HASC-SF Hearing on President's Fiscal Year 2021 Budget Request for Strategic Forces

Dr. James H. Anderson

Performing the Duties of Deputy Under Secretary of Defense for Policy

February 27, 2020

Chairman Cooper, Ranking Member Turner, and distinguished Members of the Committee, thank you for the opportunity to testify on the President's Fiscal Year (FY) 2021 Budget Request for Strategic Forces.

The United States faces an extraordinarily complex and increasingly dangerous global security environment, in which the central challenge to our prosperity and security is the reemergence of long-term strategic competition with China and Russia. Our National Defense Strategy focuses squarely on this challenge, but we must also confront the persistent threats posed by rogue regimes such as Iran and North Korea.

Each of these competitors confronts us with both unique and overlapping challenges. Strategic Forces—Nuclear, Space, and Missile Defense—offer critical capabilities necessary to meet these challenges. These capabilities are essential to rebuilding our military strength and restoring our competitive advantage so that we can protect the American people and our allies and partners, advance U.S. influence, promote prosperity, and preserve peace through strength.

The threats we face are immediate, multifaceted, and consequential. Despite decades of U.S. leadership towards smaller arsenals and decreased reliance on nuclear weapons, our strategic competitors moved in the opposite direction, elevating the risk of nuclear weapon use in a conflict to its highest level since the Cold War. Our preeminence in the space domain is under increased pressure as our competitors' counterspace arsenals multiply, threatening key capabilities and raising the risk of adversary miscalculation. Finally, the missile threat has grown dramatically owing to the proliferation of offensive missiles and technological advances; already we see the consequences of this in Iran's conduct in the Middle East.

Collectively, these threats confront us with a daunting reality. Our task at the Department of Defense is to face this reality and to plan accordingly. Our budget submission for

Strategic Forces will restore our military strength where necessary, and preserve, achieve, or extend competitive advantage where possible. These investments will ensure that our military power endures and, in combination with other elements of national power, that we are fully able to meet the increasing challenges to our national security.

Nuclear Threat, Policy, and Posture

Nuclear threats are increasing. Russia is deep into a comprehensive nuclear modernization program that includes every leg of its strategic Triad, novel new nuclear delivery systems (two of which, the *Avangard* hypersonic missile and the *Kinzhal* airlaunched ballistic missile, have already been fielded), and an arsenal of approximately 2,000 theater and tactical nuclear weapons of more than a dozen types. The Defense Intelligence Agency estimates the number of Russia's non-strategic nuclear weapons will grow significantly over the next decade. This nuclear arsenal backs a military doctrine that emphasizes the coercive and military value of nuclear weapons, including limited nuclear first-use in a regional context. Putin's boasting about Russia's nuclear modernization program and development of novel systems, and Russia's pattern of brandishing nuclear weapons to coerce—seen most recently in the Crimean crisis as well as threats to Denmark if it joined NATO's missile defense system—reflect the value Russia attaches to using nuclear force as an instrument of intimidation.

Over the next ten years, we believe China will at least double the size of its nuclear stockpile while implementing the most rapid expansion and diversification of its nuclear arsenal in its history. China's nuclear forces include a mix of strategic-range systems capable of striking the U.S. homeland as well as theater-range forces capable of threatening allies and partners, U.S. bases, and forces in the Indo-Pacific region. Diverse and improved capabilities increase the risk China may perceive that these weapons provide it with coercive options in a crisis or conflict. China's continued opacity and resistance to engaging in a meaningful strategic dialogue give us no indication where China's nuclear ambitions may stop.

Finally, the rogue State missile and nuclear threat persists. We have yet to achieve a diplomatic solution to North Korea's nuclear ambitions, and there is little doubt Iran could achieve a nuclear weapon capability rapidly if it decides to pursue it. Accordingly, our nuclear forces and posture must prepare to face a variety of nuclear threats, from diverse challengers with differing capabilities, motivations, and objectives.

Nuclear deterrence is the highest-priority mission of the Department of Defense. Our deterrent is the foundation and backstop of our national defense, underwrites every U.S.

military operation around the world, and provides our extended deterrence guarantees to more than 30 allies and partners.

Nuclear deterrence rests on the ability to convince an adversary that the United States has the resolve and the capability to respond to any contingency. Effective deterrence against the range of threats we face today requires tailored deterrence strategies supported by flexible capabilities. U.S. nuclear forces must provide a range of graduated nuclear response options including a variety of delivery systems and explosive yields to deny the adversary any first-use objectives, impose costs on nuclear use, and deter further nuclear use or escalation.

The diverse capabilities resident in the nuclear Triad, together with forward-deployed dual-capable aircraft (DCA) aircraft in Europe and the supplemental capabilities identified in the 2018 Nuclear Posture Review, provide the flexibility and resilience needed for deterrence in the most cost-effective manner. This committee is well aware of the age of the Triad systems and the challenge DoD faces in sustaining these systems as we proceed with modernizing U.S. nuclear forces after decades of deferred recapitalization. In FY 2020, Congress appropriated 98 percent of DoD's budget request for nuclear force modernization, operations, and sustainment, and appropriated more than 100 percent of the National Nuclear Security Administration (NNSA) budget request for weapons activities. We appreciate this support and request continued support.

The FY 2021 Budget Request funds all critical 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 FY 2021 Budget Request for nuclear forces is \$28.9 billion or roughly 4.1 percent of the DoD budget.

DoD's FY 2021 request also includes \$32 million for initial design work on the W93/Mk7 submarine-launched ballistic missile (SLBM). In the coming years, we will see some adjustment to our approach. This warhead and aeroshell will provide U.S. Strategic Command (USSTRATCOM) and the Navy a means to address evolving ballistic missile warhead modernization requirements, mitigate against simultaneous age-out of the W76 and W88 warheads, improve operational effectiveness, and mitigate geopolitical, technical, operational, and programmatic risk in the sea leg of the Triad. Carrying out the W93/Mk7 program is also vital for continuing our longstanding support to the United Kingdom, which is also modernizing its nuclear forces.

This budget request moves us towards a recapitalized nuclear Triad supported by supplemental capabilities to be more effective in deterring potential adversary limited nuclear use strategies, armed with weapons designed to hedge more effectively against

operational, technological, and operational risk. This is not arms racing. This is responsible planning for a nuclear force that we will need to field in the 2030s to provide for deterrence requirements in the decades that follow.

Space Threat, Policy, and Posture

Space systems underpin virtually every weapon system in our arsenal. Positioning information and timing signals from the DoD's Global Positioning System, communications information from military and commercial satellite networks, and imagery and mapping data from military and commercial reconnaissance and Earth observation satellites all support crucial national defense capabilities. But many of these capabilities were designed for an era when there were few threats in space – an era before potential adversaries developed counterspace systems and doctrine that transformed space into a warfighting domain. Now, DoD is rising to meet these challenges by transforming our space enterprise, fielding resilient architectures, developing space warfighting expertise and culture, and working closely with our likeminded allies and partners to integrate space into our combined operations.

China and Russia both see their military options as requiring the ability to deny the United States and allies and partners the advantages of space-based capabilities. China and Russia are developing sophisticated on-orbit capabilities and an array of counterspace weapons capable of targeting nearly every class of U.S. space asset. Likewise, they are both expanding their respective abilities to utilize space and have each created military space forces that they are training and equipping to prevail in future crises and conflicts. The United States is responding to this threat.

The National Defense Authorization Act (NDAA) for FY 2020 established the U.S. Space Force as a new branch of the Armed Forces within the Department of the Air Force. The U.S. Space Force will be responsible for organizing, training, and equipping space forces, focusing full-time on developing the concepts, doctrine, capabilities, and expertise needed to ensure superiority in space that is strategically linked to superiority across all military domains. The U.S. Space Force will present those forces to the Combatant Commands, most notably to U.S. Space Command. DoD is taking a "clean-sheet" approach to designing the Space Force as a twenty-first century Military Service with a streamlined organizational structure. DoD is focused on creating a structure that removes traditional layers of bureaucracy while maintaining clear lines of authority, responsibility, and accountability.

As provided in the National Defense Authorization Act for FY 2020, the duties of the U.S. Space Force are to: "1) protect the interests of the United States in space; 2) deter

aggression in, from, and to space; and 3) conduct space operations." The Space Force must be resourced adequately to fulfill these duties. The President's FY 2021 Budget Request provides \$18 billion for space programs, including \$111 million for the personnel needed to develop the strategic plans, doctrine, tactics, and test and training functions for this new Military Service. In addition to the Space Force, the President's Budget also provides funding for the new space Combatant Command – U.S. Space Command – and the new Space Development Agency, which will accelerate the development and fielding of the new military space capabilities necessary to ensure our technological and military advantage in space.

The United States is not approaching this problem alone. We are actively pursuing opportunities with allies and partners to build combined space operations and interoperable, or even integrated, architectures. DoD is leveraging allied and partner space capabilities to a greater degree than ever before. The flagship of this integration is the Combined Space Operations Center (CSpOC) at Vandenberg Air Force Base, California, with embedded British, Canadian, and Australian exchange personnel, working side-by-side with U.S. personnel. We have recently added Germany and France to the Combined Space Operations initiative.

Missile Defense Threat, Policy, and Posture

As adversary missile technology matures and proliferates, the threat to the U.S. homeland, allies, partners, and our forces in the field becomes increasingly dynamic and difficult to predict. Although traditional fixed and mobile ballistic missile threats continue to grow, adversaries are also investing in ground-, air-, and sea-launched cruise missiles as well as hypersonic weapons with diverse ranges. We see these missile technologies are being incorporated into adversary strategies meant to coerce and intimidate the United States and its allies and partners by threatening critical targets in our homelands, our ability to reinforce allies and partners in a crisis or conflict, and our ability to project power regionally.

Russia and China possess two of the largest short-, medium-, and intermediate-range ballistic missile arsenals that threaten forces abroad, allies and partners, and critical assets. Russia and China are moving beyond ballistic missile technology and progressively investing in advanced cruise and hypersonic missile capabilities meant to counter U.S. and allied missile defenses. In addition, North Korea persists with its long-range missile programs as well as increasingly lethal short-range ballistic missiles. Iran, for its part, possesses well over a thousand missiles – some of which were used in the recent attack on U.S. targets in Iraq – and a space-launch program that could develop into

an ICBM program, should Iran chose to do so. The global missile threat remains extremely fluid and dangerous – recognizing this reality is the foundation for U.S. missile defense policy both now and in the future.

To address these evolving challenges to U.S. and allied security, the United States is focused on a layered defense with adaptable systems to meet the dynamic threat environment. U.S. policy is to stay ahead of rogue State missile threats while relying on nuclear deterrence to address the large and more sophisticated Russian and Chinese ICBMs. Within this framework, our key missile defense policy objectives are centered on the following areas, as articulated in the 2019 Missile Defense Review (MDR): defending the U.S. homeland, our military forces abroad, allies, and partners; diminishing the benefits of adversary coercive threats and attacks; assuring allies and partners that we will stand by our security commitments; preserving our freedom of action to conduct military operations; and hedging against future, unanticipated offensive missile threats. The capabilities and posture described here that support U.S. policy are essential for the credibility of our deterrence, assurance, and damage limitation missions.

The United States is strengthening its homeland missile defenses and is pursuing more advanced capabilities to stay ahead of rogue State threats. Today, the United States is defended by the ground-based missile defense (GMD) system – 44 ground-based interceptors (GBIs) supported by a globally integrated network of sensors and a command and control system. To improve the current GMD system, the FY 2021 budget request includes funds for increasing the current GBI fleet's reliability through hardware and software improvements, deploying a new radar, and improving advanced sensor capabilities. DoD is also developing a new interceptor to meet future threats, the Next Generation Interceptor (NGI), which will incorporate the advanced technology needed to defeat rogue State missile threats. The FY 2021 budget contains \$638M for NGI development and risk reduction, and we anticipate it will begin to be fielded in 2028, bringing the total number of GBIs to 64. We are developing a new generation of advanced ground- and space-based sensors to detect, track, and discriminate enemy missile warheads more effectively, including the completion of ground-based radar in Alaska (\$132M in FY 2021) and the development of new space-based sensors to track more sophisticated missile threats (\$100M in FY21).

Lastly, to hedge against new developments between now and when NGI is operational, DoD is funding options for layered homeland missile defense capabilities to complement the existing GMD system, including a Spring 2020 flight test of the SM-3 Block IIA against an ICBM-class target as well as evaluating the development of a new terminal high-altitude area defense (THAAD) interceptor to support homeland defense. These DoD is requesting \$274M for these layered homeland defense efforts, which, when fully developed, could be available mid-decade.

The United States is also advancing its regional missile defense programs by: increasing our capacity by procuring additional Patriot, THAAD, and sea-based SM-3 and SM-6 interceptors; fielding additional mobile platforms, including more ballistic missile defense (BMD)-capable Aegis ships, to respond more effectively to crises or conflicts; integrating U.S. regional systems such as Patriot, THAAD, Aegis, and their associated radars to expand the area that can be defended and employ interceptors more efficiently; and integrating regional ballistic missile and cruise missile defenses. DoD is also investing in counter-hypersonic capabilities by requesting funding for developing space-based sensors to improve detection, tracking, and discrimination; conducting research and development for defenses against hypersonic missiles, including near-term sensor and command and control upgrades; and defining concepts for a regional glide-phase weapon system.

As part of the National Defense Strategy, DoD is strengthening its alliances and partnerships around the world to be able to deter and defend more effectively against shared missile threats. For example, NATO has an operational BMD capability based upon the Aegis Ashore sites in Romania and the site in Poland, which remains under construction; the Aegis BMD ships assigned to NATO radars like the AN/TPY-2 in Turkey and early-warning radars in the UK and Greenland; and NATO command and control facilities. The United States and Japan are successfully co-producing the SM-3 IIA interceptor, and Japan is also in the process of procuring two Aegis Ashore BMD systems, which will add to Japan's layered defense posture. The United States is also cooperating with South Korea to upgrade its PAC-2 batteries to the more advanced PAC-3 system. South Korea also hosts a U.S. THAAD battery, which complements U.S. and Republic of Korea Patriot units on the Korean Peninsula providing for a layered defense against missile attack. In the Gulf, Saudi Arabia and the United Arab Emirates (UAE) have conducted many dozens of successful intercepts of hostile missile attacks. Finally, our budget request continues the longstanding support for U.S.-Israeli cooperation on missile defense – highlighted today by our cooperation on the David's Sling weapon system to counter short-range ballistic missiles SRBMs and cruise missiles, and the Arrow-3 hit-to-kill interceptor to address regional ballistic missile threats. The U.S. Army is also procuring two Iron Dome batteries, co-produced with Israel, that will aid in cruise missile defense. U.S. cooperation with allies and partners strengthens deterrence and

provides assurance essential to the unity of our alliances and partnerships that are threatened by missile coercion and attacks.

Conclusion

Mr. Chairman, let me conclude by reiterating that these strategic capabilities are essential to achieving our national defense strategy. In an increasingly complex and threatening security environment, DoD must sustain the capabilities needed to deter and defend against attacks on our homeland, U.S. forces deployed abroad, allies, and partners. We must make the investments necessary to reverse the erosion of our military capabilities, restore our competitive advantages, and remain the preeminent military power in the world.

To do so, I urge you to support the important capabilities outlined in the President's FY 2021 budget request.

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