

Not for Public Release until Approved by the
House Armed Services Committee

Testimony

Before the
Strategic Forces Subcommittee
Committee on Armed Services
U.S. House of Representatives

Fiscal Year 2016 Budget Request for Nuclear Forces

Witness Statement of Dr. Arthur T. Hopkins,
Principal Deputy Assistant Secretary of Defense for
Nuclear, Chemical, and Biological Defense Programs

April 15, 2015

Chairman Rogers, Ranking Member Cooper, and distinguished members of the Subcommittee, thank you for the opportunity to testify before you today on the FY 2016 budget request for nuclear forces. I am pleased to join Assistant Secretary Scher, Admiral Benedict, and General Harencaak to discuss the Department of Defense's (DoD) most vital mission: maintaining a safe, secure, and effective nuclear deterrent for as long as nuclear weapons exist. As the Principal Deputy Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs and Nuclear Weapons Council Staff (NWC) Director, I work for the Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L) and advise the Department's senior leadership on nuclear matters. The Under Secretary has a dual role in overseeing systems acquisition in the nuclear enterprise: leading the Department's efforts to acquire the strategic delivery systems for nuclear weapons in order to meet the operational needs of our Armed Forces, and leading the NWC to address acquisition issues related to nuclear warheads and sustainment and infrastructure modernization. The NWC is a joint DoD and Department of Energy (DOE)/National Nuclear Security Administration (NNSA) organization established to facilitate cooperation and coordination, reach consensus, and institute priorities between the two departments as they fulfill their responsibilities for U.S. nuclear weapons stockpile management. To ensure the continued credibility of our nuclear deterrent, it is essential that Congress supports the President's FY 2016 budget request for nuclear weapons-related activities. Today, I will summarize the DoD and NWC perspectives on, and priorities for, warhead life extension, nuclear weapon delivery platforms modernization and replacement, modernization of the nuclear enterprise infrastructure, our ability to sustain the stockpile, and the challenges we face today and tomorrow to sustain a safe, secure, effective, and reliable nuclear stockpile.

Nuclear Enterprise Challenges

The NWC convenes approximately monthly to ensure focused attention on nuclear enterprise challenges in four vital areas. First, we must maintain and strengthen our ability to extend the life of warheads through comprehensive component reuse, refurbishment, and replacement, and ensure alignment with delivery platforms (Table 1 summarizes the current and future nuclear weapons stockpile).

Second, we must safeguard our ability to provide the intensive science and engineering required to assess an aging stockpile and certify the safety and effectiveness without nuclear testing. Third, we must remain steadfast in our commitment to sustain and modernize our aging

Table 1. The Current and Future Triad Composition

	ICBM	SLBM	Air-Leg
<i>Current</i>			
<i>Weapon System</i>	W87 Warhead W78 Warhead	W76 Warhead W88 Warhead	B61 Bomb B83 Bomb W80-1 Warhead
<i>Delivery Platform</i>	Minuteman III	Trident II D5	B-2A B-52H F15/F16 ALCM ¹
<i>Future</i>			
<i>Weapon System</i>	W78/88-1 IW-1 ² IW-2 IW-3	W78/88-1 IW-1 IW-2 IW-3	B61-12 Bomb W80-4 Warhead
<i>Delivery Platform</i>	GBSD ³	D5 Follow-on	B-2A B-52H JSF ⁴ LRSB ⁵ LRSO ⁶

infrastructure that provides materials, components, and testing facilities essential to our nuclear deterrent enterprise. And fourth, the DoD must address the challenges of sustaining and modernizing all parts of our nuclear force structure, and we must ensure that our nuclear weapons sustainment programs and delivery system modernization programs are aligned and funded.

DoD Stockpile Requirements

¹ Air-Launched Cruise Missile

² Interoperable Warhead

³ Ground-Based Strategic Deterrent

⁴ Joint Strike Fighter

⁵ Long Range Strike Bomber

⁶ Long Range Standoff

The NWC envisions a future that is flexible and adaptable to technical and geopolitical changes, and to achieve this, they endorsed the 3+2 stockpile strategy. This strategy includes three interoperable nuclear explosive packages for ballistic missiles and two air-delivered warheads; interoperability will reduce the number of different systems that must be maintained and serviced, while providing sufficient diversity among deployed systems. The 3+2 strategy addresses stockpile obsolescence and meets policy objectives of sustaining deterrence through a smaller stockpile with fewer weapon types and a modernized, responsive nuclear infrastructure capable of addressing technological and geopolitical surprise.

To support the 3+2 strategy and revitalize the enterprise, the NWC created a 25-year plan for the nuclear weapons stockpile – also known as the Baseline Plan – that aligned warhead life extension plans and infrastructure needs with ongoing platform modernization and replacement efforts. The coordinated Baseline Plan integrated NNSA nuclear security enterprise requirements and plans with military requirements.

Budget realities have forced changes to the Baseline Plan since it was adopted. In 2012, the NWC endorsed deferrals to key warhead life extension programs (LEPs) and infrastructure modernization milestones, delaying implementation of the 3+2 strategy. They delayed the Interoperable Warhead 1 (IW1) and the Long Range Standoff (LRSO) warhead schedules. For the B83-1 bomb, they adjusted the deployment requirement. For the B61-12 bomb LEP, they accepted a schedule delay due to the sequestration cuts in the FY 2014 budget. Plutonium pit production schedules and supporting plutonium infrastructure investments experienced significant delays due to shortfalls in the FY 2013 and FY 2015 budgets.

DoD and NNSA are moving forward with several weapon systems LEPs to support the Nation's long-term deterrent capabilities. The W76-1 warhead for the submarine-launched ballistic missile (SLBM) and the B61-12 bomb for the air-delivery systems are the most urgent

warhead life-extension needs in our stockpile, and the FY 2016 President's budget request fully funds these LEPs. The W76-1 LEP is beyond the halfway mark on production and is on-schedule to complete in FY 2019. The B61-12 LEP with the Air Force-provided Tailkit Assembly is undergoing development engineering and remains on schedule and budget to meet its March 2020 First Production Unit (FPU). The Air Force has funded the tail kit development and production to synchronize with NNSA bomb assembly work. The B61-12 LEP consolidates four variants of the B61 bomb and improves the safety and security of the oldest nuclear weapon system in the U.S. arsenal. The B61-12 LEP will: 1) result in a nearly 50 percent reduction in the number of nuclear gravity bombs in the stockpile, 2) facilitate the removal of a megaton-class weapon—the B83-1, 3) achieve an 80 percent reduction in the amount of special nuclear material in those bombs, and 4) implement the first step of the 3+2 strategy. These missions support both our deterrent and nonproliferation objectives as outlined in the President's 2010 Nuclear Posture Review.

The FY 2016 budget also funds expanded work on sustaining our W88 SLBM warhead, which is undergoing development engineering to replace the aging arming, fuzing, and firing system. That program is on schedule to achieve its December 2019 FPU. In August 2014, the NWC agreed to address potential conventional high explosive (CHE) scope for the W88. Based on the results of extensive review by our national laboratories, NNSA, and the Navy, the NWC made the decision to refresh the W88 CHE and identified the majority of funding offsets needed for this work. Offsets were generated by reducing sustainment activities and hedge quantities for some legacy systems. That decision identified areas where increased risk could be accepted to produce cost-savings within the current program – without additional funding – and without additional delays to future work.

The IW1, also known as the W78/88-1 LEP, will be the first of three ballistic missile warheads under the 3+2 strategy. The IW1 was delayed from FY 2025 as part of the FY 2015 budget request and is now scheduled for a 2030 FPU. A full feasibility study is planned for completion in the early 2020s. The Services committed to continued participation in the program and will plan and program for the restart accordingly.

Over the last two years, the NWC evaluated and then selected the follow-on warhead for the Air-Launched Cruise Missile replacement, the LRSO cruise missile. The W80 Nuclear Explosive Package will serve as the basis for the LRSO warhead, and the warhead LEP is now designated the W80-4. The W80-4 FPU is planned for 2025 with the first LRSO cruise missile to be achieved in 2026.

Although we have made some difficult decisions in building this budget and have taken short-term risks, we believe those risks are acceptable. The NWC believes it is imperative that Congress support the full NNSA budget request to ensure national security requirements continue to be met. The greatest challenge for the NWC is to achieve and maintain the necessary funding balance among three critical nuclear areas. To allow continued certification and ensure our nuclear weapons remain safe, secure, and effective, we must be vigilant in preserving stockpile science and engineering; sustaining and life-extending our stockpile; and sustaining and modernizing the aging nuclear enterprise infrastructure.

DoD Platform Requirements

In accordance with the Nuclear Posture Review's guidance to maintain a triad under the New START agreement with the Russian Federation, DoD has a robust plan for recapitalizing the Intercontinental Ballistic Missiles (ICBMs), SLBMs, and nuclear-capable heavy bombers that compose our strategic nuclear deterrent. Our budget request is consistent with our plans to ensure that current nuclear delivery systems will be sustained and that the modernization and

replacement programs are executable and on schedule to avoid capability gaps. In FY 2016, DoD will continue to fund: the OHIO class replacement submarine and Trident II D-5 missile life extension; the follow-on capability to the Minuteman III ICBM—the Ground-Based Strategic Deterrent (GBSD); upgrades to the B-2 and B-52H heavy bombers; and development of a LRSO missile to replace the current air-launched cruise missile.

The OHIO Replacement Program requires adequate resources and a stable, predictable funding profile to ensure the on-time construction start in FY 2021 in order to meet the deterrence patrol need date of FY 2031. The OHIO Replacement Program submarines will have a service life that will enable patrols into the 2080s. There is no margin left in the OHIO Replacement schedule. DoD cannot let the program slip any further or we risk the most survivable leg of the Nation's nuclear triad.

The Air Force has conducted a GBSD Analysis of Alternatives to study the full range of options to recapitalize the land-based leg of the Triad beyond the extended service life of the Minuteman III missile. The FY 2016 budget continues to fund this preparatory work. The Air Force's FY 2016 budget request also includes funding to continue the development of an affordable, long range, penetrating aircraft that incorporates proven technologies—the Long Range Strike Bomber. Additionally, the FY 2016 budget includes funding for Block 4 of the F-35 program, which provides research and development funds to support nuclear capability for the aircraft. This F-35 program will deliver capability that is needed for non-strategic nuclear missions in support of our extended deterrence and assurance commitments. Finally, as I mentioned earlier, the FY 2016 budget also includes funding to continue the development of the LRSO missile.

The Department's budget request is consistent with plans to ensure that current nuclear delivery systems can be sustained and that the modernization and replacement programs are

affordable, executable, and on schedule to avoid capability gaps. The replacement programs create a bow-wave in nuclear delivery system costs, and modernization will require increased investment over current levels for much of the next 15 years. The Defense Department is taking steps to control the costs of these efforts. However, even with success in this regard, we face difficult budget choices entering the 2020s to fund the necessary OHIO-Class Replacement and the Air Force strategic deterrent recapitalization programs.

DoD Nuclear Enterprise Reviews

Last year's Secretary of Defense-directed Nuclear Enterprise and Strategic Portfolio Reviews and the Program and Budget Review for the FY 2016 budget formulation focused significant attention on recapitalization, sustainment, and modernization of our nuclear deterrent systems and infrastructure. The Nuclear Enterprise Review highlighted evidence of systemic problems in the strategic deterrent forces that threaten the future safety, security, and effectiveness of our nuclear forces. These interrelated problems require cultural, structural, and sustained long-term solutions. We are addressing these issues and implementing solutions managed through monthly senior leadership meetings of the Nuclear Deterrent Enterprise Review Group chaired by Deputy Secretary of Defense Work. The review teams made clear the need to refocus attention and resources at all levels of the DoD on this essential mission. The reinvigoration of the DoD nuclear enterprise remains the Defense Department's highest priority, and we are committed to treating it as such.

Current resource levels, however, challenge our ability to fund these modernization efforts. In the near-term, we are making focused and sustained investments in modernization and manning across the nuclear enterprise. These investments are critical to ensure the continued safety, security, and effectiveness of our nuclear deterrent, as well as the long-term health of the force that supports our nuclear triad. To help fund improvements across the nuclear enterprise,

the DoD has requested an increase of approximately \$1 billion in FY 2016 to address issues such as ICBM security and manpower increases at the Navy's shipyards and Strategic Weapons Facilities. Additionally, the Department has projected the need for about \$8.5 billion over the FYDP to ensure the continued health of this essential enterprise.

Revitalizing the Nuclear Infrastructure

The 2010 Nuclear Posture Review stressed the importance of an NNSA infrastructure that can respond to technical challenges or geopolitical surprises and ultimately enable our consideration of stockpile reductions. The NWC focuses specifically on the plutonium, uranium, and tritium capabilities to support the current and future stockpile as documented in the NWC's Baseline Plan. Our nuclear enterprise infrastructure challenges are two-fold: addressing aged, end-of-life facilities maintenance, recapitalization, and replacement, and working to achieve a responsive infrastructure. The Department reinforces NNSA's need to fully develop responsive and productive plutonium and uranium capabilities for this Nation as well as the ability to produce tritium.

Stockpile Stewardship

Science is paramount to the NWC's ability to sustain a safe, secure, reliable, and effective deterrent. The Stockpile Stewardship Program has ensured our confidence in the reliability and effectiveness in the nuclear stockpile without nuclear weapons testing. NNSA's Stockpile Stewardship Program, composed of research, development, testing, and evaluation (RDT&E) facilities and personnel, enables the surveillance and assessment of the stockpile condition by revealing anomalies, evaluating impacts of anomalies on warhead performance, and implementing solutions. In general, RDT&E supports broader national security objectives by

providing capabilities to avoid technological surprise and to have confidence in system performance. The NWC Baseline Plan relies on continued investments in research, development, design, and production capabilities – something that sequestration threatens.

Conclusion

Budget constraints have forced the DoD to annually adjust its stockpile maintenance and infrastructure plans to fit within resources appropriated. These adjustments cause delays and cancellations, reduce work scope, and extend development and production periods. We have reached a point where we have removed all flexibility from the nuclear weapons life extension programs, and we are losing flexibility in our platform modernization programs. We must continue to field a strong nuclear deterrent that is supported by an agile and responsive infrastructure and valued workforce. The President's FY 2016 Budget Request supports our nuclear posture strategy for defending U.S. vital interests. It increases funding for sustaining and modernizing our nuclear forces to ensure a safe, secure, and effective deterrent for as long as nuclear weapons exist. The Department of Defense remains committed to its close and vital partnership with DOE and Congress in meeting the Nation's most fundamental security needs. In closing, I respectfully ask that you support the President's FY 2016 budget request.