match of capabilities in the force today are those we're going to want over 80 years. Our posture must, therefore, include the capacity to create different forces in the future.

So I see the community interested in further pruning as missing the point in the security environment in which we live. If you take my view as set out, that the principal nuclear deterrence problem in front of us isn't the strategic all-out global nuclear war problem, but a regional war problem, and that our allies are the focus of the strategies of these three actors, extended deterrence should be at the center of our attention; whereas we put most of our attention from the U.S. nuclear deterrence community on the strategic triad.

What we want in the nuclear realm to meet the challenge of these regional red theories of victory is the ability to signal both our nuclear resolve and the resolve of our allies. It's not enough to signal America's nuclear resolve. This only reinforces the perception that our allies don't have nuclear resolve and thus are easy pickings in this strategy. Hence, the important strategic value of dual-capable aircraft backed by the ability to deploy bombers with assured penetration capabilities of one kind or another. Those are assets that many people want to do away with in the name of greater efficiency, and I think they're the ones that are most relevant to the deterrence and assurance challenge we have in front of us.

That's a longer answer than you might have bargained for.

MR. DREW WALTERS Drew Walters with the House Armed Services Committee. Following up on that, the theory of victory that we really need to get after is the mindset of foreign leaders, or their confidence that we will back down, and that we are feckless. Yesterday on the House floor we had a vote on LRSO, GBSO, a trillion dollars over 30 years and we don't need all of this, let's just get rid of something.

In our political system we're not willing to sacrifice. There's going to always be those questions and those doubts that those debates have. Even though, at least in my seven years on the Hill, we've never made the wrong, to my mind, decision, those doubts always get raised. We always have those debates. How does that impact those foreign leaders and their theory that we're feckless and we'll back down, that we're going to just allow our current force to slowly rust?

MR. ROBERTS: The short answer would be it unhelpfully influences their thinking. But I think it's a little more complicated than that.

Our timidity as a national political leadership group in addressing the risks and challenges of the emerging security environment, as reflected in our timidity about investing for nuclear deterrence, is a signal that we have lost our commitment to sustain and win a long-term competition with them. Thus, what we need is to be freely engaged in debates about nuclear weapons and will and capable of articulating a politically persuasive case for the long-term investments that are needed. I take my experience in

working with my Japanese colleagues where we were advised early by political friends inside the Washington beltway that nuclear dialogue with the government and expert community in Japan should be avoided because it's a taboo topic and you're opening a can of worms by having that discussion. Well it reinforced the impression that we actually lack conviction in our policies. We had the same experience in NATO. Don't come to Europe and talk about nuclear deterrence, we were told, because that would just open a can of worms. The message that people took from the reticence to defend our policies and debate those with different views was simply that in our heart of hearts we didn't think our arguments would stand up to public scrutiny. But that was wrong. We do believe our arguments stand up to public scrutiny. Buy my book.

(Laughter).

So I actually think that while President Putin may take individual reports of debates in the American Congress and the body politic generally about nuclear modernization as reinforcing his general reading of the way American politics works, I think there's deterrence value in signaling our ability to debate afresh every year the benefits and drawbacks of different modernization pathways. The message conveyed over the long-term is that there is bipartisan commitment to see this 30 year project through.

Who'd like to go next?

MR. DAVE ENPOLD (ph): My name is Dave Enpold and I'm a private aerospace consultant. I like the way you formulated the red/blue four steps. The first one is the fait accompli.

It seems as though there may be a slippery slope to a fait accompli happening right now. I'm thinking every time the North Korean leader sends a more sophisticated rocket off without any significant consequences, that's at least testing the water. Mainland China building big aircraft carriers that look like islands is another one. Certainly Russia (knows the consequences ?) of arming part of Ukraine.

It seems as though we're already experiencing a slippery slope towards a fait accompli. Is it not very important for us to try and prioritize across conventional versus nuclear investments, in which a considerable amount of nuclear investment has to be made to get ready for the future because we're atrophying big time, right, because it's aging? Over all that, is it more important for us to make sure no conventional fait accompli can possibly occur, and thereby bolster our allies confidence that we won't get to the nuclear stage because we can deny them a fait accompli, the real one that we're trying to prevent?

Or, am I thinking too literally here? It would seem that your simple motion of this approach -- and I don't mean it's simple because it's not sophisticated, I think it's simple because it can be understood in a single sentence. It seems like the Achilles' heel in red strategy is that they will never be allowed success in a fait accompli. And that can

be conventionally determined. I don't think your strategy calls for them to achieve their fait accompli with nuclear weapons. They'll achieve their fait accompli with conventional weapons.

MR. ROBERTS: But I don't see this as an either/or problem for us. It seems to me that -- to stretch your argument a little bit, there's a community of people who believe that we have such conventional supremacy that we can put all of our eggs in that basket and defeat the fait accompli, or make them so impressively awful for those who would consider them, that they'll never go there and we don't need to worry about the escalation. That might have been the America of 1991. But then, Saddam Hussein gave us six months to do it. The forces with which we did that to Iraq are mostly gone. Our ability to gain conventional supremacy requires months, if not even longer. It obliges us to accept significant risks in the regions from which we would draw forces to do that.

Moreover, the conventional defense of the targets of the fait accompli cannot be conducted with 100 percent success. We can't protect Seoul from the artillery fire of North Korea. We can't send in ground forces to prevent 12 million people dying in Seoul in the course of 24 hours. We can't protect Latvia, Lithuania or Estonia by conventional military means. We can't protect Taiwan by keeping forces in Pearl Harbor.

Although we can't do 100 percent effective conventional defense of the fait accompli targets, we can raise their expected costs for our potential adversaries and increase their expected timeline, and increase their worry that they're entering a quagmire.

So I like the image that's being invoked at NATO. There was a discussion between Wales and Warsaw about creating conventional tripwire forces on the model of the Berlin Brigade. The Berlin Brigade had the role during the Cold War of sitting in Berlin and waiting to die. There was no pretense that the Berlin Brigade was going to defend Berlin. Its job was to create the understanding among the Soviet leadership that if there was war to take Berlin, enough Americans would die that American could not just stand by and say never mind.

MR. : And that was very important for the Germans, too.

MR. ROBERTS: It was. But the tripwire -- so there's a conventional tripwire now in the Baltics. This is the Rapid Reaction Force and the very Rapid Reaction Force.

Maybe what we've done is accomplish -- recall the RAND study of three years ago that said, recall Putin's post that I can be in three NATO capitols in 60 hours, or something to that effect. If we can, change his understanding to that might be a six week project or a six month project. The Ukraine is a quagmire. He's paying a high continuing cost to do that.

If we can create that understanding about the quagmire, then maybe they don't attempt the fait accompli. But we can't do a conventional defense and we can't really

understand what's their stake. I mean, I think Putin's stake in trying to break the NATO security order is very high. He has said so. His explanation for why he was entering Crimea was that for too long he had extended the hand of friendship to the West and the United States and its allies had been pursuing instead a strategy of encirclement and containment. Like a spring compressed too long, he argued, at a certain point you have to snap back hard.

So to me, we have to take a reading of their perceived stake, in addition to our ability to raise the cost of their fait accompli strategy. I think we cannot raise the cost sufficiently in our period of declining conventional dominance to escape the fact that they have prepared themselves for our escalatory actions when our conventional defense fails, and they're prepared to go there with the conviction that their employment of those means will induce our further restraint, not create further stakes for us. That's a significant strategic miscalculation on their part, but I think it's one they own.

MR. : Thank you, I'm from George Washington University. I wonder if North Korea falls into the same category with Russia and China. Russia and China are major global powers. They're expansionary powers and ambitious regional powers. North Korea seems to be in more of a defensive crouch trying to protect its own regime. It's a client state of China.

A month ago I heard a talk by former Secretary of Defense Bill Perry in which he argued that it's probably too late to roll back North Korea's nuclear program, but it would be possible still to effect a grand bargain with North Korea where they would freeze their nuclear capability in exchange for assurances of stability. So I'm wondering what do you think of Bill Perry's suggestion and whether North Korea is really in the same league as those other two countries?

MR. ROBERTS: I think it's a fair point. My red theory of victory is a bumper sticker version of three different strategies that have a lot of similarities, but of course many important differences. But I'm not sure that I have the confidence you appear to have, or at least conveyed in your bumper sticker, about North Korean strategy. It may be a porcupine state, just don't mess with me and everything will be fine.

On the other hand, it's got 50 years of history of one provocation after another, including attempting to kill the entire cabinet of the government of South Korea. It's difficult for me to imagine that this 32-year old man, envisions at the end of his 3 or 4 decades of "leadership" passing on to his son or grandson the current division on the peninsula. North Korea is, after all, a revisionist power. It seeks to restore Korean sovereignty under its preferred political model. It sees itself as the legitimate heir to the long-term historical governance structure on the peninsula. His vision is clearly the ejection of U.S. influence in the region. It may be a client state of China, but it's an odd client state relationship because the Chinese clearly fear being drawn into a war that the North Koreans might instigate. If war came, it's not at all clear to me that China would be on North Korea's side, so to speak.

I hope Dr. Perry is right. It's certainly worth a trial run. A JCPOA for North Korea would be an interesting proposition. But that option has been on the table all along. I don't see what sign there is today -- and I know Dr. Perry sees signs -- and I just don't see them. The argument is that the strategic patience of the Obama administration caused a number of windows of opportunity to close that were in fact wide open for us to seek accommodation with North Korea. But when pressed what were those windows, what were those signs, I never find persuasive evidence that they were there. I think it's difficult to imagine the circumstance in which the North Korean leadership, having paid such a price to get to where it has gotten, with now its own small nuclear force right within reach, to say never mind, we're going to stop here. Moreover, the DPRK is not Iran. Its leaders have not chosen to stop with a latent posture. They've chosen to cross the threshold and move forward. So frankly, I'm skeptical, but that's not to say it's not worth taking a run. We'd certainly like to escape the necessity of coming into a deterrence relationship with North Korea beyond the kind we already have.

Any final comments, questions or quarrels? No? Well thank you all for your time and interest. Thank you for turning out this morning.

(Applause).