STATEMENT OF

JOHN E. HYTEN

COMMANDER

UNITED STATES STRATEGIC COMMAND

BEFORE THE

HOUSE COMMITTEE ON ARMED SERVICES

MILITARY ASSESSMENT OF NUCLEAR WEAPONS REQUIREMENTS

8 MARCH 2017
INTRODUCTION

U.S. Strategic Command (USSTRATCOM) counters diverse and evolving threats through the successful execution of its primary mission: detect and deter strategic attacks against the U.S. and our allies, and provide the President responsive military forces and flexible response options if deterrence fails. The three legs of the U.S. Nuclear Triad, our nuclear command, control and communications (NC3) systems, and the supporting nuclear enterprise infrastructure are critical components of a strategic deterrence force that provides the necessary capabilities to deter adversaries and assure our allies and partners. USSTRATCOM’s number one job is to present our adversaries an intractable strategic problem and ensure they fully understand they cannot prevail in a strategic attack against the U.S., our allies or partners.

Today’s deterrence forces remain safe, secure, effective, and ready, however the U.S. faces significant near- and long-term challenges in sustaining the required capabilities to meet our enduring national security objectives and strategic stability. At a time when others continue to modernize and expand strategic capabilities, nearly all elements of the U.S. nuclear delivery systems, weapons stockpile, NC3, and other critical infrastructure are operating well beyond their expected service life. Maintaining strategic deterrence, assurance, and escalation control capabilities requires a multi-faceted, long-term approach and sustained commitment to maintain a credible strategic deterrent.

We have made great strides in positively shaping the future by making critical investments in our forces and these investments must continue. Planned sustainment and modernization activities must be completed on schedule as any delay will impact the execution of our strategic deterrence mission and unacceptably degrade our ability – and ultimately our credibility – to deter and assure. Sustained Congressional support, combined with the hard work of the exceptional men and women who support USSTRATCOM, will ensure that we remain ready, agile, and effective in deterring strategic attack, assure our Allies and partners, and respond to both current and future threats.

NUCLEAR DELIVERY SYSTEMS

All three elements of our nuclear Triad delivery system are essential to the Nation’s security as they provide our leadership the flexibility to appropriately respond to strategic attack. Our Intercontinental Ballistic Missiles (ICBMs), Ballistic Missile Submarines (SSBNs), and nuclear-capable heavy bombers provide unique and complementary attributes that underpin strategic deterrence and stability. The Triad’s synergistic capabilities present adversaries with a complex, multi-prong strategic
challenge that changes their decision calculus, and together it provides a hedge against unforeseen technical problems or changes in the global security environment.

ICBMs

Today, our ICBM force provides the President with a highly reliable, secure, prompt response option and, with smart and consistent investment, will continue to provide an effective deterrent force for many decades. The Minuteman ICBM weapon system is decades past its intended lifespan and is facing aging, obsolescence, and asset depletion issues. To maintain Minuteman viability and effectiveness through 2030, USSTRATCOM supports ongoing Air Force weapon system sustainment efforts spanning warhead fuze modernization, the Airborne Launch Control System replacement, missile transporter-erector replacement, and a Launch Control Center Block Upgrade.

It is imperative we recapitalize the ICBM force through the Ground Based Strategic Deterrent (GBSD) program, which will begin initial deployment in 2028. The GBSD program is progressing as an integrated, weapon system solution, including the flight system, weapon system command and control, ground launch systems, and support facilities that will ensure we maintain an effective land-based strategic deterrence force. GBSD achieved a significant acquisition milestone last year and I continue to support the Air Force’s efforts to leverage investments through cooperation with the Navy and industry to reduce technical development risk and cost.

SSBNs

The Ohio-class ballistic missile submarine and its Trident II D5 strategic weapon system represent the most survivable Triad leg and provide the Nation with the survivable nuclear response capability that underpins our ability to strike at any time, across myriad scenarios. USSTRATCOM continues to strongly support and work with the Navy as it sustains and modernizes the SSBN force.

While the Navy’s robust maintenance and sustainment programs has allowed the Ohio-class SSBN to be life-extended from 30 to 42 years, there is no margin left to extend these submarines further. When they begin retiring at the end of the next decade, we must have a capable replacement SSBN ready to deploy. Ensuring the Columbia-class SSBN remains on schedule and fully funded throughout the next decade is vital to preventing capability gaps. Any further delay will put the continuity of our sea-based nuclear deterrent at unacceptable risk.

We have successfully fielded the Trident II D5 missile for more than 25 years and the Navy is taking the necessary steps to address aging and technology obsolescence to effectively extend the missile’s
life. This life extension is absolutely critical as the Trident II D5 will transition from the Ohio-class SSBN to the Columbia-class SSBN as well as support our UK partners as they deploy their new Dreadnought-class SSBN.

**Nuclear Capable Bombers**

Our nuclear-capable bomber force represents the most flexible and adaptable leg of the nuclear Triad. They are critical to visibly demonstrating U.S. commitment and resolve across a wide range of crisis scenarios. The bomber force also provides a means to rapidly hedge against operational or technical challenges in other legs of the Triad. To ensure our bombers, and their associated weapons, provide a credible deterrence and assurance capability, ongoing sustainment and planned modernization activities must remain on track. The combination of greatly exceeding system design life, declining sustainability, and degraded survivability requires modern replacement systems.

The Air Force continues to execute modernization and life extension activities to ensure both bombers provide a viable long-range bomber presence to meet nuclear and conventional mission requirements while also preserving the ability to adapt to future challenges. For the B-2, these upgrades include the Defense Management System, which is critical to its survivability against advanced adversary air defenses. The Advanced Extremely High Frequency (AEHF) satellite will provide mission-critical anti-jam stealth-compatible beyond-line-of-sight communications for both nuclear and conventional missions. For the B-52, modernization programs include replacing the 1960s-era radar with a modern off-the-shelf capability to improve navigation, targeting, and weapons delivery. I also support the Air Force’s studies to ensure that the B-52 remains a viable component of the bomber force in the face of technologically advanced threats.

As adversaries deploy increasingly sophisticated, integrated air defense systems, I fully support development and fielding of the dual-capable B-21 bomber. With its long range and enhanced penetration capabilities, the B-21 will directly support U.S. policy, strategy goals, and multiple combatant commander requirements by maintaining U.S. effectiveness in increasingly challenging anti-access/area denial environments.

The Long Range Stand-Off (LRSO) cruise missile and the B61-12 gravity bomb are critical to maintaining our current strategic capabilities, and extended deterrence and assurance commitments. The aging Air Launched Cruise Missile (ALCM) is several decades past its planned end-of-service life and facing increasing reliability and survivability challenges. The LRSO cruise missile will ensure no gap in air-delivered deterrence capabilities as it ensures bomber force effectiveness by providing credible
standoff attack options and holding heavily defended targets at risk. The LRSO is the first missile system developed in unison with a nuclear warhead in mind for many decades. Limiting resources or funding of either component will disrupt its entire concept-to-capability timeline.

The B61-12 gravity nuclear bomb consolidates several legacy B61 bomb variants and allows the retirement of the B83-1, reducing the size of the U.S. arsenal while still supporting both strategic and extended deterrence objectives.

**Nuclear Security**

Protecting our nuclear forces and facilities remains a top priority and we are continually assessing threats to ensure our security apparatus is capable of denying unauthorized access or use of nuclear weapons. I fully support the Air Force’s efforts to replace the aged UH-1N Helicopter – which has become a capability gap – and ICBM Payload Transporter to ensure our weapons remain secure as threats evolve. Of recent concern have been the unauthorized flights of unmanned aerial systems (UAS) over Navy and Air Force installations. These intrusions represent a growing threat to the safety and security of nuclear weapons and personnel. Both the Navy and Air Force are working to field counter-UAS capabilities that can effectively detect, track, and, if necessary, engage small UAS vehicles.

**NUCLEAR WEAPONS AND INFRASTRUCTURE**

In concert with our delivery platforms, our nuclear weapon stockpile, and the unique facilities that sustain the stockpile, must be modernized to ensure our deterrent remains effective and credible. The Nuclear Weapons Council-approved Strategic Plan outlines the approach to sustain the stockpile, aligns warhead and platform modernization efforts, and identifies the essential NNSA industrial capacity required to maintain our deterrence capabilities. A key element of the stockpile plan is the ‘3+2’ strategy that transitions the current stockpile of 11 distinct warheads to three common nuclear explosive packages on all Air Force and Navy ballistic missile reentry systems, and two air-delivered warheads. This strategy is fully consistent with U.S. strategic deterrence policies and non-proliferation objectives. Full realization of ‘3+2’ requires sustained commitment to the modernization and recapitalization of NNSA’s infrastructure, as well as continued development of the human capital and science-based stewardship tools needed to assess and certify the stockpile.
NC3 SYSTEMS

Commensurate with the U.S. Triad, stockpile, and infrastructure, the Nation’s Nuclear Command, Control, and Communications (NC3) systems are facing obsolescence and component age-out challenges. These systems are not only essential for providing early warning and time critical information to the National Command Authority for decision making, but also to effectively direct Triad forces in response to a strategic crisis. A 21st century architecture is needed to address potential adversary’s increasingly complex and capable threats. For example, current legacy communication systems, which are critical in providing assured / secure communications to our heavy bombers and command & control aircraft through all phases of conflict, are increasingly unreliable and in desperate need of modernization. The Nation’s Milstar constellation has exceeded its design life by over 10 years and requires modernization to provide for early warning of a strategic attack. Any delay, deferment, or cancellation of NC3 modernization will create a capability gap potentially degrading the President’s ability to respond appropriately to a strategic threat.

CONCLUSION

Our Nation is faced with capable, diverse, and evolving adversaries that have the ability to threaten the U.S. and its allies and partners. Our adversaries are watching and taking note of our resolve and commitment towards the nuclear enterprise. Continued Congressional support is paramount as we transition from an aged to a more modern and flexible deterrence force capable of meeting today’s as well as tomorrow’s strategic challenges.