## Stenographic Transcript Before the

Subcommittee on Strategic Forces

## COMMITTEE ON ARMED SERVICES

## **UNITED STATES SENATE**

## U.S. NUCLEAR WEAPONS POLICY, PROGRAMS, AND STRATEGY

Wednesday, April 11, 2018

Washington, D.C.

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3	Wednesday, April 11, 2018
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5	U.S. Senate
6	Subcommittee on Strategic
7	Forces
8	Committee on Armed Services
9	Washington, D.C.
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11	The subcommittee met, pursuant to notice, at 2:32 p.m.
12	in Room SR-222, Russell Senate Office Building, Hon. Deb
13	Fischer presiding.
14	Members Present: Senators Fischer [presiding], Cotton,
15	Sullivan, Donnelly, Warren, and Peters.
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- OPENING STATEMENT OF HON. DEB FISCHER, U.S. SENATOR
- 2 FROM NEBRASKA
- 3 Senator Fischer: The hearing will come to order.
- 4 The subcommittee meets today to receive testimony on
- 5 U.S. nuclear weapons policy, programs, and strategy in
- 6 review of the Administration's Fiscal Year 2019 budget
- 7 request.
- 8 I thank the witnesses for being with us today.
- 9 General Rand and Admiral Benedict, this will likely be
- 10 the final time you appear before this subcommittee.
- 11 Congratulations to you both on your upcoming retirements.
- 12 We've enjoyed working with you and benefitted from your
- 13 testimony these past years. This nation owes you both a
- 14 deep debt of gratitude for your four decades of military
- 15 service. Gentlemen, I thank you.
- [Applause.]
- 17 Senator Fischer: Secretary Roberts and Dr. Soofer,
- 18 thank you for joining us today. We look forward to hearing
- 19 from both of you on how the budget supports the policies
- 20 described in the Administration's Nuclear Posture Review, as
- 21 well as the broader actions being taken to implement the
- 22 NPR.
- I also want to complement both of you for your work on
- 24 the NPR. Since its release, critics have made a number of
- 25 claims about its contents ranging from allegations that it

- 1 lowers the threshold for nuclear use by proposing the
- 2 employment of nuclear weapons in response to cyber attacks,
- 3 to assertions that it initiates a new global arms race.
- 4 Over the hearings and classified briefings we have held this
- 5 year, we have explored many of these criticisms and often
- 6 found that the truth is far less dramatic.
- 7 Instead, the 2018 NPR continues many of the policies
- 8 established in previous NPRs and plans put in place by the
- 9 Obama Administration, such as the modernization of our
- 10 nuclear forces. In the areas where it calls for change,
- 11 such as the introduction of two supplemental systems, the
- 12 NPR makes a clear case that the threats to our nation have
- 13 changed over the last 10 years and our nation's deterrence
- 14 posture must adapt accordingly.
- 15 Dr. Soofer, we look forward to hearing more on this
- 16 topic from you, sir.
- 17 Again, I thank the panel for being with us today. We
- 18 look forward to your comments and to your full statements,
- 19 and those full statements will be made part of the record.
- 20 With that, I would like to recognize the Ranking
- 21 Member, Senator Donnelly, for any opening remarks that he
- 22 would like to make.
- 23 Senator?

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- 1 STATEMENT OF HON. JOE DONNELLY, U.S. SENATOR FROM
- 2 INDIANA
- 3 Senator Donnelly: Thank you, Madam Chair, and thanks
- 4 for holding today's hearing, and to our witnesses for being
- 5 here.
- 6 Let me start out, as our Chair did, by noting that this
- 7 will be the last time we have testimony from two friends of
- 8 the subcommittee: General Robin Rand, the Commander of Air
- 9 Force Global Strike Command, having served in the Air Force
- 10 for 44 years -- amazing, thank you so much -- and Vice
- 11 Admiral Terry Benedict, the Director of the Navy Strategic
- 12 Systems Program, having served 41 years in the United States
- 13 Navy. The Admiral said 41 years in the Navy is equivalent
- 14 to 44 years in the Air Force.
- 15 [Laughter.]
- 16 Senator Donnelly: That's a joke, for the record.
- Both of you came to your leadership positions when our
- 18 DOD nuclear program was undergoing great change and
- 19 attention, and both of you, in my opinion, have been an
- 20 amazing credit to the airmen and seamen who perform our
- 21 nuclear deterrence mission 24/7, 365 days a year. I want to
- thank you for your service and wish you the best.
- Today's hearing is focused on DOD's nuclear weapons
- 24 policy for Fiscal Year 2019. If we include the full cost of
- 25 the B-21 bomber, the Department will be requesting about

- 1 \$22.1 billion for nuclear modernization and operations, or,
- 2 as Dr. Soofer likes to say, about 3 percent of the Fiscal
- 3 Year 2019 DOD budget. We are told in peak years it will
- 4 rise to about 6 to 7 percent.
- 5 That 6 to 7 percent deters a threat that is existential
- 6 to our homeland, and our job in Congress is to ensure those
- 7 dollars are well spent. It's in that regard that I'll ask
- 8 questions on programs and operations for Fiscal Year 2019.
- 9 Also of interest is the 2018 Nuclear Posture Review.
- 10 It has many features similar to the 2010 Nuclear Posture
- 11 Review and retains the same negative use assurance in that
- 12 we will not use nuclear weapons against nations in good
- 13 standing with the Nuclear Nonproliferation Treaty but
- 14 reserve the right to do so under extreme circumstances. It
- 15 keeps our commitment to the Nuclear Nonproliferation Treaty
- 16 and to nonproliferation in general but recognizes the
- 17 changed threat environment as compared to 2010.
- Of interest will be the proposal for two supplemental
- 19 systems, one a low-yield submarine-launched ballistic
- 20 missile, and the other the bringing back of a sea-launched
- 21 Cruise missile which was dropped in the 2010 NPR as it was
- 22 not maintained in storage stateside. My understanding is
- 23 this action upset Japan and South Korea, so that additional
- 24 aspect needs to be taken into account when we consider this
- 25 proposal, along with the programmatic and policy, force

Τ	structure, and budget impacts.
2	With that, let me thank everyone for coming today, and
3	thank you, Madam Chair, for holding this hearing.
4	Senator Fischer: Thank you, Senator Donnelly.
5	With that, I would ask for opening comments by members
6	of the panel. My apologies.
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- 1 STATEMENT OF HON. GUY B. ROBERTS, ASSISTANT SECRETARY
- 2 OF DEFENSE FOR NUCLEAR, CHEMICAL, AND BIOLOGICAL DEFENSE
- 3 PROGRAMS
- 4 Mr. Roberts: Thank you, Chairman Fischer, Ranking
- 5 Member Donnelly. Thank you for this opportunity again to
- 6 testify before you today on the Fiscal Year 2019 budget
- 7 request for nuclear forces. I'm pleased to join Vice
- 8 Admiral Terry Benedict, General Robin Rand, and Dr. Soofer
- 9 to discuss one of the Department of Defense's highest
- 10 priorities.
- 11 As the Assistant Secretary of Defense for Nuclear,
- 12 Chemical, and Biological Defense Programs and the Staff
- 13 Director for the Nuclear Weapons Council, I oversee the
- 14 Department's efforts to ensure the U.S. nuclear deterrent is
- 15 safe, secure, ready, and effective, developing and
- 16 sustaining capabilities to counter weapons of mass
- 17 destruction threats, effects, and proliferation, and ensure
- 18 DOD compliance with nuclear, chemical, and biological
- 19 treaties and agreements.
- 20 Since the Cold War, the U.S. has reduced its nuclear
- 21 stockpile by over 85 percent and deployed no new nuclear
- 22 capabilities. Meanwhile, our adversaries have modernized
- their weapons systems and developed new capabilities while
- 24 reducing transparency. With the return of Great Power
- 25 competition and emerging nuclear threats, it is important to

- 1 ensure our nation's nuclear stockpile and infrastructure are
- 2 prepared to provide a credible, flexible, ready, and
- 3 technologically advanced deterrent that is resilient to
- 4 technical and geopolitical change. The ability to
- 5 effectively deter threats to our nation's security relies on
- 6 a diverse nuclear force with the flexibility to deliver
- 7 tailored effects quickly and credibly. We now face a
- 8 challenging task to counter and deter a wide range of
- 9 current and emerging threats in an environment of increased
- 10 uncertainty and risk. We must prepare to deploy a tailored
- 11 and flexible nuclear deterrent as we face modern challenges
- 12 and hedge against an uncertain future.
- Over the past several decades, our nuclear weapons
- 14 infrastructure has suffered the ravages of time and a lack
- 15 of a comprehensive investment. Many of the specialized
- 16 capabilities required for stockpile work have atrophied or
- 17 become obsolete.
- Our effort to reestablish our production capabilities
- 19 at sufficient rates must be a national priority. As an
- 20 integrated enterprise, we are focused on developing and
- 21 executing a plan to meet stockpile needs and establish a
- 22 path forward to manufacturing critical materials and
- 23 components to meet future deterrent requirements.
- 24 While our nuclear triad forms the core of our
- 25 deterrent, it is further strengthened by denying any

- 1 potential adversary the perceived benefits of nuclear use.
- 2 By ensuring that U.S. forces and infrastructure are able to
- 3 survive and operate through nuclear attack, we remove the
- 4 incentive an adversary may have to launch such an attack in
- 5 the first place. They demonstrate that aggression of any
- 6 kind is not a rational option.
- 7 Our efforts to counter nuclear threats and respond to
- 8 post-detonation scenarios, as well as supporting nuclear
- 9 nonproliferation efforts, allow for improved responsiveness
- 10 in-theater and flexibility for U.S. forces to safeguard our
- 11 weapons systems, delivery platforms, and personnel overseas.
- Our Fiscal Year 2019 budget request is critically
- important for sustaining and revitalizing the nation's
- 14 nuclear deterrent in all its forms. It includes funding for
- 15 sustaining and modernizing our nuclear forces and addressing
- 16 military requirements in a complex and changing security
- 17 environment.
- 18 We ask that you support both the Department of Defense
- 19 and Department of Energy National Nuclear Security
- 20 Administration's budget request as we continue to work
- 21 closely to deter potential adversaries, meet emerging
- 22 threats, assure our allies, and hedge against an uncertain
- 23 future. I thank you very much for the committee's time,
- 24 support, and leadership. Thank you.
- 25 [The prepared statement of Mr. Roberts follows:]

1	Sena	ator	Fischer:	Thank	you,	Mr.	Secretary.
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- 1 STATEMENT OF ROBERT M. SOOFER, PH.D., DEPUTY ASSISTANT
- 2 SECRETARY OF DEFENSE FOR NUCLEAR AND MISSILE DEFENSE POLICY
- 3 Dr. Soofer: Thank you. Madam Chair, Ranking Member
- 4 Donnelly, I thank you for the opportunity to testify today.
- 5 With your permission, I'd like to submit a longer statement
- 6 for the record and make a few opening remarks. Thank you.
- 7 Secretary Mattis, Undersecretary Rood, and General
- 8 Selva have previously briefed the full committee on the 2018
- 9 Nuclear Posture Review, so I won't go into any great detail
- 10 today. However, I would like to take a moment to summarize
- 11 a few key points based on feedback we received from members
- 12 of Congress, as well as our allies.
- First, the findings and recommendations of the 2018
- 14 Nuclear Posture Review are well grounded in what has been a
- 15 traditional bipartisan approach to nuclear policy,
- 16 summarized by Secretary Mattis in his public remarks
- 17 following the February meeting of NATO's Nuclear Planning
- 18 Group.
- "The U.S. approach to nuclear deterrence," he said,
- 20 "embraces two co-equal principles: first, ensuring a safe,
- 21 secure, and effective nuclear deterrent; and second, working
- 22 wherever possible for nuclear nonproliferation and arms
- 23 control whenever it advances stability and security for us
- 24 and our allies. Nuclear deterrence and efforts to foreclose
- 25 proliferation and reduce the number of nuclear weapons are

- 1 not mutually exclusive."
- 2 Second, reflecting the priority afforded nuclear
- 3 deterrence, the Fiscal Year 2019 budget request includes
- 4 full funding for Department of Defense nuclear programs and
- 5 is meant to maintain the nuclear modernization plans
- 6 approved by Congress over the past years.
- 7 Third, despite what you may have seen in the press, our
- 8 nuclear posture does not increase the circumstances under
- 9 which our nation would contemplate the use of nuclear
- 10 weapons, nor do we increase reliance on nuclear weapons.
- 11 Rather, we maintain the longstanding policy that "the United
- 12 States would employ nuclear weapons only in extreme
- 13 circumstances to defend the vital interests of the United
- 14 States, allies and partners." This recognizes the enduring
- 15 role for nuclear weapons in deterring nuclear and
- 16 conventional aggression and assuring allies, while hedging
- 17 against an unpredictable security environment.
- Fourth, the recommendation to pursue two supplemental
- 19 capabilities to the existing nuclear force program of record
- 20 will not increase the likelihood of nuclear war or stimulate
- 21 an arms race. These recommendations include in the near
- 22 term modifying a small number of existing submarine-launched
- 23 ballistic missile warheads to lower their explosive yield,
- 24 and in the mid to longer term pursuing a nuclear sea-
- 25 launched Cruise missile, a capability that existed in our

- 1 arsenal until it was retired early in the prior
- 2 administration when the security environment seemed more
- 3 benign. Both these capabilities are in response to Russian
- 4 nuclear doctrine and new nuclear capabilities that must be
- 5 viewed in the broader context of the long-term competition
- 6 between the United States and Russia identified in the 2018
- 7 National Defense Strategy.
- 8 These capabilities are also applicable to what appears
- 9 to be China's growing nuclear forces that can threaten the
- 10 United States and its allies in the Indo-Pacific region.
- 11 The supplemental capabilities are needed to ensure that
- 12 Russian and Chinese leadership do not mistakenly conclude
- 13 they could achieve some advantage by initiating a limited
- 14 first use of nuclear weapons, potentially including low-
- 15 yield weapons. It's not a radical departure from previous
- 16 policy. It does not signify a shift to nuclear war
- 17 fighting. Rather, it reinforces the imperative expressed by
- 18 the previous administration to retain a range of nuclear
- 19 capabilities in explosive power and methods of delivery to
- 20 strengthen deterrence in a wide range of scenarios,
- 21 including an adversary's calibrated nuclear escalation.
- These two additional capabilities strengthen the
- 23 credibility of our declaratory policy to counter any nuclear
- 24 attack under any circumstance, which in turn raises the
- 25 nuclear threshold and strengthens deterrence by signaling to

- 1 adversaries that they have nothing to gain through limited
- 2 strikes and everything to lose.
- 3 And because these capabilities are consistent with
- 4 existing arms control treaties and do not threaten Russian
- 5 nuclear retaliatory forces, they should not stimulate an
- 6 arms race. Rather, they could provide the means for
- 7 addressing the growing disparity between Russia and the
- 8 United States in nuclear forces not limited by existing
- 9 nuclear treaties, a disparity that has been well recognized
- 10 by Congress and that will continue to grow in the future
- 11 unless we create some point of leverage.
- 12 Fifth, throughout the Nuclear Posture Review we
- 13 consulted extensively with allies and partners, and their
- 14 reaction to the NPR has been positive. Asian and European
- 15 allies recognize that the security environment has changed
- 16 for the worse and requires an emphasis on nuclear deterrence
- 17 even while we continue to pursue, where feasible, a balanced
- 18 policy that combines effective deterrence with a broad-based
- 19 effort to reduce nuclear risks through global
- 20 nonproliferation initiatives and a responsible program of
- 21 arms control.
- 22 Finally, I would add that, as noted by Secretary
- 23 Mattis, the United States' commitment to arms control and
- 24 nuclear nonproliferation remains strong, but arms control is
- 25 not an end in itself and depends on the security environment

1	and the participation of willing partners. Russia's
2	significant non-compliance with the INF Treaty and buildup
3	of nuclear weapons not limited under the new START Treaty
4	calls into question its willingness to be a serious partner
5	in arms control. The United States remains committed to
6	strategic dialogue when conditions permit.
7	I thank the committee for its strong bipartisan support
8	of U.S. nuclear policies and modernization programs over the
9	years and look forward to answering your questions. Thank
10	you.
11	[The prepared statement of Dr. Soofer follows:]
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- 1 STATEMENT OF GENERAL ROBIN RAND, USAF, COMMANDER, AIR
- 2 FORCE GLOBAL STRIKE COMMAND
- 3 General Rand: Good afternoon, Chairman Fischer and
- 4 Ranking Member Donnelly. Thank you for allowing me to
- 5 appear before you today, and thank you very much for your
- 6 kind remarks.
- 7 As I conclude my third year in command of Air Force
- 8 Global Strike Command, I have four fundamental focus areas.
- 9 First, the fight tonight, the fight in 2030, the
- 10 professional development of our airmen, and the care and
- 11 feeding of our families. Today I will highlight two of
- 12 these areas in my opening comments.
- In the fight tonight, let me say the strength of Global
- 14 Air Force Strike Command is in our 34,000 airmen and their
- 15 remarkable families. Representing them today is Command
- 16 Chief Master Sergeant Tommy Mazzone, a highly distinguished
- 17 combat veteran and the senior ranking non-commissioned
- 18 officer in our command. He is also my best wingman. He and
- 19 these airmen are nothing short of spectacular and deserve
- 20 our nation's gratitude for their service of providing global
- 21 strike and strategic nuclear deterrence.
- Right now, we have airmen deployed to the
- 23 Intercontinental Ballistic Missile fields of Colorado,
- 24 Nebraska, Wyoming, Montana, and North Dakota, where they
- 25 provide a 24/7, 365-day umbrella of strategic nuclear

- 1 deterrence and assurance for our nation and our allies.
- 2 At the same time, we have striker airmen deployed in
- 3 the Middle East in support of Central Command and Africa
- 4 Command fighting violent extremists. We have airmen
- 5 deterring our adversaries and assuring our partners in
- 6 European Command and Pacific Command, and we have airmen
- 7 supporting counter-narcotic operations in U.S. Southern
- 8 Command, all of this while our bomber airmen remain postured
- 9 to support the U.S. Strategic Command's nuclear operational
- 10 plan.
- 11 At the direction of the commander of the United States
- 12 Strategic Command, in September 2017, we reorganized to
- 13 establish one line of authority for USSTRATCOM's air
- 14 component under a single four-star commander. The
- 15 reorganization established clear lines of authority,
- 16 simplifying an outdated command structure for bomber and our
- 17 missile forces. My position is now dual hatted as the
- 18 Commander of Air Force's Strategic-Air Joint Force Air
- 19 Component Commander, and the Commander of Air Force Global
- 20 Strike Command.
- 21 A major part of this reorganization was to activate the
- 22 Joint Global Strike Operations Center, or J-GSOC,
- 23 headquartered at Barksdale Air Force Base. The J-GSOC
- 24 enables us to focus on the operational nuclear deterrence
- 25 and global strike missions, while the headquarters of Air

- 1 Force Global Strike Command focuses on organize, train, and
- 2 equip aspects of our mission.
- 3 Equally important as our ability to fight tonight is
- 4 our ability to fight in 2030. Simply stated, modernization
- 5 of our nuclear forces is at a critical juncture. The key to
- 6 Air Force Global Strike Command's continued success will
- 7 remain our ability to modernize, sustain, and recapitalize.
- 8 To accomplish this we must have predictable, adequate, and
- 9 flexible budgets in order to continue our readiness recovery
- 10 while building a more capable and lethal force. The future,
- 11 as Great Power competition reemerges as a major focus area,
- 12 requires that Air Force Global Strike Command lead the way.
- I am happy to report today that we're on a good path
- 14 moving forward, and I look forward to answering any of your
- 15 questions about our modernization and sustainment plans
- 16 related to our mission.
- 17 Again, Madam Chairwoman and subcommittee members,
- 18 Ranking Member Donnelly, I want to thank you for your
- 19 dedication to our great nation and the opportunity to appear
- 20 before the committee today to highlight the missions and
- 21 successes of the striker airmen and Global Air Strike.
- 22 Thank you.
- 23 [The prepared statement of General Rand follows:]

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- 1 STATEMENT OF VICE ADMIRAL TERRY J. BENEDICT, USN,
- 2 DIRECTOR, STRATEGIC SYSTEMS PROGRAMS
- 3 Admiral Benedict: Yes, ma'am. Madam Chairman, Ranking
- 4 Member Donnelly, thank you for the opportunity to be here
- 5 today, and thank you for your support of the Navy's
- 6 deterrence mission and for your very kind words to open.
- 7 It's been my greatest privilege as the Director to
- 8 represent the men and women of SSP for the last eight years.
- 9 My goal as the Director has been to ensure that they are
- 10 properly positioned to execute the mission with the same
- 11 level of success today and tomorrow as they have done since
- 12 our program's inception in 1955.
- SSP is currently extending the Trident II D5 strategic
- 14 weapon system to match the Ohio Class service life and to
- 15 serve as the initial weapon system on the Columbia Class.
- 16 I'll summarize our efforts by saying that all of our life
- 17 extension programs remain on track and on budget. Our life
- 18 extension efforts will ensure an effective and credible sea-
- 19 based strategic deterrent on both the Ohio and the Columbia
- 20 Class until the 2040s.
- 21 The Navy is also taking steps to ensure a credible
- 22 weapons system is available beyond 2040. In fact, the last
- 23 Nuclear Posture Review directs the Navy to "begin studies in
- 24 2020 to define a cost-effective, credible, and effective
- 25 sea-launched ballistic missile that we can deploy through

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the life of the Columbia SSBN through the 2080s." We will
 2
     execute that direction.
          I look forward to your questions. Thank you.
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          [The prepared statement of Admiral Benedict follows:]
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- 1 Senator Fischer: Thank you, Admiral.
- 2 As I noted in my opening statement, one of the basic
- 3 premises of the NPR is that our nuclear forces must adapt to
- 4 the changing threat landscape that we face. Some critics,
- 5 including the Russian government, have attacked us by
- 6 denying that the security environment has changed, while
- 7 others argue that the sheer power of the U.S. nuclear
- 8 arsenal is somehow going to insulate us from any changes in
- 9 a security environment.
- 10 Dr. Soofer, you touched on this in your opening
- 11 statement when you note that "potential adversaries do not
- 12 stand still," and consequently U.S. deterrence requirements
- 13 cannot remain, as you put it, fixed.
- We've heard plenty of testimony about the changing
- 15 threat environment on this committee and on the full
- 16 committee. I don't think that's in question. But I'd like
- 17 to explore the notion that U.S. nuclear forces have no need
- 18 to adapt to a different security environment.
- 19 So, Dr. Soofer, U.S. nuclear policy and planning has
- 20 long emphasized the need for flexible adverse nuclear forces
- 21 specifically to adjust to a changing threat landscape. Is
- 22 that correct?
- Dr. Soofer: Yes, it is.
- 24 Senator Fischer: And I'm sure that you've seen these
- 25 vague criticisms that the current U.S. nuclear posture is

- 1 more than sufficient to deter any new threats. What is your
- 2 reaction to statements like this? And in your opinion, what
- 3 would be the impact to strategic stability of overlooking
- 4 the expansion of adversaries' arsenals, the increasing
- 5 ability of adversaries to deny U.S. nuclear employment, and
- 6 the violation of treaties, and concluding this warrants no
- 7 change in U.S. nuclear posture?
- 8 Dr. Soofer: Thank you, Madam Chair. As senior DOD
- 9 leadership has testified, including General Hyten, today we
- 10 have a strong nuclear deterrent, and there should be no
- 11 question that we have the ability to deter current threats.
- But in the course of the Nuclear Posture Review, we
- 13 concluded that, as I indicated, the threat doesn't stand
- 14 still, and there's some disturbing trends out there that
- 15 require a response.
- 16 One of the biggest problems that we faced was the
- 17 growing disparity between Russia and the U.S. in a category
- 18 of weapons called non-strategic nuclear weapons, sometimes
- 19 referred to as tactical nuclear weapons. This has been a
- 20 concern not only of ours but of previous administrations as
- 21 well, and even during the new START ratification proceedings
- 22 in 2010 there was a provision in the resolution ratification
- 23 that directed the administration within one year to address
- 24 this disparity, bring the Russians back to the negotiating
- 25 table.

- 1 So we've been concerned about this for a long time, and
- 2 we came to the conclusion that it wasn't just the numbers
- 3 but it was the types of capabilities that they were
- 4 deploying -- depth charges, torpedoes, short-range ballistic
- 5 missiles; air, land, and sea-launched Cruise missiles. Why
- 6 would you build so many different types of nuclear weapons?
- 7 Both the U.S. and Russia reduced their tactical nuclear
- 8 weapons at the end of the Cold War. We have a modest number
- 9 that we are modernizing but certainly not expanding, but the
- 10 Russians are expanding their capabilities.
- 11 So they have the capabilities, plus you've heard about
- 12 their nuclear doctrine, their limited nuclear war doctrine.
- 13 Some people would argue that maybe the Russians wouldn't do
- 14 this in an actual scenario, but we have to assume that they
- 15 would because they have the capability and they exercise the
- 16 capability.
- So you have the doctrine, you have the capabilities,
- 18 you have what everybody agrees is a more belligerent Russia.
- 19 So we add all that up, and we came to the conclusion that
- 20 just maybe the Russians perceived an advantage with this new
- 21 capability. After all, if they didn't think they needed
- them, they probably wouldn't build them given our strategic
- 23 triad.
- So we felt we had to do something in the near term and
- 25 in the long term to address this problem. In the near term

- 1 it's the modification of a modest number of submarine-
- 2 launched ballistic missile warheads, just so the Russians
- 3 understand that at that low level of low-yield capability,
- 4 we have a response option, the president has a response
- 5 option. It's for deterrence purposes, not for war fighting.
- 6 In the longer term, how do you address this growing
- 7 disparity in non-strategic weapons? We've been trying to
- 8 get the Russians to come back to the table to negotiate
- 9 reductions, but they haven't been willing to come back. So
- 10 by going forward with a sea-launched Cruise missile
- 11 capability, a capability that, by the way, is consistent
- 12 with the INF Treaty, consistent with the new START Treaty,
- 13 maybe this will give us some leverage to bring them back to
- 14 the negotiating table.
- 15 If we don't do this, the problem may be that we get to
- 16 a point where the Russians may perceive they have not only a
- 17 military advantage over us, because the numbers are so
- 18 disparate, but now your allies start to worry. They say,
- 19 well, the Russians have two times or three times, ten times
- 20 as many weapons as the United States does. Maybe in a
- 21 crisis situation, they'd question our leadership. So
- 22 there's a real military and strategic problem associated, I
- 23 think, with not addressing the growing threat.
- I hope that answers the question.
- 25 Senator Fischer: Yes. As we look at Russia and their

- 1 doctrine of escalate to deescalate, and I think we've had
- 2 numerous discussions on that in this subcommittee and in the
- 3 full committee as a whole, there seems to be acceptance of
- 4 that now and kind of almost a downplaying of it, and instead
- 5 the focus I think is on -- and I think it comes from the
- 6 Russians in many areas. The focus is on we are so superior
- 7 in our nuclear capabilities, the power that the United
- 8 States has, then why would the United States need to change?
- 9 They view it as a change in the posture that we're taking.
- 10 You mentioned so many points to that, but specifically
- 11 how would you address the Russians saying that the United
- 12 States has such superiority when it comes to our power that
- 13 we have with our nuclear capabilities that there's no way
- 14 they're going to do the escalate to deescalate?
- 15 Dr. Soofer: First, the Russian claim in Putin's March
- 16 1st speech, where he's claiming that he's doing this in
- 17 reaction to what the U.S. is doing, of course that's
- 18 nonsense because these capabilities, the Russian
- 19 capabilities have been in development for decades. So it's
- 20 clearly not a response to what the United States is doing.
- 21 We are playing catch-up at this point. So I think that
- 22 criticism on its face is just false.
- So I'm not quite sure how to address it other than
- 24 that. I would just go back to say that even Ash Carter,
- 25 former Secretary of Defense, he noted that there has been no

- 1 arms race. The only country that's been running this race
- 2 has been the Russians over the last 10, 20 years.
- 3 Senator Fischer: Thank you.
- 4 Senator Donnelly?
- 5 Senator Donnelly: Thank you, Madam Chair.
- 6 Assistant Secretary Roberts, what is your assessment of
- 7 the NNSA efforts on modernization in general and the ability
- 8 to produce up to 80 plutonium pits by 2030, as required by
- 9 statute?
- 10 Mr. Roberts: Thank you, Senator, for the question.
- 11 Given the future stockpile requirements, number one, I
- 12 certainly support, as stated in the NPR, to produce 80 pits
- 13 by 2030. Based on the work that we've done now, I think
- 14 that we're in a good position to actually achieve that.
- 15 We've recently completed a review. It was basically an
- 16 engineering analysis, as well as a workforce analysis on the
- 17 path that we've looked at, the various alternatives that
- 18 have come out of those, both an analysis of alternatives
- 19 review and this engineering analysis that was just recently
- 20 completed.
- 21 The modernization aspects we've looked at that are in
- 22 place at a production facility at Los Alamos, this is the
- 23 one place where we still have existing and enduring
- 24 production capabilities. In fact, Los Alamos has been the
- 25 plutonium Center of Excellence for operations. They will

- 1 have the capability to produce up to 30 pits per year. Now
- 2 we have to look at how we get from 31 to 80.
- 3 So this engineering analysis was looking at the
- 4 processes that are necessary to select the best location for
- 5 future pit production requirements of 50-plus pits per year,
- 6 and we're undergoing right now a final assessment to make a
- 7 recommendation to the Deputy Secretary of Energy. Hopefully
- 8 that will be done very soon. We've looked at the various
- 9 alternatives, and we've come up with a recommendation that
- 10 will hopefully meet that requirement, and we'll do that
- 11 before the 11th of May, which we're required to do by law,
- 12 as you know.
- 13 Senator Donnelly: Thank you.
- 14 Admiral Benedict, can you give us the status for Fiscal
- 15 Year 2019 on the Navy role in the conventional prompt strike
- 16 system?
- 17 Admiral Benedict: Yes, sir. To date, we have been
- 18 operating under the Defense-wide account. We flew a very
- 19 successful experiment late last year in the fall. As I have
- 20 briefed, the results of that were classified, but it was a
- 21 very successful experiment, met all our objectives. We have
- 22 now been directed to do the second experiment along the
- 23 lines of conventional prompt strike, as well as at the
- 24 direction of OSD we are running a motor competition. The
- 25 inputs from industry are in SSP. We are evaluating those,

- 1 and I would suspect that we will make an award here very
- 2 shortly.
- 3 Senator Donnelly: Thank you.
- Dr. Soofer, we haven't seen all the budget data for the
- 5 low-yield submarine-launched ballistic missile. How much
- 6 will it cost in Fiscal Year 2019 for the NNSA and for the
- 7 DOD?
- 8 Dr. Soofer: Thank you, Senator. I believe the request
- 9 for Department of Defense is \$23 million, and I think it
- 10 will be \$50 million to complete the project. Unfortunately,
- 11 Senator, I don't have the numbers for NNSA. I'm going to
- 12 say that they're going to be in a similar range, and those
- 13 numbers will be provided to Congress by OMB in a whole-of-
- 14 government errata by the end of this month.
- 15 Senator Donnelly: Okay. Thank you.
- 16 General Rand, my understanding is we dropped from the
- 17 B-2 the ability to send and receive information with the new
- 18 satellite system that can operate in a nuclear stress
- 19 environment. Does that concern you?
- 20 General Rand: No, sir. I made that decision largely,
- 21 and then coordinated it with my boss, General Hyten, at
- 22 STRATCOM. The rationale, sir, is that the AEHF that you
- 23 referred to will not be fielded until 2026. It's our
- 24 intention to sunset the B-2 in the early 2030s. The six
- 25 years of utility to have us receive and transmit isn't worth

- 1 the squeeze when that \$1.3 billion that we save can be used
- 2 for other more critical MC-3 capabilities across the
- 3 enterprise.
- 4 I will tell you that what we did do is we have sped up
- 5 the acquisition of what's called the common very low
- 6 frequency receiver that we will start putting on the B-2 in
- 7 Fiscal Year 2019.
- 8 Senator Donnelly: Thank you.
- 9 Thank you, Madam Chair.
- 10 Senator Fischer: Thank you, Senator Donnelly.
- 11 Senator Sullivan?
- 12 Senator Sullivan: Thank you, Madam Chair.
- Gentlemen, thanks for being here.
- Dr. Soofer, I wanted to thank you for your help
- 15 previously on the Advancing America's Missile Defense Act.
- 16 A number of us worked on that last year and it became a full
- 17 part of the NDAA; very strong bipartisan support, by the
- 18 way. It started really significantly revamping our missile
- 19 defense for our country when the threats are very
- 20 significant.
- 21 As you know, in the previous NDAA there had been a
- 22 demand for the completion of the Ballistic Missile Defense
- 23 Review, and I'm sure all of you are hard at work. I had the
- 24 opportunity to question Undersecretary Rood on that
- 25 recently, and I was pressing him. Didn't get it, but I'd

- 1 like to press you now to try to get the review sooner rather
- 2 than later because, again, one of the things that I think
- 3 was very positive in this last go-around was that it was
- 4 very bipartisan. I'm working with a number of folks on the
- 5 committee and some of the folks in the Pentagon. I'm
- 6 looking at ways to make progress again on some of the
- 7 missile defense issues.
- 8 But it would be really important, as we're marking up
- 9 the NDAA this year, to be informed by the review. Otherwise
- 10 we essentially miss an entire year.
- 11 So you probably were ready for this question, but can
- 12 we get a commitment from you to have that done, say, by
- 13 within the next month? You know how this schedule works.
- 14 Dr. Soofer: Yes.
- 15 Senator Sullivan: How about before we start marking up
- 16 the NDAA in earnest?
- 17 Dr. Soofer: Senator, we are now weeks away from
- 18 getting this done. I think the draft is done. It's a
- 19 coordination problem, and you know how difficult it is to
- 20 get coordination.
- 21 Senator Sullivan: Correct, but you know how difficult
- 22 it is to miss the window.
- Dr. Soofer: Yes, sir.
- Senator Sullivan: And given your background, you know
- 25 a lot about how the markup of that bill works. Do you think

- 1 we'll have it in time to be informed as we mark up the next
- 2 National Defense Authorization Act? It would be a missed
- 3 opportunity is all I'm saying.
- 4 Dr. Soofer: It would be, sir, and we will do our best
- 5 to have it done and to you by the end of this month or early
- 6 next month.
- 7 Senator Sullivan: Okay. Good. Well, we want to keep
- 8 working with you and keep pressing you on that.
- 9 Let me ask, as we are looking at one of the things --
- 10 we did a CODEL, a number of us, up to Fort Greeley in Alaska
- 11 where we're going to have a new missile defense field built.
- 12 One of the challenges that we want to work with all of you
- on, Senator Inhofe and I, and I know the Chair and Ranking
- 14 I'm sure are very supportive of this as well, but when we
- 15 were up there talking about how long it would take to
- 16 actually fully operationalize a new field at Fort Greeley,
- 17 which everybody agrees we need, the estimates were four,
- 18 maybe five years -- four, maybe five years. We won World
- 19 War II in four to five years.
- 20 So we want to work with all of you to accelerate the
- 21 deployment of these missiles that are supposed to protect
- 22 the entire United States, and I think four to five years is
- 23 unacceptable. I think everybody says it's unacceptable, but
- 24 we need to look at ways to make sure that -- the threat is
- 25 here. The threat is here right now, today. The whole point

- 1 of the bill was to advance our missile defense. Four to
- 2 five years doesn't help anyone.
- 3 Do you care to comment on that, any of the members of
- 4 the panel here? We need to do more, faster, and we can. We
- 5 won a war in that amount of time. I think we can build a
- 6 new missile field.
- 7 Dr. Soofer: Senator, I agree. I've always wondered
- 8 why it takes so long. The answer that usually comes back is
- 9 the weather in Alaska, the construction --
- 10 Senator Sullivan: Well, trust me, we built the Alcan
- 11 Highway in World War II, which was 1,100 miles, in eight
- 12 months. We can do this stuff. We can do it. We're
- 13 Americans, we can do it. So the weather is not a big deal
- 14 in Alaska, trust me.
- 15 Dr. Soofer: And I think the other limiting factor may
- 16 be development of the redesigned kill vehicle.
- 17 Senator Sullivan: We can get the silos built, and I'm
- 18 not saying we have to get that done. How about just a
- 19 commitment from all of you at all levels of the government
- 20 to just accelerate this? Nobody wants this to be four to
- 21 five years. Can I get that from everybody here in positions
- 22 of authority?
- Dr. Soofer: Yes, sir.
- 24 Admiral Benedict: Yes, sir. Absolutely.
- 25 Senator Sullivan: And then one final question. As we

- 1 are looking at the missile defense provisions in the NDAA,
- 2 one issue that keeps coming up is the idea of space-based
- 3 sensors uniformly to integrate our theater, Aegis, THAAD,
- 4 homeland. Would you all agree with that as a priority?
- 5 Dr. Soofer: Absolutely.
- 6 Senator Sullivan: Okay. Thank you.
- 7 Senator Fischer: Thank you, Senator Sullivan.
- 8 Senator Warren?
- 9 Senator Warren: Thank you, Madam Chair.
- 10 And thank you to our witnesses for being here today.
- 11 So, the Administration's Nuclear Posture Review calls
- 12 for a new low-yield submarine-launched ballistic missile.
- 13 DOD has previously suggested that this could be accomplished
- 14 quickly by modifying the W-76 warhead that goes into our
- 15 existing submarine-launched Trident missile. The NNSA
- 16 administrator recently came before our committee, and she
- 17 testified that she didn't know how long it would take NNSA
- 18 to modify the W-76 warhead, and she didn't know whether it
- 19 could be done before the life extension production line
- 20 closes at the end of the year.
- 21 So let me ask you this, Dr. Soofer: Does DOD know how
- 22 long it will take to modify the W-76 warhead?
- 23 Dr. Soofer: When we considered this during the Nuclear
- 24 Posture Review, and since then, we came to the conclusion
- 25 based on talking to people at NNSA that this could take two

- 1 to three years at the most.
- 2 Senator Warren: So you think two to three. Does that
- 3 mean it can't be done by the end of the life extension
- 4 program?
- 5 Dr. Soofer: I think it's important that it be done by
- 6 the end of the life extension program.
- 7 Senator Warren: So you think it will be within the end
- 8 of the life extension program.
- 9 Dr. Soofer: It should be.
- 10 Senator Warren: Okay. All right. So, the NNSA
- 11 administrator also testified that NNSA had not requested any
- 12 funding to modify the W-76 warhead, she didn't know if they
- 13 would request a reprogramming or a supplemental request, so
- 14 let me ask you about that one, Dr. Soofer. I understand
- 15 that the DOD budget does include \$22.6 million for the SLBM.
- 16 Is the OMB request next month a reprogramming or a
- 17 supplemental?
- Dr. Soofer: They call it, as a formal term, errata.
- 19 It's a whole-of-government errata.
- 20 Senator Warren: An errata?
- 21 Dr. Soofer: An errata.
- 22 Senator Warren: Okay.
- Dr. Soofer: It's a new term to me, as well. But it
- 24 essentially will be a reallocation of funds, because I think
- 25 they're thinking of trying to do that with existing funds,

- but I'm not sure. It's called an errata, a whole-of-
- 2 government errata.
- 3 Senator Warren: Okay, but it's a reallocation is what
- 4 you're telling me, it's not new money. You're shaking your
- 5 head, right? It's a reallocation. So what is the money
- 6 going to be reallocated from?
- 7 Dr. Soofer: That's a decision for NNSA and the
- 8 Department of Energy to make, and I'm not privy to that.
- 9 Senator Warren: So we don't know where it comes from.
- 10 Dr. Soofer: You'll know when you see the budget
- 11 request.
- 12 Senator Warren: Okay. But right now, it's that
- 13 somebody is actually willing to give up \$23 million, right?
- 14 Okay.
- What is DOD using the \$23 million for?
- 16 Admiral Benedict: So, ma'am, the \$23 million in the
- 17 Department of Defense is actually in my budget, and my
- 18 budget will be to do the integration of the NNSA effort to
- 19 ensure that all my documentation is complete and consistent
- 20 with this type of weapon, and to do the work at my strategic
- 21 weapons facilities, to do the loud-out change between the
- 22 current configuration on the submarines and this new
- 23 configuration.
- 24 Senator Warren: Okay. So the NNSA is going to do the
- 25 actual modification.

- 1 Admiral Benedict: Yes, ma'am.
- 2 Senator Warren: And the \$22.6 million is so that you
- 3 can -- say that one more time?
- 4 Admiral Benedict: I need to do the integration of
- 5 their effort with --
- 6 Senator Warren: So it's to integrate.
- 7 Admiral Benedict: Yes, sir. Yes, ma'am, integrate
- 8 with the system. I need to change all my documentation to
- 9 ensure that I'm complete and consistent with nuclear
- 10 weapons, and then I need to do the actual work at my
- 11 strategic weapons facilities to change the warhead on the
- 12 missiles. Yes, ma'am.
- 13 Senator Warren: Okay. Thank you.
- 14 You know, I appreciate and I think you all understand
- 15 why we're concerned about this. We're all familiar with
- 16 NNSA's program management challenges in recent years, and
- 17 given that track record, I find the number of unknowns that
- 18 we heard before from the administrator and that still seem
- 19 to be there worrisome. We're already asking them to conduct
- 20 an unprecedented number of life cycle extension programs,
- 21 along with other demands of the stockpile stewardship
- 22 programs, and I just have real concerns about their capacity
- 23 to take on additional work. I think maintaining our current
- 24 arsenal and our current programs should be our number-one
- 25 priority and that we should manage that first.

- 1 Thank you very much. Thank you, Madam Chair.
- 2 Senator Fischer: Thank you, Senator Warren.
- 3 Senator Cotton?
- 4 Senator Cotton: Dr. Soofer, I want to speak to you
- 5 first about Russia's pattern of behavior regarding their
- 6 international commitments. Is Russia violating the INF
- 7 Treaty?
- 8 Dr. Soofer: Yes, it is, Senator.
- 9 Senator Cotton: Is Russia still violating the Open
- 10 Skies Treaty?
- 11 Dr. Soofer: I believe so, Senator.
- 12 Senator Cotton: We also know what happened in the
- 13 United Kingdom a few weeks ago with the poisoning of two
- 14 Russians. I know you aren't the lead for chemical weapons
- 15 issues, but given what's been reported by our government and
- 16 the actions we've taken, is it fair to say that Russia has
- 17 violated the Chemical Weapons Convention?
- Dr. Soofer: I don't know, Senator. I assume so.
- 19 Senator Cotton: I'll answer yes.
- 20 What about some other international agreements to which
- 21 Russia is a party? The Budapest Memorandum, the
- 22 Presidential Nuclear Initiative, the Conventional Forces in
- 23 Europe Agreement, the BNN document. Is Russia out of
- 24 compliance with all of these in one way or another?
- 25 Dr. Soofer: Yes, Senator.

- 1 Senator Cotton: What do you think this pattern of
- 2 behavior tells us about how much Russia respects its
- 3 international commitments?
- 4 Dr. Soofer: I think they scorn their international
- 5 commitments, and they're bent on upsetting the status quo.
- 6 Senator Cotton: So what about the new START Treaty?
- 7 Is Russia complying with its obligations under new START?
- 8 Dr. Soofer: We believe that they have met the limits.
- 9 Yes, Senator.
- 10 Senator Cotton: After all the scorn they show for
- 11 these other commitments, they are upholding their
- 12 commitments under the new START Treaty. Why would that be?
- Dr. Soofer: I think it's a strategic approach. I
- 14 think that they are limiting their strategic nuclear weapons
- 15 while they circumvent this by building up their non-
- 16 strategic nuclear weapons that are not limited by the
- 17 treaty. I think it's a very clever approach.
- 18 Senator Cotton: So they are complying with their
- 19 obligations under the treaty that tends to benefit them
- 20 while they get the benefits of violating all of their other
- 21 treaties.
- 22 Dr. Soofer: Yes, sir.
- 23 Senator Cotton: Well, new START expires in about three
- 24 years, but we'll have the option to extend it for another
- 25 five years. Do you think it makes sense in this set of

- 1 circumstances to extend the new START Treaty if Russia
- 2 remains in violation of almost every other international
- 3 agreement that they have made?
- 4 Dr. Soofer: Senator, we're going to begin a whole-of-
- 5 government review of the pros and cons of extending that
- 6 treaty.
- 7 Senator Cotton: Thank you.
- 8 Finally, I want to address what President Putin said in
- 9 his televised remarks last month about all kinds of new
- 10 Russian capabilities. I don't think any of these
- 11 capabilities were terribly surprising for people who have
- 12 followed the matters. But would something like an
- intercontinental-range nuclear-powered Cruise missile be
- 14 covered under the new START Treaty? Or what about his so-
- 15 called intercontinental underwater vehicle?
- 16 Dr. Soofer: Senator, these are not covered by the new
- 17 START Treaty.
- 18 Senator Cotton: So, all of the new systems he's
- 19 announced are not covered by the treaty that benefits him,
- 20 and he violates all the obligations under the other treaties
- 21 that don't benefit him. Given that set of circumstances, I
- 22 think we should take a serious second look at extending the
- 23 new START Treaty.
- 24 Admiral Benedict, if I can turn to you, I noted in the
- 25 Nuclear Posture Review that it said we would now field a

- 1 fleet of at least -- that's the quote, "at least" -- 12
- 2 Columbia Class SSBNs. I think the previous statement had
- 3 been we would field 12 Columbia Class SSBNs. Does that mean
- 4 that there is some thinking inside the Navy or the broader
- 5 Department of Defense that we might need more than 12
- 6 Columbia Class submarines?
- 7 Admiral Benedict: Sure. I think that's a decision
- 8 that will be made and a recommendation made by leadership as
- 9 we approach the end of production. But I think, given the
- 10 current changing world dynamic, we want to reserve the right
- 11 to revisit that at some point.
- 12 Senator Cotton: So that's the import of those words
- 13 "at least"?
- 14 Admiral Benedict: Yes, sir.
- 15 Senator Cotton: I think that's something we should
- 16 entertain as well. I was glad to see that in the review,
- 17 and thank you for that, Admiral.
- Gentlemen, thank you again for your testimony today.
- 19 Senator Fischer: Thank you, Senator.
- 20 We'll begin a second round of questions.
- 21 Dr. Soofer, the Nuclear Posture Review repeatedly makes
- 22 the point that we have not made sufficient progress towards
- 23 a responsive nuclear infrastructure despite the fact that
- 24 it's been a longstanding goal that's been confirmed in
- 25 previous NPRs. So with that in mind, can you describe how

- 1 the Department is translating the NPR into specific
- 2 guidance, and what processes will be put in place so we can
- 3 assure a successful implementation?
- 4 Dr. Soofer: Thank you, Senator. Just today, as a
- 5 matter of fact, we put together a package or a memo to the
- 6 Secretary of Defense that lists about 40 different actions
- 7 following from the Nuclear Posture Review. Those actions
- 8 are assigned to specific entities within the Department of
- 9 Defense -- Joint staff, Army, Navy, OSC policy, STRATCOM.
- 10 It's our recommendation that the Office of the Secretary of
- 11 Defense review the progress twice a year and report to the
- 12 Deputy and the Secretary on how well we're implementing
- 13 these specific recommendations.
- 14 Again, there are about 40 different recommendations.
- 15 Some of those recommendations speak directly to our hedging
- 16 criteria and the need to have a more responsive nuclear
- 17 infrastructure. I will note, however, that these
- 18 implementation recommendations are only for the Department
- 19 of Defense and do not pertain to the Department of Energy.
- 20 They would have their own procedures.
- 21 Senator Fischer: And will the Department provide that
- 22 implementation guidance to this committee?
- 23 Dr. Soofer: I think as soon as the Secretary of
- 24 Defense signs that, we should come up and brief you on the
- 25 implementation plan.

- 1 Senator Fischer: Thank you.
- 2 You mentioned hedging, and with the NPR we see that it
- 3 emphasizes the importance of being able to hedge against the
- 4 geopolitical and technical uncertainties that we're seeing
- 5 out there.
- 6 To what extent is the Department reviewing its hedging
- 7 strategies to ensure that they're keeping pace with this new
- 8 threat environment?
- 9 Dr. Soofer: Maybe I can start, but Secretary Roberts,
- 10 given his affiliation with the Nuclear Weapons Council, may
- 11 be better suited. But this idea of hedging is nothing new.
- 12 Previous administrations have done it, and they've hedged
- 13 against geopolitical changes, what happens if the
- 14 relationship with Russia gets even worse and they break out
- 15 of the new START Treaty and they start deploying more
- 16 weapons? How do you hedge against that? Do you hedge
- 17 against technical problems in your force?
- 18 But because our force is so old and we're in the
- 19 process of recapitalizing every leg, we also have a new
- 20 level of risk called programmatic risk or schedule risk. So
- 21 what happens if the new systems don't come online in time
- 22 before the old systems are retired? So we have to figure
- 23 out a way to hedge against that possibility given the fact
- 24 that sometimes programs are late.
- 25 So again, this is part of the NPR implementation

- 1 tasking, but I think the Nuclear Weapons Council is looking
- 2 seriously at this as well.
- 3 Senator Fischer: Mr. Secretary, that also is an issue
- 4 when we look at the NNSA's protection capacity, correct?
- 5 Mr. Roberts: Yes, yes.
- 6 Senator Fischer: Would you like to continue from Dr.
- 7 Soofer's comments on that?
- 8 Mr. Roberts: Well, first of all, I endorse everything
- 9 he said. But also, the Nuclear Weapons Council and the
- 10 subordinate bodies, because we have now created three other
- 11 subordinate bodies, one on standing and safety, one on
- 12 transformation coordination, and then one on compartmental
- issues and an advisory committee for that regard, what we're
- 14 doing is we are taking on that accountability and
- 15 enforcement, looking at the priorities.
- 16 Senator Fischer: When you say we're taking it on, is
- 17 that the Weapons Council?
- 18 Mr. Roberts: Yes, ma'am.
- 19 Senator Fischer: Okay.
- 20 Mr. Roberts: Taking on those roles and
- 21 responsibilities, in effect an enforcing function because of
- 22 the criticality of the dates we've set out very explicitly
- 23 in the Nuclear Posture Review. There is no margin for many
- of these programs. If we don't, we're going to have a gap,
- 25 and that gap is going to adversely affect our deterrence to

- 1 the point where it may not be credible. So that's very
- 2 important. It will be difficult, but it's something that we
- 3 absolutely have to do.
- 4 Senator Fischer: Do you have any insight into the
- 5 future in looking at how that road map is going to differ,
- 6 perhaps, from any existing plans or requirements that we
- 7 have out there now?
- 8 Mr. Roberts: I've been very --
- 9 Senator Fischer: Or are you just right on schedule,
- 10 right on point?
- 11 Mr. Roberts: I've never been very good at predicting
- 12 the future.
- 13 Senator Fischer: But you do have the flexibility to
- 14 confront any changes that may be happening on the world
- 15 stage?
- 16 Mr. Roberts: Yes, and that's part of my office's
- 17 responsibilities, is that we'll be watching that very
- 18 closely and identifying, in fact, and bringing to this
- 19 committee any issues and problems that we see are important
- 20 and that need to be addressed.
- 21 Senator Fischer: Okay. Thank you very much.
- 22 Senator Donnelly?
- 23 Senator Donnelly: Thank you, Madam Chair.
- Secretary Roberts, will the low-yield submarine
- 25 ballistic missile warhead undergo the traditional 6.x review

- 1 process the Nuclear Weapons Council has established for
- 2 acquisition programs?
- 3 Mr. Roberts: Yes, it will.
- 4 Senator Donnelly: This would be for General Rand. My
- 5 understanding is that your organization has ownership of the
- 6 National Airborne Command Post, or NEACP, a modified 747,
- 7 which is aging out by the 2030s. How is its replacement
- 8 coming along?
- 9 General Rand: Sir, there has been no money yet laid
- 10 into the palm or the fight app for this, but I think we are
- 11 going to begin some very serious discussions in the next
- 12 weeks and months to follow, but not only about the NEACP
- 13 but, if I could, about the family of systems that includes
- 14 the Take Charge and Move Out, as well as the Airborne
- 15 Command Post. So I will pitch my opinions and ideas to the
- 16 Chief of Staff of the Air Force and to General Hyten, and
- 17 there is no doubt a need to get very serious about this.
- 18 Senator Donnelly: Because the follow-up question I had
- 19 is are some of its missions going to be split amongst other
- 20 aircrafts and other commands?
- 21 General Rand: No, sir, not at this time. We intend to
- 22 keep the NEACP for what it's intended for the ability for
- 23 the nuclear command and control communications, as well as
- 24 to support Secretary of Defense. But we will keep those
- 25 three, the Take Charge and Move Out that supports the Navy,

- and the Airborne Command Post, as well as how we use the
- 2 NEACP.
- 3 Senator Donnelly: Okay.
- 4 General Rand: I personally am in favor of looking at
- 5 some commonality in that platform, though, for those three
- 6 missions.
- 7 Senator Donnelly: Thank you.
- 8 Admiral Benedict, what are we doing, or what do we need
- 9 to be doing to solve the radiation hardened microelectronic
- 10 problem that seems to be looming?
- 11 Admiral Benedict: Yes, sir. That is not a Navy
- 12 problem, that is not an Air Force problem. I believe that
- is a national problem, and I will tell you that the
- 14 Department of Defense is extremely serious about taking that
- on at the Department level. OSD Industrial Base, that group
- 16 that manages industry, has formed a task force which has not
- just the Navy and the Air Force on it but also DTRA and all
- 18 the other interagency groups which will deal with radiation
- 19 levels to an event of a nuclear capability. That is chaired
- 20 by OSD Industrial Base, and the executive agent for that is
- 21 actually Crane.
- 22 Crane has done all our nuclear rad hard piece part work
- 23 for the D-5 life extension effort. We have procured enough
- 24 parts to ensure that we can sustain the Trident II D-5 life
- 25 extension effort through the 2040s. Our next need will be

- 1 in the follow-on, which is directed in the NPR, and we are
- 2 working closely with the United States Air Force. We passed
- 3 the entire rad hard database that we developed for the life
- 4 extension effort to the Air Force as part of commonality,
- 5 and they will be the first ones to deal with the actual
- 6 issue of reduced capacity for the rad hard industry in the
- 7 U.S.
- 8 Senator Donnelly: Thank you.
- 9 And then, Admiral Benedict, what's the status for the
- 10 rocket propellant industrial base?
- 11 Admiral Benedict: Sir, that remains, in my opinion, my
- 12 professional opinion, fragile. We are down to, essentially,
- 13 two major suppliers. If you were to segregate those between
- large capability and small to medium capability, we have one
- 15 in each. Not only are we fragile in the major developers
- 16 for solid rocket motors, we are seeing fragility within the
- 17 suppliers of constituents, some of the necessary chemicals
- 18 that make up a large percentage of a solid rocket motor.
- 19 That is, again, being addressed in OSD at the Industrial
- 20 Base Group through policy. We are working closely with the
- 21 Industrial Base.
- 22 I'll just remind this committee, we are the only
- 23 strategic asset that is in production today. We have
- 24 maintained a minimum state of production for the Trident II
- 25 D-5 rocket motors in order to ensure that there is capacity.

- 1 That skill set does remain alive, and we are producing at
- 2 the minimum sustaining safe rate for the Trident rocket
- 3 motors. The next, again, large rocket motor production
- 4 requirement will be the Air Force GBSD effort.
- 5 Senator Donnelly: Thank you.
- 6 Thank you, Madam Chair.
- 7 Senator Fischer: Thank you, Senator.
- 8 Senator Peters?
- 9 Senator Peters: Thank you, Madam Chair.
- 10 And thank you for all four of your testimonies here
- 11 today and for your service to the country. We appreciate
- 12 it.
- Dr. Soofer, I'd like to start with you and ask you a
- 14 little bit about missile defense. I understand the NDAA is
- 15 reviewing three potential locations for a continental U.S.
- 16 interceptor site to join the current sites that are out
- 17 there. One of the locations under consideration is Fort
- 18 Custer Training Center, as you know, in Michigan, and my
- 19 understanding is that that site is shovel ready. It
- 20 provides the lowest cost, the least environmental impact
- 21 options out there, which we're very proud of.
- In last year's STRATCOM posture hearing, General Hyten
- 23 testified that it would likely take five to ten years to
- 24 construct a third site once the decision is made. This is
- 25 not something, obviously, that you can just turn on. As a

- 1 result of that, I would agree with Senator Sullivan, who
- 2 suggested that we need this report as soon as possible so we
- 3 can inform the NDAA and be thinking through some of these
- 4 strategic implications going forward.
- 5 So my question for you is, what are the criteria and
- 6 priorities that the NDAA will consider when selecting a
- 7 preferred site for the continental interceptor site, as
- 8 required?
- 9 Dr. Soofer: Senator, I think the Missile Defense
- 10 Review will try to address some of that. But if I could
- 11 just talk generally about the types of criteria --
- 12 Senator Peters: That would be great.
- Dr. Soofer: You have to ask yourself, what is the
- 14 threat you're protecting against? If it's mostly coming
- 15 from the east, say from the Middle East, there's one
- 16 location. If you want to get the Middle East and provide
- 17 additional protection from North Korea, you might choose a
- 18 different site. Are you trying to maximize your battle
- 19 space, get as many shots off as possible, have what's called
- 20 a shoot opportunity? That will dictate which site.
- 21 So all three of those in terms of getting input from
- 22 the warfighter, balancing it against the threat, and the
- 23 ease of construction, I think those are all being weighed.
- 24 Senator Peters: In the full committee recently,
- 25 actually in February, I asked General Robinson about the

- 1 missile threat from Iran, and she indicated -- I'll quote
- 2 her statement in the committee. She said she "watches North
- 3 Korea with an eyeball and a half, and then a half an eyeball
- 4 on Iran."
- 5 So from a battle space perspective, what are the
- 6 current consequences -- or I should say what would be the
- 7 consequences for the current GMD system if Iran were to
- 8 develop a ballistic missile capability that would threaten
- 9 the United States?
- 10 Dr. Soofer: Based on our analysis during the missile
- 11 defense review -- and I think this is supported by the
- 12 previous administration's findings -- you can actually
- 13 protect most of the United States against an Iranian threat
- 14 from the interceptors at Fort Greeley, as long as you have
- 15 the proper sensor support on the east side. You may recall
- 16 that we had plans to build a long-range discriminating radar
- in Alaska to help discriminate the threat from North Korea.
- 18 You have to do the same from Iran.
- 19 So there is some inherent capability today to defend
- 20 against Iran, but it depends on the complexity of the
- 21 Iranian threat. If they have more warheads, more counter-
- 22 measures, then the system in Fort Greeley would not suffice
- 23 and it would make sense to have an additional site, a third
- 24 site somewhere else to deal with that threat.
- 25 Senator Peters: Areas such as Michigan, New York, and

- 1 Ohio that are being considered, something towards the
- 2 Midwest or East would be the place to have it, would be the
- 3 natural site for it?
- 4 Dr. Soofer: Yes, sir.
- 5 Senator Peters: So the question, though, as you
- 6 mentioned, we may have that capability, unless the system is
- 7 more sophisticated. However, given the fact that we have to
- 8 look five to ten years out and that's not an easy task to
- 9 do, but it's probably safe to assume that if they should get
- 10 that capability, they will constantly be improving it over
- 11 that time, that we need to be making these plans now. So
- 12 that process, there's a balancing act of what we can do now
- 13 and what we must do in the future. How do you weigh those?
- 14 Dr. Soofer: Exactly right, sir. I'll be honest with
- 15 you that one of the greatest areas of uncertainty is the
- 16 nature of the threat. We can share with you the information
- 17 we have in the intelligence world and have a more fulsome
- 18 discussion about that, but then there's also the issue of
- 19 cost.
- 20 Senator Peters: Of course.
- 21 Dr. Soofer: To go to an additional site, I'm thinking
- 22 about \$5 billion. Others say the priority should be sensors
- 23 in space, or a multiple kill vehicle, so we have to weigh
- 24 those.
- This committee had some very significant debates over

- an East Coast missile defense site, and I think where they
- 2 came down was it's a hedge against the Iranian threat to go
- 3 forward with a sensor. So there is a requirement for an
- 4 Atlantic radar.
- 5 But all these considerations are important. What
- 6 happens to the future of the agreement with Iran? This
- 7 could all impact the nature of the threat, and I think
- 8 that's going to be weighed in the final Missile Defense
- 9 Review, sir.
- 10 Senator Peters: Right. Thank you for your response,
- 11 appreciate it.
- 12 Senator Fischer: Thank you, Senator.
- I have one last question for the Admiral and the
- 14 General. I would be interested in knowing your views on the
- 15 NPR, if you support it, if you see it as enhancing our
- 16 ability to deter our adversaries.
- General Rand: Madam Chair, as I told you this morning,
- 18 I believe it's a good, sound document, and in my mind it's
- 19 what the 11 previous administrations supported. It states
- 20 the fact that there's a requirement for the triad to
- 21 continue, that it needs to be lethal, and it should be used
- 22 only in extreme circumstances. I like the fact that that is
- 23 our declaratory policy, and I think it is a good guideline
- 24 for setting the tone for deterrence and assurance.
- 25 Senator Fischer: Thank you, sir.

- 1 Admiral?
- 2 Admiral Benedict: Yes, ma'am. I would echo what
- 3 General Rand said. We were supportive during the
- 4 development of the NPR. We stand fully in a supporting role
- of being able to deploy a low-yield weapon on the Trident
- 6 weapon system as quickly as possible, and I believe it
- 7 actually enhances deterrence. Yes, ma'am.
- 8 Senator Fischer: Thank you, sir.
- 9 Senator Donnelly, did you have other questions?
- 10 Senator Donnelly: No, Madam Chair.
- 11 Senator Fischer: Okay. With that, I would like to
- 12 thank our panel of witnesses for coming before this
- 13 committee today. Your information is always very helpful to
- 14 us.
- 15 And we extend our best wishes to General Rand and
- 16 Admiral Benedict for your many years of service to this
- 17 country. Thank you very much.
- We are adjourned.
- [Whereupon, at 3:39 p.m., the hearing was adjourned.]
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