SASC-SF Hearing on the President's Fiscal Year 2019 Budget Request

for Strategic Nuclear Forces

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Chairwoman Fischer, Ranking Member Donnelly, and distinguished Members of the Committee, thank you for the opportunity to testify on the President's Fiscal Year (FY) 2019 Budget Request for Nuclear Forces and Atomic Energy Defense Activities.

The Changing Strategic Environment

Today, the United States faces an increasingly complex global security environment, in which the central challenge to our prosperity and security is the reemergence of long-term strategic competition by revisionist powers in China and Russia. The 2017 *National Security Strategy* observes that Russia and China are asserting their global and regional influence and are fielding military capabilities designed to deny the United States' ability to project power and defend our allies and partners in Europe and Asia respectively.

Long-term competition with China and Russia requires increased U.S and allied military investment because of the magnitude of the threats they pose today, and the potential that these threats will increase in the future. This is underscored in the 2018 *National Defense Strategy*, which asserts that we must also simultaneously strengthen our efforts to deter and counter the clear and present dangers posed by rogue regimes such as North Korea and Iran.

The United States for years worked to reduce the role and number of nuclear weapons worldwide, but potential adversaries have done the opposite. Over the past decade, they have vigorously pursued the modernization of their existing nuclear forces and the development and fielding of new nuclear capabilities. In some cases, they deliberately elevated and expanded the prominence of nuclear weapons in their military strategies. Nuclear weapons are seen as a useful means of political coercion and a potential source of military advantage, especially when facing an opposing force with far greater potential at the conventional level of war. It is no surprise, therefore, that Russia, China and North Korea, in particular are modernizing and expanding their nuclear arsenals.

The Nuclear Threat

The 2018 *Nuclear Posture Review* (NPR) reflects DoD's strategic priority to maintain a safe, secure, survivable and effective nuclear deterrent. The NPR used a threat-based approach by examining the challenges posed by Russia, China, and other states' strategic policies, programs, and capabilities, particularly nuclear.

Russia

Russia is improving and expanding its nuclear capabilities with a large, diverse, and modern arsenal of strategic and non-strategic weapons. With non-strategic nuclear weapons numbering in the thousands, in addition to its strategic nuclear stockpile, Russia is widening the quantitative and qualitative gap between its nuclear arsenal and our own.

Russia's nonstrategic nuclear weapons provide a flexible, usable adjunct to its conventional forces to prevent battlefield defeat. Russia is modernizing an active stockpile of up to 2,000 such weapons that can be deployed on ships, bombers and tactical aircraft, and with ground forces. This includes short-range ballistic missiles, air-to-surface missiles, gravity bombs, torpedoes, and depth charges. Russia is also deploying a nuclear ground-launched cruise missile in violation of the 1987 Intermediate Nuclear Forces (INF) Treaty. By contrast, NATO's nonstrategic nuclear posture relies upon a modest number of gravity bombs and dual-capable tactical aircraft, capabilities that are being modernized but not expanded in size.

The asymmetry in nonstrategic nuclear weapons has always been a source of concern precisely because of the fear that it could contribute to regional deterrence instability. This is why we have consistently called for extending the bilateral arms control framework to include these forces. With equal consistency Russia has refused to consider these offers. Now, with its ongoing violation of the INF Treaty, Russia is poised to extend this asymmetry with the development, production, and fielding of a mobile ground-launched system that can quickly and reliably strike deep into NATO territory.

In support of these capabilities, Russia's military doctrine emphasizes the coercive nature and military value of nuclear weapons. During its invasion and illegal annexation of Crimea, Russia raised the alert of its nuclear forces and issued veiled nuclear threats to warn against Western intervention. Russia has repeatedly in recent years brandished its nuclear sword against our NATO allies, while Russian President Putin issued this past July an edict that "in conditions of a military conflict, demonstration of readiness and determination to use force by employment of a non-strategic nuclear weapon is an efficient deterrence factor."

This past month, NATO's Secretary General Jens Stoltenberg expressed, "Our concern [is] that Moscow has clearly stated in their doctrine that they are prepared to use nuclear weapons in regional conflicts...We see the danger that Russia could gradually move from using conventional

weapons to nuclear weapons." Russian military doctrine allows for use of nuclear weapons on a limited scale with the goal of protecting Russian strategic and operational gains in a local aggression and deterring an effective NATO response. Russian leaders might execute such a strategy if they believed that it was their best chance to terminate or freeze a conflict on favorable terms - and that NATO and the United States would hesitate to respond in kind because most available nuclear options carry a high risk of further, unintended escalation or could be defeated by Russia's growing anti-access/area denial capabilities (e.g., advanced integrated air defenses). This approach, of course, is as risky as it is reckless—but Russian leaders could conclude the risk is acceptable if the stakes for Russia were sufficiently high and that they enjoyed "escalation advantage" at the nonstrategic nuclear level.

Our aim is to disabuse Russia of the notion that nuclear warfare is a viable option and to reinforce deterrence at all levels. We understand that the exact elements of Russia's nuclear doctrine are subject to public interpretation and debate—and that we cannot know with certainty what would trigger limited nuclear use against NATO. But given the stakes, it would not be responsible to base our policy on a benign reading of Moscow's intentions and how Russian leaders think about the nuclear threshold and the risks of escalation.

China

China is rapidly modernizing its strategic and non-strategic nuclear weapons as part of its efforts to prevent the United States from defending its allies and partners in the region. And, China continues to expand its nuclear capabilities in both quantity and quality. Since 2010, it has announced the development of or fielded new road-mobile and MIRV-capable ICBMs, theater-range ballistic missiles, a new SLBM, a new ballistic missile submarine, and the H-6K strategic bomber.

China's ICBMs and SLBMs are capable of reaching the United States, and nuclear-armed, theater-range ballistic missiles are capable of reaching U.S. territory, allies, partners, forces and regional bases. China's rapid military modernization, growing and diversifying nuclear arsenal, and assertive approach to expanding its geopolitical power at the expense of the sovereignty of its neighbors undermine the stability of the Indo-Pacific region. Moreover, China's lack of transparency regarding the scope and scale of its nuclear modernization leaves the international community with concerns about its future intent.

North Korea

North Korea's continued pursuit of nuclear weapons, combined with frequent threats against the United States and our South Korean and Japanese allies, are a major challenge to peace and security in Northeast Asia and around the world. North Korea has dramatically increased its missile flight testing, including recent ICBM tests, and has conducted six nuclear tests since

2006. Just as concerning is North Korea's history of proliferating nuclear and missile technology.

Iran

Finally, Iran's continued efforts to destabilize its neighbors and support violent extremists undermine stability in the region. Iran's destabilizing regional actions, aggressive strategy, and development of increasingly longer-range missile capabilities calls into question its long-term commitment to foregoing nuclear weapons. Although Iran has agreed to constraints on its nuclear program in the Joint Comprehensive Plan of Action (JCPOA), it retains the technological capability and much of the capacity necessary to develop a nuclear weapon within one year of a decision to do so.

United States Nuclear Policy

The 2018 Nuclear Posture Review reflects the Department of Defense's strategic priority to maintain a safe, secure, survivable and effective nuclear deterrent. The highest U.S. nuclear policy and strategy priority is to deter potential adversaries from nuclear attack of any scale against the United States or its allies. However, deterring nuclear attack is not the sole purpose of nuclear weapons. Given the diverse threats and profound uncertainties of the current and future threat environment, U.S. nuclear forces play the following critical roles in U.S. national security strategy. They contribute to the:

- Deterrence of nuclear and non-nuclear attack
- Assurance of allies and partners
- Achievement of U.S. objectives if deterrence fails
- Capacity to hedge against an uncertain future

Effective U.S. deterrence of nuclear attack and non-nuclear strategic attack requires ensuring that potential adversaries do not miscalculate regarding the consequences of nuclear first use, either regionally or against the United States itself. They must understand that the costs far outweigh any perceived benefits from non-nuclear aggression or limited nuclear escalation.

The requirements for effective deterrence vary given the need to address the unique perceptions, goals, interests, strengths, strategies, and vulnerabilities of different potential adversaries. The deterrence strategy effective against one potential adversary may not deter another. Consequently, the United States will apply a tailored approach to effectively deter across a spectrum of adversaries, threats, and contexts.

Tailoring our deterrence strategy requires a diverse set of nuclear capabilities to provide the President the flexibility needed to address a spectrum of adversaries and threats and enable

adjustments over time. Flexibility means having the appropriate range and mix of nuclear and other capabilities required to tailor deterrence strategies now and into the future.

The United States has understood the value of flexibility for nuclear deterrence for six decades, but its importance is now magnified by the emerging diversity of nuclear and non-nuclear strategic threats and the dynamism and uncertainties of the security environment. This need for flexibility to tailor U.S. capabilities and strategies to meet future requirements and unanticipated developments runs contrary to a rigid, continuing policy of "no new nuclear capabilities."

Potential adversaries do not stand still. On the contrary, they seek to identify and exploit weaknesses in U.S. capabilities and strategy. Thus, U.S. future force requirements for deterrence cannot prudently be considered fixed. The United States must be capable of developing and deploying new capabilities, if necessary, to deter, assure, or achieve U.S. objectives if deterrence fails, and hedge against uncertainty.

Declaratory Policy

U.S. nuclear declaratory policy is consistent with the 2010 NPR and states that "the United States would employ nuclear weapons only in extreme circumstance to defend the vital interests of the United States, allies and partners." The 2018 NPR clarifies that the "extreme circumstances" that may lead the United States to consider nuclear use, include, but are not limited to: significant non-nuclear strategic attacks on U.S., allied, or partner civilian population or infrastructure; and significant non-nuclear strategic attacks on U.S. or allied nuclear forces, their command and control, or warning and attack assessment capabilities. This is not—as sometimes portrayed—an expansion of the circumstances under which the U.S. might consider the use of nuclear weapons, but rather a clarification intended to reduce the probability of adversary miscalculation.

The 2018 NPR further states that "The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations."

United States Nuclear Posture

The 2018 NPR confirms the findings of all previous NPRs that the diverse capabilities of the nuclear triad provide the flexibility and resilience needed for deterrence in the most cost-effective manner. Unfortunately, each leg of the triad is now operating far beyond its originally-planned service life. Consequently, we must not delay the recapitalization of the triad initiated by the previous Administration.

The FY2019 budget request funds all critical Department of Defense (DoD) modernization requirements, helping to ensure that modern replacements will be available before the Nation's legacy systems reach the end of their extended service lives. The FY19 budget request for

nuclear forces is \$24 billion, which includes \$11 billion for nuclear force sustainment and operations, \$7 billion for recapitalization programs (including LRSO, B-21, GBSD, and the Columbia Class SSBN), and \$6 billion for Nuclear Command, Control and Communications (including MILSATCOM).

The DoD request to recapitalize the nuclear enterprise in FY19 is about 1.4% of the total DoD base budget. Overall, nuclear force modernization will cost approximately \$320 billion over 23 years. At its highest level of funding in 2029, recent estimates, such as those from the 2018 Nuclear Posture Review, project that the total cost to sustain and modernize U.S. nuclear forces will account for about 6.4% of the Defense budget, returning to about 3% upon completion of modernization.

Supplemental Capabilities

The President's budget request includes two supplemental capabilities designed to enhance deterrence against emerging challenges in the near- and mid-term. The first of these is to modify a small number of existing submarine-launched ballistic missile (SLBM) warheads to provide a low-yield ballistic missile option in the near term. The Department requests \$22.6M in FY19 to support integration of these warheads into the missile system. We also request funds of \$1M in FY19 to initiate an analysis of the performance requirements and costs to pursue a modern nuclear-armed sea-launched cruise missile (SLCM) that could be available in the mid-term. This capability was previously fielded but retired in 2011 given the hope of a more benign security environment.

The modified SLBM warhead and a modern SLCM will provide additional low-yield employment capabilities that an adversary will have to consider if contemplating a limited use of nuclear weapons. They will also provide additional diversity in platforms, range, and survivability, and a valuable hedge against future nuclear "break out" scenarios. The SLCM also improves overall survivability of the deterrence force and provides additional assurance to allies. The availability of such systems will give an adversary pause, especially if paired with other demonstrations of U.S. and allied resolve, and thus lessen the risk of a catastrophic miscalculation. United States leadership will want options that are operationally effective and that signal unmistakably the will to defend vital interests and impose significant costs on an adversary - but that can be executed in a way that is perceptibly restrained and has some prospect of managing the risk of further escalation.

This is not a warfighting approach, but rather reinforces deterrence of conflict at the outset. The possession of potent, flexible nuclear capabilities can bolster deterrence by convincing adversaries not to initiate a conventional war in the first place, or by compelling them to accept conventional defeat rather than reaching for nuclear weapons.

These capabilities are consistent—and fully comply—with the New START Treaty and the INF Treaty. They will not add to the number of nuclear weapons in the U.S. nuclear stockpile or create pressures for an "arms race," and when fielded will not pose a threat to Russia's nuclear retaliatory capabilities. Deployed at sea, these systems will not place added burdens on allies for basing and support.

Some have suggested that low-yield nuclear weapons undermine deterrence by lowering the nuclear threshold and making nuclear war more likely. There is no empirical basis to this claim. The United States has long maintained a high threshold for nuclear use together with a diverse range of nuclear explosive yields and response options. These proposed supplements to our current strategic forces would contribute to deterrence by raising a potential adversaries' threshold for nuclear use. They would make nuclear war less, not more, likely by demonstrating to adversaries that the United States is fully prepared to deter nuclear threats at every stage of an escalating crisis or conflict.

This would help ensure that potential adversaries do not perceive an exploitable advantage in using low-yield nuclear weapons and thereby deny them confidence that their coercive threats of either limited nuclear first use or actual first use can provide a useful advantage over us and our allies. These supplements are not intended to mimic or match adversary nuclear capabilities. They can, nevertheless, counter Russian limited nuclear war doctrine, help address the imbalance in U.S. and Russian non-strategic nuclear forces, and may create incentives for Russia to return to compliance with its nuclear arms control commitments and reduce numbers of non-strategic nuclear weapons.

Arms Control and Nonproliferation

The U.S. commitment to nonproliferation and arms control remains strong. We value an integrated approach that combines effective deterrence with a broad-based effort to reduce nuclear risks through global nonproliferation initiatives and a responsible program of arms control. The United States remains committed to all of its obligations under the Nuclear Non-Proliferation Treaty, including Article VI. By providing a credible nuclear umbrella extended to over thirty allies and partners, the U.S. is meeting their need for nuclear deterrence and at the same time enabling them to forgo independent nuclear weapons capabilities.

Arms control can contribute to U.S., allied and partner security by helping to manage strategic competition among states. By codifying mutually agreed-upon nuclear postures in a verifiable and enforceable manner, arms control can help foster transparency, understanding, and predictability in adversary relations, thereby reducing the risk of misunderstanding and miscalculation.

Arms control, however, is not an end in itself, and depends on the security environment and the participation of willing partners. Russia continues to violate a series of arms control treaties and

commitments, most significantly, its non-compliance with existing obligations under the Intermediate-Range Nuclear Forces (INF) Treaty and its failure to abide by its obligations under numerous agreements such as the Helsinki Accords, which established the inviolability of borders. Russia also refuses to address the disparity in the number of non-strategic nuclear weapons in its stockpiles as compared to the United States.

The United States does not wish to regard Russia as an adversary and seeks stable and productive relations. We remain committed to strategic dialogue when conditions permit and there is a meaningful prospect for positive outcomes. Given its actions in recent years, realistically the onus is on Russia to restore the basis for constructive engagement; if it does so, it will find a willing partner in NATO and the United States.

We understand the importance of a balanced policy that combines effective deterrence with a broad-based effort to reduce nuclear risks through global nonproliferation initiatives and a responsible program of arms control. This past February, Washington and Moscow announced that they had achieved the negotiated limits of the New START Treaty, codifying the lowest levels of strategic nuclear weapons since the era of bilateral nuclear arms control began. The Treaty remains in effect until 2021 unless a decision is made to extend it.

Today, however, it is difficult to envision further progress given Russia's significant non-compliance with its INF Treaty obligations and its refusal to discuss limits to nonstrategic nuclear weapons. Make no mistake, Russia's decision to violate the INF Treaty, regardless of the military implications, is a significant political act that calls into question its willingness to be a serious security partner. Still, the United States remains committed to finding a diplomatic solution that brings Russia back into full and verifiable compliance. The Alliance is united in this goal and this approach, as reflected in the 15 December 2017 statement by the North Atlantic Council on the INF Treaty. While the United States will continue to pursue a diplomatic solution, we are also implementing economic and military measures intended to induce the Russian Federation to return to compliance. This includes a review of military concepts and options, including options for conventionally-armed, ground-launched, intermediate-range missile systems.

It is useful to view the NPR initiatives in this light. U.S. resolve to maintain modern nuclear forces and prevent destabilizing force imbalances from emerging or persisting provides the necessary foundation for effective arms control. This is a lesson borne out in the history of U.S.-Russia arms control, including the INF Treaty. The decision to pursue a modern sea-launched cruise missile capability is a Treaty-compliant response to Russia's violation of this Treaty and - it is hoped - will provide an incentive to Moscow to return to compliance or agree to negotiate limits on nonstrategic nuclear weapons that could enhance allied security.

Likewise, minimizing the number of nuclear weapon states and limiting the spread of expertise and technology that enable nuclear proliferation remain foundations of American policy. We

understand our unique leadership role in nonproliferation and nuclear security, and our commitment to these goals - and to exercising active leadership in pursuing them - is undiminished. We remain focused on a pragmatic approach to strengthening the NPT and the and other elements of the global nonproliferation regime and creating conditions within the NPT framework for further progress in disarmament, consistent with our obligations under Article VI of the Treaty.

At the same time, despite the importance of these goals, we no longer believe they can be effectively advanced by unilaterally reducing or limiting the capabilities available to ensure deterrence. Today that path carries unacceptable risk. Nonproliferation faces acute challenges, to be sure, but can and will be pursued even as we take the steps necessary to strengthen nuclear deterrence.

Conclusion

According to Secretary Mattis, "nuclear weapons have and will continue to play a critical role in deterring nuclear attack and in preventing large-scale conventional warfare between nuclear-armed states for the foreseeable future."

In an increasingly complex and threatening security environment, DoD must sustain the capabilities needed to deter and defend against attacks on our homeland, as well as those aimed at U.S. forces deployed abroad, our allies and partners. This requires making the investments needed to address the on-going erosion of our nuclear capabilities. Along with our allies and partners, we must ensure that we have the capabilities needed, now and in the future, to protect our people and the freedoms we cherish, and are able to engage potential adversaries diplomatically from a position of strength. This is a top priority of the Department of Defense.

While nuclear deterrence remains a bedrock of our security, Secretary Mattis has also observed that "the U.S. approach to nuclear deterrence embraces two co-equal principles: First, ensuring a safe, secure and effective nuclear deterrent; and second, working wherever possible for nuclear nonproliferation and arms control, whenever it advances stability and security for us and our allies. Nuclear deterrence and efforts to foreclose proliferation and reduce the number of nuclear weapons are not mutually exclusive."

To achieve these goals, I urge you to support the important capabilities contained in the President's FY19 budget request.

Thank you again for the opportunity to testify. I look forward to your questions.