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HEARING  
ON  
NATIONAL DEFENSE AUTHORIZATION ACT  
FOR FISCAL YEAR 2016  
AND  
OVERSIGHT OF PREVIOUSLY AUTHORIZED  
PROGRAMS  
BEFORE THE  
COMMITTEE ON ARMED SERVICES  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED FOURTEENTH CONGRESS  
FIRST SESSION  
SUBCOMMITTEE ON STRATEGIC FORCES HEARING  
ON  
**FISCAL YEAR 2016 BUDGET REQUEST FOR  
STRATEGIC FORCES**

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# CONTENTS

	Page
STATEMENTS PRESENTED BY MEMBERS OF CONGRESS	
Cooper, Hon. Jim, a Representative from Tennessee, Ranking Member, Subcommittee on Strategic Forces .....	2
Rogers, Hon. Mike, a Representative from Alabama, Chairman, Subcommittee on Strategic Forces .....	1
WITNESSES	
Haney, ADM Cecil D., USN, Commander, United States Strategic Command .	4
McKeon, Brian P., Principal Deputy Under Secretary of Defense for Policy, Department of Defense .....	3
APPENDIX	
PREPARED STATEMENTS:	
Cooper, Hon. Jim .....	23
Haney, ADM Cecil D. ....	39
McKeon, Brian P. ....	25
Rogers, Hon. Mike .....	21
DOCUMENTS SUBMITTED FOR THE RECORD:	
[There were no Documents submitted.]	
WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING:	
Mr. Lamborn .....	67
Mr. Larsen .....	67
QUESTIONS SUBMITTED BY MEMBERS POST HEARING:	
Mr. Rogers .....	71



## **FISCAL YEAR 2016 BUDGET REQUEST FOR STRATEGIC FORCES**

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HOUSE OF REPRESENTATIVES,  
COMMITTEE ON ARMED SERVICES,  
SUBCOMMITTEE ON STRATEGIC FORCES,  
*Washington, DC, Thursday, February 26, 2015.*

The subcommittee met, pursuant to call, at 1:31 p.m., in room 2118, Rayburn House Office Building, Hon. Mike Rogers (chairman of the subcommittee) presiding.

### **OPENING STATEMENT OF HON. MIKE ROGERS, A REPRESENTATIVE FROM ALABAMA, CHAIRMAN, SUBCOMMITTEE ON STRATEGIC FORCES**

Mr. ROGERS. I am going to call the hearing of the House Armed Services subcommittee to order.

We just came back from a procedural vote. I think we have about an hour before we vote, so I want to go ahead and get started while the members may still be walking over from the chamber so that we can get as much done as possible.

This is our first hearing of the 114th Congress, and I would like to welcome back our returning members, especially the distinguished gentleman from Tennessee, my buddy, Mr. Cooper. I look forward to another Congress working with you and solve some of the most technically demanding and most important issues that the Armed Services Committee has to handle.

I welcome our new members here today as well. I won't go name by name, but I look forward to working with each of you as well.

We have got some important issues to address this year. We have a budget request from the President that in some ways is among the best we have seen since he came into office, but the Presidents request and the Congress makes the decisions, so we will see how it comes out.

To make the best decisions possible, we need to hear from the best minds available. No pressure, fellows. We certainly have that today.

I am pleased to kick off our NDAA [National Defense Authorization Act] process for the fiscal year 2016 with two witnesses who have responsibilities for each of the key facets of the Strategic Forces Subcommittee's jurisdiction: missile defense, national security nuclear weapons programs, and nuclear proliferation and cooperative threat reduction activities.

To help us understand the policies and programs this subcommittee oversees and how they relate to the fiscal 2016 authorization bill, we have the Honorable Brian McKeon, Principal Deputy Under Secretary of Defense Policy, Department of Defense; Ad-

miral Cecil D. Haney of the U.S. Navy, Commander, the United States Strategic Command.

Admiral, you are in much demand by the subcommittee. I appreciate you making yourself available.

Mr. McKeon, I know you are very pleased to be returning here and I know you look forward to reviewing the transcript.

I remind my colleagues that at the conclusion of this open hearing, we will adjourn to a classified discussion in a different room.

I would also like to make sure that all the members are aware that we will have next Tuesday a classified session on next generation missile defense technology and capability.

I do not believe that the world can afford nor can our own security allow U.S. power to continue to recede. If you think ISIL [Islamic State of Iraq and the Levant] is a threat, I agree with you. If you think Vladimir Putin is set on re-creating the Soviet-like sphere of influence regardless of what these sovereign neighboring countries want for themselves, I think you are right. If you watch China literally create islands in the middle of other countries' territorial waters in the South China Sea and ask do they feel constrained by anything, I would tell you, I think the answer is no.

So the question becomes, what are we going to do about it? Are we going to provide less funding for the Department of Defense than the President requested, which has already sustained literally hundreds of billions of dollars in cuts? I don't believe that that is an option that the Congress can seriously consider.

I hope the witnesses will make very clear today what they see as the impacts of a return to sequestration in fiscal year 2016 or a budget that funds only the Budget Control Act [BCA] caps.

With that, I yield for a statement to my friend and colleague from Tennessee, Mr. Cooper.

[The prepared statement of Mr. Rogers can be found in the Appendix on page 21.]

**STATEMENT OF HON. JIM COOPER, A REPRESENTATIVE FROM TENNESSEE, RANKING MEMBER, SUBCOMMITTEE ON STRATEGIC FORCES**

Mr. COOPER. Thank you, Mr. Chairman. I look forward to working with you again in this session of Congress.

I completely agree with you on the need to end sequestration, but I hope that the majority and the minority will be able to come with a plan to do that, because right now we are running on empty.

I would—in order to save time, and look forward to the classified session, insert my statement for the record.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Cooper can be found in the Appendix on page 23.]

Mr. ROGERS. I thank the gentleman.

Mr. McKeon, Admiral Haney, you both have provided prepared statements, which I will add to today's record. Without objection, so ordered. And I ask you to briefly summarize those statements in 3 minutes or less so that we can turn to questions.

And we will start with Mr. McKeon, if you would proceed.

**STATEMENT OF BRIAN P. McKEON, PRINCIPAL DEPUTY  
UNDER SECRETARY OF DEFENSE FOR POLICY, DEPART-  
MENT OF DEFENSE**

Mr. McKEON. Thank you very much, Mr. Chairman, Ranking Member Cooper, and other members of the subcommittee for this opportunity to testify today.

In his speech in 2009 in Prague, President Obama highlighted 21st century nuclear dangers and declared that the United States will seek the peace and security of a world without nuclear weapons, but while we work toward that goal, which he acknowledged would not be reached quickly, he pledged that as long as nuclear weapons exist, the United States will maintain a safe, secure, and effective nuclear arsenal, both to deter potential adversaries and to assure U.S. allies and other security partners that they can count on America's security commitments.

In his confirmation proceedings, Secretary Carter affirmed the view that nuclear deterrent remains our highest priority mission and, as such, nuclear weapons policy and strategy are an important element of our budget request. The request focuses on maintaining stable and robust deterrence in a time of geopolitical uncertainty, while managing the transition from our current nuclear force to a modernized nuclear force. We will manage this transition through life extension programs for the warheads, replacing aging delivery systems, and enhancements to sustainment and operations of the current force. It also includes the funding necessary to address the findings of last year's nuclear enterprise reviews.

Last November and December, we briefed the committee and your staff on the results of the two reviews ordered by then Secretary Hagel of the DOD [Department of Defense] nuclear enterprise. As we said then, the Department has undertaken a serious and vigorous response to the findings of these reviews. Senior leaders are being held accountable for addressing the issues identified in the reviews and we are working to create an enduring system of continuous self-evaluation, honest reporting of problems, and detailed monitoring of corrective actions and their effectiveness in fixing the problems.

Secretary Hagel created what he called a Nuclear Deterrent Enterprise Review Group to reinforce senior leader accountability and asked the deputy secretary to lead the effort. In his final weeks in the Department, Secretary Hagel convened the group for one last time to reinforce the importance of this undertaking. Secretary Carter shares Secretary Hagel's commitment to holding leaders of DOD accountable and to ensuring the real near-term improvements in the nuclear force sustainment and morale.

The President has opted for a nuclear sustainment and modernization plan that is consistent with his commitment to retain a safe, secure, and effective deterrent for as long as nuclear weapons exist. As I said, the plan focuses on modernizing platforms, delivery systems, and weapons of our current triad to preserve military capabilities in the face of evolving threats.

It is not, as some have claimed, a nuclear weapons buildup. On the contrary, the number of nuclear weapons in the United States is the smallest it has been since the Eisenhower administration and will continue to go down as we reach new START [Strategic

Arms Reduction Treaty] limits. Further, our approach to warhead sustainment and modernization will enable additional reductions in the non-deployed hedge force.

The effort to modernize our delivery systems and extend the life of our warheads across the triad in our non-strategic nuclear force will require significant resources over the next decade and beyond, but as I noted at the outset, their nuclear mission is the highest priority of the Department and we must prioritize it accordingly.

Mr. Chairman, members of the committee, we would ask your support for the President's budget in this area, because it protects vital U.S. interests.

Thank you very much for the opportunity to be here.

[The prepared statement of Mr. McKeon can be found in the Appendix on page 25.]

Mr. ROGERS. I thank you, Mr. McKeon.

Admiral Haney, the floor is yours.

**STATEMENT OF ADM CECIL D. HANEY, USN, COMMANDER,  
UNITED STATES STRATEGIC COMMAND**

Admiral HANEY. Good afternoon, Chairman Rogers, Ranking Member Cooper, and members of the committee.

U.S. Strategic Command executes a diverse set of global responsibilities that contribute directly to our national security, and I can say with full confidence today that Strategic Command remains capable and ready to meet our assigned missions, and our strategic nuclear forces are safe, secure and effective. As you know, the current global security environment is more complex, dynamic and uncertain than at any time in our history as state and non-state actors challenge our democratic values and our security in so many ways.

The nature of strategic threats, weapons of mass destruction, space and cyberspace, requires serious attention. We continue to see emerging capabilities to include, but are not limited to, the modernization of strategic nuclear capabilities, counterspace and cyberspace activities, conventional and asymmetric threats, and disturbing trends upsetting the strategic balance, giving rise for concern not only for U.S. Strategic Command, but for my fellow combatant commanders that we team with around the globe.

Given all of this, including your description of the strategic and security environment, the missions of U.S. Strategic Command remain important to our joint military forces, our Nation, and our allies and partners.

We remain focused on deterring strategic attack, and assuring allies by providing combat support to our joint military forces and other combatant commanders across the spectrum of their operations to support national security and strategic stability.

Strategic deterrence today is far more than just nuclear, although it is underpinned first and foremost by our nuclear capabilities. It includes a robust intelligence apparatus, space, cyberspace, conventional and missile defense capabilities, and comprehensive plans that link organizations and knit their capabilities together in a coherent way.

Additionally, we are engaged daily in a broad range of activities across our other mission areas: space; cyberspace; intelligence, sur-



veillance, and reconnaissance [ISR]; commanding weapons of mass destruction; joint electronic warfare; global strike; and analysis and targeting. These efforts guide my six command priorities: deterrence; strategic attack; providing our Nation with a safe, secure and effective nuclear deterrent force; building enduring relationships with partner organizations to confront the broad range of global challenges; addressing these challenges in space, building our cyberspace capability and capacity; and anticipating change and confronting uncertainty with agility and innovation.

Achieving strategic deterrence in the 21st century requires continued investment in strategic capabilities and renewed multi-generational commitment of intellectual capital.

The President's budget for 2016 strikes a responsible balance between national priorities, fiscal realities, and begins to reduce some of the risks we have accumulated because of deferred maintenance and sustainment. This budget supports my mission requirements, but there is no margin to absorb new risks. Any cuts to that budget, including those imposed by sequestration, will hamper our ability to sustain and modernize our military forces.

None of this work could be done, of course, without our well-trained and motivated people, and I can personally attest to their talent, dedication, and professionalism of the team of military and civilian experts that man our forces. They represent our most precious resource and deserve our unwavering support.

In these uncertain times, I am proud to lead such a focused team, and we are building our future on a strong and successful past. And we count on your support, of course, in working together with those men and women so that we can ensure that we are ready with a safe, secure, and effective strategic deterrent.

Thank you. I look forward to your questions.

[The prepared statement of Admiral Haney can be found in the Appendix on page 39.]

Mr. ROGERS. I thank you, Admiral Haney.

And I recognize myself now for the first round of questions. And this is for you, Admiral Haney.

As recently stated by the director of the Defense Intelligence Agency at a HASC [House Armed Services Committee] hearing on worldwide threats, quote, "the threat to U.S. space systems and services will increase as potential adversaries pursue disruptive and destructive counterspace capabilities," close quote.

Can you provide your perspective on the threat to our space systems, and what are you doing about it, and are we properly organized in this—in space for our warfighting domain?

Admiral HANEY. Chairman, yes, this is an important topic to me, as we have seen very disturbing trends in space from particular nation-states like China as well as Russia, who have been public about their counterspace endeavors and ambitions. We have seen direct-ascent, anti-satellite, kill vehicles launched just as most recently in last summer from China. Fortunately, this time it didn't hit anything, as it did in 2007, creating just thousands and thousands of pieces of debris, which we are still struggling with, but it shows this intent of their investments that they are not very transparent in sharing their intent with us.

Additionally, we see things that they have also put in orbit that also is of concern, as well as things on land that are also being used to threaten our assets, such as lasers, such as jamming capability and what have you that threatens communications, GPS [Global Positioning System].

With all that, you will find in this President's budget a plan to invest to provide us more capability for command and control. We must be able to get better at space situational awareness. There are some investments in that regard, and also space control. And these investments, including the ability to be more resilient with our capabilities in space, is what we aim to get to.

Mr. ROGERS. Great. Would you say that Russia—or I am asking. Is Russia, China, Pakistan, are they all building new nuclear weapons with new military capabilities?

Admiral HANEY. Yes, Chairman, they are.

Mr. ROGERS. Great.

Mr. McKeon, who is following the U.S. lead in terms of not building new nuclear weapons?

Mr. McKEON. Well, there are a lot of countries in the world who don't have nuclear weapons that are not seeking them, sir, but—

Mr. ROGERS. Anybody that does have them that is following our lead in not building more? You just heard me mention three.

Mr. McKEON. I did, but there is probably at least one. I am not sure of the answer to, and probably wouldn't want to say it here in this setting.

Mr. ROGERS. With that, I will yield to the ranking member for any questions he may have.

Mr. COOPER. Thank you, Mr. Chairman.

I am worried that the greatest risk to our nuclear defenses is not at the witness table, and they are fine organizations, but it is on this side, because it is my understanding, and I am glad that a number of our colleagues are here on both sides of the aisle, it is my understanding that the budget for this Congress will be marked up to sequestration levels.

And it is also my understanding that when we do our markup for the NDAA, that that will be at sequestration levels, which means, in plain English, when the admiral testified that the President's budget was sufficient, but probably barely, and anything below that is trouble, we will be marking up the NDAA at a level \$35 billion below the President's budget. That is just unacceptable.

And this committee has a great tradition of bipartisanship, people working together for strong defense for America. We have got to solve this problem. We really don't have a lot of time to do it. I don't want to upset, you know, leadership in either party, but this is the national defense we are talking about, and there has got to be an answer before we mark up, so that we don't mark up to artificially and cruelly and devastatingly inadequate numbers. So somehow or another, I think that has got to be the top priority for this subcommittee.

It is not our jurisdiction, it is really no one's jurisdiction; it is everyone's jurisdiction on the committee that cares about a strong national defense. So I am not blaming anyone, but this is a very curious situation. I cannot remember a markup environment like this

where we will be going in where we will be deliberately below the President's number.

So hopefully there will be a solution. I don't have one right now, but I feel great urgency in trying to help us and our colleagues try to find one. One way to do it would be to find pay-fors that are within our jurisdiction. It is easy to try to get another committee to pay for stuff, but that would be ruled out of order automatically, so we are going to have to find, you know, monies within our own jurisdiction. How do we do that? There are only a few areas to go to, and none of those are popular. So we have really got a lot of work to do just in the next month or two, otherwise, there is a big train wreck coming.

So I appreciate the witnesses being here. I look forward to questioning you in the closed session, but the real work has to be done by the folks on this side of the table, I think.

Thank you, Mr. Chairman.

Mr. ROGERS. Yeah. I want to associate myself with the ranking member's remarks. Marking up to the BCA levels is not a responsible thing to do, and I am going to do everything in my power to keep us from having to do that. And I also think that the President's number is much more responsible and the minimum that we should be thinking about.

With that, the chair now recognizes the gentleman from Louisiana, Mr. Fleming, for 5 minutes.

Dr. FLEMING. Thank you, Mr. Chairman. And I want to thank the panel. And it is great to see you again, General Haney.

You know, there has been talk over time over the last 6 or 7 years I have been in Congress that we go from a nuclear triad to a diad, and most recently that discussion came up in Senate testimony when retired Marine General James Mattis recommended to the Senate Armed Services Committee the notion that moving away from a triad of nuclear forces, that is, from ballistic missiles—excuse me—ballistic missiles, submarines, bombers and land-based ballistic missiles to a diad of submarines and bombers. And so I would love to get your perspective on that, Admiral?

Admiral HANEY. Congressman Fleming, thank you for the question. There have been—I know when we went through the Nuclear Posture Review in 2010 all the way through the Quadrennial Defense Review for 2014, a lot of work that is ongoing to continue to validate the need for the United States of America to have a triad, and I fully support that.

The responsiveness of our intercontinental ballistic missile force, the survivability nature of our submarines, and the flexibility of our bombers is exactly what we need our adversaries to have to contemplate if they decide they want to escalate their way out of a conflict. Thank you.

Dr. FLEMING. And so we want to make it as complex of an equation as possible. But did I call you "General"? I am sorry. Did I—he just put your name in front of me and I wasn't sure why. I apologize if I called you "General." I meant to say "Admiral Haney." Excuse me for that.

But in any event, we want to make it as difficult on our enemies as possible, do we not? We want to make it as complex of an equation, and at the same time, we need as—to a prior question and

discussion, we need to have the most modernized weapons systems and delivery systems as possible. Would you agree with that, Admiral?

Admiral HANEY. Congressman Fleming, yes, I would agree with it. Given the existential threat and the nature of the threat, very important for the United States.

Dr. FLEMING. Please describe the modernization and sustainment challenge of our current bomber fleet. What is your view of the President's request regarding the modernization programs, the new long-range strike family of systems, and how those timelines are being tackled for the fleet aging out and for when the new bomber comes online?

Admiral HANEY. Congressman, our air lag is supported today by the B-2 and the B-52 aircraft. The B-52, which was last off the assembly line in 1962, will be used out at least until the 2040 time period, so it is very important that we invest in a long-range bomber. We have also had multiple decades of utilization of our B-2 aircraft, and as a result, in order to have the strategic and conventional capability those platforms provide from a global strike nature and to our joint military forces, it is important that we re-capitalize and move forward as the Air Force is investing in the long-range bomber.

Dr. FLEMING. So even at this point where we are trying to get the long-range strike bomber up and going, in development and eventually on the assembly line, we are looking at current weapons system bombers that will be nearly a century old when they are retired, certainly 80, 90 years old, and they will be flown by great-grandsons and daughters, maybe even great-great-grandsons and daughters, when they are finally retired.

Admiral HANEY. That's correct, Congressman.

Dr. FLEMING. Yeah. Thank you.

I yield back.

Mr. ROGERS. Thank the gentleman.

The chair now recognizes the gentleman from California, Mr. Garamendi, for 5 minutes.

Mr. GARAMENDI. Thank you very much, gentlemen, for your service and for being here today, and Mr. Chairman, for calling the meeting.

I am going to follow up on the questions that Mr. Fleming raised and stay with it.

The purpose of the long-range bomber is precisely what, Admiral?

Admiral HANEY. Congressman, our long-range bomber today provides the flexibility to provide adequate capability to our joint military forces from the air, both conventional as well as strategic nuclear capability, as part of our nuclear strategic deterrent today.

Mr. GARAMENDI. So it would be designed to penetrate enemy airspace?

Admiral HANEY. The capability is designed to penetrate enemy airspace. Our B-2's in particular with their stealth capability and our B-52's with their long-range strike capability.

Mr. GARAMENDI. And the long-range standoff cruise missile, what is its purpose?

Admiral HANEY. Today we have the air-launched cruise missile that is capable to be carried on our B-52 aircraft. Its purpose is to provide that flexible option to our national security apparatus, the President, in order to allow another avenue in which, if we were in extreme circumstances, to be able to have that capability. It is also designed as a deterrent mechanism first and foremost such that any adversary that would want to challenge us would have to consider—

Mr. GARAMENDI. Excuse me.

Admiral HANEY [continuing]. That avenue.

Mr. GARAMENDI. I don't want to get mixed up. We have got the current missile and the new long-range standoff missile.

Admiral HANEY. That is—

Mr. GARAMENDI. I am not sure which one of the two you were speaking to? My—

Admiral HANEY. Well, the air-launched cruise missile is what we have today.

Mr. GARAMENDI. Right. Exactly.

Admiral HANEY. The air-launched missile will time-out here in between 2020 and 2030. It has been under various life extension programs and what have you there. The long-range strike option cruise missile is its replacement.

Mr. GARAMENDI. So it would also be air-launched?

Admiral HANEY. That is correct.

Mr. GARAMENDI. And its purpose is to penetrate enemy airspace and deliver nuclear weapons as well as conventional weapons?

Admiral HANEY. Nuclear weapons.

Mr. GARAMENDI. Nuclear weapons only, as is the current air-launched missile, correct?

Admiral HANEY. That is correct.

Mr. GARAMENDI. So do we need both the long-range bomber and the long-range strike missile to deliver a nuclear weapon?

Admiral HANEY. Congressman, the air-launched cruise missile that we currently have will expire, and we need a replacement for it, and that is why we need the air—the long-range strike option.

Mr. GARAMENDI. I understand that, you said it clearly, but my question goes to do we need a long-range bomber to deliver a nuclear weapon into enemy airspace as well as the new long-range missile? Do we need both—

Admiral HANEY. Yes.

Mr. GARAMENDI [continuing]. For that purpose of delivering a nuclear weapon?

Admiral HANEY. We need both.

Mr. GARAMENDI. In a classified hearing, I'd like to have an answer to three letters: Why?

Admiral HANEY. I would be happy to discuss it.

Mr. GARAMENDI. Thank you.

I yield back.

Mr. ROGERS. Thank the gentleman.

Chair now recognizes the gentleman from Colorado, Mr. Coffman, for 5 minutes.

Mr. COFFMAN. Thank you, Mr. Chairman.

I just want to continue the point a little bit about the next generation bomber. And, you know, given—again, given the advances

in precision-guided munitions and cruise missiles and other capabilities of striking targets, again, can you tell me why it is important to have a next generation manned bomber?

Admiral HANEY. Congressman, one, as our current capability is getting older and mature, we will need something to replace it for decades to come.

Second of all, our adversaries are getting more and more capability in anti-access and access denial kinds of capabilities, and I think it is important from a deterrence as well as from an offensive standpoint, being that these bombers are both strategic-capable, to be strategic-capable as well as conventional-capable to provide that kind of calculus that any adversary would have to think about in challenging our democratic values.

Mr. COFFMAN. Thank you, Mr. Chairman.

I yield back.

Mr. ROGERS. Thank the gentleman.

Chair now recognizes the gentleman from Washington State, Mr. Larsen, for 5 minutes.

Mr. LARSEN. Thank you, Mr. Chairman.

Admiral, I have got a September 22 letter that was to the committee regarding some issues with regards to costs of the capitalization of strategic arsenal, and it says in your letter, "our planned capitalization activities will require close to 10 percent of the DOD budget for a period of time, but the cost of losing a credible deterrent capability would likely be much greater, not only in dollars," and so on.

Ten percent of the DOD budget obviously over any period of time is a lot, because a lot of folks are asking for 10 percent of the DOD budget in the DOD. So the question I have is, how do you—how are you thinking about—how are we thinking about planning for that amount of money, for the planned recapitalization?

Admiral HANEY. Congressman Larsen, first I should state, you know, that was less than 10 percent, as you articulated. And as I look at some of the Congressional Budget Office work that is ongoing more specifically as it looks over a period of—in the 2020 to 2030s when we would have to recapitalize the bulk of our strategic forces, it's really in the order of 5 to 6 percent.

Mr. LARSEN. And what is it now?

Admiral HANEY. Today it is less than 3 percent, somewhere in the order of 2.6.

Mr. LARSEN. Sure. Okay. So it is a doubling?

Admiral HANEY. Thereabouts, yes, sir.

Mr. LARSEN. Yeah. Three to six. Two and a half to five is a doubling. And so the plan, then—you and I may not be here then, but how are we thinking about the competition for dollars in the DOD budget to achieve that?

Admiral HANEY. Well, the competition, I think, is what has to play itself out, quite frankly, as my recommendation to the Department, and I think it has been echoed through 2014 and then some, relative to the importance of our strategic nuclear capability, a time and place where others have modernized their capability that provide an existential threat to the United States of America.

So in order to maintain and sustain strategic stability, it is very important that we have that kind of balance. And when you look

at over time, even the 2.6 percent, that we are able to take technology that was designed and built for the most part in the 1960s and 1970s, and the life span we've been able to have on what we have today, everything from *Ohio*-class SSBNs [ballistic missile nuclear submarines], designed for 33 years, and we are getting 42 out of it. Quite frankly, the question really is, can we afford not to.

Mr. LARSEN. That is the question we have to ask for every budget item that comes to us, and we don't have the money for all that, so—can you—I don't know if it's Admiral or Mr. McKeon, if you can—which one is best to answer this. Recently at the NATO [North Atlantic Treaty Organization] parliamentary assembly a couple weeks back, they had a discussion about hybrid warfare, it is nothing new, but it is being talked about with relation to how Russia is approaching Ukraine and other areas. Part of that is cyber operations.

And I wanted to—I don't know which one to ask. What kind of investment are we making in cyber operations to sort of perhaps fill the gap that the West has or even the United States has to play on that playing field as opposed to the other activities that we are doing with overflights and such?

Mr. McKEON. In terms of cyber, Admiral Haney may be best placed to answer since the Cyber Command is a subcommand under his command.

Mr. LARSEN. Right.

Mr. McKEON. I can say we are investing a lot in cyber mission forces for cyber defense activities in the Department, and a total force of around 6,000 people we are projecting toward, but I don't know the dollar figure off the top of my head.

Admiral HANEY. Congressman Larsen, I will have to provide you that answer in writing. I don't have it on the top of my head. I know the investment in terms of the number of people that was already articulated.

[The information referred to can be found in the Appendix on page 67.]

Mr. LARSEN. Yeah. So when you do that, I would like the numbers of people and dollars is great, also the use, how it's perhaps either filling a gap or enhancing what we are already doing, especially as it's being coordinated with other elements of our ability to act?

Admiral HANEY. Congressman, we are building these cyber teams, cyber mission forces, cyber protection teams in order to, one, protect ourselves from cyber attacks. We are being probed on a daily basis by a variety of different actors.

Mr. LARSEN. The protection side is one thing. What about the other side?

Admiral HANEY. The other aspect of it, we are distributing these forces out to the various combatant commands so that they can be integrated into our overall joint military force capability.

Mr. LARSEN. Yeah. Thank you.

Thank you, Mr. Chairman.

Mr. ROGERS. I thank the gentleman.

Chair now recognizes the gentleman from Alabama, Mr. Brooks, for 5 minutes.

Mr. BROOKS. Thank you, Mr. Chairman.

Mr. McKeon and Admiral Haney, when you think about key emerging technologies of strategic importance, would you put conventional prompt global strike hypersonic on that list, and if so, where?

Mr. McKEON. I am not sure how I would rank it, sir. It's an important technology we are trying to develop, as you know.

Mr. BROOKS. Admiral.

Admiral HANEY. I would agree. I would not be prepared to rank it, other than to say it's important that we continue the R&D [research and development] efforts so we can understand it and then be able to provide it as a part of our arsenal.

Mr. BROOKS. When it comes to hypersonic technology and systems development, where would you say the United States is with regard to our allies and adversaries? Ahead, behind, about even? How would you characterize it, the progress we are making versus the progress some of our geopolitical foes are making?

Mr. McKEON. Congressman, I think we would have to get you a better answer in the IC's [Intelligence Community's] assessment of this. I am not sure I would say we were ahead, but I wouldn't say that we are significantly behind, but I am not schooled on the analysis on that.

Mr. BROOKS. Admiral.

Admiral HANEY. I would agree. And the only thing I would add is in 2013, we had a successful flight and we have had a lot of good indicators of where we are with the associated program.

Mr. BROOKS. Based on your knowledge of ongoing development activities of the last decade within the Air Force, DARPA [Defense Advanced Research Projects Agency], Navy and Army, how would you characterize the current state of conventional prompt global strike hypersonic development? Is it progressing as you would like to see? Should we put more funding into it, less funding into it, or about the same levels?

Mr. McKEON. Sir, as you know, in the last year, we've had an unsuccessful test of the program. I think—we've had some conversations about this recently in the Department. I was in a meeting with the deputy secretary and Mr. Kendall not too long ago where we talked about this, and the deputy was pressing us on essentially the question you just asked us, and I think we came to the conclusion we have it at about the right level right now in terms of the research and development.

Mr. BROOKS. Admiral, is there anything that you would like to add? Should we be pressing harder for development, or about the same pace, or slower?

Admiral HANEY. I right now think we are in a good spot in where we are right now in terms of our investments with conventional prompt global strike.

Mr. BROOKS. Thank you for your service.

Mr. Chairman, I yield back.

Mr. ROGERS. The chair now recognizes the gentleman from Arizona, Mr. Franks, for 5 minutes.

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

Thank you both for being here.



Admiral, thank you for your service to the country. Always appreciate your acumen and commitment, and glad it is on our side. My first question is for you, sir.

The budget for missile defense has been slashed by about \$7 billion as compared to projected levels from fiscal year 2009 and it continues on a fairly sharp downward slope, and this is in the face of a growing ballistic missile threat to the U.S. and our allies at a pace we really haven't seen before. So I guess the obvious question I ask you, sir, is are you concerned about this trend, and your best military advice, should that trend continue?

Admiral HANEY. Congressman, I think when you look at the whole, we have made some good—great strides of recent here relative to missile defense: one, the European Phased Adaptive Approach is on track with the phases we have there, the Ground-Based Interceptor [GBI] program, we have investments in the sensor discrimination kill vehicle, and those things, which I think are very important as we go forward to be able to get the missile defense program where we want it to be for not just now, but into the future.

Mr. FRANKS. Well, I certainly would applaud the way that the military has handled resources that they have had. My question was more in line with the budget. Do you think that the decreased budget for missile defense is wise from the military perspective?

Admiral HANEY. Congressman, from the military perspective and just looking at from my career to where I am now relative to the kinds of capabilities we have, I would like to see more confidence in our various systems, particularly for the kill vehicle performance. I know there is some work going on by Missile Defense Agency associated with that and investments associated with it as well.

So I couldn't come here and tell you I need another dime in this particular area. I think what we have in the President's budget is about the right balance.

Mr. FRANKS. So quickly, then, two points related to the phased adaptive approach. You know, leaving the last phase, now having cancelled that, where does that leave us in terms of any sort of redundant homeland protection from potential ICBMs [intercontinental ballistic missiles] in the future from a country like Iran?

Admiral HANEY. Well, the missile defense capability is a layered capability, includes the European Phased Adaptive Approach, our Aegis ships, our ground based indicators, our THAAD [Terminal High Altitude Area Defense] programs, et cetera, all in an integrated fashion, and ultimately I would say our offensive capability as a whole as a joint military force is part of that. So—

Mr. FRANKS. Admiral, my question was—my question, sir, was with the loss of that last phase, have we not eliminated redundant protection for the homeland of the United States as opposed to the original plan?

Admiral HANEY. Congressman, I believe with what we have today planned for missile defense is adequate in terms of our investment while we have research and development into other areas, as issue of homeland defense.

Mr. FRANKS. All right. Well, Mr. McKeon, I—thank you, sir. Why is it the policy of this administration not to keep pace with the threats, and they continue to reduce our ballistic missile defense

budget? It seems—you know, I understand the admiral has given some very good answers, but I am not sure we are really addressing the question I am asking, is, in the face of increasing ballistic missile threats, increasing missile threats, why is the budget falling to the extent that it is? Is this just a policy conclusion of the administration?

Mr. McKEON. Congressman Franks, I would say a couple of things. Some of the reductions that we have already taken over the course of the life of the administration, we are cancelling some development programs that had various risk and unacceptable costs and schedule problems. A few of these were cancelled by Secretary Gates in the first year, such as airborne laser.

Overall, we have a tough budget environment, which you gentlemen know very well, and missile defense has not been exempted from this. So we do occasionally have to make some tough choices. Priorities in the budget now are increasing the number of GBIs from 30 to 44, focusing on improving the kill vehicle and the long-range discrimination radar. We think we have the forces right now to deal with the current and projected threat.

Mr. FRANKS. Well, Mr. McKeon, I hope you are correct. One thing is certain: the original missile defense plan, the third site did give redundant protection of the homeland. It does not now, nor is it anticipated to do so in the future. And being the father of 6-year-old twins, I take that a little personally.

And with that, Mr. Chairman, I had yield back.

Mr. ROGERS. I thank the gentleman. The chair now recognizes the gentleman from Colorado, Mr. Lamborn, for 5 minutes.

Mr. LAMBORN. Thank you, Mr. Chairman, and thank you for having this hearing.

Admiral Haney, thank you for our earlier conversation and for being here and for your service. We earlier touched on, but I would like to explore in a little more detail, the fact that we are going to be purchasing weather information from China and Russia for weather over the Indian Ocean, including some CENTCOM [U.S. Central Command] areas like Afghanistan. Do you have any concerns about purchasing potentially sensitive information that would go to our warfighters from China or Russia?

Admiral HANEY. Congressman, thank you for that question. As we look to the future, I have concerns that we have enough diversity in our capability so that we are not dependent on one particular country that may not be there to support us in the future, and I think we have to be very careful with that. So I'm supportive of the efforts that are ongoing now, particularly in the weather, which we depend upon, all the combatant commanders depend upon for our maneuverability and capabilities. And I know there is some work ongoing here relative to U.S. weather satellite capability.

Mr. LAMBORN. Do you know what the dollar amount is that DOD is asking for in the President's budget for that purchase?

Admiral HANEY. I do not. I will have to—I am not sure if you are aware.

Mr. LAMBORN. Mr. McKeon, would you happen to know that?

Mr. McKEON. Sir, I don't know the dollar figure. The defense meteorological satellite program, the last satellite is funded and it's

expected to launch, I believe next year, and it is fully funded and I don't think we have any problems with it. Well, there may be some final numbers in the 2016 budget, so I have to confirm that with you.

There is a follow-on program we are working on, it's not a program of record yet, that would come online in the early 2020s, so we don't expect there to be a gap. I am not familiar with anybody planning to depend on the Chinese or Russians.

Mr. LAMBORN. Okay. Well, we will have to dig a little further into that. Maybe I could follow up with a question for the record?

Mr. McKEON. Certainly.

Mr. LAMBORN. And lastly, Admiral Haney, we talked some about New START Treaty, and I have real concerns about it. I think it has many flaws, one of which is the fact that Russian tactical nuclear weapons were not included in the treaty at all. What concerns do you have about tactical capabilities in the nuclear weapon field for Russia?

Admiral HANEY. Well, I have concerns that Russia has a number of non-strategic nuclear weapons in their arsenal and they also have modernization programs associated with them, as well as I am concerned about their violation of the INF [Intermediate-Range Nuclear Forces] treaty with a ground-launched cruise missile system that they have been testing.

Mr. LAMBORN. And I guess I do have a follow-up.

I was just given some information, Mr. McKeon, and I will just read a key takeaway that the Air Force supplied this committee. DOD currently does not rely on non-allied international sources for environmental data, but may be required to do so as early as 2017 due to EUMETSAT [European Organization for the Exploitation of Meteorological Satellites], E-U-M-E-T-S-A-T's recent decision not to replace Meteosat-7.

Mr. McKEON. Congressman Lamborn, I am not an expert on space, I will be the first to admit it. We have a very capable DASD [Deputy Assistant Secretary of Defense] for space. I spoke to him about this issue in the last couple of days in anticipation of questions in this area. I have conveyed what he has conveyed to you. So we will double-check whatever briefing from the Air Force that you have and circle back.

[The information referred to can be found in the Appendix on page 67.]

Mr. LAMBORN. Okay. Thank you, Mr. Chairman.

I yield back.

Mr. ROGERS. I thank the gentleman.

What we want to do now is go ahead and recess and go into the classified portion of the hearing at this time. They are saying we are going to be called for votes around 2:30, but our cloakroom has proved not to be very good at predicting those things, so I don't want to keep you all waiting around here if we can avoid it.

So we are now standing in recess to move into a classified setting.

[Whereupon, at 2:17 p.m., the subcommittee proceeded in classified session.]



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# **A P P E N D I X**

FEBRUARY 26, 2015

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**PREPARED STATEMENTS SUBMITTED FOR THE RECORD**

FEBRUARY 26, 2015

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**Statement of Chairman Mike Rogers, Subcommittee on Strategic Forces**

*As prepared for delivery (26 Feb 2015)*

I call this hearing of the Strategic Forces Subcommittee to order.

This is our first hearing of the 114<sup>th</sup> Congress, and I would like to welcome back our returning members, especially the distinguished gentleman from Tennessee, Mr. Jim Cooper.

I look forward to another Congress working with you to solve some of the most technically demanding, and most important, issues that the Armed Services Committee has to handle.

I welcome our new Members here today as well.

I won't go name-by-name, but, I look forward to working with each of you.

We have some important issues to address this year.

We have a budget request from the President that in some ways is among the best we've seen since he came into office.

But, the President requests, and the Congress makes the decisions.

And to make the best decisions possible, we need to hear from the best minds available.

And we certainly have that today.

I am pleased to kick off our N-D-A-A process for Fiscal Year 2016 with two witnesses who have responsibilities for each of the key facets of the Strategic Forces Subcommittee's jurisdiction: missile defense, national security space, nuclear weapons programs, and nuclear nonproliferation and cooperative threat reduction activities.

To help us understand the policies and programs this subcommittee oversees and how they relate to the Fiscal Year 2016 authorization bill, we have:

The Honorable Brian P. McKeon  
Principal Deputy Under Secretary of Defense for Policy  
Department of Defense

Admiral Cecil D. Haney, USN  
Commander  
United States Strategic Command

Admiral, you are much in demand by this subcommittee.

I appreciate your lifetime of service to this country and your willingness to, time-after-time, respond to our invitations to appear for hearings and briefings.

Mr. McKeon, I know how very pleased you are to be here today and I know you look forward to reviewing the transcript.

I remind my colleagues that at the conclusion of this open hearing, we will adjourn to a classified discussion in a different room.

I would also like to make sure that all of the Members are aware that we will have next Tuesday a classified session on next-generation missile defense technology and capability.

I have just one comment to make before I turn to Mr. Cooper – who, like me, would much rather listen to our witnesses than hear himself speak (it must be a Southern thing): I'm not sure I've ever seen a time when the world has been as unsettled as it is today.

So, I do not believe the world can afford, nor can our own security allow, U.S. power to continue to recede.

If you think ISIL is a threat, I agree with you.

If you think Vladimir Putin is set on recreating a Soviet-like sphere of influence, regardless of what these sovereign neighboring countries want for themselves, I think you're right.

If you watch China literally create islands in the middle of other countries' territorial waters in the South China Sea and ask: "do they feel constrained by anything"? I would tell you I think the answer is no.

So, the question becomes, what are we going to do about it?

Are we going to provide LESS funding for the Department of Defense than the President requested, which has already sustained literally hundreds of billions of dollars of cuts?

I do not believe that is an option that we as a Congress can seriously consider.

I hope the witnesses will make very clear today what they see as the impacts of a return to sequestration in fiscal year 2016, or a budget that funds only to the Budget Control Act caps.

With that, I yield for a statement to Mr Cooper, a man who would probably smile more if only he had a better college football team at home.

HEARING ON FY16 BUDGET REQUEST FOR STRATEGIC FORCES  
OPENING STATEMENT  
February 26, 2015

RANKING MEMBER COOPER

I join Chairman Rogers in welcoming Admiral Haney and Mr. McKeon to this hearing.

I would like to make a few brief points.

First and foremost, I continue to be extremely concerned about the impacts of sequestration. This congressionally-mandated stranglehold on the executive agencies, and particularly on DOD, undermines our national security. It continues to be a self-imposed risk we should not bear and that Congress should fix.

Second, we must adequately fund the nuclear deterrent and I support the increased investments to ensure a strong nuclear deterrent. We cannot short-change the nuclear arsenal. Lack of funding and competent management leading for example to having a broken launch control center door for years and FedExing a wrench across ICBM bases is incomprehensible. As important, we need a clear understanding of what the costs are and how DOD plans to fund and manage expensive concurrent sustainment and recapitalization efforts over the next few decades.

Third, funding is not the only issue. There are clear leadership and culture problems. 91 officers were involved in test-cheating, several were investigated on drug charges, one of the officers was recently even found guilty of being a gang leader, women on a nuclear weapons submarine were illegally being filmed in the shower, a STRATCOM Deputy Commander spent 30 hours a week gambling and using fake poker chips, and a general officer in charge of our ICBMs exhibited erratic and drunken behavior during a trip to Moscow. Several of these mishaps were revealed in the press as Congress was assured for months that these were isolated incidents that had been effectively addressed. We've had a DOD internal and independent study and assessment at the direction of the former Secretary of Defense. Can you guarantee that this lack of leadership and deficient culture will not continue? The credibility of the deterrent depends on addressing the fundamental issues of accountability, responsibility and culture within the nuclear enterprise.

Let us be partners in solving these issues. Thank you for your testimony and sharing your insights.

STATEMENT OF  
BRIAN P. MCKEON  
PRINCIPAL DEPUTY  
UNDERSECRETARY OF DEFENSE FOR POLICY

BEFORE THE HOUSE  
ARMED SERVICES  
SUBCOMMITTEE ON STRATEGIC FORCES  
FEBRUARY 26, 2015

Chairman Rogers, Ranking Member Cooper, members of the Subcommittee, thank you for the opportunity to testify on the Fiscal Year 2016 Budget Request for Strategic Forces. I am grateful for your consistent attention to and continuing support of the critical mission of nuclear deterrence and nonproliferation.

#### **SUPPORTING POLICY OBJECTIVES**

In his April 2009 speech in Prague, President Obama highlighted 21<sup>st</sup> century nuclear dangers, declaring that to overcome these grave and growing threats, the United States will “seek the peace and security of a world without nuclear weapons.” While we work toward that goal, which he acknowledged would not be reached quickly, he pledged that as long as nuclear weapons exist, the United States will maintain a safe, secure, and effective nuclear arsenal, both to deter potential adversaries and to assure U.S. allies and other security partners that they can count on America’s security commitments.

In his confirmation proceedings, Secretary of Defense Carter affirmed the view that the nuclear deterrent remains our highest priority mission. As such, U.S. nuclear weapons policy and strategy are an important element of the President’s FY 2016 Budget Request. The budget request focuses on maintaining stable and robust deterrence in a time of geopolitical uncertainty, while managing the transition from our current nuclear force to a modernized nuclear force via life extension programs (LEPs) for the warheads, replacing aging delivery systems, and enhancements to sustainment and operations of the current force. It includes the funding necessary to address the findings of last year’s Nuclear Enterprise Reviews.

To sustain a safe, secure, and effective nuclear deterrent, we must both maintain and modernize our nuclear forces and their command and control systems. The scope of this work

necessitates continuing focus, through FY 2016 and beyond. In addition to providing for our own defense, U.S. nuclear capabilities strengthen regional deterrence and assure our allies and partners. Maintaining credible extended deterrence and assurance is necessary to honor our alliance commitments, and support our nuclear nonproliferation objectives. As members of this Subcommittee well understand, the Strategic Forces mission extends beyond U.S. nuclear forces. It also involves protecting and defending our access to and use of space and cyberspace.

#### **NUCLEAR ENTERPRISE REVIEWS**

Last November and December, we briefed the Committee and your staff on the results of the two reviews ordered by Secretary Hagel of the DoD Nuclear Enterprise. As we said then, the Department has undertaken a serious and vigorous response to the findings of these reviews. Senior leaders are being held accountable for addressing issues identified in the reviews, and the Department is working to create an enduring system of continuous self-evaluation, honest reporting of problems up the chain of command, and detailed monitoring of corrective actions and their effectiveness in fixing the problems identified.

The President's budget request allocates significant resources to implement recommended changes to ensure the safety, security, and effectiveness of the force. But not all of the recommendations involve funding. The recommendations fall in several key areas: additional oversight to clarify the nuclear deterrent leadership structure and reduce administrative burdens imposed on the forces; increased investment in the nuclear deterrent enterprise to improve and sustain current equipment and infrastructure, and increased personnel and training; and improvements in the way we conduct inspections, assure the reliability of our nuclear personnel, and provide for security of our nuclear weapons.

Last year, then-Secretary Hagel created the Nuclear Deterrent Enterprise Review Group (NDERG) to reinforce senior leader accountability and integrate all the elements of the nuclear force into a coherent enterprise. He asked Deputy Secretary Work to lead this effort and provide regular updates on the Department's actions and progress in improving the health of our nuclear forces. In his final weeks in the Pentagon, then-Secretary Hagel convened the group one last time during his tenure to remind everyone of the critical importance of this effort.

Secretary Carter shares Secretary Hagel's commitment to holding accountable the leaders of DoD's nuclear mission, and to ensuring real near-term improvements in nuclear force sustainment and morale. With sustained Congressional support and continued commitment from the highest levels of the Department – to include the leadership of the services – I believe that our plan for addressing issues identified in the Nuclear Enterprise Reviews will succeed.

#### **STABLE AND ROBUST DETERRENCE**

The President has opted for a nuclear sustainment and modernization plan that is consistent with his commitment to retain a safe, secure, and effective deterrent for as long as nuclear weapons exist. This plan focuses on modernizing the platforms, delivery systems, and weapons of our current Triad to preserve military capabilities in the face of evolving threats. Our plan is consistent with the Administration's policy objective of reducing the role of nuclear weapons in U.S. defense strategy. It is not, as some have claimed, a nuclear weapons buildup. On the contrary, the number of nuclear weapons in the United States is the smallest it has been since the Eisenhower Administration. The number of deployed strategic weapons will continue to decrease as we approach February 2018, when we must begin to adhere to the central limits of the New START Treaty. Furthermore, our approach to warhead sustainment and modernization



favors advancements that will continue to enable additional reductions in the non-deployed hedge force.

The effort to modernize our delivery systems and extend the life of our warheads across the Triad and our non-strategic nuclear force will require significant resources over the next decade and beyond. But as I noted at the outset, the nuclear mission is the highest priority mission in the Department of Defense and we must prioritize it accordingly.

#### **SUSTAINING THE CURRENT FORCE**

The President's FY 2016 Budget Request funds sustainment efforts that are needed to maintain the health of our nuclear forces. Let me provide a few examples:

The Air Force recently completed several modernization programs that will sustain the Inter-continental ballistic missile (ICBM) force through the mid-2020s. In order to sustain Minuteman III through 2030, the Air Force will need to address additional age-related concerns.

The ICBM Fuze Replacement Program is a joint Air Force and Navy effort that is leveraging commonality to increase efficiency and reduce costs. It will help sustain re-entry systems flown by the Minuteman III ICBM and the Trident II D5 submarine-launched ballistic missile (SLBM), and is representative of a larger effort, encapsulated in the long-term 3+2 strategy, to leverage potential compatibility and commonality of SLBM and ICBM warheads and components.

The FY 2016 budget funds continued and expanded work on sustaining our SLBM warheads. The W76-1 SLBM Warhead LEP is well underway, with production now past the halfway mark and on track to be completed in FY 2019. The President's budget funds an

expanded work scope for the W88 Alteration (ALT) 370, to include needed replacement of the warhead's conventional high explosive. After considering a range of alternatives, the Nuclear Weapons Council determined to accommodate the increase in program costs primarily by reducing surveillance on some legacy warhead systems.

The Navy is conducting a Trident II D5 missile LEP to sustain it through at least 2042 in order to support the extended life of the OHIO-class submarine. This program will also allow the Trident II D5 to be deployed on OHIO Replacement SSBNs.

The Air Force continues to modernize its nuclear-capable bomber fleet to extend the life of the B-52 and B-2 aircraft.

The FY 2016 budget request funds procurement of the remaining ALCM Service Life Extension Program kits, and takes other actions needed to maintain and assess that important system's effectiveness.

### **3+2 STRATEGY**

The 3+2 strategy remains the Administration's long-term approach to maintaining an effective nuclear Triad at reduced force levels and reduced cost. A total of five nuclear warhead types—three interoperable warheads for ballistic missiles, plus one gravity bomb and one cruise missile warhead—will replace the 11 in the current stockpile. This modernization and consolidation of warhead types will allow for more efficient hedging and additional reductions in the stockpile without reducing the military capabilities we require. In addition, fewer warhead types will result in cost savings associated with reduced warhead transportation, surveillance, and certification.

**MODERNIZING U.S. NUCLEAR FORCES**

The Air Force has conducted a Ground-Based Strategic Deterrent (GBSD) Analysis of Alternatives (AoA) to study the full range of concepts to recapitalize the land-based leg of the Triad beyond the extended service life of the Minuteman III missile. The FY 2016 budget continues to fund this preparatory work. DoD is reviewing GBSD acquisition planning and options for reducing programmatic risk.

The OHIO Replacement Program, and supporting systems, requires adequate resources, of particular concern beyond the Future Years Defense Program (FYDP), and a stable, predictable funding profile to ensure an on-time construction start in FY 2021 and to meet the deterrence patrol need date of FY 2031. The OHIO Replacement Program submarines will have a service life that will enable patrols into the 2080s. This new class of submarines will remain survivable even as adversary anti-submarine warfare technology advances and proliferates. I want to underscore, however, that we are stretching the current OHIO class submarines to the limit, and there is no margin left in the schedule. Simply put, we cannot let the OHIO Replacement Program system slip any further.

The Long Range Strike Bomber (LRS-B) is one of the Air Force's top three acquisition priorities and is currently in the development phase. The Air Force's FY 2016 budget request includes funding to continue the development of an affordable, long range, penetrating aircraft that incorporates proven technologies. The F-35 is another of the Air Force's top three acquisition priorities. Like the LRS-B, the F-35 program will deliver capability that is needed for both the conventional and non-strategic nuclear missions. The FY 2016 budget includes

funding for Block 4 of the F-35 program, in addition to research and development funds for a non-strategic nuclear capability for the aircraft.

The B61-12 LEP is an important early step towards implementing the 3+2 strategy. Four existing strategic and tactical variants of the B61 gravity bomb will be replaced with a single weapon design. In addition, the megaton-class B83 strategic gravity bomb will be retired from the stockpile once confidence in the B61-12 is attained. Along with fewer weapon types, the end result will be significantly fewer weapons and lower net explosive yield in the stockpile.

The Long-Range Stand-Off (LRSO) cruise missile will replace the Air Launched Cruise Missile (ALCM) as the United States' only air-launched, long-range standoff nuclear capability. Sustaining an effective deterrent against nuclear attack depends on preserving such credible response capabilities, including the ability to overcome evolving adversary defenses. LRSO will also provide a rapid and flexible hedge against changes in the strategic environment and limitations of the other two legs of the Triad.

A Life Extension Program for the ALCM's W80 warhead will allow for its use in the LRSO. LRSO will be compatible with legacy B-2 and B-52 aircraft, as well as the future Long-Range Strike Bomber (LRS-B). As you know, last year, we proposed a three- year delay in funding of the LRSO, due to funding constraints affecting both the Department of Defense and Department of Energy. This year, we are partially reversing the decision and moving the schedule forward by two years.

The FY 2016 budget funds multiple NC3 upgrades. The Department continues to prioritize resources to address known capability gaps while incrementally building toward a fully

modern NC3 architecture that will ensure timely decision-making, and cybersecure, support for the President.

#### **MISSILE DEFENSE**

The FY 2016 President's Budget funds the development and deployment of robust ballistic missile defense (BMD) capabilities to protect the U.S. homeland, deployed forces, allies, and partners.

For homeland defense, the budget request maintains our commitment to increase the number of deployed Ground-Based Interceptors (GBI) to 44 by FY 2017; continue development of the Redesignated Kill Vehicle (RKV); and proceed with the development of the Long-Range Discrimination Radar (LRDR). When combined with the planned GBI reliability and system engineering improvements, these actions will enable the homeland missile defense system to deal effectively with the maturing ICBM threat from North Korea and a potential ICBM threat from Iran.

The FY 2016 President's Budget also reflects the Department's commitment to building regional missile defenses that are interoperable with systems deployed by international partners.

The Department continues to support the European Phased Adaptive Approach (EPAA), which is designed to protect U.S. deployed forces and allies in Europe from ballistic missile attacks from the Middle East. We are on schedule to complete the construction of the Aegis Ashore site in Romania by the end of this year. The budget request also supports the implementation of Phase 3 of the EPAA, to include the deployment of Aegis Ashore to Poland in the FY 2018 timeframe.

**NATIONAL SECURITY SPACE**

As the 2014 Quadrennial Defense Review notes, “military operations depend on freedom of access in space, making security in this domain vital to our ability to project power and win decisively in conflict.” As the Director of National Intelligence has noted, adversaries are moving aggressively to deny these advantages to the United States. To address these concerns, the Department conducted a portfolio-wide review of our space systems focusing on how we assure U.S. space capabilities in light of these future threats. The result was a significant adjustment in our FY 2016 space portfolio.

In accordance with the Review's findings and recommendations, FY 2016 investments aim first and foremost to improve the resilience and mission assurance of U.S. space assets. These changes are reflected in several key program initiatives that increase funding for current and new space initiatives and the continuation of future follow-on systems to support the warfighter and achieve assured space objectives. Some specific strategic initiatives to this end include assuring access to space through the development of domestically-sourced space launch services; upgrading space situational awareness (SSA) and space control capabilities to better identify, characterize, and address threats in the space environment; and enhancing the Global Positioning System (GPS) architecture. These adjustments amount to a new investments of over \$5 billion across the portfolio over the FYDP.

**NONPROLIFERATION**

As the new National Security Strategy says, “No threat poses as grave a danger to our security and well-being as the potential use of nuclear weapons and materials by irresponsible states or terrorists... Vigilance is required to stop countries and non-state actors from developing

or acquiring nuclear, chemical, or biological weapons, or the materials to build them.” Weapons of Mass Destruction (WMD) proliferation risks are more difficult to mitigate than ever before. Our increasingly interconnected world makes WMD-related knowledge and technology more readily available to those seeking to do harm to the United States and our interests abroad.

The Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention, and the Biological Weapons Convention (BWC) are key elements of the international nonproliferation architecture. DoD will continue to work with the Department of State to support and strengthen these regimes.

DoD’s Cooperative Threat Reduction (CTR) Program is the most comprehensive tool to prevent WMD risks from becoming concrete threats against the Homeland. The CTR Program has a decades-long track record of working with foreign partners to destroy existing WMD, most recently leading the successful efforts to eliminate Syrian and Libyan chemical weapons. Our mission for the CTR Program in FY 2016 will continue efforts to make dangerous nuclear, chemical, and biological materials more difficult for bad actors to acquire; and to enable foreign partners to detect, interdict, analyze, and safely eliminate nuclear, chemical, and biological threats on their own soil.

#### **MEETING TODAY’S CHALLENGES AND EMERGING THREATS**

Together with our Allies and partners, we face a number of challenges, both persistent and evolving. These include preventing the emergence of a nuclear-armed Iran, containing the threat of a belligerent North Korea, maintaining strategic stability with China as well as Russia, and maintaining the strength and credibility of U.S. extended deterrence and assurance in NATO and Asia.

Russia's recent behavior currently poses one of our most pressing and evolving strategic challenges – challenges felt across the strategic forces mission space. We are confronted with Russia's occupation of Crimea, continuing Russian aggression in eastern Ukraine, Russia's increasingly aggressive nuclear posturing and threats, including the prospect of nuclear weapons in Crimea, and its violation of the Intermediate-Range Nuclear Forces (INF) Treaty.

The Administration's response to Russia's actions must be integrated across all instruments of national power, including diplomatic, economic, and military. Our strategy must serve and be guided by the vital interests of the United States and our allies.

We need not respond symmetrically to every Russian provocation. In particular, there is currently no need to expand the role for U.S. nuclear weapons, or to change our nuclear posture. Our modernization plan was specifically designed to hedge against geopolitical risk, including increasing strategic competition with Russia. It does so by sustaining a full Triad that offers a range of capabilities that underwrite strategic stability and serve to convince Russia and other potential adversaries that they cannot escalate their way out of a failed conventional aggression.

We do not want to find ourselves engaged in an escalatory action/reaction cycle as a result of Russia's violation of the INF Treaty. We will continue to press Russia to return to compliance with the Treaty, while at the same time preparing responses to prevent Russia from gaining a significant military advantage from its violation and to protect the security interests of the United States and our allies. We will continue to work together with Russia on implementing the New START Treaty, while remaining vigilant with respect to ongoing treaty verification activities.



**CONCLUSION**

The President's FY 2016 Budget Request supports our nuclear, nonproliferation, and space strategies for defending U.S. vital interests. It increases funding for sustaining and modernizing our nuclear forces to ensure a safe, secure, and effective deterrent for as long as nuclear weapons exist. Those same capabilities that provide for our defense also extend deterrence to, and assure, U.S. allies and partners, contributing in turn to our nonproliferation policy objectives. Sustaining stable and robust nuclear deterrence allows a steady approach to the persistent and evolving strategic challenges we face today and will face in the years to come. We request the Committee's support for this budget.

Thank you for the opportunity to appear before you today. I look forward to your questions.



**Brian P. McKeon**

**Principal Deputy Under Secretary of Defense for Policy**



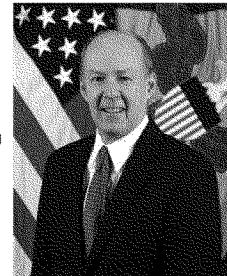
Brian P. McKeon was confirmed as the Principal Deputy Under Secretary of Defense for Policy on July 28, 2014. He is responsible for advising the Under Secretary of Defense for Policy and the Secretary of Defense on all matters pertaining to the development and execution of U.S. national defense policy and strategy.

Previously, Mr. McKeon served as Deputy Assistant to the President, Executive Secretary of the National Security Council (NSC), and Chief of Staff for the National Security Council staff at the White House, a position he held from 2012-2014. In this position, he was the Chief Operating Officer for two National Security Advisers, managing all administrative, budget, and personnel matters for the NSC staff. Prior to joining the NSC staff, Mr. McKeon served as the Deputy National Security Advisor to the Vice President from 2009 to 2012, where he advised Vice President Biden on all national and homeland security matters.

Before serving in the Executive Branch, Mr. McKeon was Chief Counsel for the Democratic members of Senate Foreign Relations Committee from 1997 to 2009; he served concurrently as Deputy Staff Director from 2007 to 2009. In addition to helping to manage the Committee's agenda and staff, he played a lead role on nominations, treaties, the management and operations of the Department of State, and was deeply involved in a broad range of regional and functional issues.

Mr. McKeon served as a law clerk to U.S. District Judge Robert G. Doumar of the Eastern District of Virginia in 1995 to 1996. Earlier in his career, he worked for Senator Joseph R. Biden, Jr. in various capacities from 1985 to 1995, including seven years as a Legislative Assistant for Foreign Policy and Defense.

Mr. McKeon received a B.A. in Government and International Studies from the University of Notre Dame and a J.D. from the Georgetown University Law Center.



HOUSE COMMITTEE ON ARMED SERVICES  
SUBCOMMITTEE ON STRATEGIC FORCES

STATEMENT OF  
ADMIRAL C. D. HANEY  
COMMANDER  
UNITED STATES STRATEGIC COMMAND  
BEFORE THE  
HOUSE COMMITTEE ON ARMED SERVICES  
SUBCOMMITTEE ON STRATEGIC FORCES  
26 FEBRUARY 2015

HOUSE COMMITTEE ON ARMED SERVICES  
SUBCOMMITTEE ON STRATEGIC FORCES

**INTRODUCTION**

Mr. Chairman and distinguished members of the committee, I am honored to join you today. I appreciate the opportunity to testify about the posture of United States strategic forces, my assessment of the President's Fiscal Year 16 (FY16) Budget, and how United States Strategic Command (USSTRATCOM) is confronting today's complex global security environment. I am also pleased to be here with Principal Deputy Under Secretary of Defense for Policy Brian McKeon. I thank Congress and this committee for your support to our Nation's defense.

I am pleased to report that USSTRATCOM remains capable and ready to meet our assigned missions and that the Nation's strategic nuclear deterrent force remains safe, secure, and effective. USSTRATCOM is focused on deterring strategic attack and providing assurance to our allies while providing combat support to our Joint Military Forces and other Combatant Commands across the spectrum of their operations to support national security and strategic stability. While executing our global responsibilities, we made progress toward forging enduring partnerships with agencies and organizations across the U.S. government, commercial industry, and Allied nations. We took part in a number of vigorous exercises and thought-provoking wargames, and we participated in and conducted penetrating reviews of our nuclear enterprise.

Having traveled extensively to meet first-hand the men and women who carry out and support our strategic missions, I can personally attest to the talent, dedication and professionalism of the military and civilian personnel conducting these missions. Without doubt, our success to date is largely due to those who dedicate themselves to national security in spite of uncertainty and resource challenges. I want to publicly acknowledge their service and devotion to duty and country.

Today's complex and dangerous global security environment demands that we properly sustain and modernize our strategic capabilities. The President's FY16 Budget strikes a

responsible balance between national priorities and fiscal realities, and begins to reduce some of the risk we have accumulated because of deferred maintenance and sustainment as we pursue modernization. This budget supports my mission requirements, but I remain concerned that if we do not receive relief from the Budget Control Act, we will experience significant risk in providing the U.S. with the strategic capabilities it needs. We cannot as a Nation afford to underfund these vital missions.

#### **GLOBAL SECURITY ENVIRONMENT**

The world today remains complex, dynamic, and uncertain. The military capabilities of nation states and non-state actors are improving across all domains. Nations around the world continue to execute long-term military modernization programs, including capabilities that pose an existential threat to the United States. Additionally, non-state actors show increasing ability to strategically impact worldwide stability and the security of the U.S. and our key allies. Nuclear weapon ambitions and nuclear, chemical and biological technologies proliferation continue, increasing the risk that others will resort to Weapons of Mass Destruction (WMD) coercion in regional crises or WMD use in future conflicts.

Russia took a number of troubling actions in 2014: intrusions into Ukraine, to include the attempted annexation of Crimea, violation of the Intermediate-range Nuclear Forces Treaty, long-range bomber flights penetrating U.S. and Allied defensive zones, and strategic force exercises conducted in the midst of the Ukraine crisis. Russia has pursued more than a decade of investments and modernization across their strategic nuclear forces. Russia also has significant cyber capability, as evidenced by events in Estonia, Georgia and Ukraine. Russia has also publicly stated they are developing non-nuclear precision-strike, cyber and counter-space

capabilities, and Russian leaders openly maintain that they possess anti-satellite weapons and conduct anti-satellite research.

China is increasingly using low intensity coercion to advance its near abroad agenda with respect to sovereignty disputes. Combined with an overall lack of military transparency, its investment in capabilities such as counterspace technologies raises questions about China's global aspirations. According to the International Monetary Fund, China's gross purchasing power recently exceeded our own for the first time. China is using that wealth to modernize its strategic forces by enhancing existing silo-based ICBMs, conducting flight tests of a new mobile missile, and developing a follow-on mobile system capable of carrying multiple warheads. Strategic modernization extends to naval capabilities as China continues testing and integration of new ballistic missile submarines, their first sea-based strategic nuclear deterrent. China is also developing multi-dimensional space capabilities supporting their access-denial campaign. With more than 60 nations operating satellites in space, China needs to be more forthcoming about missile tests that appear to be more focused on the development of destructive space weapons. China has also made headlines associated with exploitation of computer networks.

Other states such as North Korea, Iran, and Pakistan are working to advance their strategic capabilities. North Korea in particular continues work to advance their nuclear ambitions, to include conducting multiple nuclear tests and claiming a miniaturized warhead capable of delivery by ballistic missile. At the same time, North Korea continues to advance its ballistic missile capability, including the development of a new road-mobile ballistic missile and a submarine-launched ballistic missile; and develop its offensive cyber capabilities.

We remain concerned about Iran's nuclear activities and as a government remain dedicated to preventing them from acquiring a nuclear weapon. I remain hopeful that the P5-

plus-1 negotiations will have the desired effect. Like North Korea, there are also public examples of Iran's cyber activities and capabilities.

Ungoverned or ineffectively governed regions remain incubators for those who seek to attack targets in—and the values of—democratic societies across the globe. Terrorist threats continue to morph in both substance and style, and Violent Extremist Organizations (VEOs) recruit and operate freely across political and social boundaries. While natural biological threats such as Ebola challenge our capacity to contain and control them, WMD in the hands of unrestrained VEOs could prove catastrophic. Such a scenario highlights the importance of our countering WMD and our non-proliferation efforts. Finally, the Assad regime continues to engage in low-level tactical use of toxic industrial chemicals as weapons in Syria, while failing to fully address the omissions and discrepancies in its chemical weapons declaration to the Organization for the Prohibition of Chemical Weapons.

Space systems continue to enable a wide range of services, providing vital national, military, civil, scientific, and economic benefits to the global community. As the number of space-faring nations and commercial enterprises continue to grow, the space domain is becoming increasingly congested, contested, and competitive. Given the counter space initiatives by Russia, China, and others, we must continue to reinforce the peaceful use of space while ensuring continued space operations through partnerships and resiliency.

Our dependence on cyberspace and the electromagnetic spectrum (EMS) creates risk. The worldwide cyber threat continues to grow, with state and non-state actors targeting U.S. networks on a daily basis. Today, a small number of cyber actors have the potential to create large-scale damage. While most cyber threats can be characterized as criminal in nature, wide-ranging intrusions and attacks have threatened critical infrastructure and impacted commercial

enterprise. Likewise, our use of the EMS has become so commonplace that we largely take spectrum access for granted. The global proliferation of once-restricted technologies allows adversaries and potential adversaries to directly challenge our freedom of maneuver and our ability to operate in the EMS and in cyberspace.

Finally, uncertainty continues to manifest in other ways such as social unrest and turmoil, regional competition for scarce resources and economic opportunities, naturally occurring phenomena such as climate change and disease, and rapid proliferation of empowering technologies. Additionally, the concept of mating advanced weapon systems with commonplace items—such as surface-to-surface cruise missiles disguised as shipping containers—blurs the line between military and civilian environments and complicates our deterrence calculus.

#### **USSTRATCOM IN THE 21<sup>ST</sup> CENTURY**

USSTRATCOM counters these diverse and complex threats through the execution of its fundamental mission: **to deter and detect strategic attacks against the U.S. and our allies, and to defeat those attacks if deterrence fails.** USSTRATCOM is assigned nine distinct responsibilities: **Strategic Deterrence; Space Operations; Cyberspace Operations; Global Strike; Joint Electronic Warfare; Missile Defense; Intelligence, Surveillance and Reconnaissance; Countering Weapons of Mass Destruction; and Analysis and Targeting.** These diverse assignments are strategic in nature, global in scope, and intertwined with Joint Force capabilities, the interagency and the whole of government. **Each mission supports or is interconnected with the others, and their combined capabilities create the conditions for strategic deterrence against a variety of threats.**

Deterrence is a fundamentally human endeavor, firmly rooted in psychology and social behavior. At the most basic level, deterrence is achieved through one of two mechanisms. The



first is an aggressor's recognition that unacceptable costs may be imposed for taking an action and recognition that forgoing said action may avoid these costs. The second is an aggressor's belief that the contemplated action will not produce its perceived benefit, or that not acting will produce a greater perceived benefit. These elements combine to convince potential adversaries that they will not succeed in an attack, and even if they try, the costs will far outweigh the benefits and thus restraint is the preferred choice. These fundamental elements of deterrence are well understood, and are supported by USSTRATCOM's capabilities.

Strategic deterrence in the 21<sup>st</sup> century is far more than just nuclear, although our nuclear deterrent remains the ultimate guarantor of our security. It includes a robust intelligence apparatus; space, cyber, conventional, and missile defense capabilities; and comprehensive plans that link organizations and knit their capabilities together in a coherent way. America's nuclear deterrent—a synthesis of dedicated sensors, assured command and control, the triad of delivery systems, nuclear weapons, enabling infrastructure, trained ready people, and treaties and non-proliferation activities—remains foundational to our national security and has been a constant thread in the geopolitical fabric of an uncertain world. The likelihood of major conflict with other nuclear powers is remote today, and the ultimate U.S. goal remains the achievement of a world without nuclear weapons. Until that day comes, the U.S. requires a safe, secure and effective nuclear deterrent force, even as it continues to reduce its nuclear stockpile and the number of deployed nuclear warheads. As stated in the 2014 Quadrennial Defense Review (QDR), our nuclear deterrent capabilities “...deter nuclear attack on the United States, as well as on our allies and partners” and communicate “...to potential nuclear-armed adversaries that they cannot escalate their way out of failed conventional aggression.”

USSTRATCOM efforts are guided by my six overarching priorities. **My number one priority is to deter strategic attack.** Strategic attacks can occur through a variety of mechanisms in any domain and are defined by their scope and their decisive negative outcomes for the Nation. They may impact many people or systems, affect large physical areas, act across great distances, persist over long periods of time, disrupt economic or social structures, or change the status quo in a fundamental way. We must continue our efforts to deter strategic threats to global stability.

**Second, we will provide the Nation with a safe, secure and effective nuclear deterrent force.** Foundational documents such as the 2010 Nuclear Posture Review, the 2013 Report on Nuclear Weapons Employment Strategy, and the 2014 QDR have consistently repeated this mandate. It is my responsibility to provide our Nation with a viable and credible nuclear deterrent force as long as nuclear weapons exist.

**Third, we will build enduring relationships with partner organizations to confront the broad range of global challenges.** We aim to work seamlessly across the federal government, commercial sector, and with partners and Allies to apply the breadth of USSTRATCOM capabilities toward a synchronized pursuit of national objectives. Robust interaction occurs at all levels in our organization and includes operations, exercises and wargames with other Combatant Commands and Allies.

**Fourth, we will continue to address challenges in space.** Space capabilities remain foundational to our way of life, yet are increasingly vulnerable to hostile actions. Robust space domain awareness remains central to our ability to maintain an advantage in space.

**Fifth, we must continue to build cyberspace capability and capacity.** Cyberspace supports operations extensively in all of my mission areas and has become a critical facet of

national power. We must continue to develop a robust cyber mission force with the authorities, skills, and resources to protect against a maturing set of cyber threats.

**Finally, geopolitical and fiscal realities demand that we anticipate change and confront uncertainty with agility and innovation.** Sound decision-making requires thorough analysis to prioritize our activities along with flexible, agile, adaptable thinking and systems. I fully support the Defense Innovation Initiative and the associated Advanced Capability and Deterrence Panel. These efforts will help us identify new operational concepts, develop cutting edge technology, and enable a continuing evolution of ideas on how to deter current and potential adversaries.

#### **MISSION AREA CAPABILITIES & REQUIREMENTS**

Even the best analysis will never be error free, so we must maintain adequate readiness to confront uncertainty. Prioritizing resources to meet our requirements requires a thoughtful assessment of national priorities in the context of fiscal realities. The President's FY16 Budget supports my mission requirements, but there is no margin to absorb risk. Any cuts to that budget—including those imposed by sequestration—will hamper our ability to sustain and modernize our military forces, and will add significant risk to our strategic capabilities now and in the future.

#### **Nuclear Deterrent Forces**

In the wake of a series of events involving the Nation's nuclear forces and their leadership, Secretary Hagel directed an internal and external review of the entire Department of Defense (DOD) nuclear enterprise. The reviews concluded that while our nuclear forces are currently meeting the demands of the mission, we needed to make significant changes to ensure the future safety, security, and effectiveness of the force. I fully support planned investments in

the nuclear enterprise that will improve and sustain current equipment in response to these reviews.

Our nuclear deterrent is the ultimate insurance against a nuclear attack on the United States. We must commit to investments that will allow us to maintain this insurance in a safe and secure way for as long as nuclear weapons exist, or risk degrading the deterrent and stabilizing effect of a credible and capable nuclear force. Today we spend less than 3 percent of the DOD budget on nuclear capabilities. As stated by the Congressional Budget Office, recapitalization investments that are necessary to ensure safety and security will increase this number to “roughly 5 percent to 6 percent.”

**Sensors.** Strategic missile warning remains one of our most important missions. Along with persistent and tailored intelligence capabilities, our Integrated Tactical Warning and Attack Assessment network of sensors and processing facilities provide timely, accurate, unambiguous, and continuous tactical early warning and allow us to select the most suitable course of action in rapidly developing situations. The Defense Support Program is nearing the end of its operational life, but the Space-Based Infrared System program is on track to provide continuous on-orbit capability. The survivable and endurable segments of these systems, along with Early Warning Radars and nuclear detonation detection elements, are in urgent need of continued simultaneous sustainment and modernization. We must continue to maintain legacy systems at ever-increasing risk to mission success. Prompt and sufficient recapitalization of these critical facilities and networks—to include electromagnetic pulse protection and survivable endurable communications with other nodes in the system—will be central to maintaining a credible deterrent. I fully support continued investment in this critical area.

**Nuclear Command, Control and Communications (NC3).** Assured and reliable NC3 is fundamental to the credibility of our nuclear deterrent. The aging NC3 systems continue to meet their intended purpose, but risk to mission success is increasing as key elements of the system age. The unpredictable challenges posed by today's complex security environment make it increasingly important to optimize our NC3 architecture while leveraging new technologies so that NC3 systems operate together as a core set of survivable and enduring capabilities that underpin a broader, national command and control system.

I appreciate Congress' direction last year to establish the Council on Oversight of the National Leadership Command, Control and Communications System (CONLC3S). The CONLC3S has proven effective in bringing NC3 stakeholders together to synchronize and prioritize NC3 modernization efforts, and then articulate those priorities to Congress. Specific programs include the Family of Beyond-line-of-sight Terminals, Presidential National Voice Conferencing, the Multi-Role Tactical Common Data Link, Phoenix Air-to-Ground Communications Network, the E-4B Low Frequency Transmit System, B-2 Common Very Low Frequency Receiver, and the E-6B service life extension and Airborne Launch Control System replacement programs.

The USSTRATCOM Command and Control (C2) Facility will support all our missions and will feature prominently in our future nuclear and national C2 architecture. The project is progressing well and will soon transition from exterior construction to interior fit-out. Timely, consistent, and stable funding is vital to keeping the project on-time and on-budget. I appreciate the steadfast support that Congress continues to provide for this effort.

**Nuclear Triad.** The policy of maintaining a nuclear triad of strategic nuclear delivery systems was most recently re-iterated in the 2014 QDR. Our Intercontinental Ballistic Missiles,

Ballistic Missile Submarines, and nuclear capable heavy bombers each provide unique and complementary attributes that together underpin strategic deterrence—and each element is in need of continued investment.

**Intercontinental Ballistic Missiles (ICBMs).** Our ICBM force promotes deterrence and stability by fielding a responsive and resilient capability that significantly complicates the decision calculus of any potential adversary. Though first fielded in 1962, the Minuteman Weapon System is sustainable through 2030, with near-term investments in the Mk21 replacement fuze, ICBM Cryptographic Upgrade, Payload Transporter vehicle replacement, Transporter-Erector vehicle replacement, and UH-1N helicopter replacement programs to address age-related issues. The Air Force is initiating the Ground Based Strategic Deterrent program to begin recapitalizing the ICBM enterprise. USSTRATCOM fully supports an integrated weapon system recapitalization effort that synchronizes flight systems, ground systems, command and control, infrastructure, and support equipment development and deployment.

**Ballistic Missile Submarines (SSBNs).** Recapitalizing our sea-based strategic deterrent force is my top modernization priority. The Navy's SSBNs and Trident II D5 ballistic missiles constitute the Triad's most survivable leg. In 2014, the Ohio-class fleet completed the submarine force's 4000<sup>th</sup> strategic deterrent patrol. This stealthy and highly capable force is undergoing needed modernization to extend the life of the D5 missile and replace the Ohio-class SSBNs which begin to retire in 2027. No further extension is possible and maintaining operational availability is a concern. We must resource sustainment of the Ohio class SSBNs to maintain the required availability through the transition period to the Ohio Replacement Program (ORP) SSBN and until the last hull is decommissioned in 2040. Stable funding of the ORP, the life-of-

ship reactor core, and supporting systems and infrastructure is critical to achieving a first deterrent patrol in 2031. In addition, we must continue our commitment to the United Kingdom to develop and field the Common Missile Compartment to ensure both nations' SSBNs achieve operational capability on schedule.

**Heavy Bombers.** Our dual-capable B-52 and B-2 bombers continue to provide significant conventional capabilities along with flexibility, visibility and a rapid hedge against technical challenges in other legs of the nuclear triad. Planned sustainment and modernization activities, to include associated NC3, will ensure a credible nuclear bomber capability through 2040. Looking forward, a new highly survivable penetrating bomber is required to credibly sustain our broad range of deterrence and strike options beyond the lifespan of today's platforms. Maintaining an effective air-delivered standoff capability is vital to meet our strategic and extended deterrence commitments and to effectively conduct global strike operations in anti-access and area-denial (A2AD) environments. The Long Range Stand-Off AoA completed earlier this year recommended a follow-on nuclear cruise missile to replace the aging Air Launched Cruise Missile (ALCM) with a capability designed for future adversary A2AD environments.

**Weapons and Infrastructure.** Nuclear weapons and their supporting infrastructure underpin our nuclear triad, with the average warhead today over 27 years old. Surveillance activities, Life Extension Programs (LEPs), and Stockpile Stewardship efforts are key to sustaining our nuclear arsenal by mitigating age-related effects and incorporating improved safety and security features without a return to nuclear testing.

As a member of the Nuclear Weapons Council (NWC) I work in close coordination with my DOD and Department of Energy counterparts to ensure we maintain a safe, secure and

effective nuclear stockpile. Active and sustained execution of the NWC's long-term "3+2" strategy to deliver three ballistic missile and two air-delivered warheads is crucial to achieving this goal while addressing both near-term technical needs and future capability requirements. The W76-1 and B61-12 LEPs are on track and are necessary to maintain confidence in the reliability, safety and intrinsic security of our nuclear weapons. Early activities are underway supporting the cruise missile replacement by the late 2020s. The President's FY16 Budget supports this and ensures schedule alignment of the cruise missile delivery platform and its associated weapon.

Sustaining and modernizing the nuclear enterprise infrastructure—in physical and intellectual terms—is central to our long-term strategy. Continued material investment and maintaining an adequate pool of nuclear scientists and engineers is crucial to providing critical capabilities that meet our stockpile requirements.

**Treaties.** International agreements such as New Strategic Arms Reduction Treaty (New START), the Open Skies Treaty (OST), and the Intermediate-range Nuclear Forces (INF) Treaty contribute to strategic stability through transparency, confidence building, and verification. The State Department has primary responsibility for treaty administration, and USSTRATCOM remains closely involved in their execution.

New START's central limits and verification mechanisms reduce the likelihood of misperceptions and misunderstandings. Similarly, OST demonstrated its utility during the crisis in the Ukraine, where overflight missions allowed the 34 state parties to the treaty the opportunity to observe the situation on the ground, thereby supplementing other sources of information. In a similar vein, the INF Treaty promoted strategic stability by addressing



capabilities of significant concern to our European Allies. While these agreements have served valuable roles in promoting strategic stability, treaty violations are a cause for concern.

The U.S. has a long-standing commitment to reducing the number of nuclear weapons consistent with national policy and geopolitical conditions. At the height of the Cold War, the U.S. had 31,000 nuclear warheads. When New START was ratified in February 2011, we had 1,800 deployed warheads. USSTRATCOM continues to work with the Office of the Secretary of Defense, the Joint Chiefs of Staff, and the Services to implement New START. To date, the U.S. and Russia have together conducted over 70 inspections and have exchanged more than 7,000 New START message notifications. In 2014, the U.S. finalized the New START force structure and completed de-MIRVing MM III ICBMs. Given the proper authority and funding, we are on track to achieve New START's limits of 1,550 deployed warheads, 700 deployed delivery systems, and 800 deployed and non-deployed delivery systems by February 2018.

#### **Space Operations**

The U.S. must maintain assured access to space. Our national space capabilities allow us to globally navigate, communicate, and observe natural and man-made events in areas where non-space sensors are either not available or not feasible. Space capabilities are also a key component of strategic deterrence. Our space sensors, command and control systems, and space situational awareness capabilities are critical to supporting both our deployed forces and our national decision making processes.

As articulated in the 2011 National Security Space Strategy, the space domain is contested, congested, and competitive. Our potential adversaries have signaled their ability to conduct hostile operations in space as an extension of the terrestrial battlefield, and consider these operations essential to deny U.S. forces the asymmetric advantages of space. To mitigate

this trend, the U.S. continues to partner with responsible nations, international organizations and commercial firms to promote responsible, peaceful and safe use of space. We also strive to maximize the advantages provided by improved space capabilities while reducing vulnerabilities; and seek to prevent, deter, defeat and operate through attacks on our space capabilities.

Foundational to all of these efforts is sufficient Space Situational Awareness (SSA)—the information that allows us to understand what is on orbit, where it is and where it is going, and how it is being used. Our goal is to ensure space remains a safe domain for all legitimate users. Sharing SSA information and collaborating with other nations and commercial firms promotes safe and responsible space operations, reduces the potential for debris-producing collisions, builds international confidence in U.S. space systems, fosters U.S. space leadership, and improves our own SSA through knowledge of other owner/operator satellite positional data.

USSTRATCOM is committed to using the full capabilities of our overhead-persistent infrared systems for all relevant mission areas. We are actively partnering with the Intelligence Community to more effectively manage our intelligence requirements, share data, and ensure all of our assets are effectively working to support national priorities.

In accordance with U.S. law, USSTRATCOM has negotiated SSA Sharing Agreements and Arrangements with 46 commercial entities, two intergovernmental organizations (EUMETSAT and European Space Agency), and eight nations (France, Italy, Japan, Australia, Canada, South Korea, United Kingdom, and Germany) and is in the process of negotiating agreements with additional nations. Through these sharing agreements, USSTRATCOM assists partners with activities such as launch support; maneuver planning; support for on-orbit anomaly resolution, electromagnetic interference reporting and investigation; support for launch anomalies and de-commissioning activities; and on-orbit conjunction assessments.

At the nucleus of USSTRATCOM's approach to space security is both strategic and tactical mission assurance—ensuring Combatant Commanders have required access to space-based capabilities, achieved through freedom of action in space. USSTRATCOM's Joint Functional Component Command for Space (JFCC Space), located at Vandenberg Air Force Base in California, leads the efforts to ensure continuous and integrated space operations and routinely track tens of thousands of space objects in orbit around the Earth. This includes more than 1,100 active satellites owned and operated by approximately 60 nations and government consortia, plus hundreds of small commercial and academic satellites. In 2014, this allowed JFCC Space to issue more than 12,000 conjunction alerts, resulting in 121 collision avoidance maneuvers, to include several maneuvers by the International Space Station.

We must sustain judicious and stable investments to preserve the advantages we hold in this dynamic and increasingly complex environment. Examples include the Space Fence program which will greatly expand the capacity of the Space Surveillance Network, investments in modeling and simulation which will increase our understanding of the space environment and adversary capabilities, and funding for satellite communications that are resistant to interference. We must also continue to seek out innovative and cooperative solutions with Allies and partners to ensure the products and services we derive from operating in space remain available, even when threatened by natural events or the actions of a determined adversary. These include both active and passive protection measures for individual systems and constellations and a critical examination of the architectural path we will follow to ensure resilience and affordability in space.

#### **Cyberspace Operations**

This year marks the fifth anniversary of the activation of our assigned sub-unified command, US Cyber Command (USCYBERCOM) located at Ft. Meade, Maryland.

USCYBERCOM seeks to impart an operational outlook and attitude to the running of the DOD's roughly seven million networked devices and 15,000 network enclaves—which represent a global system that operates at the speed of light beyond geographic and political boundaries.

Our primary focus for cyberspace operations within DOD is to increase capacity and capability. The Cyber Mission Force (CMF) construct addresses the significant challenges of recruiting, training, and retaining the people, facilities and equipment necessary to generate the workforce required for successful cyberspace operations. Our plans call for the creation of 133 cyber mission teams manned by more than 6,000 highly trained personnel by the end of FY16. To date, 61 of those teams are fielded and engaged in a variety of missions. The majority of these teams will support the combatant commands, with the remainder supporting national missions. It is imperative that we continue to pursue fulfilling our cyber capabilities. Budget stability is key to achieving this vision, as every training day we lose to fiscal constraints will cause further delays in fielding the CMF.

In order to posture the DOD to better defend against the growing number of threats, USSTRATCOM proposed the establishment of a Joint Force Headquarters – DOD Information Network (JFHQ-DODIN). The JFHQ-DODIN became operational in January 2015 and enables the Commander, USCYBERCOM to delegate authority for the operational and tactical level planning, execution, and oversight of DOD information network operations and defense to a subordinate unit. This arrangement ensures tactical mission success while allowing USCYBERCOM to remain focused on operational and strategic concerns.

#### **Global Strike**

USSTRATCOM's Joint Functional Component Command for Global Strike (JFCC-GS) operates from Offutt AFB, Nebraska with headquarters at Barksdale AFB, Louisiana. JFCC-GS

provides a unique ability to command and control our global strike capabilities and build plans that rapidly integrate into theater operations. This includes integration of combat capability associated with kinetic and non-kinetic effects.

Conventional prompt strike (CPS) capability offers the opportunity to rapidly engage high-value targets without resorting to nuclear options. CPS can provide precision and responsiveness in A2AD environments while simultaneously minimizing unintended military, political, environmental, economic or cultural consequences. I support continuing research and development of capabilities that help fill the conventional strike gap with a discernible non-ballistic trajectory, maneuverability for over-flight avoidance, and payload delivery capability.

Effective strike solutions require dedicated analysis. USSTRATCOM's Joint Warfare and Analysis Center (JWAC) in Dahlgren, Virginia enhances our Strategic Deterrence and Global Strike missions by providing unique and valuable insight into selected adversary networks. JWAC's ability to solve complex challenges for our Nation's warfighters—using a combination of social and physical science techniques and engineering expertise—is invaluable to protecting the Nation and helping the Joint Force accomplish its missions.

#### **Joint Electronic Warfare**

America's prosperity and security relies on assured access to the electromagnetic spectrum (EMS) to achieve strategic advantage and enable the instruments of national power. The EMS reaches across geopolitical boundaries and warfighting domains, and is tightly integrated into the operation of critical infrastructures and the conduct of commerce, governance, and national security.

Joint Electromagnetic Spectrum Operations (JEMSO) underpin U.S. national objectives and enable the combat capability of the Joint Force by ensuring friendly access to the EMS while

denying adversaries the same. USSTRATCOM is engaged in developing JEMSO policy and doctrine, and in addressing capability gaps across the DOD. Additionally, the USSTRATCOM JEMSO Office in conjunction with the Joint Electronic Warfare Center and Joint Electromagnetic Preparedness for Advanced Combat Center work closely with the combatant commands, Services and other Department agencies supporting the warfighter through advocacy, planning, and training.

Effective operations in the EMS will require development of an Electromagnetic Battle Management (EMBM) capability. The size and complexity of the EMS drives the requirement for the EMBM to be automated, interface at the machine level, and operate at near real-time speeds. This effort provides guidance for Service interoperability while retaining flexibility to meet Service-specific requirements. Future efforts will further refine and add context to the approved architectures.

#### **Missile Defense**

Effective missile defense is an essential element of the U.S. commitment to strengthen strategic and regional deterrence against states of concern. Today, 30 operational Ground Based Interceptors protect the U.S. against a limited ICBM attack from potential regional threats such as North Korea, but continued investment in three broad categories is required to improve our capabilities against growing threats: persistent and survivable engagement-quality tracking sensors, increased interceptor inventories with improved performance and reliability, and increased regional capability and capacity. These needs can be addressed by funding priority programs such as: Long-Range Discriminating Radar, a redesigned Exo-atmospheric Kill Vehicle (EKV), Aegis Ballistic Missile Defense and the Theater High-Altitude Area Defense extended range concept, Overhead Persistent Infra-Red sensors, Upgraded Early Warning Radars, and Joint Tactical Ground Stations.

New technologies must be proven before we can count on them to contribute to our operational plans. I fully support the concept of “fly before you buy,” and I was pleased by the Missile Defense Agency’s successful test in June 2014 of the Capability Enhancement II EKV.

The European Phased Adaptive Approach (EPAA) contributes to the defense of the United States, our deployed forces in Europe, and our Allies. For example, the forward-based radar deployed in Turkey is capable of providing important early trajectory data on possible Iranian missile launches. EPAA Phase 1 was completed in 2011 and efforts are on track to fulfill Phase 2 and Phase 3 commitments in 2015 and 2018 respectively. Interoperability between NATO’s Active Layered Theatre Ballistic Missile Defence system and the U.S. command and control network has been successfully demonstrated.

In December 2014, with the assistance of the Japanese Ministry of Defense, the DOD fielded a second AN/TPY-2 radar in Japan. The radar will augment the existing AN/TPY-2 radar and will enhance the ability to defend Japan, our forward deployed forces, and the U.S. homeland from North Korean ballistic missile threats.

The missile defense community—including USSTRATCOM’s Joint Functional Component Command for Integrated Missile Defense (JFCC-IMD) located in Colorado Springs, Colorado—continued to refine its understanding of missile defense challenges from technical and resourcing perspectives. These include evaluating current and future sensor architectures to better integrate missile defense and situational awareness missions, studying potential CONUS interceptor sites, understanding current and future cruise and ballistic missile threats, improving hit-to-kill assessment capabilities, and optimizing the location of missile defense assets.

#### **Intelligence, Surveillance, & Reconnaissance (ISR)**

The demand for ISR will always outpace our ability to fully satisfy all requirements. At the same time, we are focused on the goal of increasing the effectiveness and persistence of our

ISR capabilities while reducing the “cost of doing business.” Located at Joint Base Anacostia-Bolling AFB, Washington, D.C., USSTRATCOM’s Joint Functional Component Command for ISR (JFCC-ISR) is working with our headquarters, the Joint Staff, the Services, the combatant commands and the Intelligence Community to improve the management of the Department’s existing ISR capabilities given the high demands on these critical assets. I fully support this maximizing the agile and effective use of the capabilities we have, while also enhancing allied and partner contribution and cooperation. These efforts are designed to increase the persistence of our ISR capabilities, reduce the risk of strategic surprise, and increase our ability to respond to crises.

#### **Countering Weapons of Mass Destruction (CWMD)**

In June, the Secretary of Defense issued a new Defense Strategy for Countering WMD which affirms that the pursuit of WMD and potential use by actors of concern pose a threat to U.S. national security and peace and stability around the world. As DOD’s global synchronizer for CWMD planning efforts, USSTRATCOM supports this strategy by leveraging the expertise resident in our Center for Countering Weapons of Mass Destruction (SCC-WMD), the Standing Joint Force Headquarters for Elimination (SJFHQ-E), and our partners at the Defense Threat Reduction Agency (DTRA)—all located at Ft. Belvoir, Virginia. Together, our organizations conduct real-world and exercise CWMD activities with the other combatant commands to identify, prioritize, and mitigate WMD risks posed by proliferation of WMD technology and expertise to nation states and non-state actors.

USSTRATCOM contributed to the international effort to eliminate Syria’s declared chemical weapons program in support of United States European and Central Commands. Additionally, SCC-WMD, SJFHQ-E, and DTRA personnel supported United States Africa Command’s response to the 2014 Ebola outbreak in West Africa through the establishment of



Regional Contingency Team – Ebola. The work conducted by this team—and the lessons learned along the way—will enable more effective responses to future natural or man-made biological threats.

To execute the DOD Strategy for CWMD, the CWMD community has identified a need for a comprehensive situational awareness capability that incorporates collaborative tools, continuously assesses the WMD threat, and provides a shared holistic awareness of the WMD environment. This capability would provide an enhanced awareness of emergent catastrophic-scale WMD threats that require continued collaboration across the interagency and partner nations to enable a proactive rather than reactive approach. We work closely with DTRA to develop this capability with input from our partners—such as the Intelligence Community and the Departments of State, Energy, Homeland Security and Justice—which will help us to clearly define operational information needs. Finally, there is an urgent need to update aging agent defeat weapons and develop modeling and simulation capabilities to assess collateral damage during WMD weapon attacks.

#### **OUR PEOPLE**

People remain our most precious resource and deserve our unequivocal commitment to their well-being. My travels throughout the past year visiting nuclear task forces, component commands, and USCYBERCOM confirmed my belief that we have an outstanding team in place across all of our mission areas. I am proud to serve alongside the men and women of USSTRATCOM and have the utmost respect for their professionalism, dedication to our missions, and sustained operational excellence.

We must continue to recruit and retain those who support the missions associated with strategic deterrence, from operators in the field to scientists in laboratories conducting

surveillance and life extension work. We must directly support this unique workforce, but also ensure we support initiatives to keep them aware of our Nation's support for their important missions for the foreseeable future.

Whether they are underway on an SSBN, standing alert in a Launch Control Center, or supporting a mission from cyberspace to outer space, these great Americans will do all they can for their Nation, but are rightly concerned about their futures given continuing manpower reductions planned over the next several years. We are seeking the most efficient ways to achieve the Department's goals and are on track to do so, but cannot accommodate further cuts without a commensurate loss of organizational agility and responsiveness.

#### **CONCLUSION**

Achieving strategic deterrence in the 21<sup>st</sup> century requires an investment in strategic capabilities and a renewed, multi-generational commitment of intellectual capital. In today's uncertain times, I am honored to lead such a focused, innovative and professional group dedicated to delivering critical warfighting capabilities to the Nation. Your support, together with the hard work of the exceptional men and women of United States Strategic Command, will ensure that we remain ready, agile and effective in deterring strategic attack, assuring our Allies and partners, and addressing current and future threats.



## United States Navy Biography

### Admiral Cecil D. Haney Commander, U.S Strategic Command

Admiral Cecil Haney, a native of Washington, D.C., is a 1978 graduate of the United States Naval Academy.

His career as a submariner includes assignments in USS John C. Calhoun (SSBN 630), USS Frank Cable (AS 40), USS Hyman G. Rickover (SSN 709), USS Asheville (SSN 758), and Submarine Squadron 8, culminating in command of USS Honolulu (SSN 718).

Subsequent fleet command assignments include Submarine Squadron 1 from June 2002 to July 2004, and Submarine Group 2 from October 2006 to March 2008.

Haney's shore duty tours include administrative assistant for enlisted affairs at Naval Reactors; congressional appropriations liaison officer for the Office of the Secretary of Defense (Comptroller); deputy chief of Staff of Plans, Policies and Requirements, U.S. Pacific Fleet (N58); director, Submarine Warfare Division (N87); director, Naval Warfare Integration Group (N00X); deputy commander, U.S. Strategic Command and Commander, U.S. Pacific Fleet.



Haney holds master's degrees in Engineering Acoustics and System Technology from the Naval Post Graduate School, and a master's degree in National Security Strategy from the National Defense University.

Haney's decorations include the Navy Distinguished Service Medal (two awards), Defense Superior Service Medal (two awards), Legion of Merit (four awards), Navy Commendation Medal (three awards), Navy Achievement Medal (two awards), and various campaign and unit awards. In addition, he was the 1998 Vice Admiral James Bond Stockdale Leadership Award recipient.



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**WITNESS RESPONSES TO QUESTIONS ASKED DURING  
THE HEARING**

FEBRUARY 26, 2015

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#### **RESPONSE TO QUESTION SUBMITTED BY MR. LAMBORN**

Mr. McKEON. Low-earth orbit (LEO) systems in polar orbits are particularly important for polar coverage and for longer-range forecasting. For LEO systems, the Department of Defense (DOD) has made the decision to launch Defense Meteorological Satellite Program Flight 20 (DMSP-20). That decision, combined with our partners' capabilities, will extend our ability to meet LEO requirements until the 2025 range. This step provides us several additional years to determine how best to use DOD capabilities, such as our planned Weather System Follow-on program, and capabilities of civil and international partners to continue supporting operational requirements.

Weather satellites in geosynchronous orbit (GEO) support requirements for near-real-time weather information. In GEO, we rely primarily on two National Oceanic and Atmospheric Administration (NOAA) satellites (GOES-13 and GOES-15), two EUMETSAT satellites (METEOSAT-7 and METEOSAT-10), and one Japanese satellite (MTSAT-2/Himawari-7). EUMETSAT currently does not plan to replace METEOSAT-7 when it reaches its estimated end of lifetime in 2017. This would leave a gap in the area covered by this satellite, which is located at 57 degrees east longitude over the Indian Ocean. The United States and our partners maintain on-orbit back-up capabilities, such as repositioning these assets to this region that offer some flexibility for extending coverage for a few years. Work is ongoing with NOAA and our international partners and we will still ultimately need to determine an appropriate longer-term solution that will meet our requirements with acceptable reliability. [See page 15.]

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#### **RESPONSE TO QUESTION SUBMITTED BY MR. LARSEN**

Admiral HANEY. The current planned investment for the Cyber Mission Force (133 teams) in the Future Years Defense Program (FYDP—FY 2014—FY 2018) is \$1.878 billion dollars for the development of approximately 6100 individuals required in the four Service branches. This effort began in October of 2013 and today we have 3100 personnel assigned to 58 of the 133 teams. My team is extremely appreciative of the support this committee has provided the Department and we look forward to continued cooperation as we help defend the nation. [See page 11.]





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**QUESTIONS SUBMITTED BY MEMBERS POST HEARING**

FEBRUARY 26, 2015

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### QUESTIONS SUBMITTED BY MR. ROGERS

Mr. ROGERS. Are there any allies who are not yet convinced Russia is violating the INF treaty? Who are they? What are we doing, country by country, to explain and demonstrate how we know?

Mr. MCKEON. [The information referred to is classified and retained in the committee files.]

Mr. ROGERS. Do you agree with Ms. Gottemoeller that Russia is cheating, or not in compliance, with approximate 8 out of 12 treaties or agreements? Please explain how the U.S. is responding to each case.

Mr. MCKEON. I agree with the answers Under Secretary Gottemoeller submitted in response to questions for the record posed by Representatives Garamendi and Turner after her December 10, 2014, testimony to the House Armed Services Committee. In her answers, she elaborated and clarified that Russia is in violation of the Intermediate-Range Nuclear Forces (INF) Treaty, the Conventional Armed Forces in Europe (CFE) Treaty, and the Budapest Memorandum. I also agree with her statement that verifiable arms control statements continue to be an important tool to enhance the security of the United States and its allies and partners. The Administration takes violations of arms control agreements very seriously. The United States is responding to each case of non-compliance or questions on adherence by Russia as follows:

- CFE Treaty: Russia suspended implementation of the CFE Treaty in 2007 and has made it clear that it will not return to compliance. In 2011, the United States suspended performance of certain obligations under the CFE Treaty with regard to Russia. We were joined by our NATO Allies that are party to the CFE Treaty, as well as by Georgia and Moldova, in taking this step. In all, 24 of the 30 countries that are party to the CFE Treaty have suspended implementation of certain CFE Treaty obligations with regard to Russia.
- INF Treaty: The United States has determined that the Russian Federation is in violation of its obligations under the INF Treaty not to possess, produce, or flight-test a ground-launched cruise missile with a range capability of 500 to 5,500 km, or to possess or produce launchers of such missiles. The United States is finalizing a range of diplomatic, economic, and military response options to convince Russia to return to compliance with the INF Treaty and to deny Russia significant military advantage from deploying the missile that violates the INF Treaty.
- Budapest Memorandum: Russia is in clear violation of its commitments under the Memorandum to respect the independence, sovereignty, and existing borders of Ukraine. The United States, together with allies and partners, has levied extensive sanctions on Russia, is providing financial assistance to Ukraine, and is supporting allies and partners in the region through efforts such as the European Reassurance Initiative. NATO formed a Response Force to deter Russian military action against Allies.

Mr. ROGERS. As you know, nuclear modernization costs continue to be a topic of discussion up here. What priority does the Department of Defense assign to the nuclear deterrence mission? Do you believe the nuclear modernization plan DOD and NNSA have laid out is appropriate and affordable amidst the wider defense budget?

Mr. MCKEON. The President has opted for a sustainment and modernization program that is broad and consistent with his commitment to retain a safe, secure, and effective deterrent for as long as nuclear weapons exist. This plan focuses on modernizing the platforms, delivery systems, and warheads of our current Triad, including our non-strategic nuclear forces, to credibly preserve military capabilities in the face of evolving threats.

This program will require significant resources over the next decade and beyond, but the nuclear mission is the highest priority mission within the Department of Defense, and we must prioritize it accordingly. The President's FY 2016 budget request includes significantly increased investment in the nuclear Triad as well as its supporting infrastructure and manpower. Sequestration presents the greatest threat to the viability of our sustainment and modernization plan.

Mr. ROGERS. Why does the United States need the long-range standoff weapon (LRSO)—the follow-on to the current air-launched cruise missile (ALCM)? What is the short, elevator speech we can bring to our fellow Members on the floor and constituents back home—why is this capability important?

Mr. MCKEON. The Long-Range Stand-Off (LRSO) cruise missile will replace the Air-Launched Cruise Missile (ALCM) as the United States' only air-launched, long-range standoff nuclear capability.

- Sustaining the ALCM is becoming increasingly difficult, and its reliability in the next decade is not assured even with substantial investment. The ALCM's service lifetime has already been extended more than two decades beyond the 10 years that were originally planned.
- The LRSO will sustain the U.S. ability to credibly challenge the evolving anti-access/area denial (A2AD) capabilities of potential adversaries. These A2AD capabilities limit the survivability of the B-52 and will eventually threaten the ALCM's ability to continue its role as a penetrating platform.
- The penetrating LRSO cruise missile and the next-generation penetrating strategic bomber (LRS-B) will provide complementary capabilities, and neither can fully substitute for the other. Different capabilities provide varied confidence levels of penetration in the evolving and layered A2AD threat environment posed by our potential adversaries. A penetrating bomber that can carry a penetrating missile maximally expands the accessible space of targets that can be held at risk.
- The LRSO is therefore important for preserving flexible and credible response options for the President, and hence for sustaining an effective deterrent against nuclear attack. Preserving these options also supports the President's ability in a crisis to signal intent and control escalation by giving the President a nuclear deterrent that can be recalled if it successfully controls escalation. These are long-standing core elements of U.S. nuclear strategy.
- The LRSO will provide a rapid and flexible hedge against changes in the strategic environment and limitations of the other two legs of the Triad. Under the New START Treaty, each strategic bomber counts as one launcher and one warhead, regardless of the number of nuclear cruise missiles and bombs in our inventory. This provides a rapid upload capability to hedge against geopolitical or technical surprise.

Mr. ROGERS. Is it true that the Commander of U.S. European Command non-concurred last year when OSD-P asked for his input on approving Russian Federation requests under the Open Skies treaty? Why did the DOD proceed anyway? Have you personally reviewed the EUCOM non-concurrence and the strong objections from NORTHCOM and STRATCOM?

Mr. MCKEON. As I outlined to then-Chairman McKeon in my classified letter dated November 17, 2014, the Under Secretary of Defense for Policy and Chairman of the Joint Chiefs of Staff requested Combatant Commanders, including the Commanders of U.S. European Command, U.S. Northern Command, and U.S. Strategic Command, to provide information on the proposal to certify Russia's An-30 Open Skies Treaty aircraft. This information was part of the deliberative process and was used to inform DOD and U.S. Government decision-making. As we worked with other U.S. departments and agencies, we determined that the specific concerns would be ameliorated by some important, separate components of the policy, which I outlined to Chairman McKeon.

Mr. ROGERS. Russia and China are building missile defenses against the U.S. and its strategic forces. Why do we continue to worry about their concerns about our missile defenses? Why do we maintain there is something "destabilizing" about U.S. missile defenses but nothing about theirs?

Mr. MCKEON. We consider missile defense to be a stabilizing force. Both Russia and China have or are developing missile defense capabilities of their own and have expressed concerns that U.S. missile defenses adversely affect their strategic capabilities and interests; however, as the United States has stated in the past, our homeland defense capabilities are focused on regional actors such as Iran and North Korea and are not designed for a large-scale Russian or Chinese missile attack.

Mr. ROGERS. The 2010 Ballistic Missile Defense Review stated, "Today, only Russia and China have the capability to conduct a large-scale ballistic missile attack on the territory of the United States, but this is very unlikely and not the focus of U.S. BMD. As the President has made clear, both Russia and China are important partners for the future, and the United States seeks to continue building collaborative and cooperative relationships with them."

How is the Administration doing building a "collaborative and cooperative relationship" with Russia, in particular? If Russia attacked our forces in Europe with

its short- and medium-range ballistic missiles, would we not use our missile defense capabilities against it?

Mr. McKEON. Much has changed since 2010, and Russia's unlawful actions in Crimea and its actions in eastern Ukraine have significantly altered the level of U.S.-Russian engagement. Working closely with Europe and other partners and Allies, the Administration has imposed real costs on Russia for its aggressive actions. The Department of Defense halted defense and military cooperation with Russia. The Administration has also prohibited exports of sensitive technologies that could be used in Russia's military modernization and has imposed blocking sanctions on 18 Russian defense technology firms. I do not want to speculate in an unclassified response about measures the United States would take in response to an attack on our forces in Europe; suffice it to say the United States would respond.

Mr. ROGERS. Please explain why we use missile defense to defend American aircraft carriers from China's ballistic missiles, but, we won't plan to use our missile defenses to defend American cities?

Mr. McKEON. The U.S. fields a missile defense system for the homeland to counter the projected threats from North Korea and Iran. While the Ground-based Midcourse Defense (GMD) system would be employed to defend the United States against limited missile launches from any source, it does not have the capacity to cope with large scale Russian or Chinese missile attacks and is not intended to affect the strategic balance with those countries.

Mr. ROGERS. As you know, U.S. Missile Defense spending is limited. At the same time, our allies are significantly investing, through Foreign Military Sales, in U.S. missile defense systems. What is OSD-Policy doing, in concert with the Joint Staff and COCOMs, to develop policies and guidance to make sure the U.S. can be fully interoperable and burden share with these allies?

Mr. McKEON. In the 2010 Ballistic Missile Defense Review (BMDR), the Administration articulated its policy of seeking contributions from allies and partners. This policy has been repeated many times by high-level U.S. officials in speeches both at home and abroad. We work regularly through multi-national exercises, workshops, roundtables, and conferences to inform officials of allied and partner governments about ballistic missile defense (BMD), the costs associated with BMD, and the value of BMD both as a deterrent and as an active defense. We also work to inform and educate these audiences on the benefits of interoperability and sharing sensor information. The Defense Security Cooperation Agency works closely with foreign governments on Foreign Military Sales cases of U.S.-manufactured missile defense systems. There is a robust interagency group that collaborates to facilitate these cases. All of these efforts are coordinated with the Joint Staff and the Combatant Commands.

Mr. ROGERS. I've got a question related to space. You certainly know the national security advantage space provides. For something as important as space services, do you want to rely on the Russians or the Chinese to meet warfighter requirements?

Mr. McKEON. The Department will not rely on Russia or China to meet U.S. national security requirements. The continuous availability of space capabilities and services is indispensable to the protection of U.S. national security. Our responsibility is to ensure that U.S. forces can count on receiving the advantages of space whenever and wherever necessary.

Mr. ROGERS. I am concerned with the Air Force's plan for space-based weather collection that we could be headed down a similar path of relying on unreliable partners. Should we be designing a new satellite system that would require our reliance on Russian and Chinese weather data for our warfighter requirements?

Mr. McKEON. The Department of Defense (DOD) does not rely on Russian or Chinese weather data and does not plan to rely on such data. At both geosynchronous orbit and low-earth orbit, DOD meets its requirements through a combination of our own capabilities and the capabilities of civil partners such as the National Oceanic and Atmospheric Administration and those of our allied partners, such as the European meteorological consortium EUMETSAT and the Japan Meteorological Agency.

Mr. ROGERS. The Fiscal Year 2013 NDAA contains a limitation on international agreements concerning outer space activities. The specific language requires a certification that that such agreement has no legally-binding effect or basis for limiting the activities of the United States in outer space, and that such agreement is equitable, enhances national security, and has no militarily significant impact on the ability of the United States to conduct military or intelligence activities in space. What is the current negotiation status of any international agreements regarding outer space, like the Code of Conduct or moratorium on direct ascent ASAT tests, and do we have your commitment to closely adhering to the existing U.S. law governing this area?

a. Are you familiar with the recent Joint Staff assessment of the EU Code and the impacts it found?

b. Would any implementing guidance put in place concurrent with the U.S. signature on such draft of the Code disallow DOD from taking any actions in outer space? Would it require changes to any actions we could take in outer space?

Mr. McKEON. The European Union-led process to develop an International Code of Conduct for Outer Space Activities (EU Code) should reinforce key space norms that are already U.S. Government standard practice, such as pre-launch notifications under the Hague Code of Conduct Against Ballistic Missile Proliferation, observance of UN Debris Mitigation Standards, and safety-of-flight practices to share collision warning information.

The Department worked closely with the Department of State during bilateral and multilateral informal discussions on the draft EU Code, and will continue to do so if these discussions progress to formal negotiations to ensure that U.S. national security and legislative requirements are met.

The Joint Staff has conducted three operational assessments of previous drafts of the EU Code. The findings were incorporated into the Department's position on the drafts, and this process will continue during any negotiations. If such negotiations reach a conclusion, the Department will conduct a final review to ensure the non-binding EU Code does not constrain either the development of the full range of space capabilities nor the ability of the United States to conduct necessary national security space operations.

Mr. ROGERS. During the peak years of nuclear modernization, how much of the DOD budget will be going towards nuclear deterrence? Is that an appropriate level of funding for what Secretary Hagel recently called "DOD's highest priority mission"?

Admiral HANEY. USSTRATCOM assessment is consistent with the findings in the recent CBO report, "Projected Costs of the U.S. Nuclear Forces, 2015 to 2024," that "estimates the costs of the nuclear forces represent roughly 5 percent to 6 percent of the total cost of the Administration's plans for national defense for the next 10 years."

The President's Budget reflects a renewed emphasis on the nuclear enterprise and I believe the investments entailed are appropriate to ensure continued long-term viability of the Nation's strategic deterrent force.

However, I remain concerned continued budget uncertainty and/or a return to Budget Control Act (BCA) levels could very well reverse the momentum in the President's Budget and negatively impact both sustainment and the "just in time" modernization programs critical to maintaining a safe, secure and effective nuclear force.

Mr. ROGERS. Why does the United States need the long-range standoff weapon (LRSO)—the follow-on to the current air-launched cruise missile (ALCM)? What is the short, elevator speech we can bring to our fellow Members on the floor and constituents back home—why is this capability important?

Admiral HANEY. The standoff capability combined with the flexibility of the Air Launched Cruise Missile (ALCM) provides makes it a key component of the Nation's strategic deterrence strategy. The ALCM has provided strategic deterrence for more than 30 years and is well past its designed 10-year service life. Aging issues are a cause for concern regarding reliability, availability, and survivability of this crucial capability. The Long Range Standoff (LRSO) missile replaces the current nuclear cruise missile and addresses projected adversary defense developments to ensure future objectives remain achievable.

Projected adversary air defense developments will impact confidence in the ALCM's future capabilities and overall mission effectiveness. Combined with the penetration capability of the B-2 and the future Long Range Strike-Bomber (LRS-B), the LRSO will allow for continued penetration into advancing air defenses to deny sanctuary for potential adversaries anywhere in the world. Additionally, improved capability aspects of the LRSO ensure viability of the B-52 as a standoff platform to the end of its service life in 2040. Ultimately, the combination of credible bomber, cruise missile, and gravity weapon capabilities enable continued operational flexibility and the ability to signal resolve to our adversaries.

Mr. ROGERS. Can you please outline your concerns about the Open Skies treaty? I'm asking for your best military advice concerning potential risks to U.S. national security.

Admiral HANEY. USSTRATCOM's capabilities are not significantly impacted by Open Skies overflights today, any more than we have been since the Treaty was implemented in 2002. After consultation with its allies, the U.S. approved certification of Russia's Electro-Optical and Multi-Spectral Imaging digital sensors in 2014. However, this did not establish a precedent for certification of any sensor/aircraft com-

bination in the future. Should Russia submit a request to certify new Infrared and/or Synthetic Aperture Radar capabilities, it would be prudent to conduct further analyses of these particular sensors and their implications for national security. With that being said, as the U.S. works with Russia on a number of broader concerns, Open Skies continues to serve as a fundamental transparency and confidence building measure in support of the Euro-Atlantic alliance.

Mr. ROGERS. Do you agree with DIA Director, LTGEN Stewart who recently stated to the HASC, "The Open Skies construct was designed for a different era. I am very concerned about how it is applied today and I'd love to talk about in a closed hearing."

Admiral HANEY. When negotiations on Open Skies first began in the 1990's the United States and NATO were completing the NATO-Russia Founding Act with Russia. Since that time Russia has taken actions that fall outside internationally accepted norms of behavior.

While the U.S. works with Russia on a number of broader concerns, Open Skies continues to serve as a fundamental transparency and confidence building measure in support of the Euro-Atlantic alliance. Regarding specific Russian OST airspace restrictions (e.g., Kaliningrad, Moscow) I support the State Department's continuing dialogue with Russia and effort with other States Parties, via diplomatic channels, to urge Russia to address U.S. concerns.

Mr. ROGERS. As you know, U.S. Missile Defense spending is limited. At the same time, our allies are significantly investing, through Foreign Military Sales, in U.S. missile defense systems. What is OSD-Policy doing, in concert with the Joint Staff and COCOMs, to develop policies and guidance to make sure the U.S. can be fully interoperable and burden share with these allies?

Adm. HANEY. Same question to you from a COCOM perspective.

Admiral HANEY. As threat ranges from ballistic missiles increase over time, the interdependencies between Combatant Commands continue to grow in importance. Resource constraints underscore the criticality of leveraging allied and partner capabilities to mitigate gaps. Allied and partner engagement requires a comprehensive, coordinated approach to facilitate advancement toward optimal Missile Defense integration. This includes more specific policy to enable information sharing and integration of allies into the regional defense architectures.

USSTRATCOM supports the Office of the Secretary of Defense for Policy (OSD/P), the Joint Staff, and the Geographic Combatant Commands (GCCs) in working with partners and allies to resolve policy issues related to burden sharing and interoperability. Foreign Military Sales are principally a Service and MDA issue, but we have been working with the GCCs to look at options for planning and use of allied and partner systems around the world. Our largest and most successful activity is the ongoing 23-nation NIMBLE TITAN missile defense engagement series. These two-year campaigns bring partners from Europe (NATO and non-NATO states), the Gulf states, the Asia-Pacific region, and North America, together with the U.S. Department of State, OSD/P, the Joint Staff, and the Combatant Commands to stimulate the dialogue on many of the policy issues related to burden sharing and interoperability. We are currently in the middle of executing the NIMBLE TITAN '16 campaign, which culminates with a CAPSTONE event in June 2016.

Mr. ROGERS. I am concerned with the Air Force's plan for space-based weather collection that we could be headed down a similar path of relying on unreliable partners. Should we be designing a new satellite system that would require our reliance on Russian and Chinese weather data for our warfighter requirements?

Admiral HANEY. Currently we are not designing a system that relies on Russian or Chinese data to meet warfighter requirements, nor should we in the near future.

Mr. ROGERS. As recently stated by the Director of the Defense Intelligence Agency at a HASC hearing on worldwide threats, "the threat to U.S. space systems and services will increase as potential adversaries pursue disruptive and destructive counterspace capabilities . . . Chinese and Russia military leaders understand the unique information advantages afforded by space systems and are developing capabilities to deny U.S. use of space in the event of a conflict." Can you provide your perspective threat to our space systems?

Admiral HANEY. Both countries have acknowledged they are developing or have developed counter-space capabilities. Both countries have advanced directed energy capabilities that could be used to track or blind satellites, disrupting key operations. Based on the number and diversity of China's existing and developmental counterspace capabilities, China probably will be able to hold at risk U.S. national security satellites in every orbital regime in the next five to ten years. Russia has publically stated they are developing counterspace capabilities and replacing Soviet-made on-orbit ballistic missile early warning systems.

Mr. ROGERS. The 2010 National Space Policy states that the Secretary of Defense shall “Develop capabilities, plans, and options to deter, defend against, and, if necessary, defeat efforts to interfere with or attack U.S. or allied space systems”. What is the priority of this responsibility for STRATCOM?

Admiral HANEY. Space-based capabilities and effects are vital to U.S. warfighting, homeland security, and our way of life. Our national security is inextricably dependent on space capabilities. Therefore, addressing challenges in space remains a top priority for USSTRATCOM. We continue to work with the entire DOD community to keep pace with growing threats to our space systems.

The recently released President’s Budget (PB 16) provides \$4.7 billion of additional space security investments that are essential for enhancing our Space Situational Awareness, updating our Command and Control systems, and improving our Offensive and Defensive Space Capabilities. Additionally, USSTRATCOM is updating all of its operational plans and nearing completion on a major update to our concept plan for space operations. These planning efforts specifically address defending and protecting our space capabilities in an increasingly contested domain.

Mr. ROGERS. Can you discuss the importance of assured access to space and maintaining two launch systems that are capable of delivering national security satellites into orbit?

Admiral HANEY. USSTRATCOM needs assured access to space to accomplish our UCP-assigned missions. Perturbations in the launch schedule place warfighting capability at risk. Multiple launch systems capable of delivering national security satellites into orbit increases our confidence that we’ll have the capabilities we need when we need them.

Mr. ROGERS. What within the NDERG process do you feel is of value and what would you like to see done with this group? Are actions performed by the NDERG in any way duplicative with the NWC?

Admiral HANEY. The Nuclear Deterrence Enterprise Review Group (NDERG) is a forum for the SECDEF to understand the status of the Nuclear Deterrent Enterprise and associated sustainment and modernization programs given the importance of this strategic capability for our national security. This allows SECDEF the opportunity to interface with key stakeholders and leaders to synchronize efforts and hold leaders accountable for delivering a safe, secure, effective and credible nuclear strategic deterrent. I feel these forums are essential for mission success and are an effective and efficient process to resolve issues. It is vital that the performance of this critical mission continues to get this additional focus.

The actions of the NDERG and Nuclear Weapon Council (NWC) are not duplicative. The NWC is a joint activity of the DOD and DOE established in public law. Their responsibilities are focused primarily on the activities supporting the Nation’s nuclear weapons stockpile and aligning DOE bomb and warhead sustainment and modernization programs with complementary DOD systems and programs.

Mr. ROGERS. What is driving the requirement to modernize our nuclear capabilities? Is it age of our forces or the ongoing modernization efforts of other nuclear powers?

Admiral HANEY. Simply stated, we’ve deferred many programs for as long as possible and any additional slip could result in a loss of capability and increased cost. Today’s complex and dangerous global security environment, to include the ongoing modernization efforts of other nuclear powers, demands that we properly sustain and modernize our strategic capabilities. The President’s FY16 Budget strikes a responsible balance between national priorities and fiscal realities, and begins to reduce some of the risk we have accumulated because of deferred maintenance and sustainment as we pursue modernization. This budget supports my mission requirements. We cannot as a Nation afford to underfund these vital missions, *especially given that other nations are modernizing their strategic capabilities. We have delayed investment in some of the replacement capabilities for too long and we must not delay these programs any further: examples Ohio Replacement Program, Long Range Strike Bomber, B-61 and Long Range Standoff (LRSO) missile, Minuteman replacement. We must have sustained resources dedicated in PB16 and beyond.* I remain concerned that if we do not receive relief from the Budget Control Act, we will experience significant risk in providing the U.S. with the strategic capabilities it needs.

Mr. ROGERS. If sequestration were to return, what would your assessment be of the impact on sustainment and modernization of our nuclear forces?

Admiral HANEY. If fiscal constraints are imposed by the Budget Control Act, it would measurably weaken our national defense, and provide encouragement and momentum to America’s foes. The missions that have the highest risk are those missions requiring strategic deterrence and assurance capabilities that take time to replace once they are no longer available. Sequestration in FY 2013 resulted in adjust-



ments to our nuclear force sustainment and modernization plans to fit within the appropriated resources. Return of sequestration jeopardizes our ability to meet our national defense strategy by incurring unacceptable levels of risk.

The President's Fiscal Year 2016 budget strikes a responsible balance between national priorities and fiscal realities, and begins to address accumulated risks from deferred sustainment and modernization programs for weapons systems and infrastructure. Budget cuts imposed by sequestration will cause capability gaps in the coming decade because there is no margin left in the timeline required to modernize our strategic forces before our current capabilities become unsustainable.

Mr. ROGERS. Why is a Triad of nuclear forces still necessary? What can we do with three legs that we can't do with one or two?

Admiral HANEY. Every day, the Triad deters potential adversaries, assures allies, and preserves stability with countries that pose an existential threat to the United States. It is the combination of attributes across the Triad that ensures potential adversaries understand they cannot escalate their way out of a failed conflict. The Triad imposes unacceptable costs and denies benefits of a strategic attack against the United States.

The integration of warning, NC3, attribution, and nuclear forces provides an assured response across all postures. Our ICBM force promotes deterrence and stability by fielding a responsive and resilient capability. The Navy's SSBNs and Trident II D5 ballistic missiles constitute the Triad's most survivable leg. Our dual-capable B-52 and B-2 bombers continue to provide significant conventional capabilities along with flexibility and visibility. Finally, the three legs of the Triad provide the capability to mitigate risk caused by technological failure of any weapon or platform, technical advances by our adversaries, or significant changes in the geopolitical environment. If the nuclear forces were reduced to a Dyad or Monad, the ability to deter, assure, and manage risk is significantly degraded.

Mr. ROGERS. Since the President's goal is a world free of nuclear weapons, why should we modernize our nuclear capabilities?

Admiral HANEY. The President also said "So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. I'm not naive. This goal will not be reached quickly—perhaps not in my lifetime. It will take patience and persistence." He went on to state "Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies."

The U.S. has a long-standing commitment to reduce nuclear forces consistent with national policy and geopolitical conditions. This has been demonstrated by an enduring track record of arms reduction treaties including on-going force structure changes under the New Strategic Arms Reduction Treaty. However, as long as nuclear attack remains an existential threat, we must commit resources to ensure our deterrent forces remain viable and credible.

Modernization enables incorporation of modern safety and security features into weapons that were designed decades ago; allows reductions in the number of weapons by reducing numbers and types of warheads (e.g., B61-12 modernization). In order to maintain strategic stability, the United States must retain an effective nuclear capability, especially in light of adversary nuclear modernization efforts.

Mr. ROGERS. Why do you need a replacement for the ALCM?

Admiral HANEY. The Air Launched Cruise Missile (ALCM) has provided strategic deterrence for over 30 years, but is well past its designed 10-year service life and aging issues will begin to adversely affect reliability, availability, and survivability. The stand-off capability combined with the maximum flexibility the ALCM provides makes it a key component of the Nation's strategic deterrence strategy. The Long-Range Standoff missile (LRSO) replaces the ALCM and addresses projected adversary air defense developments.

Projected adversary air defense developments will impact confidence in the ALCM's future capabilities and overall mission effectiveness. Combined with the penetration capability of the B-2 and the future Long Range Strike-Bomber (LRS-B), the LRSO will allow for continued penetration into advancing air defenses to deny sanctuary for potential adversaries anywhere in the world. Additionally, improved capability aspects of the LRSO ensure viability of the B-52 as a standoff platform to the end of its service life in 2040. Ultimately, the LRSO will play a key role in enabling continued operational flexibility and in ensuring the ability to signal resolve to our adversaries.

Mr. ROGERS. Can the *Ohio*-class be extended any further?

Admiral HANEY. No, the *OHIO*-class submarines cannot be extended any further. The submarines original life span was projected for 30 years. However by the ingenuity of our engineers which have examined the design and looked for every effi-

ciency to extend its life, the submarine can remain viable and in service for 42 years. The Ohio-class will be the oldest class of submarine the U.S. has ever operated when they begin to retire in 2027. The Navy is delivering the OHIO Replacement SSBN “just in time” to prevent a critical capability gap. Additional replacement schedule slips will lead to a situation where current U.S. strategic deterrence requirements will not be met.

Mr. ROGERS. Why is there increased investment in space capabilities in PB16? Why is it important?

Admiral HANEY. Our potential adversaries have signaled their ability to conduct hostile operations in space as a natural extension of the terrestrial battlefield, and consider these operations essential to deny U.S. forces the asymmetric advantages of space. China launched an anti-satellite test in 2007 and July 2014. Russia has publicly stated it is expanding its counterspace capabilities, while in the possession of anti-satellite weapons and conducting anti-satellite research. This budget supports my mission requirements, maintains our asymmetric advantage in space, and protects our strategic capabilities.

