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HOUSE ARMED SERVICES COMMITTEE
STRATEGIC FORCES SUBCOMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE HOUSE ARMED SERVICES COMMITTEE
STRATEGIC FORCES SUBCOMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: The Obama Nuclear Deterrent Modernization Plan and Schedule

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Air Force Global Strike Command

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Introduction

Chairman Rogers, Ranking Member Cooper, and distinguished Members of the Committee; thank you for allowing me to come before the committee today to discuss nuclear deterrence and the need for modernization. I look forward to explaining why nuclear deterrence and long range global strike are absolutely critical to this Nation's interests; we cannot afford to delay modernizing and recapitalizing these important weapon systems.

Air Force Global Strike Command (AFGSC) Mission

As you know, the Command was created to provide a focus on the stewardship and operation of two legs of our nation's nuclear triad while also accomplishing the conventional global strike mission. In the near future, the command will also become responsible for all Air Force activities supporting USSTRATCOM, overseeing Nuclear Command, Control, and Communications (NC3) as a weapon system, and assuming responsibility for the E-4B and the USNORTHCOM Mobile Command and Control Center. Therefore, it is imperative we be flexible enough to operate seamlessly in a world that continues to rapidly change. Until we have the peace and security of a world without nuclear weapons, we must never forget the stabilizing influence the triad has on our allies, partners, and adversaries. In order for us to be effective across the spectrum of conflict, from day-to-day deterrence and assurance operations to nuclear engagement, our Airmen must be ready and equipped with the right tools to do the job.

The Command's top priority is to ensure our nuclear arsenal is safe, secure, and effective. This priority underlies every nuclear-related activity in AFGSC whether it is the maintainer turning wrenches or our planners working on future weapon systems. We must never fail in the special trust and confidence the American people have bestowed on our nuclear warriors. It means that leaders must continue to support and advocate for the sustainment, modernization, and survivability of these weapon systems.

Threat Environment

The current nuclear threat environment facing our nation has never been more complex, and will only become more so in the near future. Potential adversaries continue an unprecedented modernization effort across the full spectrum of nuclear capabilities including

Intercontinental Ballistic Missiles (ICBMs), Submarine Launched Ballistic Missiles (SLBMs), and land attack nuclear weapons.

Russia places the highest priority and investment on the maintenance of its robust arsenal of strategic and nonstrategic nuclear weapons. It is modernizing its strategic nuclear forces and upgrading its command and control facilities. Russia will field more road-mobile SS-27 Mod-2 ICBMs with multiple independently targetable reentry vehicles, deploy more Dolgorukiy class ballistic missile submarine with SS-N-32 Bulava submarine launched ballistic missiles, and will continue the development of next generation ICBMs and cruise missiles

In the Pacific, China has the world's largest and most comprehensive missile force, and has prioritized the development and deployment of regional ballistic and cruise missiles to expand its conventional strike capabilities. China is modernizing its nuclear forces by enhancing silo and underground facility-based ICBMs and adding more road-mobile systems. In addition, the People's Liberation Army Navy deployed the JIN-class nuclear-powered ballistic missile submarine in 2015, which, when armed with the JL-2 SLBM, provides Beijing its first sea-based nuclear deterrent.

North Korea's nuclear weapons and evolving ballistic missile programs underscore the growing threat. The North Korean display of a new or modified road mobile ICBM during a recent parade and its recent tests of a new submarine-launched ballistic missile capability highlight its commitment to diversifying its missile forces and nuclear delivery options, while strengthening missile force survivability. North Korea also continues efforts to expand its stockpile of weapons grade fissile material. In early January, North Korea issued a statement claiming it had successfully carried out a hydrogen bomb test, and on February 7, Pyongyang launched a space launch vehicle from a west coast testing facility. The technology involved in a satellite launch would be applicable to North Korea's other long-range missile programs and is prohibited under United National Security Council resolutions. As of June 21, North Korea has attempted six MUSUDAN Intermediate Range Ballistic Missile (IRBM) launches with one assessed as a limited success and have claimed that they now possess the technology to miniaturize a nuclear warhead. North Korea's continued development of long and short range missiles threaten our allies in the region and will ultimately threaten the U.S. mainland as their ICBM program matures.

Air Force Global Strike Command Forces

Intercontinental Ballistic Missile Forces

The 450 dispersed and hardened missile silos maintain strategic stability by presenting potential adversaries a near insurmountable obstacle should they consider a disarming attack on the U.S. Currently, no potential adversary can hope to destroy this force without depleting its own arsenal. Additionally, the ever alert ICBM force provides the President with a rapid response capability which in turn allows bombers to execute conventional missions and the submarine fleet to maintain sustainable port rotations. ICBMs are a cost effective force multiplier for the air and sea legs of the triad. In order to continue providing strategic stability and day-to-day employment flexibility, it is imperative that we must recapitalize our ICBM fleet. Parts and reverse-engineering manufacturing are becoming problematic, and in the long term, more expensive than fielding a new or recapitalized weapon system. Additionally, ICBM boosters have an age out date of 27 years while the ICBM guidance system's age out date is 25 years after manufacture.

As part of our plan to meet New START limits of 400 operational silos, we have pulled missiles from 27 of the planned 50 launch facilities (LF). This action reduces the number of deployed ICBMs consistent with New START limits. These 50 fully operational silos are spread throughout the force and will remain capable of receiving a booster if needed. Also, as directed by the Nuclear Posture Review to enhance strategic stability and meet New START warhead limits, we have reduced the entire MMIII force each to a single warhead.

Minuteman III

We continue to sustain the Minuteman III ICBM to ensure it is safe, secure, and effective through its remaining life cycle. This includes upgrading the command, control, and communications systems and support equipment. We continue moving forward on the Transporter Erector Replacement Program (TERP) and the Payload Transporter Replacement (PTR) to modernize our existing fleet of large maintenance vehicles utilized to transport missile components to and from the field. We currently expect TERP to reach initial operational capability (IOC) in FY18 and PTR to begin production in FY17.

We are also equipping ICBM launch control centers (LCC) and the airborne launch control system (ALCS) with critical communications systems upgrades to replace degrading, obsolete systems and to update encryption capability. We continue to push forward on

improving Remote Visual Assessment at our remote LFs, a significant security upgrade, to improve situational awareness and security. We expect this program to be IOC in FY19. Another very important program, ICBM Cryptographic Upgrade II, is scheduled to begin production in FY17 and will improve our cryptographic security while dramatically streamlining code change operations.

The Minuteman III system has proven to be a steadfast and capable contribution that under pins our nation's strategic deterrence posture. Unfortunately, we are at a point where continuing subsystem modifications and just in time sustainment actions are no longer a viable option to extend the life of this aging system. A replacement system is necessary to preserve the stabilizing land-based force presence beyond 2030 and take advantage of efficiencies of state of the art technologies and architectures.

Ground Based Strategic Deterrent (GBSD)

The Minuteman flight system, currently on its third model, has been on continuous alert since the early 1960s and has proven its value in deterring our adversaries and assuring our allies well beyond the platform's initial 10-year lifespan. ICBM capability gaps were identified and validated by the Joint Requirements Oversight Council, and subsequently approved in August 2012 by the Air Force Chief of Staff, resulting in an Analysis of Alternatives (AoA). The AoA was completed in 2014 and concluded that integrated full-scale replacement to the MM III weapon system was the most cost-effective approach to filling capability gaps and addressing supportability issues. Additionally, we are engaged with our Navy partners to further investigate areas for intelligent commonality between potential GBSD systems and future Navy weapons. We hope to find areas of overlap with the objective of reducing design, development, manufacturing, logistics support, production, and testing costs for the nation's strategic systems while still acknowledging that the different weapon systems will have some requirements that necessitate unique solutions due to their differing missions and operational environments. We are also collaborating with the NNSA to develop a life extension program for our aging W78 nuclear warhead, which will operate on GBSD.

The Minuteman III flight system experiences propellant/component age out and subsystem attrition issues in the 2030 timeframe. In addition, the command and control (C2), supporting subsystems (power, environmental, etc.) and infrastructure [facilities] recapitalization is necessary to continue safe, secure, and effective operations. It is no small task to upgrade the

C2 systems along with the underlying infrastructure supporting the weapon system. For example, at our largest missile field operated by the 341st Missile Wing, we must connect and support hardened systems across almost 14,000 square miles, an area the size of Maryland. This vital nuclear C2 is currently serviced by buried copper wire and equipment installed in the 1960s. AFGSC is defining approaches to replace C2 and modernize necessary facilities that are supportable over the life cycle and reduces the costs to operate the system. GBSD cannot be viewed as just another life extension to our existing MMIII; it is time to field a replacement ground-based capability that can be integrated into a modernized C2 system so we can continue assuring our allies and deterring potential adversaries well into the future. Thank you for your continued support of GBSD and ensuring it will lead to a viable replacement for the MM III ICBM.

UH-1N

AFGSC is the lead command for the Air Force's fleet of 62 UH-1N helicopters. The majority of these aircraft support two critical national missions: nuclear security in support of the ICBM force and the Continuity of Operations and transport missions in the National Capitol Region. They also actively participate in the Defense Support of Civil Authorities program often being called upon to help with search and rescue activities.

The UH-1N does not meet the missile field needs for range, speed, and capacity as outlined by DOD and USSTRATCOM requirements. We have aggressively employed mitigation measures such as arming the UH-1N, providing re-fueling stations throughout the missile complex, fast rising B-Plugs at our launch facilities, and additional forward positioning of security forces “defenders” in the missile fields; however, these measures drive addition manpower, training, and infrastructure costs that would be eliminated with a properly equipped medium lift helicopter.

UH-1N Follow On

We are dedicated to replacing the UH-1N with a medium lift helicopter capable of meeting mission requirements. The UH-1N Replacement Program was funded in FY 2016 and we are now moving out to deliver this capability in order to close this critical gap. This past January, the Air Force conducted a High Performance Team which confirmed our most critical capability requirements. Our counterparts in SAF/AQ and Air Force Materiel Command (AFMC) are developing and presenting an acquisition strategy, in August 2016, to support a full

and open competition for the UH-1N Replacement Program. While we work to deliver the aircraft, we must also work through support challenges such as infrastructure, maintenance, and aircrew training. I can assure you that Secretary James, General Goldfein, and I are completely dedicated to delivering the replacement helicopters as soon as possible.

Bomber Forces

The B-52 is an extremely versatile weapon system providing precision, large payload, and timely global strike capabilities both conventional and nuclear weapons. Complementing the B-52, the B-2 can penetrate an adversary's most advanced Integrated Air Defense Systems to strike heavily defended and hardened targets. Our flexible dual-capable bomber fleet is the most visible leg of the nuclear triad. They provide decision makers the ability to demonstrate resolve through generation, dispersal, or deployment. Additionally, our ability to rapidly place bomber sorties on alert ensures their continued survival in support of the President and to meet combatant command requirements.

B-52

The B-52 may be the most universally recognized symbol of American airpower…its contributions to our national security through the Cold War, Vietnam, Desert Storm, Allied Force, Iraqi Freedom, Enduring Freedom and now Operation Inherent Resolve are well documented. Our Airmen continue to enable the B-52 to deliver the highest mission capable rate of all bombers as it flies in combat against ISIL even while it shows our resolve deployed to the Pacific and northern Europe. The B-52 is able to deliver the widest variety of nuclear and conventional weapons. Even now, we maintain complete coverage of our Nuclear Deterrence Operations requirements while supporting our overseas Continuous Bomber Presence for Pacific Command.

I anticipate the B-52 will remain a key element of our bomber force beyond 2050. Its airframe and multi-faceted capabilities continue to prove robust, so it is paramount to invest resources into this aircraft now to keep it more viable in both conventional and nuclear mission areas for the next 30 years. Our B-52s are still using 1960s radar technology which is creating maintenance challenges because of the radar's high mean time between failure rate. This causes a 35% chance of the radar's failure during a 20 hour combat mission, which is unacceptable. The current radar on the B-52 will be even less effective in the future threat environment, and without an improved radar system on the B-52, there will be increased degradation in mission

effectiveness. To address this deficiency, the B-52 Radar Modernization Program is approaching the conclusion of a Cost Capability Analysis Study and will be working toward an AoA sufficiency review and a Material Development Decision this year. Additionally, we are always looking at cost-effective ways to improve efficiency and performance so we continue to investigate the value added in replacement of the 1960's engines from an operational and financial perspective.

Finally, I want to point out that we are still working to convert 29 operational B-52 aircraft and 12 in storage to a conventional-only configuration as part of our plan to meet New START commitments. As of June 27, we have converted all of the aircraft in storage and 18 of the planned 29 operational B-52s. We are on track to meet our New START Treaty commitments well before the FY18 deadline.

B-1

AFGSC acquired the B-1 in October of last year. While no longer nuclear-capable, the B-1 has been the backbone of the USAF's fight against terrorism for the past 10 years, first in Afghanistan and more recently against ISIL in Iraq and Syria. The B-1s came home earlier this year as they continue to undergo the Integrated Battle Station modification, the most extensive update to the aircraft in its 30+ year history. Finally, the B-1 contributes to AFGSC's mission by providing a large payload of conventional weapons to support our primary deterrence mission. It will also be the only USAF threshold platform for fielding the Navy's Long Range Anti-ship Missile, a vital capability for Combatant Commanders.

B-2

For over 25 years, our 20 B-2s have provided the nation with an assured penetrating bomber capability. In each of our nation's last conflicts, the B-2 has led the way. This is a direct result of the outstanding Airmen who work to operate, maintain, and secure the aircraft.

We will preserve and improve the B-2's ability to penetrate hostile airspace and hold any target at risk. Two major modernization programs that enable the B-2's effectiveness in future conflicts are the Defensive Management System Modernization and Extremely High Frequency SATCOM programs. These programs are essential to ensure the B-2's ability to penetrate and strike targets in the anti-access and area denial environment (A2AD). We are striving to maintain the proper balance of fleet sustainment efforts, testing, aircrew training, and combat readiness. The dynamics of a small fleet continue to challenge our sustainment efforts primarily

due to vanishing vendors and diminishing sources of supply. AFMC is working to ensure timely parts availability; however, many manufacturers do not see a strong business case in supplying parts for a small aircraft fleet. Problems with a single part can have a significant readiness impact on a small fleet which lacks the flexibility of a large force to absorb parts shortages and logistics delays. In spite of these challenges, the B-2 is able to penetrate enemy defenses and deliver a wide variety of nuclear and conventional weapons due to its stealth and long-range capabilities.

B-21

The combat edge of our B-2 is being challenged by proliferating next generation air defenses. The B-21 program will extend American air dominance against next generation capabilities and advanced air defense environments. We continue to work closely with partners throughout the Air Force to develop the B-21 and field a fleet of new dual-capable bombers scheduled to become operational in the mid-2020s. Make no mistake – the B-21 will be a nuclear bomber, however it will not be delayed for use in a conventional capacity while it undergoes final nuclear certification. The B-21 is being designed with an open architecture which will allow us to integrate new technology and respond to future threats for many years into the future. Thank you for your continued support for this critical program as it moves forward.

Air Launched Cruise Missile

The AGM-86B Air Launched Cruise Missile (ALCM) is an air-to-ground, winged, subsonic nuclear missile delivered by the B-52. It was fielded in the 1980s and is already twenty years past its design life which makes it very difficult to maintain. To ensure the USAF maintains its credible stand-off nuclear capability, the ALCM requires Service Life Extension Programs (SLEP). These SLEPs require ongoing support and attention to ensure the ALCM will remain viable through 2030, but this does not in any way remove the need for Long Range Stand Off (LRSO) Missile. Despite the SLEP, this Combatant Command required system is becoming increasingly vulnerable to advanced A2AD threats and our ability to ensure its continued reliability with SLEPs is a concern.

Long Range Stand-Off Missile

The LRSO is the replacement for the aging ALCM. The ALCM has significant capability gaps that will only worsen through the next decade. The LRSO will be a reliable, flexible, long-range, and survivable weapon system to complement the nuclear Triad. The

LRSO missile will ensure the bomber force (B-52, B-2 and B-21) can continue to hold high value targets at risk in an evolving threat environment, to include targets within an anti-access environment. Additionally, we have synchronized our efforts with NNSA to develop the W80-4 warhead to be fully integrated with LRSO.

B61

The B61-12 Life Extension Program (LEP) will result in a smaller stockpile, reduced special nuclear material in the stockpile, and improved B61 surety. AFGSC is the lead command for the B61-12 Tail Kit Assembly program, which is needed to meet USSTRATCOM requirements on the B-2. The B61-12 Tail Kit Assembly program is in the Engineering and Manufacturing Development Phase 1 and is synchronized with NNSA efforts. The design and production processes are on schedule and within budget to meet the planned Fiscal Year 2020 First Production Unit date for the B61-12 Tail Kit Assembly, and support the lead time required for the March 2020 B61-12 all-up round. This joint Department of Defense (DOD) and Department of Energy endeavor allows for continued attainment of our strategic requirements and regional commitments.

NC3

The nation's NC3 systems are the life blood by which the President will collaborate with combatant commanders and communicate his nuclear command and control authorities to the nuclear forces. Many of these systems are well past their planned life span and face diminishing manufacturing sources and material shortages. The Air Force has begun a journey to put rigor back into sustainment and modernization of these NC3 systems. With continued focus, exploitation of technological advances, and partnership with industry, NC3 systems will continue to contribute to the nuclear surety of the Nation's arsenal.

Conclusion

Thank you for your continued support of Air Force Global Strike Command and our strategic deterrent and global strike missions. The President's 2015 National Security Strategy is clear: "As long as nuclear weapons exist, the United States must invest the resources necessary to maintain – without testing – a safe, secure, and effective nuclear deterrent that preserves strategic stability." Fiscal constraints, while posing planning challenges, do not alter the national

security landscape or the intent of competitors and adversaries, nor do they diminish the enduring value of long range, strategic forces to our nation.

Although we account for only 1% of the DOD budget, AFGSC forces represent two-thirds of the nation's nuclear triad and play a critical role in ensuring U.S. national security, while also providing joint commanders rapid global combat airpower. AFGSC will continue to seek innovative, cost-saving measures to ensure our weapon systems are operating as efficiently as possible. Modernization, however, is necessary to continue to meet U.S. nuclear deterrence requirements. AFGSC is operating B-52s built in the 1960s with equipment designed in the 1950s; operating ICBMs with 1960s infrastructure; and utilizing 1960s era weapon storage areas. We cannot afford to delay modernization initiatives across the two legs of the nation's nuclear triad and the NC3 systems which connect our capabilities to the President.

I would like to take this opportunity to thank the Congress for your ongoing support of the nuclear enterprise. Your support does not go unnoticed and is absolutely critical to ensuring AFGSC provides the nuclear and conventional capabilities this Nation deserves. It is my privilege to lead this team empowered with special trust and responsibility. It is truly an honor to be a Wingman to the outstanding Airmen who make up Air Force Global Strike Command.