HASC-SF Hearing on the President's Fiscal Year 2018 Budget Request for Nuclear Forces and Atomic Energy Defense Activities

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Chairman Rogers, Ranking Member Cooper, and distinguished Members of the Committee, thank you for the opportunity to testify on the President's Fiscal Year (FY) 2018 Budget Request for Nuclear Forces and Atomic Energy Defense Activities.

Historical deterrence role of U.S. nuclear weapons

For decades, U.S. nuclear forces have provided the ultimate deterrent against nuclear attacks on the United States and our allies. During the Cold War, nuclear forces also played a key role in deterring the threat of massive conventional attack in Europe and elsewhere. Since the end of the Cold War, nuclear weapons have remained a foundational element of U.S. strategy for deterring strategic attacks and large-scale war, and for assuring U.S. allies, even as the United States worked to reduce the role and salience of nuclear weapons worldwide. It is apparent that, unfortunately, some nations have not followed our lead in reducing the role of nuclear weapons, and have, in some cases, deliberately elevated and expanded the prominence of nuclear weapons in their strategies.

Nuclear Posture Review

The President directed the Department of Defense (DoD) to conduct a comprehensive review of our nuclear weapons policy. Not surprisingly, an enduring deterrence role for U.S. nuclear forces is explicit in the President's direction. The Nuclear Posture Review (NPR) will look at all elements of U.S. nuclear forces and posture to ensure that our nuclear deterrent is modern, robust, flexible, resilient, ready, and appropriately tailored to deter 21st century threats. The NPR is underway, and we expect to complete it by the end of this calendar year.

The NPR is led by the Office of the Under Secretary of Defense for Policy (OUSD(P)) and the Joint Staff, in direct consultation with the Department of Energy's (DOE) National Nuclear Security Administration (NNSA) and the Department of State. OUSD(P) and Joint Staff leadership are working closely with representatives from the Military Departments, Combatant Commands, and across DoD components. We are also consulting with key allies and partners, other U.S. Government departments and agencies, and appropriate congressional committees.

The 2017 NPR is following a structured and deliberate process to meet the President's direction. That process begins with reviewing and assessing changes in the strategic environment since the last NPR, which was conducted in 2009. We must then determine the roles of nuclear weapons in U.S. national security strategy, develop strategies to fulfill those roles, and assess the capabilities needed to implement U.S. nuclear strategy.

I will not prejudge the outcome of the NPR, but will outline some of the challenges and questions we must consider.

Continuity and Change in the Security Environment

Maintaining effective nuclear deterrence is an absolute imperative, and it is the highest priority mission of the DoD. Effective deterrence requires a deliberate strategy for how to deter and how to communicate messages of resolve and restraint to potential adversaries, and it requires forces that are structured and postured to support that strategy within the existing security environment. Strategy, forces, and posture must also be flexible enough to maintain stability while adjusting to both gradual and rapid technological and geopolitical changes.

The 2017 NPR must consider elements of both continuity and change in the international security environment. There is continuity in the reality that we live in a world with potential adversaries armed with nuclear weapons. Nuclear weapons in the hands of potential adversaries pose the only clear existential threat to the United States, and, likewise, threaten our allies. Russia remains our only near peer in terms of arsenal size, though China also fields a substantial nuclear force. Both Russia and China are actively engaged in extensive programs to modernize their nuclear forces, and are well positioned to retain them for the foreseeable future. Knowledge about nuclear, chemical, and biological weapons is widespread, and, therefore, we cannot rule out the possibility of further proliferation of weapons of mass destruction (WMD). Finally, there is an element of continuity in the ever-present possibility of impending change, which can appear as a gradual evolution or as rapid upsets.

Recent years have indeed brought changes to the security environment that U.S. nuclear policy must address. Russia has undertaken aggressive actions against its neighbors and threatened the United States and its NATO Allies—including nuclear threats. It has elevated strategies of nuclear first use in its strategic thinking and military exercises, and is violating the landmark Intermediate-Range Nuclear Forces (INF) Treaty.

Resolving Russia's INF Treaty violation is a top priority for this Administration. This Administration has been clear with Russia that the status quo is unacceptable and that the United States must therefore consider concrete steps that will deny Russia any significant military advantage from this violation. While our strong preference is for Russia to return to compliance with the Treaty, the United States is prepared to hold Russia accountable and take steps to

change Russia's calculus. This is not only to mitigate against the new threats presented by the missiles, but also to ensure arms control agreements remain credible in the future.

Russia presents a significant set of challenges, but is only one element of an increasingly complex global strategic environment. In the Asia-Pacific region, China's increased assertiveness suggests a desire to dominate that region. North Korea's leadership has demonstrated a willingness to accept economic countermeasures and international isolation in order to advance its nuclear weapons capability and develop ballistic missiles able to strike the U.S. homeland as well our allies in the region. The United States remains committed to ensuring that Iran never acquires a nuclear weapon. As the Administration conducts its policy review of the Joint Comprehensive Plan of Action (JCPOA), we will continue to meet our commitments under the deal. Iran continues its ballistic missile program, which is outside of the JCPOA.

Across the globe, new threats are emerging from non-nuclear strategic capabilities, most of which are not constrained by arms control agreements. These include conventional ballistic missiles, offensive capabilities within the space and cyber domains, and the potential for hypersonic weapons armed with non-nuclear as well as nuclear munitions. Technological advancements mean that future proliferators might seek and find WMD development paths that are different from those we are used to detecting and countering. Finally, existing nuclear weapon States might pursue new means for delivering nuclear weapons, and for defeating U.S. nuclear forces through active defenses or counterforce attacks.

Nuclear Forces and Posture for Implementing U.S. Deterrence Strategy

It is against this backdrop that the President directed DoD to ensure that the U.S. nuclear deterrent is modern, robust, flexible, resilient, ready, and appropriately tailored to deter 21st century threats. Each of these characteristics contributes to the effectiveness of our deterrence strategy. Modern nuclear forces would incorporate 21st century technology, whereas the current U.S. arsenal relies on aging technology that, in some cases, dates back more than half a century. A robust deterrent is strong and able to convince a range of potential adversaries with varying perceptions and values that the risks in attacking the United States or its allies far outweigh any expected benefits. A resilient deterrent is stable, such that plausible changes in adversary strategy, forces, and posture would not create or expose vulnerability in our ability to deter attack. A ready deterrent is postured to enable rapid response across a wide range of conditions and scenarios, thereby further enhancing stability. A tailored deterrent is one that is calibrated to the specific actors and conditions we see today and would expect to see in the near-term, and a flexible deterrent is one that can be adapted further to meet evolving threats and sudden upsets.

Prior reviews across multiple Administrations determined that the surest way to maintain stable and effective nuclear deterrence is to sustain a full triad of land-based intercontinental ballistic missiles (ICBMs), ballistic-missile submarines (SSBNs), and strategic bombers, together with dual-capable fighter aircraft (DCA) equipped to employ nonstrategic nuclear weapons. Each leg

of the triad provides unique and complementary capabilities that, together, enable and protect the credibility, flexibility, and survivability of the U.S. deterrent. Each leg also provides a hedge against technical problems or changes in the security environment.

As we conduct the NPR, DoD must continue with the existing Program of Record for recapitalizing our aging strategic triad; dual-capable aircraft; Nuclear Command, Control, and Communications (NC3) systems; and supporting infrastructure. After decades of deferred modernization following the end of the Cold War, most of our current systems are well past their planned service lives. Replacement and modernization programs for strategic delivery and NC3 systems must proceed without further delay if we are to retain existing deterrent capabilities. Similarly, significant delays in delivering a nuclear capability for the F-35 aircraft would create gaps in the ability of the United States and its NATO Allies to support U.S. and Alliance nuclear posture. Nuclear warhead life extension programs (LEPs), together with supporting stewardship activities and infrastructure modernization, must also continue apace to ensure the continued effectiveness of U.S. deterrent forces.

DoD will continue to coordinate with DOE's National Nuclear Security Administration (NNSA) to ensure that programs for warheads and delivery systems are integrated and well aligned. Close and effective coordination between the Departments is one key measure of the overall health of the nuclear enterprise. Maintaining that health also requires stable and adequate funding for both DoD and DOE/NNSA.

Cost of Nuclear Recapitalization

The nuclear enterprise is affordable if nuclear deterrence is prioritized appropriately. During the coming period of increased recapitalization spending, nuclear forces will remain a small fraction of the DoD budget – with annual funding levels that are projected to range from approximately 3 percent to 6 percent of total defense spending. This includes spending to sustain and operate the existing force—currently about \$12-14 billion per year—as well as recapitalization spending to develop and field modernized replacements.

DoD expects nuclear recapitalization costs to total approximately \$230-\$290 billion spread over more than two decades, from FY 2018 to FY 2040, in constant FY 2018 dollars. This projection includes the total cost of strategic delivery systems that have a nuclear-only mission, and a portion of the cost of the B-21 bomber, which will have both conventional and nuclear roles. The fraction of the B-21 cost DoD apportions to the nuclear mission is consistent with the historical cost of delivering nuclear capability to a strategic aircraft. The DoD projection for total recapitalization cost also includes modernizing NC3 systems.

Previous DoD projections of \$350-\$450 billion for nuclear recapitalization included the full cost of the B-21 bomber, even though the planned size of the bomber force is determined entirely by its conventional mission. The previous projections also included DoD outyear planning funds

that were reallocated in each budget request to DOE/NNSA to support nuclear warhead LEPs and other stockpile activities. Beginning in FY 2018, these funds will be accounted for in NNSA budget requests rather than in DoD's. Finally, the updated total of \$230-\$290 billion also reflects program progress that has been made in FY 2017 and refinements in cost projections for individual programs.

Public mischaracterizations of non-DoD reports have in some cases created confusion about nuclear recapitalization costs. This is particularly true for studies that included in their estimates nuclear force sustainment and operations in addition to recapitalization, but are often characterized as projecting costs for recapitalization alone. For example, the Congressional Budget Office (CBO) released a report in February 2017 that projected \$400 billion for the full cost of U.S. nuclear forces over the next 10 years. In addition to the DoD recapitalization programs that I outlined a moment ago, the CBO estimate includes force sustainment and operations; all NNSA weapons activities, including warhead LEPs and infrastructure; and a projected cost growth of 16 percent.

In making these long-term cost projections, there are always legitimate questions about what to include, what timeframe to cover, and what level of uncertainty is reasonable to expect. DoD is committed to taking a responsible approach to budgeting for nuclear force sustainment and recapitalization. We believe that the President's budget request for the current FY and the five-year Future Years Defense Plan (FYDP) provides the most reliable assessment of these costs.

President's Budget Request for Nuclear Forces

The President's Budget Request (PBR) for FY 2018 and the FYDP provide for sustainment and operation of our existing nuclear forces, and fully fund the DoD nuclear recapitalization Program of Record. Future budget submissions will reflect any policy and program adjustments resulting from the NPR.

The portion of the PBR dedicated towards the DoD nuclear enterprise for FY 2018 is \$19 billion, which includes \$14 billion for nuclear force sustainment and operations and \$5 billion for associated recapitalization programs. It funds the Columbia-class SSBN to replace the current Ohio-class SSBN; the Ground-Based Strategic Deterrent (GBSD) to replace the Minuteman III ICBM; the B-21 next-generation penetrating bomber; the Long-Range Standoff (LRSO) cruise missile to replace the AGM-86B Air-Launched Cruise Missile (ALCM); the DoD portion of the B61-12 nuclear gravity bomb, which will consolidate and replace several existing gravity bomb variants; and modernized NC3 systems. Over the FYDP, the FY 2018 PBR funds nuclear recapitalization programs at a total of \$43 billion.

The PBR for FY 2018 incrementally funds the first Columbia-Class SSBN, which requires average ship construction funding of about \$5 billion per year from FY 2021 to FY 2025. It funds the GBSD Program at \$0.2 billion in FY 2018, increasing to \$2.5 billion in FY 2022. It

also fully funds the B-21 bomber at about \$2.7 billion per year in the FYDP, a portion of which is attributed to nuclear modernization, and the LRSO at an average of \$0.5 billion per year. The President's FY 2018 budget adds more than \$3 billion across the FYDP, relative to the previous year's request, to continue implementing recommendations from the 2014 Nuclear Enterprise Reviews for improving the health of the DoD nuclear enterprise. This includes \$2.8 billion in increased funding for the ICBM and sea-based deterrent programs, and about \$500 million for the program to replace ICBM security helicopters.

These investments demonstrate the President's commitment to nuclear deterrence and national defense. The critical mission of ensuring an effective nuclear deterrent is one that the Department of Defense shares with the DOE/NNSA and the Congress. We look forward to continuing to work together in faithfully and responsibly fulfilling this mission, and we look forward to congressional and allied input as we conduct the NPR. Thank you, again, for the opportunity to testify. I look forward to your questions.