



DOCUMENTATION

In February 2023, Russia suspended the implementation of the New Strategic Arms Reduction Treaty (New START) with the United States. Over a decade since the Senate gave its advice and consent to New START's ratification, it is worth revisiting the experts' criticisms made at the time of Senate consideration. As the excerpts below show, events since New START's entry into force validated their insights and criticisms of the Treaty.

Document No. 1. Prepared Statement, Hon. Robert G. Joseph before the Senate Foreign Relations Committee, June 24, 2010.

Chairman Shaheen, Senator Lugar, distinguished members, thank you for the invitation to appear before this committee to discuss the New START Treaty. Having retired from the career civil service in 2007 after serving at the Department of Defense, on the National Security Council staff, and at the Department of State, I am here today in a personal capacity.

While my direct experience with arms control is grounded within the executive branch, I am well aware of the vital role the Senate has played in all of the treaties that I have been associated with—including the INF Treaty and the START I Treaty to reduce nuclear arms and provide strategic stability. In particular, this committee has consistently provided close scrutiny of all arms control agreements submitted for consent to ratification. Our Nation's security has benefited from this due diligence—from asking hard questions and from fixing flaws that have been uncovered in the process.

I would like to raise three questions for your consideration based on concerns that I have in my reading of the New START Treaty.

The first is whether New START—especially the provisions on limitations and monitoring—meet the long-held standards we have thought necessary to protect U.S. security? Do the terms of the treaty limit what we assume to be limited or are there gaps that must be addressed? And, equally important, do the terms provide for effective verification?

A number of arms control experts have concluded that, based on their examination of the treaty, rail-mobile ICBMs would not be counted under the treaty limits. Other experts disagree. The position of the Obama administration is clear and now part of the treaty record. In testimony to this committee, Dr. Jim Miller, Principal Deputy Under Secretary of Defense for Policy, has stated unequivocally that rail-mobile ICBM launchers, missiles and warheads are accountable.

I do not know the Russian position. But I do know that the New START Treaty is totally silent on rail-mobiles and that all previous START provisions that captured rail-mobile ICBMs were either deleted or changed to exclude them. To me, it is inconceivable that, should Russia again deploy rail-mobile ICBMs, they would not be counted under the treaty's launcher and warhead limits. That said, based solely on the treaty text, its protocols and annexes, one can come to a different conclusion than that of the administration—one that excludes rail-mobiles from accountability.

On this point, I believe Senate can play a very constructive role by ensuring that there is no room for ambiguity, through amendment or other means, such as a formal exchange of



notes. The language should not allow for competing interpretations. It should be clear and precise—as it is with silo-based and road-mobile missiles.

When faced with an analogous situation in the INF ratification debate, on important points on which the terms of the INF Treaty were not clear, the Senate directed the Reagan administration to seek clarification with the then Soviet Union on several aspects of the verification regime and on the meaning of a “weapons delivery vehicle.” As it was then, leaving any potential loophole would not be in our security interest or in the interest of improved United States-Russian relations. Ambiguities involving treaty obligations do not lead to greater confidence. Rather, they undermine mutual trust.

Another principal, longstanding theme in Senate oversight has been the requirement for effective verification. “Trust but verify” has been the standard for more than 20 years. Whether the New START Treaty meets this standard is a major issue.

The Intelligence Community (IC) has yet to provide its assessment. How that assessment will be stated and conditioned will be a key factor in evaluating the treaty. Experience suggests that there will be substantial conditionality in the IC’s judgments. The level of confidence in the assessments will differ depending on the assumptions. As just one example, if Russia does what the IC expects in terms of road-mobile ICBM deployments, the confidence level will be higher than the level if Russia practices denial and deception techniques that are not prohibited by the treaty. As with previous assessments from the IC and State, the devil will be in the details.

We do know that the verification regime for New START includes data exchanges and onsite inspections that could provide valuable information that we may not have absent the treaty being ratified. But we also know that the treaty leaves potentially significant gaps in our ability to monitor developments in Russia’s strategic posture. For example, the end of the United States on-the-ground presence at Votkinsk means we will have less confidence than under START I in our ability to determine what is exiting this Russian missile manufacturing facility.

Moreover, given the telemetry exchange provisions, whereby each side determines the information to be shared, we may have additional gaps in understanding ongoing and future Russian strategic force improvements. The Obama administration argues that this change in monitoring posture will not affect the ability to verify New START limits because these limits are different than under START I. While perhaps technically true, New START is being advertised as a means of strengthening predictability. Yet, because of changes in the telemetry regime, we will have less transparency into Russia’s modernization. This is likely to undermine confidence and predictability.

The question before the Senate is not whether we are better off with the monitoring provisions of New START Treaty than without them. The question is whether the treaty is verifiable. The answer is unclear at this time. Before rendering judgment on the treaty, we must await assurances of the ability to verify its provisions.

A final point on the terms of New START relates to the size of the reductions and whether the treaty will provide for equal force reductions. While technically accurate, saying that the

treaty will result in a one-third reduction of deployed strategic warheads (from 2,200 to 1,550) ignores two factors.

First, both sides are already well below the 2,200 level of the Moscow Treaty. Russian military journalist Alexander Golts has written that Russia is now about 100–150 warheads above the 1,550 level and that, with the expected near term retirement of legacy systems, Russia will soon be under the limit—with or without New START. For our part, under guidance set by President Bush, the United States has been in the process of going significantly lower than the 2,200 warhead limit. In fact, I understand we are now below 2,000 deployed warheads.

Second, actual reductions of warheads may be substantially less than advertised given the change in the bomber counting rule. Technically, because strategic bombers, no matter what their actual load out, are counted as carrying one warhead, it is possible that any actual reductions in deployed warheads would be much less than anticipated. In fact, it is possible under the treaty for either or both parties to increase the level of deployed warheads beyond the 2,200 level set by the Treaty of Moscow.

While the bomber counting rule may be a positive for the United States if we modernize this leg of the triad, it is essential to understand how the treaty works and the implications. In doing so, we must recognize that, while the United States will almost certainly seek to go below the 1,550 level of actual deployed warheads, the same may not be true for Russia. And Moscow is not legally obligated to do so.

As for who reduces more, the answer is clear. As stated by Secretary Gates, Russia is currently below the top levels permitted under New START with regard to delivery vehicles. Consequently, Moscow is not likely to have to eliminate a single launcher from where it was headed without New START. The expectation is that Russia will cut some deployed warheads but significantly less than suggested by the administration. For the United States, the reductions are much deeper and, in the case of launchers, well below what U.S. military officials had earlier stated to be the U.S. requirement.

My second question relates to the treaty's impact on two vital capabilities for the future: missile defenses and conventional prompt global strike capabilities—the very capabilities that, according to the recently released Nuclear Posture Review, make possible the reductions in nuclear forces envisioned in New START. What will be the impact of New START on our ability and willingness to develop and deploy future capabilities in both of these areas to meet future threats?

I know my esteemed colleague, Ambassador Edelman, will go into some detail on conventional prompt global strike, so I will limit my remarks to missile defenses. Initially, the Obama administration gave numerous assurances that there would be no limitations on missile defenses in the treaty—“no way, no how.” Later, once the treaty text was made public, the line changed to “no meaningful” limitations and “no constraints on current and planned” programs.

We know there are restrictions on missile defenses in the treaty, both direct and possibly indirect. Article V prohibits the future conversion and use of ICBM and SLBM launchers for placement of missile defense interceptors. While the Obama administration has stated it has

no intention to convert such launchers for missile defense, the previous administration did undertake such conversions. And future administrations might also find the conversion option attractive. As Dr. Kissinger testified before this committee: "I would also have preferred to avoid prohibiting the use of missile launching sites for strategic defense as unnecessarily limiting strategic options of a future President."

As for implicit constraints on missile defenses, Russian officials have stressed what they call the "legally binding" protocol language which notes the "inter-relationship between strategic offensive arms and strategic defensive arms." Foreign Minister Lavrov has repeatedly stated that Russia will be entitled to withdraw from the treaty if there is a change from existing levels in the "quantitative and qualitative" capacities of U.S. strategic defenses. By doing so, Moscow may desire to gain leverage over the future direction of U.S. missile defense programs—development and deployments of future systems that are necessary to defend the United States and our friends and allies.

Last week Under Secretaries of Defense Michele Flournoy and Ashton Carter, two widely respected professionals, wrote in the *Wall Street Journal* that New START "does not constrain the U.S. from testing, developing and deploying missile defenses." They emphasized that these "capabilities are critical to protecting U.S. citizens, our forces abroad, and our allies from real and growing threats." In the ratification process, the Senate can build on, and make formal, this assurance. It can also make evident that the United States will not accept limits on current and future missile defense programs and capabilities. Perhaps the best means of doing so would be an explicit statement that no further limitations or prohibitions on missile defenses, such as those that could potentially be agreed in the treaty's consultative body, will be acceptable.

My third question is how does the United States benefit from New START?

The Obama administration has stressed the importance of New START to "re-set" the United States-Russian relationship. To the extent that the treaty improves mutual confidence in our bilateral relations, it may make a modest, near term contribution. To the extent the treaty contributes to the reestablishment of the cold-war relationship we had with the Soviet Union, it will carry a long-term cost.

For some in Russia, including in high government positions, the United States is seen and described openly as the adversary. For them, New START serves a number of purposes: it constrains U.S. forces while not encumbering Russian forces; it perpetuates deterrence through the balance of terror and mutual assured destruction; it enhances the status of Russia and restores in part the lost prestige from superpower days; and it once again treats nuclear weapons—the one category of arms on which Russia can compete with the United States—as the principal currency of the relationship.

If we do believe the cold war is over, and if we want a normal relationship with Russia, we need to move beyond cold-war approaches. We need to base our relations on common interests and joint efforts to deal with today's security challenges, such as countering nuclear terrorism and managing the expansion of nuclear energy in a manner that reduces the risks of nuclear weapon proliferation.

Predictability and stability are important elements of our relationship with Russia. Reductions of nuclear weapons to the lowest level possible consistent with our security requirements, including for extended deterrence for our friends and allies, are important to our nonproliferation goals. But these objectives are not well-served by traditional arms control of the type practiced in the cold war when we and the Soviet Union were enemies in a divided world with thousands of nuclear weapons pointed at each other.

The Obama administration has also made the case that New START is important because it demonstrates the U.S. commitment to disarmament, and thereby will lead to greater support for U.S. nonproliferation goals. The first half of the administration's case is sound—through New START and other means, it has established impeccable credentials on disarmament. However, it is far from clear that this has or will lead to greater international pressure on states like Iran or to greater cooperation in strengthening the NPT regime. The most recent U.N. Security Council resolution on Iran falls far short of what the administration sought, as did the outcome of the NPT review conference.

In closing, I would join with many others, including in the Senate and in the administration, to stress the need for ensuring an effective, reliable, and safe nuclear deterrent force for the future. New START must be assessed in the context of a robust commitment to maintain the necessary nuclear offensive capabilities required to meet today's threats and those that may emerge. This is a long-term commitment, not a 1-year budget bump-up. It includes the maintenance of the TRIAD and of a modern nuclear weapons infrastructure. These are the capabilities that will provide strategic stability, deterrence, and credible assurances to our friends and allies.

Document No. 2. Prepared Statement, Dr. Keith B. Payne before the Senate Armed Services Committee, July 27, 2010.

Chairman Levin, Senator McCain, distinguished members, thank you for the invitation to appear before the committee to discuss New START; it is an honor to do so.

I would like to begin by observing that reductions in the number and diversity of U.S. forces can matter greatly because the credibility of our forces is dependent on their flexibility to provide a spectrum of deterrent options and their resilience to adjust in a timely way to changes in the threat environment. This flexibility and resilience, in turn is determined to a great extent by the number and diversity of our strategic forces.

An "assured destruction"-type deterrent lacking this flexibility and resilience is likely to be incredible against many of the limited, yet severe threats we and our allies may face. U.S. officials knew this full well during the Cold War; virtually all major nuclear policy documents since the 1960s emphasized the need for flexibility and multiple strategic force options.¹

¹ See Richard Nixon, National Security Council, *National Security Decision Memorandum-242*, Policy for Planning the Employment of Nuclear Weapons, January 17, 1974 (Top Secret, declassified February 20, 1998). See also, Jimmy Carter,

That need is particularly important today because the contemporary threat environment can shift rapidly and surprisingly. In one crisis we may need one set of strategic capabilities to deter credibly, in a different crisis, a different set of strategic capabilities may be necessary; assuring allies credibly may necessitate still different types of strategic forces; and when an attack cannot be deterred, an altogether different set of forces may be necessary to defend.

If we want a credible deterrent across a spectrum of severe threats, including for example, nuclear and biological threats to our allies, our forces must have the quantity and diversity necessary to be flexible and resilient. The 2009 report by the bipartisan Strategic Posture Commission, *America's Strategic Posture*, emphasizes this contemporary U.S. requirement given the fluid threat environment.²

Understanding this requirement is the necessary starting point for any review of New START. The material question regarding verification and New START in general is whether the treaty is compatible with the flexibility and resilience essential to the credibility of U.S. forces over the long term—not simply whether we could retain an “assured second-strike” capability. Under New START, would the combination of U.S. force reductions and Russian force deployments (with or without Russian cheating) threaten the necessary flexibility and resilience of our forces? We must not allow enthusiasm for quantitative nuclear reductions to degrade the flexibility and resilience of our forces and return U.S. to old discarded standards of “assured destruction.” Our ability to deter and assure credibly would be undermined. Instead, as our force numbers move lower, we must be careful to advance the force flexibility and resilience that helps make them credible.

My conclusion is that New START raises some concerns in this regard.

For example, a recent administration report on verification apparently emphasizes that “any” Russian cheating “would have little effect on the assured second-strike capabilities of U.S. strategic forces . . .”³ This claim suggests that an “assured devastating second-strike capability” is adequate for U.S. strategic forces, and therefore “any” Russian cheating could have no serious effect on our ability to deter or assure.⁴ Yet, as noted, every Republican and Democratic administration since the 1960s has concluded that an “assured destruction” capability alone is inadequate because it requires little or none of the flexibility and resilience so important for credible deterrence and assurance.

The treaty would limit U.S. strategic force flexibility and resilience because it requires sizeable reductions in the number of U.S. strategic nuclear launchers, and would limit some types of strategic conventional forces for prompt global strike (PGS). Administration officials

Presidential Directive/NSC-59, The White House, July 25, 1980 (Top Secret, Partially declassified August 20, 1996); Harold Brown, Department of Defense Annual Report Fiscal Year 1982 (Washington, DC: USGPO, 1981), p. 40.

² The Final Report of the Congressional Commission on the Strategic Posture of the United States, *America's Strategic Posture* (Washington, DC: USIP, 2009), pp. 23, 24–26.

³ Unclassified portions of the report quoted by Chairman Carl Levin, Senate Armed Services Committee, *Hearing on the New Strategic Arms Reduction Treaty (START) Implementation*, July 20, 2010, CQ Congressional Transcript.

⁴ “Assured devastating second-strike capability” is the descriptor used by Dr. James Miller in, Senate Armed Services Committee, *Hearing on the New Strategic Arms Reduction Treaty (START) Implementation*, July 20, 2010, CQ Congressional Transcript.

have said, “The treaty does not constrain our ability to develop and deploy non-nuclear prompt global strike capabilities.”⁵

In fact, New START would restrict deployment of U.S. conventional PGS options based on existing ICBMs or sea-based ballistic missiles. These would be limited under New START’s ceiling of 700 deployed launchers.⁶ We would have to reduce our strategic nuclear force launchers below 700 on a 1:1 basis for each of these conventional PGS systems deployed. The treaty would thus limit our flexibility and resilience in this area. In general, a 1:1 replacement of nuclear forces by conventional forces has understandably and specifically been rejected for deterrence purposes by senior U.S. military leaders.⁷

Administration officials have said, nevertheless, that so limiting these conventional PGS options is acceptable assuming there is a need for only a small number of such systems.⁸ Unfortunately, there can be no certainty behind that assumption given the many different and now-unknown threats that will arise in New START’s 10–15 year timeframe. Perhaps the option of deploying many such conventional PGS systems will be critical for deterrence, assurance or defense. Under New START we would be mightily constrained from doing so because of the treaty’s limits and its required 1:1 trade-off with our nuclear forces.

This problem might be mitigated with Senate guidance that there be no further negotiated restrictions on advanced U.S. non-nuclear PGS systems and a requirement for a firm commitment to the development and deployment, as soon as technically and operationally sound, of conventional PGS capabilities that are not limited by treaty.

In addition, New START’s force limits do not allow “more [capability] than is needed” for deterrence under current planning.⁹ Leaving little or no such margin may be risky when force flexibility and diversity is necessary to deter and assure across a range of threats.

Senior U.S. military leaders have noted in open testimony that New START would indeed allow sufficient U.S. strategic force flexibility.¹⁰ The analysis behind this important conclusion reportedly was predicated on three key assumptions: (1) U.S. planning guidance for strategic forces would remain the same; (2) there would be no requests for an increase in forces; and (3) Russia would be compliant with New START.¹¹

⁵ Dr. James Miller, *Ibid.* See also, Department of State, Bureau of Verification, Compliance, and Implementation, *Fact Sheet*, April 8, 2010, at <http://www.state.gov/t/vci/rls/139899.htm>.

⁶ Under New START the number of deployed U.S. strategic launchers will have to be reduced from today’s reported level of 880 launchers to a ceiling of 700 deployed launchers. Amy Woolf, *The New START Treaty: Central Limits and Key Provisions*, Congressional Research Service 7–5700 (June 18, 2010), p. 19.

⁷ General Kevin Chilton, Senate Armed Services Committee, *Hearing to Receive Testimony on the Nuclear Posture Review*, April 22, 2010, pp. 24–25.

⁸ Woolf, *The New START Treaty: Central Limits and Key Provisions*, pp. 17–18; also, Miller, Senate Armed Services Committee, *Hearing to Receive Testimony on the Nuclear Posture Review*, April 22, 2010, p. 24.

⁹ General Kevin Chilton, Senate Foreign Relations Committee, *Hearing, The New START Treaty: Views From the Pentagon*, June 16, 2010, Federal News Service.

¹⁰ General Kevin Chilton, Senate Armed Services Committee, *Hearing to Receive Testimony on the Nuclear Posture Review*, April 22, 2010 p. 14.

¹¹ General Kevin Chilton, *Ibid.*, pp. 8, 13; and, House Armed Service Committee, *Hearing, U.S. Nuclear Weapons Policy and Force Structure*, April 15, 2010, p. 11.

Would the treaty allow sufficient U.S. flexibility and resilience to adjust as necessary for credible deterrence and assurance if one or all of those starting optimistic assumptions do not hold, as is plausible?

For example, what if Russia again decides to violate its treaty commitments? What if relations with China and Russia return to a crisis pitch, and they express more severe nuclear threats to our allies or to us? What if Iranian deployment of nuclear weapons and missiles throws the entire Middle East into an unprecedented security crisis? What if the apparent nuclear nexus of Burma, Iran, North Korea and Syria poses unprecedented threats to our allies or our forces abroad?¹² U.S. planning and force requirements might have to change with any and all of these unwanted developments that could arise during New START's tenure. What new quantitative or qualitative strategic force requirements might arise as a result for credible deterrence, assurance or defense, and would New START preserve the necessary U.S. force flexibility and resilience to meet those requirements? These are fundamental questions regarding the treaty and international security.

More simply, will the United States, at least, develop and deploy the diverse strategic force structure that remains possible under the treaty and could help preserve U.S. force flexibility and resilience? The traditional U.S. triad of bombers, ICBMs, and sea-based missiles—now buttressed by missile defenses and the potential for new non-nuclear PGS capabilities—can be extremely valuable in this regard because the diversity of offensive and defensive options helps provide the flexibility and resilience to adjust to a multitude of different threats and circumstances.

Fortunately, the Obama administration has expressed its intention to support the triad, missile defense deployment, and conventional PGS. At this point, however, there is no apparent, concrete administration commitment to advanced conventional PGS deployment or to replacing the aging ICBM and bomber legs of the triad, including the air-launched cruise missile. This fosters concern that enthusiasm for force reductions may come at the expense of the longstanding requirements for force diversity, flexibility, and resilience, and take refuge in old “assured destruction” thinking. If our numbers are to decline further, we must take care to ensure continued flexibility and resilience—whether through traditional means or innovations.

Bombers have great inherent flexibility and resilience, and the weapons counting rules for bombers under New START are extremely permissive. But these counting rules will be advantageous for U.S. only if we modernize our bomber force. While Russia has decided to build a new strategic bomber and apparently has a new long-range air-launched nuclear cruise missile near deployment,¹³ the Obama administration plans to cut U.S. nuclear-capable bombers by more than one-third under New START and has made no apparent

¹² See the discussion in, “Article Sees Serious Implications for India From Burma’s Purported Nuclear Plans,” *The Tribune Online* (Chandigarh), July 17, 2010, SAP20100717534024.

¹³ See “Moscow Upgrades Strategic Bomber Fleet,” *Air & Cosmos*, (Paris) January 8, 2010, pp. 34–35, EUP201001081; “Russian Military Pundits Consider Recent Missile Launches, Prospects,” *Mayak Radio*, (Moscow) August 8, 2001, CEP20070811950032.

commitment to replace the venerable B-52 or to a new air-launched cruise missile.¹⁴ Similarly, the administration has announced that it will reduce the number of U.S. ICBM launchers by at least 30 under New START,¹⁵ while Russia is deploying new MIRVed mobile ICBMs, and has decided for a new heavy MIRVED ICBM as is now permitted under New START.

Over time, this New START-inspired combination of U.S. ICBM launcher reductions and permitted Russian MIRVed heavy ICBMs could again challenge the survivability of the U.S. ICBM and bomber legs of the triad—a situation long-recognized as highly “destabilizing.” If their survivability is at risk, so will be much of the triad’s flexibility and the credibility of U.S. forces to deter, assure and defend.

Hard decisions will need to be made during the life of this treaty if we are to advance flexible offensive and defensive capabilities and a resilient force structure. How much confidence can we have that the administration will take the necessary strategic modernization steps given its highest nuclear priority of non-proliferation and movement toward a nuclear free world, its commitment to further negotiations, and its presumption against any new nuclear warheads?¹⁶ Credible assurances and the necessary strategic modernization budgets tied to New START would be helpful in this regard. A solid U.S. commitment to bomber and cruise missile modernization, Minuteman III replacement or life extension with enhanced survivability measures, and missile defenses of all ranges could help provide this confidence.

Concern about New START’s reduction of U.S. force flexibility and resilience—however modest or significant—also might be eased if the treaty’s ceilings on Russian forces actually would reduce the threats we might face. But, according to numerous Russian open sources, New START’s ceilings are of little real consequence for Russia because Russia’s aged Cold War strategic launchers already have been reduced below New START’s ceilings, and will decline further with or without the treaty—and Russia’s comprehensive post-Cold War nuclear modernization programs are moving forward slowly at this point. Aleksey Arbatov, the former Deputy Chairman of the Duma Defense Committee, notes, “The new treaty is an agreement on reducing the American and not the Russian [strategic nuclear forces]. In fact, the latter will be reduced in any case because of the mass removal from the order of battle of obsolete arms and the one-at-a-time introduction of new systems.”¹⁷ Prior to the New START negotiations, Russian open sources already projected that by 2012 Russian strategic nuclear forces could have as few as 406 launchers and fewer than 1,500 warheads—well below New

¹⁴ White House Fact Sheet on the “1251 report,” May 13, 2010, available at www.whitehouse.gov/sites/default/files/New%20START%20section%201251%20fact%20sheet.pdf.

¹⁵ Ibid.

¹⁶ Department of Defense, *Nuclear Posture Review Report*, April 2010, p. vi; and, Testimony of Dr. James Miller, House Armed Service Committee, *Hearing, U.S. Nuclear Weapons Policy and Force Structure*, April 15, 2010, pp. 38, 41.

¹⁷ “Russia: Arbatov Critique of Khramchikhin Article on Poor State of RF Air Defense,” *Nezavisimoye Obozreniye Online*, March 5, 2010, CEP20100305358011.

START ceilings using its counting rules.¹⁸ The point was made most succinctly by Dr. Sergei Rogov, Director of the USA and Canada Institute in Moscow: “We will not have to reduce anything prematurely. In effect, [with] the ceilings established by the new START Treaty. . . Only the United States will have to conduct reductions . . . ”¹⁹

New START’s common ceilings essentially appear to require unilateral reductions by the United States. Russian officials and analysts have long celebrated this situation, while some U.S. officials and treaty proponents have acknowledged it only recently.²⁰ In this context, it is difficult to take seriously the notion that the treaty’s supposed reductions for Russia justify its prospective limitations on U.S. flexibility and resilience.

Even though Russia’s forces are declining dramatically with or without New START, does not the treaty provide solid barriers against the re-emergence of Russian strategic forces? Unfortunately, no. New START neither requires real Russian reductions nor does it provide hard limits on a renewed build up of Russian strategic nuclear forces. This is a troubling irony.

How can it be so? New START contains sufficient loopholes and permissive counting rules to allow Russia to deploy far beyond the treaty’s 1,550 strategic nuclear warheads ceiling within the terms of the treaty if Russia finds the financial resources to do so. In fact, according to a report by the official news agency of the Russian Federation, RIA Novosti, Russia could deploy 2,100 strategic nuclear weapons under the treaty—well above the putative 1,550 warhead ceiling.²¹ There are avenues that would allow Russia to deploy many more than 2,100 warheads under the treaty. This may be significant over time because Russia’s highest defense procurement priority is the modernization of its strategic nuclear forces.²² According to Russian open sources, Russia has a new strategic air-launched nuclear cruise missile near deployment, is MIRVing its new mobile ICBMs (the RS-24), and has committed to deploy at least one new strategic bomber, a new 5000 km-range submarine-launched cruise missile, and a new heavy ICBM. There also has been interest expressed in the Russian press for a new rail-mobile ICBM and a new air-launched ICBM—neither of which, according to some open Russian commentary, would necessarily have to be counted under the treaty’s force ceilings.

The bottom line is that aging forces and Russia’s production and financial problems are causing reductions in Russia’s force numbers precipitously—with or without New START. But, if and when Russia has the necessary financial and production capacity, New START will not prevent Russia from deploying new forces well beyond New START’s specified ceilings.

¹⁸ See, “Russia: Strategic Missile Troops Chief, Aide Cited on 25 December RS-24 Test Launch,” *NEWSru.com*, December 25, 2007, CEP20071227358002.

¹⁹ Sergei Rogov, “Attempt Number 6: the Balance of Achievements and Concessions. Only the United States Will Have to Reduce Its Strategic Forces,” *Nezavisimoe Voennoe Obozrenie*, April 9, 2010, (In Russian), available at: <http://nvo.ng.ru/concepts/2010-04-09/1—snv.html>.

²⁰ See for example, Woolf, *The New START Treaty: Central Limits and Key Provisions*, p. 20.

²¹ Ilya Kramnuk, “New START Treaty based on Mutual Russian-U.S. Concessions,” *RIA Novosti*, April 22, 2010, at <http://en.rian.ru/analysis/20100409/158499862.html>.

²² As stated by the First Deputy Defense Minister, Col-Gen. Vladimir Popovkin in, Pavel Felgenhauer, “Russia Seeks to Impose New ABM Treaty on the U.S. by Developing BMD,” July 16, 2010, at georgiandaily.com.

In sum, force numbers and diversity do matter because flexibility and resilience are key contributors to the credibility of our forces. This was true in the past and is even more so now. New START's limits, including on some U.S. conventional PGS options, will require U.S. force reductions and constrain U.S. strategic force flexibility and diversity. The most important question in this regard is whether U.S. forces in the future will retain sufficient flexibility and resilience to be credible in conditions that are less optimistic than those assumed by the administration in its New START analyses. An important consideration in this regard is that the treaty's ceilings appear not to require real Russian nuclear force reductions in the near-term, and its loopholes and extreme permissiveness would not prevent the renewal of Russian strategic capabilities over time. A treaty that could reduce U.S. flexibility and resilience but not require real Russian cuts nor preclude a future Russian strategic renewal merits close Senate scrutiny.

There are some steps that might help to mitigate these risks posed by New START. They involve U.S. commitments, demonstrated by policy guidance and robust program budgets for advanced conventional PGS, missile defense, and innovative replacements for our aging ICBMs, bombers and air-launched missiles—modernization programs permitted under the treaty.

NEW START AND MISSILE DEFENSE

Many others have commented on New START's connections to missile defense. So, I will only summarize my own conclusions here. Senior administration officials have said about missile defense that, "There are no constraints of any kind in the New START Treaty,"²³ and, "The treaty does nothing to constrain missile defenses . . . there is no limit or constraint on what the United States can do with its missile defense systems."²⁴ Such administration statements simply are false. New START includes limitations on U.S. missile defense options. Judgments may differ regarding the significance of these limitations, but there should be no further denials that New START includes them.

U.S. missile defense options may need to be protected, particularly given Russia's long-standing goal to veto U.S. missile defense and the administration's apparent commitment to further negotiations. Toward this end, the Senate could direct the President to make more clear to Russia than now is reflected in the pertinent U.S. Unilateral Statement that the United States recognizes no treaty limits on missile defense beyond those in Article 5, paragraph 3, and that the United States will not agree to any further negotiated limits of any kind on U.S. missile defense options. In addition, New START establishes the Bilateral Consultative Commission (BCC) and gives it broad authority to "agree upon such additional measures as may be necessary to improve the viability and effectiveness of the Treaty."²⁵ Missile defense

²³ Secretary Ellen Tauscher, House Armed Service Committee, *Hearing, U.S. Nuclear Weapons Policy and Force Structure*, April 15, 2010, p. 19.

²⁴ Secretary Ellen Tauscher, *Press Briefing*, "New START Treaty and the Obama administration's Nonproliferation Agenda," March 29, 2010, available at, www.state.gov/t/us/139205.htm.

²⁵ New START Treaty, Protocol, Part 6, Section 1, paragraph b.

is part of the subject matter of the treaty and its protocol, and the BCC is authorized specifically to discuss the unique distinguishing features of missile defense launchers and interceptors and make “viability and effectiveness” changes in the treaty. These could be done in secret and without Senate advice and consent.²⁶ Such institutions are not supposed to make substantive changes in the terms of treaties. But, START I’s Joint Compliance and Inspection Commission (JCIC) served with a more limited scope, and appears to have made significant changes in START’s terms without Senate advice and consent. This past precedent is not comforting in this regard.

The Senate might find it particularly valuable to insist on continuous and complete visibility into the ongoing workings of the BCC. This could be particularly helpful to ensure that no new limits on missile defense emerge, without Senate advice and consent, from the BCC’s potentially secret proceedings.

Thank you.

The following entries provide excerpts relevant to nuclear weapons and missile defense policy from the Senate and the House versions of the National Defense Authorization Act (NDAA). The NDAA is perhaps the most important regularly passed law with far-reaching implications for defense and national security policy. Both versions signal congressional concerns over the deteriorating strategic environment, bipartisan support for nuclear weapons modernization, and the importance of regional missile defenses.

Document No. 3. FY 2024 National Defense Authorization Act Passed by the U.S. House of Representatives, Select Excerpts.

SEC. 1234. PROHIBITION ON NEW START TREATY INFORMATION SHARING.

(a) PROHIBITION.—None of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2024 for the Department of Defense may be used to provide the Russian Federation with notifications as required by the New START Treaty.

(b) WAIVER.—The Secretary of Defense may waive the prohibition in subsection (a) on a case-by-case basis if the Secretary of Defense certifies to the appropriate congressional committees in writing, 30 days in advance of exercising such a waiver, that—

- (1) the waiver is in the national security interest of the United States; and
- (2) the Russian Federation is providing similar information to the United States as required by the New START Treaty.

²⁶ New START Treaty, Article XV, paragraph 2; New START Treaty, Protocol, Part 6, Section 5.

SEC. 1631. ESTABLISHMENT OF MAJOR FORCE PROGRAM FOR NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS PROGRAMS.

Chapter 9 of title 10, United States Code, is amended by adding at the end the following new section:

“§ 239e. Nuclear command, control, and communications: major force program and budget assessment

(a) ESTABLISHMENT OF MAJOR FORCE PROGRAM.

The Secretary of Defense shall establish a unified major force program for nuclear command, control, and communications programs pursuant to section 222(b) of this title to prioritize such programs in accordance with the requirements of the Department of Defense and national security.

SEC. 1632. REPEAL OF REQUIREMENT FOR REVIEW OF NUCLEAR DETERRENCE POSTURES.

Section 1753 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92; 133 Stat. 1852) is repealed.

SEC. 1633. RETENTION OF CAPABILITY TO REDEPLOY MULTIPLE INDEPENDENTLY TARGETABLE REENTRY VEHICLES.

Section 1057 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66; 10 U.S.C. 495 note) is amended by inserting “and Sentinel” after “Minuteman III” both places it appears.

SEC. 1634. PILOT PROGRAM ON DEVELOPMENT OF REENTRY VEHICLES AND RELATED SYSTEMS.

(a) IN GENERAL.—The Secretary of the Air Force may carry out a pilot program, to be known as the “Reentry Vehicle Flight Test Bed Program”, to assess the feasibility of providing regular flight test opportunities that support the development of reentry vehicles to—

- (1) facilitate technology upgrades tested in a realistic flight environment;
- (2) provide an enduring, high-cadence test bed to mature technologies for planned reentry vehicles; and
- (3) transition technologies developed under other programs, prototype projects, or research and development programs related to long-range ballistic or hypersonic strike missiles.

SEC. 1635. INTEGRATED MASTER SCHEDULE FOR THE SENTINEL MISSILE PROGRAM OF THE AIR FORCE.

(a) DOCUMENTATION REQUIRED.—Not later than 30 days after the date of the enactment of this Act, the Under Secretary of Defense for Acquisition and Sustainment, acting through the Assistant Secretary of the Air Force for Acquisition, Technology, and

Logistics, shall submit to the congressional defense committees an approved integrated master schedule for the Sentinel missile program of the Air Force.

(b) **QUARTERLY BRIEFINGS.**—Not later than 180 days after the date of the enactment of this Act, and on a quarterly basis thereafter until January 1, 2029, the Secretary of the Air Force shall provide to the congressional defense committees a briefing on the progress of the Sentinel missile program.

(c) **NOTIFICATION.**—Not later than 30 days after the Secretary of the Air Force becomes aware of an event that is expected to delay, by more than one fiscal quarter, the date on which Sentinel missile achieves initial operational capability (as set forth in the integrated master schedule submitted under subsection (a)), the Secretary shall—

- (1) submit notice of such delay to the congressional defense committees; and
- (2) include with such notice—
 - (A) an explanation of the factors causing such delay; and
 - (B) a plan to prevent or minimize the duration of such delay.

SEC. 1637. NOTIFICATION OF DECISION TO DELAY STRATEGIC DELIVERY SYSTEM TEST EVENT.

(a) **NOTIFICATION AND REPORT.**—Not later than five days after the Secretary of Defense makes a decision to delay a scheduled test event for a strategic delivery system, the Secretary shall submit to the congressional defense committees written notice of such decision together with a report on the decision.

SEC. 1638. PROHIBITION ON REDUCTION OF THE INTERCONTINENTAL BALLISTIC MISSILES OF THE UNITED STATES.

(a) **PROHIBITION.**—Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2024 for the Department of Defense may be obligated or expended for the following, and the Department may not otherwise take any action to do the following:

- (1) Reduce, or prepare to reduce, the responsiveness or alert level of the intercontinental ballistic missiles of the United States.
- (2) Reduce, or prepare to reduce, the quantity of deployed intercontinental ballistic missiles of the United States to a number less than 400.

(b) **EXCEPTION.**—The prohibition in subsection (a) shall not apply to any of the following activities:

- (1) The maintenance or sustainment of intercontinental ballistic missiles.
- (2) Ensuring the safety, security, or reliability of intercontinental ballistic missiles.
- (3) Facilitating the transition from the Minuteman III intercontinental ballistic missile to the Sentinel intercontinental ballistic missile (previously referred to as the “ground-based strategic deterrent weapon”).

SEC. 1639. LIMITATION ON AVAILABILITY OF FUNDS FOR RETIREMENT OF B83-1 NUCLEAR GRAVITY BOMBS.

(a) **LIMITATION ON USE OF FUNDS.**—Except as provided by subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2024 for the Department of Defense or the Department of Energy for the deactivation, dismantlement, or retirement of the B83-1 nuclear gravity bomb may be obligated or expended to deactivate, dismantle, or retire more than 25 percent of the B83-1 nuclear gravity bombs that were in the active stockpile as of September 30, 2022, until a period of 90 days has elapsed following the date on which the Secretary of Defense submits to the Committees on Armed Services of the Senate and the House of Representatives the study required under section 1674(a) of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 (Public Law 117-263).

(b) **EXCEPTION.**—The limitation on the use of funds under subsection (a) shall not apply to the deactivation, dismantling, or retirement of B83-1 nuclear gravity bombs for the purpose of supporting safety and surveillance, sustainment, life extension, or modification programs for the B83-1 or other weapons currently in, or planned to become part of, the nuclear weapons stockpile of the United States.

SEC. 1641. ESTABLISHMENT OF NUCLEAR SEA-LAUNCHED CRUISE MISSILE PROGRAM.

(a) **ESTABLISHMENT.**—Not later than 30 days after the date of the enactment of this Act, the Secretary of Defense shall establish and commence implementation of a nuclear sea-launched cruise missile program (referred to in this section as the “SLCM-N Program”).

(b) **PURPOSES.**—The purposes of the SLCM-N Program shall be—

- (1) to provide the United States with a needed nonstrategic nuclear capability and make that capability available to the Department of Defense;
- (2) to strengthen tailored deterrence of regional adversaries; and
- (3) to assure allies and partners of the United States of the Nation’s commitment to their defense.

(c) **ACTIVITIES.**—Under the SLCM-N Program, the Secretary of Defense shall—

- (1) accelerate and conclude research and development activities for nuclear sea-launched cruise missiles and transition such missiles to the procurement and fielding phases;
- (2) conduct a concept of operations study to inform the fielding of nuclear sea-launched cruise missiles aboard platforms identified by the Navy, including the Virginia class submarine;
- (3) designate the nuclear sea-launched cruise missile as an Acquisition Category ID (ACAT ID) program in accordance with Department of Defense Instruction 5000.85, titled “Major Capability Acquisition”, dated November 4, 2021; and
- (4) ensure that the missiles developed under the program achieve initial operational capability not later than September 30, 2031.

(d) **WARHEAD DEVELOPMENT.**—Not later than 30 days after the date of enactment of this Act, the Administrator for Nuclear Security shall initiate phase 6.2 of the nuclear sea-launched cruise missile warhead designated W80–4 ALT.

(e) **RULE OF CONSTRUCTION.**—Nothing in this section shall be construed to supersede or otherwise alter the organizational relationships and responsibilities of departments and agencies of the Federal Government regarding oversight and management of ongoing activities relating to the nuclear sea-launched cruise missile.

SEC. 1642. QUARTERLY REPORTS ON PROGRESS OF SEA-LAUNCHED CRUISE MISSILE-NUCLEAR PROGRAM.

(a) **IN GENERAL.**—Not later than 15 days after the last day of each fiscal quarter until the termination date specified in subsection (c)—

(1) the Secretary of the Navy shall submit to the congressional defense committees a report on the execution of funding appropriated for the Sea-Launched Cruise Missile-Nuclear program; and

(2) the Administrator for Nuclear Security shall submit to the congressional defense committees a report on the execution of funding appropriated for the W80-4 nuclear warhead variant under development for such program.

SEC. 1643. CONGRESSIONAL NOTIFICATION OF NUCLEAR COOPERATION BETWEEN RUSSIA AND CHINA.

If the Commander of United States Strategic Command determines, after consultation with the Director of the Defense Intelligence Agency, that militarily significant cooperation between the Russian Federation and the People’s Republic of China related to nuclear or strategic capabilities is likely to occur or has likely occurred, the Commander shall submit to the congressional defense committees a notification of such determination that includes—

(1) a description of the military significant cooperation; and

(2) an assessment of the implication of such cooperation for the United States with respect to nuclear deterrence, extended deterrence, assurance, and defense.

SEC. 1644. REPORT ON ACCELERATION OF NUCLEAR MODERNIZATION PRIORITIES.

The Under Secretary of Defense for Acquisition and Sustainment shall submit to the congressional defense committees a report that includes an identification of any additional authorities and reforms necessary to allow the Department of Defense to accelerate its current nuclear modernization priorities.

SEC. 1662. NATIONAL MISSILE DEFENSE POLICY.

Subsection (a) of section 1681 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328; 10 U.S.C. 4205 note) is amended to read as follows:

(a) **POLICY.**—It is the policy of the United States—

(1) to research, develop, test, procure, deploy, and sustain, with funding subject to the annual authorization of appropriations for National Missile Defense, systems that

provide effective, layered missile defense capabilities to defeat increasingly complex missile threats in all phases of flight; and

(2) to maintain a credible nuclear capability as the foundation of strategic deterrence.”.

SEC. 1663. PROGRAMS TO ACHIEVE INITIAL AND FULL OPERATIONAL CAPABILITIES FOR THE GLIDE PHASE INTERCEPTOR PROGRAM.

(a) PROGRAM TO ACHIEVE INITIAL OPERATIONAL CAPABILITY.—

(1) IN GENERAL.—The Secretary of Defense, acting through the Director of the Missile Defense Agency and in coordination with the officials specified in subsection (d), shall carry out a program to achieve, by not later than December 31, 2029, an initial operational capability for the Glide Phase Interceptor as described in paragraph (2).

(2) REQUIRED CAPABILITIES.—For purposes of paragraph (1), the Glide Phase Interceptor program shall be considered to have achieved initial operational capability if—

(A) the Glide Phase Interceptor is capable of defeating, in the glide phase, any endo-atmospheric hypersonic vehicles that are known to the Department of Defense and fielded as of the date of the enactment of this Act; and

(B) not fewer than 12 Glide Phase Interceptor missiles have been fielded.

(b) PROGRAM TO ACHIEVE FULL OPERATIONAL CAPABILITY.—

(1) PROGRAM REQUIRED.—The Secretary of Defense, acting through the Director of the Missile Defense Agency and in coordination with the officials specified in subsection (d), shall carry out a program to achieve, by not later than December 31, 2032, full operational capability for the Glide Phase Interceptor as described in paragraph (2).

(2) REQUIRED CAPABILITIES.—For purposes of paragraph (1), the Glide Phase Interceptor program shall be considered to have achieved full operational capability if—

(A) the Glide Phase Interceptor is capable of defeating, in the glide phase, any endo-atmospheric hypersonic vehicles—

(i) that are known to the Department of Defense and fielded as of the date of the enactment of this Act; and

(ii) that the Department of Defense expects to be fielded before the end of 2040;

(B) not fewer than 24 Glide Phase Interceptor missiles have been fielded; and

(C) the Glide Phase Interceptor has the ability to be operated collaboratively with space-based or terrestrial sensors that the Department of Defense expects to be deployed before the end of 2032.

SEC. 1664. RESEARCH AND ANALYSIS ON MULTIPOLAR DETERRENCE AND ESCALATION DYNAMICS.

(a) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Defense shall seek to enter into an agreement with a university affiliated research center with expertise in strategic deterrence to conduct research and analysis on multipolar deterrence and escalation dynamics.

(b) ELEMENTS.—The research and analysis conducted under subsection (a) shall include assessment of the following:

- (1) Implications for strategic deterrence and allied assurance given the emergence of a second near-peer nuclear power.
- (2) Potential alternative conventional, strategic, and nuclear force structures to optimize deterrence of two near-peer nuclear powers.
- (3) The contribution made by countervailing nonstrategic capabilities to strategic deterrence.
- (4) Escalation patterns arising from Russia’s Strategic Operations to Destroy Critically Important Targets operational concept and response options for the United States.
- (5) Multilateral efforts that could contribute to multipolar strategic deterrence and escalation dynamics.
- (6) Capabilities and operations sufficient to assure European and Pacific allies.

SEC. 1665. LIMITATION ON USE OF FUNDS PENDING SUBMISSION OF REPORT ON MISSILE DEFENSE INTERCEPTOR SITE.

Of the funds authorized to be appropriated by this Act for fiscal year 2024 for the Office of the Under Secretary of Defense for Policy, for travel, not more than 80 percent may be obligated or expended until the date on which the Secretary of Defense submits to the congressional defense committees the report on the requirement for a missile defense interceptor site in the contiguous United States required by section 1665 of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 (Public Law 117– 263).

SEC. 1666. REPORT ON HAWAII MISSILE DEFENSE.

(a) FINDINGS.—Congress makes the following findings:

- (1) The budget justification materials submitted by the Secretary of Defense support of the budget of the President for fiscal year 2023 effectively cancelled all activities for the Homeland Defense Radar—Hawaii due to ongoing reevaluation of the missile defense posture and sensor architecture in the area of responsibility of the United States Indo-Pacific Command.
- (2) The budget justification materials submitted by the Secretary of Defense support of the budget of the President for fiscal year 2024 include \$40,000,000 for the Hawaii Air Route Surveillance Radar Version 4 (ARSR-4), which is intended to “address Department of Defense capability gaps driven by new threats and provide dual use for Hawaii for Air Traffic Control and weather monitoring”.
- (3) Briefings provided by the Department of Defense indicated a very limited viewing area for this proposed radar, which does not support adequate warning or discrimination of threats, and the request for ARSR-4 does not include any effort associated with integrating the radar to the overall missile defense sensor architecture to support increased defensive capabilities for Hawaii.

(b) REPORT.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees a report on

the findings of the review conducted by the Secretary of the integrated air and missile defense sensor architecture of the United States Indo-Pacific Command, and specific programs of record which support additional sensor coverage for the state of Hawaii. Such report shall include an identification of—

- (1) the investments that should be made to increase the detection of nonballistic threats and improve the discrimination of ballistic missile threats, particularly with regards to Hawaii; and
- (2) investments to integrate any sensors into the missile defense system to assist with protection of the State.

SEC. 1667. REPORT ON POTENTIAL ENHANCEMENTS TO AEGIS ASHORE SITES IN POLAND AND ROMANIA.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Director of the Missile Defense Agency shall submit to the congressional defense committees a report on potential enhancements to Aegis Ashore sites in Poland and Romania.

(b) ELEMENTS.—The report required by subsection (a) shall include—

- (1) an assessment of the feasibility and advisability of—
 - (A) enhancing associated sensor systems to detect a broader array of missile threats;
 - (B) fielding a mixed fleet of defensive interceptor systems; and
 - (C) physical hardening of the facilities;
- (2) a funding profile, by year, detailing the complete costs associated with any options assessed under paragraph (1); and
- (3) such other information as the Director considers appropriate.

SEC. 1669. POLICY AND REPORT ON NORTH ATLANTIC TREATY ORGANIZATION EFFECTIVE INTEGRATED AIR AND MISSILE DEFENSE CAPABILITIES IN EUROPE.

(a) POLICY.—It is the policy of the United States to contribute integrated air and missile defense capabilities, such as forward deployed AN/TPY-2 radars and Aegis Ashore sites, to the North Atlantic Treaty Organization to defeat increasingly complex threats to the United States Armed Forces and the military forces of member countries of the North Atlantic Treaty Organization in Europe.

(b) REPORT.—

- (1) NATO REPORT.—Not later than 270 days after the date of the enactment of this Act, the Secretary of Defense shall provide to the North Atlantic Treaty Organization Conference of National Armaments Directors for Ballistic Missile Defense a report containing options to improve the existing integrated air and missile defense architecture to detect, track, and defend against increasingly complex adversarial missile threats to the territory of member countries of the North Atlantic Treaty Organization and deployed members of the United States Armed Forces.

SEC. 1670. INDEPENDENT ANALYSIS OF SPACE-BASED MISSILE DEFENSE CAPABILITY.

(a) **IN GENERAL.**—Not later than 90 days after the date of the enactment of this Act, the Secretary of Defense, acting through the Director of the Missile Defense Agency, shall seek to enter into an arrangement with an appropriate federally funded research and development center to update the study referred to in subsection (c).

(b) **ELEMENTS.**—The assessment conducted for purposes of updating the study shall, at a minimum, include analysis of the following matters:

(1) The extent to which space-based capabilities would address current and evolving missile threats to the United States and United States deployed forces.

(2) The maturity levels of technologies necessary for an operational space-based missile defense capability.

(3) Potential options for developing, fielding, operating, and sustaining a space-based missile defense capability, including estimations of cost and assessments of effectiveness for different architectures.

(4) The technical risks, knowledge gaps, or other challenges associated with the development and operation of space-based interceptor capabilities.

(5) Estimated costs for developing and deploying such capability.

(6) The ability of the Department of Defense to protect and defend on-orbit space-based missile defense capabilities, including any recommendations for resiliency requirements that would be needed to ensure the effectiveness of such capabilities.

SEC. 3118. INTEGRATED MASTER SCHEDULE FOR THE FUTURE-YEARS NUCLEAR SECURITY PROGRAM.

(a) **IN GENERAL.**—Not later than March 31, 2024, the Administrator for Nuclear Security shall develop an integrated master schedule for the future-years nuclear security program that incorporates all programs of record for nuclear warhead development, including pit production activities, production, and sustainment at the National Nuclear Security Administration.

SEC. 3119. PROHIBITION ON AVAILABILITY OF FUNDS TO RECONVERT OR RETIRE W76-2 WARHEADS.

(a) **PROHIBITION.**—Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2024 for the National Nuclear Security Administration may be obligated or expended to reconvert or retire a W76-2 warhead.

(b) **WAIVER.**—The Administrator for Nuclear Security may waive the prohibition under subsection (a) if the Administrator, in consultation with the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, certifies in writing to the congressional defense committees that—

(1) Russia and China do not possess naval capabilities similar to the W76-2 warhead in the active stockpiles of the respective countries; and

(2) the Department of Defense does not have a valid military requirement for the W76–2 warhead.

SEC. 3132. PLAN FOR DOMESTIC ENRICHMENT CAPABILITY TO SATISFY DEPARTMENT OF DEFENSE URANIUM REQUIREMENTS.

(a) REPORT.—Not later than 120 days after the date of the enactment of this Act, the Administrator of the National Nuclear Security Administration shall submit to the congressional defense committees a report that contains a plan to establish a domestic enrichment capability dedicated to solely satisfying the requirements of the Department of Defense for highly enriched uranium, high-assay low enriched uranium, low enriched uranium, and depleted uranium. Such plan shall include—

- (1) a description of mixes and amounts of enriched uranium expected to be necessary between the date of the enactment of this Act and 2060 to meet the requirements of the Department of Defense;
- (2) key milestones, steps, and policy decisions required to achieve the domestic defense enrichment capability;
- (3) the dates by which such key milestones need to be achieved;
- (4) a funding profile, broken down by project and sub-project, for obtaining such capability;
- (5) a cost profile to establish such capability by the date that is two years before the date on which such capacity is needed;
- (6) a plan for any changes to the workforce of the Administration that are necessary to establish such capability;
- (7) a description of any changes in the requirement of the Department of Defense for highly enriched uranium due to AUKUS; and
- (8) any other elements or information the Administrator determines appropriate.

(b) ANNUAL CERTIFICATION REQUIREMENT.—

(1) IN GENERAL.—Not later than February 1 of each year after the year during which the report required by subsection (a) is submitted until the date specified in paragraph (2), the Administrator shall submit to the congressional defense committees a certification that—

- (A) the Administration is in compliance with the plan and milestones contained in the report; or
- (B) the Administration is not in compliance with such plan or milestones, together with—
 - (i) a description of the nature of the non-compliance;
 - (ii) the reasons for the non-compliance; and
 - (iii) a plan to achieve compliance.

SEC. 3133. INDEPENDENT ASSESSMENT OF PLUTONIUM PIT AGING MILESTONES AND PROGRESS.

(a) IN GENERAL.—The Administrator for Nuclear Security shall seek to enter into an arrangement with the scientific advisory group known as JASON to conduct an assessment of the report entitled “Research Program Plan for Plutonium and Pit Aging”, published by the National Nuclear Security Administration in September 2021, and the work undertaken as a result of such report.

(b) ELEMENTS.—The assessment required under subsection (a) shall contain the following:

(1) A determination regarding whether the report referred to in such subsection meets the criteria

for appropriate pit aging research described by JASON in its 2019 Pit Aging Letter Report (JSR-19-2A).

(2) Information relating to any improvements or additions to such report.

(3) A review of initial data collected by the National Laboratories included in such report to determine the possibility of updating the expected lifetimes of plutonium pits, including, if such updates are not possible, an estimate of when such a updates would be possible.

Document No. 4. FY 2024 National Defense Authorization Act Passed by the U.S. Senate, Select Excerpts.**SEC. 1250. STRATEGY FOR IMPROVING POSTURE OF GROUND-BASED THEATER-RANGE MISSILES IN INDO-PACIFIC REGION**

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees a strategy for improving the posture of ground-based theater-range missile capabilities in the Indo-Pacific region.

(b) ELEMENTS.—The strategy required by subsection (a) shall include the following:

(1) An assessment of gaps in conventional ground-based theater-range precision strike capabilities in the area of responsibility of the United States Indo-Pacific Command.

(2) An identification of military requirements for conventional ground-based theater-range missile systems, including range, propulsion, payload, launch platform, weapon effects, and other operationally relevant factors in the Indo-Pacific region.

(3) An identification of prospective basing locations in the area of responsibility of the United States Indo-Pacific Command, including an articulation of the bilateral agreements necessary to support such deployments.

(4) A description of operational concepts for employment, including integration with short-range and multi-domain fires, in denial operations in the Western Pacific.

(5) An identification of prospective foreign partners and institutional mechanisms for co-development and co-production of new theater-range conventional missiles.

- (6) An assessment of the cost and schedule of developmental ground-based theater-range missiles programs, including any potential cost-sharing arrangements with foreign partners through existing institutional mechanisms.
- (7) The designation of a theater component commander or joint task force commander within the United States Indo-Pacific Command responsible for developing a theater missile strategy.
- (8) Any other matter the Secretary considers relevant.

SEC. 1511. PROHIBITION ON REDUCTION OF THE INTER-CONTINENTAL BALLISTIC MISSILES OF THE UNITED STATES.

(a) PROHIBITION.—Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act for fiscal year 2024 for the Department of Defense may be obligated or expended for the following, and the Department may not otherwise take any action to do the following:

- (1) Reduce, or prepare to reduce, the responsiveness or alert level of the intercontinental ballistic missiles of the United States
- (2) Reduce, or prepare to reduce, the quantity of deployed intercontinental ballistic missiles of the United States to a number less than 400.

(b) EXCEPTION.—The prohibition in subsection (a) shall not apply to any of the following activities:

- (1) The maintenance, sustainment, or replacement of intercontinental ballistic missiles.
- (2) Ensuring the safety, security, or reliability of intercontinental ballistic missiles.

SEC. 1512. SENTINEL INTERCONTINENTAL BALLISTIC MISSILE PROGRAM SILO ACTIVITY.

The LGM-35A Sentinel intercontinental ballistic missile program shall refurbish and make operable not fewer than 150 silos for intercontinental ballistic missiles at each of the following locations:

- (1) Francis E. Warren Air Force Base, Laramie County, Wyoming.
- (2) Malmstrom Air Force Base, Cascade County, Montana.
- (3) Minot Air Force Base, Ward County, North Dakota.

SEC. 1513. MATTERS RELATING TO THE ACQUISITION AND DEPLOYMENT OF THE SENTINEL INTERCONTINENTAL BALLISTIC MISSILE WEAPON SYSTEM.

(a) AUTHORITY FOR MULTI-YEAR PROCUREMENT.—

(b) Subject to section 3501 of title 10, United States Code, the Secretary of the Air Force may enter into one or more multi-year contracts for the procurement of up to 659 Sentinel intercontinental ballistic missiles and for sub-systems associated with such missiles.

(c) AUTHORITY FOR ADVANCE PROCUREMENT.—The Secretary of the Air Force may enter into one or more contracts, beginning in fiscal year 2024, for advance procurement associated with the Sentinel intercontinental ballistic missiles for which authorization to

enter into a multi-year procurement contract is provided under subsection (a), and for subsystems associated with such missiles in economic order quantities when cost savings are achievable.

(d) **CONDITION FOR OUT-YEAR CONTRACT PAYMENTS.**—A contract entered into under subsection (a) shall provide that any obligation of the United States to make a payment under the contract for a fiscal year after fiscal year 2024 is subject to the availability of appropriations or funds for that purpose for such later fiscal year.

SEC. 1514. PLAN FOR DECREASING THE TIME TO UPLOAD ADDITIONAL WARHEADS TO THE INTERCONTINENTAL BALLISTIC MISSILE FLEET.

(a) **IN GENERAL.**—The Secretary of the Air Force, in coordination with the Commander of the United States Strategic Command, shall develop a plan to decrease the amount of time required to upload additional warheads to the intercontinental ballistic missile force.

(b) **ELEMENTS.**—The plan required by subsection (a) shall include the following:

- (1) An assessment of the storage capacity of weapons storage areas and any weapons generation facilities at covered bases, including the capacity of each covered base to store additional warheads.
- (2) An assessment of the current nuclear warhead transportation capacity of the National Nuclear Security Administration and associated timelines for transporting additional nuclear warheads to covered bases.
- (3) An evaluation of the capacity of the maintenance squadrons and security forces at covered bases and the associated timelines for adding warheads to the intercontinental ballistic missile force.
- (4) An identification of actions that would address any identified limitations and increase the readiness of the intercontinental ballistic missile force to upload additional warheads.
- (5) An evaluation of courses of actions to upload additional warheads to a portion of the intercontinental ballistic missile force.
- (6) An assessment of the feasibility and advisability of initiating immediate deployment of W78 warheads to a single wing of the intercontinental ballistic missile force as a hedge against delay of the LGM-35A Sentinel intercontinental ballistic missile.
- (7) A funding plan for carrying out actions identified in paragraphs (4) and (5).

SEC. 1516. LONG-TERM SUSTAINMENT OF SENTINEL ICBM GUIDANCE SYSTEM.

(a) **IN GENERAL.**—Prior to issuing a Milestone C decision for the program to develop the LGM-35A Sentinel intercontinental ballistic missile system (referred to in this section as the “Sentinel”), the Under Secretary of Defense for Acquisition and Sustainment shall certify to the congressional defense committees that there is a long-term capability in place to maintain and modernize the guidance system of the Sentinel over the full life cycle of the Sentinel.

(b) **CERTIFICATION ELEMENTS.**—The certification described in subsection (a) shall include a list of capabilities to maintain and advance—

- (1) accelerometers;
- (2) gyroscopes;
- (3) guidance computers;
- (4) specialized mechanical and retaining assemblies;
- (5) test equipment; and
- (6) such other components to ensure the guidance system will be maintained and modernized over the life of the Sentinel.

SEC. 1518. MATTERS RELATING TO THE NUCLEAR-ARMED SEA-LAUNCHED CRUISE MISSILE.

(a) **PROGRAM TREATMENT.**—Not later than 90 days after the date of the enactment of this Act, the Under Secretary of Defense for Acquisition and Sustainment shall—

- (1) establish a program for the development of a nuclear-armed, sea-launched cruise missile capability;
- (2) designate such program as an acquisition category 1D program, to be managed consistent with the provisions of Department of Defense Instruction 5000.85 (relating to major capability acquisition);
- (3) initiate a nuclear weapon project for the W80-4 ALT warhead, at phase 6.2 of the phase 6.X process (relating to feasibility study and down select), to align with the program described in paragraph (1);
- (4) submit to the National Nuclear Security Administration a formal request, through the Nuclear Weapons Council, for participation in and support for the W80-4 ALT warhead project; and
- (5) designate the Department of the Navy as the military department to lead the W80-4 ALT nuclear weapon program for the Department of Defense.

(b) **INITIAL OPERATIONAL CAPABILITY.**—The Secretary of Defense and the Administrator for Nuclear Security shall take such actions as necessary to ensure the program described in subsection (a) achieves initial operational capability, as defined jointly by the Secretary of the Navy and the Commander of United States Strategic Command, by not later than fiscal year 2035.

(c) **LIMITATION.**—The Under Secretary of Defense for Acquisition and Sustainment may not approve a Full Rate Production Decision or authorize Full Scale Production (as those terms are defined in the memorandum of the Nuclear Weapons Council entitled “Procedural Guidelines for the Phase 6.X Process” and dated April 19, 2000), for the W80-4 ALT program.

SEC. 1519. OPERATIONAL TIMELINE FOR STRATEGIC AUTOMATED COMMAND AND CONTROL SYSTEM.

(a) **IN GENERAL.**—The Secretary of the Air Force shall develop a replacement of the Strategic Automated Command and Control System (SACCS) by not later than the date

that the LGM-35A Sentinel intercontinental ballistic missile program reaches initial operational capability.

SEC. 1520. AMENDMENT TO ANNUAL REPORT ON THE PLAN FOR THE NUCLEAR WEAPONS STOCKPILE, NUCLEAR WEAPONS COMPLEX, NUCLEAR WEAPONS DELIVERY SYSTEMS, AND NUCLEAR WEAPONS COMMAND AND CONTROL SYSTEMS.

Section 492a of title 10, United States Code, is amended by adding at the end the following new subsection:

(d) INDEPENDENT ASSESSMENT BY UNITED STATES STRATEGIC COMMAND.—

(1) IN GENERAL.—Not later than 150 days after the submission to Congress of the budget of the President under section 1105(a) of title 31, United States Code, the Commander of United States Strategic Command shall complete an independent assessment of the sufficiency of the execution of acquisition, construction, and recapitalization programs of the Department of Defense and the National Nuclear Security Administration to modernize the nuclear forces of the United States and meet current and future deterrence requirements.

(2) CONTENTS.—The assessment required under paragraph (1) shall evaluate the ongoing execution of modernization programs associated with—

- (A) the nuclear weapons design, production, and sustainment infrastructure;
- (B) the nuclear weapons stockpile;
- (C) the delivery systems for nuclear weapons; and
- (D) the nuclear command, control, and communications system.

SEC. 1537. INTEGRATED AIR AND MISSILE DEFENSE ARCHITECTURE FOR THE INDO-PACIFIC REGION.

(a) STRATEGY REQUIRED.—The Commander of United States Indo-Pacific Command shall, in coordination with the Under Secretary of Defense for Acquisition and Sustainment, the Commander of United States Northern Command, the Director of the Missile Defense Agency, and the Director of the Joint Integrated Air and Missile Defense Organization, develop a comprehensive strategy for developing, acquiring, and operationally establishing an integrated air and missile defense architecture for the United States Indo-Pacific Command area of responsibility.

(b) STRATEGY COMPONENTS.—At a minimum, the strategy required by subsection (a) shall address the following:

(1) The sensing, tracking, and intercepting capabilities required to address the full range of credible missile threats to—

- (A) the Hawaiian Islands;
- (B) the island of Guam and other islands in the greater Marianas region, as determined necessary by the Commander of United States Indo-Pacific Command;
- (C) other United States territories within the area of responsibility of United States Indo-Pacific Command; and

- (D) United States forces deployed within the territories of other nations within such area of responsibility.
 - (2) The appropriate balance of missile detection, tracking, defense, and defeat capabilities within such area of responsibility.
 - (3) A command and control network for integrating missile detection, tracking, defense, and defeat capabilities across such area of responsibility.
 - (4) A time-phased scheduling construct for fielding the constituent systems that will comprise the integrated air and missile defense architecture for such area of responsibility.
- (c) ANNUAL REPORT.—
- (1) IN GENERAL .—Not later than March 15, 2024, and not less frequently than once each year thereafter, the Commander of United States Indo-Pacific Command shall, in coordination with the Under Secretary of Defense for Acquisition and Sustainment, the Commander of United States Northern Command, the Director of the Missile Defense Agency, and the Director of the Joint Integrated Air and Missile Defense Organization, submit to the congressional defense committees an annual report outlining the following with regard to the strategy developed pursuant to subsection (a):
 - (A) The activities conducted and progress made in developing and implementing the strategy over the previous calendar year.
 - (B) The planned activities for developing and implementing the strategy in the upcoming year.
 - (C) A description of likely risks and impediments to the successful implementation of the strategy.

SEC. 1538. MODIFICATION OF NATIONAL MISSILE DEFENSE POLICY.

Section 1681(a) of the of the National Defense Authorization Act for fiscal year 2017 (Public Law 114-328; 10 U.S.C. 4205 note) is amended to read as follows:

- (a) POLICY.—It is the policy of the United States to—
 - (1) maintain and improve, with funding subject to the annual authorization of appropriations and the annual appropriation of funds for National Missile Defense—
 - (A) an effective, layered missile defense system capable of defending the territory of the United States against the developing and increasingly complex missile threat; and
 - (B) an effective regional missile defense system capable of defending the allies, partners, and deployed forces of the United States against increasingly complex missile threats; and
 - (2) rely on nuclear deterrence to address more sophisticated and larger quantity near-peer intercontinental missile threats to the homeland of the United States.”

SEC. 1617. SECURITY ENHANCEMENTS FOR THE NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS NETWORK.

- (a) REQUIRED ESTABLISHMENT OF CROSS-FUNCTIONAL TEAM.—

(1) **IN GENERAL.**—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall establish a cross-functional team, in accordance with section 911(c) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328; 10 U.S.C. 111 note), to develop and direct the implementation of a threat-driven cyber defense construct for systems and networks that support the nuclear command, control, and communications (commonly referred to as “NC3”) mission.

(2) **PARTICIPATION IN THE CROSS-FUNCTIONAL TEAM.**—The Secretary shall ensure that each of the military departments, the Defense Information Systems Agency, the National Security Agency, United States Cyber Command, and the Nuclear Command, Control, and Communications Enterprise Center of United States Strategic Command provide staff for the cross-functional team.

(3) **SCOPE.**—The cross-functional team shall work to enhance the cyber defense of the nuclear command, control, and communications network during the period beginning on the date of the enactment of this Act and ending on October 31, 2028, or a subsequent date as the Secretary may determine.

(b) **REQUIRED CONSTRUCT AND PLAN OF ACTION AND MILESTONES .**—Not later than one year after the date of the enactment of this Act, the head of the cross-functional team established pursuant to subsection (a)(1) shall develop a cyber defense construct and associated plans of actions and milestones to enhance the security of the systems and networks that support the nuclear command, control, and communications mission that are based on—

- (1) the application of the principles of the Zero Trust Architecture approach to security;
- (2) analysis of appropriately comprehensive endpoint and network telemetry data; and
- (3) control capabilities enabling rapid investigation and remediation of indicators of compromise and threats to mission execution.

SEC. 3112. PROHIBITION ON ARIES EXPANSION BEFORE REALIZATION OF 30 PIT PER YEAR BASE CAPABILITY.

Section 4219 of the Atomic Energy Defense Act (5022 U.S.C. 2538a) is amended by—

(a) redesignating subsection (f) as subsection (g); and

(b) inserting after subsection (e) the following new subsection (f):

(f) **PROHIBITION ON ARIES EXPANSION BEFORE REALIZATION OF 30 PIT PER YEAR BASE CAPABILITY.**—

(1) **IN GENERAL.**—Unless the Administrator certifies to the congressional defense committees that the base capability to produce 30 plutonium pits per year has been established at Los Alamos National Laboratory, the Advanced Recovery and Integrated Extraction System (commonly known as ‘ARIES’) spaces at the Plutonium Facility at Technical Area 55 (commonly known as ‘PF-4’) may not be modified, including by installing additional equipment.

(2) **EXCEPTIONS.**—Paragraph (1) shall not apply with respect to—

- (A) the planning and design of an additional ARIES capability; or
- (B) the transfer of the ARIES capability to a location other than PF-4.”.

SEC. 3120. ANALYSES OF NUCLEAR PROGRAMS OF FOREIGN COUNTRIES.

(a) CAPABILITY TO CONDUCT ANALYSES OF NUCLEAR PROGRAMS.—The Secretary of Energy shall, using existing authorities of the Secretary, take such actions as are necessary to improve the ability of the Department of Energy to conduct comprehensive, integrated analyses of the nuclear programs of foreign countries.

(b) ADDITIONAL ANALYSES REQUIRED.—The Secretary shall conduct analyses of—

- (1) countries that may pursue nuclear weapons programs in the future;
- (2) developing technologies that make it easier for the governments of countries or for non-state actors to acquire nuclear weapons; and
- (3) entities that may be developing the ability to supply sensitive nuclear technologies but may not yet have effective programs in place to ensure compliance with export controls.