NOT FOR PUBLICATION UNTIL RELEASED BY
SENATE ARMED SERVICES COMMITTEE
STRATEGIC FORCES SUBCOMMITTEE
UNITED STATES SENATE

DEPARTMENT OF THE AIR FORCE
PRESENTATION TO THE SENATE ARMED SERVICES
COMMITTEE- STRATEGIC FORCES SUBCOMMITTEE
UNITED STATES SENATE

SUBJECT: FY19 Posture for Department of Defense Nuclear Forces

STATEMENT OF: General Robin Rand, Commander
Air Force Global Strike Command

April 11, 2018

NOT FOR PUBLICATION UNTIL RELEASED BY
SENATE ARMED SERVICES COMMITTEE
STRATEGIC FORCES SUBCOMMITTEE
UNITED STATES SENATE

Introduction

Chairwoman Fischer, Ranking Member Donnelly and distinguished members of the committee, thank you for allowing me to come before you and represent over 34,000 Air Force Global Strike Command (AFGSC) Total Force Airmen. It is an honor to be here today, and I look forward to updating you on what the command has accomplished and where we are going.

Air Force Global Strike Command Mission

Air Force Global Strike Command is a warfighting command responsible for two legs of our nation's nuclear triad and the nation's nuclear command, control, and communications (NC3) capabilities while simultaneously accomplishing the conventional global strike mission. As long as nuclear weapons exist, the United States must deter attacks and maintain strategic stability, assure our allies, and hedge against an uncertain future. At AFGSC, we're especially focused on today's evolving world and tomorrow's emerging threats.

The command's top priority is to ensure our nuclear arsenal is lethal, safe, and secure. This priority underlies every nuclear-related activity in AFGSC, and we must never fail in the special trust and confidence the American people have bestowed on our nuclear warriors. To that end, our nation's leaders must continue to support and advocate for the sustainment and modernization of these weapon systems. Sustaining and progressing these efforts require predictable, sufficient, and flexible budgets. Reinforced in the 2018 Nuclear Posture Review, the nuclear deterrent is at a crossroads, and there is no higher priority for national defense. We must concurrently modernize the nuclear triad and the infrastructure that enables its effectiveness, and we require budget stability to accomplish these efforts.

In 2017, AFGSC significantly reorganized at the direction of the Commander, United States Strategic Command (CDRUSSTRATCOM), the first step in a larger USSTRATCOM restructuring. Under the previous construct, responsibilities for the air, space, and naval strategic missions were spread amongst several lines of authority. The reorganization solved two issues.

First, it cleaned up an outdated and confusing command structure for bomber and intercontinental ballistic missile (ICBM) forces under USSTRATCOM. Second, it allowed AFGSC to reshape the command and stand up a full time air component to USSTRATCOM. Our nation relies on the strategic deterrence AFGSC provides every day. In order to perform this high priority mission, AFGSC needed an organizational structure that allows a portion of the command to focus on supporting day-to-day deterrence, while the rest of the command focuses on OT&E commitments. On 29 September 2017, AFGSC stood up Air Forces Strategic – Air (AFSTRAT-Air) as the full time air component to USSTRATCOM. This gives CDRUSSTRATCOM a single four-star general responsible for USSTRATCOM's air missions.

The Joint-Global Strike Operations Center (J-GSOC) was created to handle the day-to-day responsibilities of the strategic deterrence mission for USSTRATCOM's air component. The J-GSOC consists of the Joint Air Operations Center (JAOC) Joint Nuclear Operations Center (JNOC). The JAOC, already in existence, handles the conventional portion of the command's mission. The two nuclear task forces were combined into the JNOC, and focuses on the nuclear portion of the command's mission. Several additional mission teams were also aligned under the J-GSOC. The National Airborne Operations Center (NAOC), combined with AFGSC's existing responsibility for the E-4B, allows AFSTRAT, through USSTRATCOM, to better organize, train, equip, and present the NAOC mission to support the President and Secretary of Defense. The Standoff Munitions Application Center (SMAC) was stood up to provide expertise in planning and targeting of Air Force standoff weapons. The Cruise Missile Support Activity Atlantic (CMSALANT) and Pacific (CMSAPAC) were also aligned under the J-GSOC, and combined with SMAC, give the J-GSOC the ability to plan and target any standoff weapon in support of any combatant commander.

In addition to standing up the J-GSOC, CDRUSSTRATCOM also designated the AFGSC Commander as the Joint Force Air Component Commander (JFACC). The dual-hatted Commander, AFSTRAT-Air/JFACC has the ability to monitor, control, and direct all the air assets assigned or attached to USSTRATCOM anywhere in the world. These include the Air Force bomber, tanker, intelligence, surveillance, and reconnaissance, and ICBM forces as well as the USSTRATCOM Airborne Command Post (ABNCP) and Take Charge and Move Out (TACAMO) missions. The JFACC also supplies a common operating picture to

CDRUSSTRATCOM that provides status and locations of all air assets.

These warfighting authorities were immediately tested during USSTRATCOM's Global Thunder exercise, and performed well beyond expectations. We have already achieved initial operating capability and are on track to achieve full operational capability by July 1, 2018. As emphasized in the 2017 National Defense Strategy (NDS), the global security environment is now more complex and volatile than experienced in recent memory, and inter-state strategic competition is now the primary concern in US national security. The AF FY19 budget prioritizes a more lethal and ready force, strengthening alliances and partnerships, and delivering greater performance. AFGSC's bomber, ICBM forces, and NC3 systems support both the NDS strategy and AF priorities by deterring potential adversaries, assuring our allies and partners, and guaranteeing the security of our national interests through cost-effective modernization. If deterrence should fail, AFGSC stands ready to defeat our adversaries through the persistent employment of lethal combat power.

Air Force Global Strike Command Forces

Intercontinental Ballistic Missile Forces

Twentieth Air Force (20 AF), one of two Numbered Air Forces in AFGSC, is responsible for the Minuteman III (MMIII) ICBM, UH-1N helicopter forces, the Kirtland Underground Munitions Maintenance and Storage Complex at Kirtland Air Force Base, New Mexico, and a ground combat training squadron at Camp Guernsey, Wyoming. The 450 dispersed and hardened Launch Facilities (LFs), are controlled, maintained, defended, and supported by AFGSC Airmen every single day, providing the bulk of our day-to-day nuclear alert force, and doing so with precision and professionalism. Our ICBM experts, the silent warriors, are deployed in place, and preserve strategic stability by providing the nation a credible and responsive deterrent in a contested environment and presenting adversaries a nearly insurmountable obstacle of numbers should they consider a disarming attack on the United States.

Minuteman III

We continue to sustain and modernize the MMIII ICBM and its command, control, and

communications systems and support equipment. To modernize our existing fleet of large missile maintenance vehicles, we continue moving forward on the $123M Transporter Erector Program (TERP) and the $201M Payload Transporter Replacement (PTR). We currently expect PTR to begin production in FY19.

The ICBM Launch Control Centers (LCC) will be equipped with modernized communications systems to improve and replace aging and obsolete systems. The LCC Block Upgrade, expected to begin full deployment in 2019, is a $96M modification effort that replaces multiple LCC components to include modern data storage and higher fidelity voice communications capabilities. A significant security upgrade to the remote visual assessment capability at our LFs will increase situational awareness and security. This $51.6M program is expected to begin deployment in FY19.

In FY18 we are scheduled to conduct three operational MMIII flight tests and two simulated electronic launch tests that will demonstrate the operational credibility of the nuclear deterrent force and the AF's commitment to sustaining that capability. We conducted four MMIII flight tests and two simulated electronic launch tests in FY17.

In an effort to vastly improve the nuclear capability of our ICBM force, the ICBM Programmed Depot Maintenance program began in FY16. The program places operational LFs and LCCs on an 8-year depot-level maintenance cycle. It greatly increases the effectiveness and lethality of our ICBMs by ensuring their sustainment is done in an engineering-based, systematic way. Successful prototyping of the program was accomplished in FY16, with 26 LFs and LCCs undergoing the maintenance. Thirty nine LFs and LCCs were completed in FY17, and 50 are planned in FY18. This program is key to ensure MMIII viability through the transition to Ground Based Strategic Deterrent (GBSD).

Our effort to remove 50 ICBM boosters from their LFs as part of our effort to meet New Strategic Arms Reduction Treaty (START) limits is complete. The selected LFs are spread across all three ICBM wings and will remain fully operational and capable of receiving boosters, if needed. The final booster was removed in early June 2017, a full nine months ahead of the treaty-mandated suspense of February 2018.

Ground Based Strategic Deterrent

The Minuteman weapon system was fielded nearly 60 years ago, yet has remained a cornerstone deterrence platform. ICBMs are the sole weapon system capable of rapid global response and impose a time-proven and unpalatable cost to attack by peer, near-peer, and aspiring nuclear nations. The current system, the MMIII, suffers from age-out, asset depletion, and numerous performance shortfalls. Simply put, it will not meet critical mission performance or force requirements by 2030.

To meet these requirements, we're successfully moving forward on developing the GBSD. OSD/AT&L approved the GBSD Acquisition Strategy in July 2016, Milestone A was achieved on 23 August 2016; on 21 August 2017, technology maturation and risk reduction contracts were awarded, initiating a three year acquisition risk reduction activity. When complete, a second cost-reducing, competitive source selection will identify a single provider and initiate material development efforts beginning in the 2020 timeframe. GBSD is fully funded at $8.5B for FY19-23.

We remain engaged with our Navy partners and have identified promising areas for intelligent commonality between GBSD systems and future Navy weapons. Additionally, we are collaborating with the National Nuclear Security Administration (NNSA) to develop a W78 warhead replacement program starting in 2019. The replacement warhead will use a Mk21 aeroshell and will deploy on GBSD after FY30; the Navy will study the feasibility of using the same nuclear explosive package with their flight vehicle. Due to MMIII system age-out, attrition, and commitment requirements, the first priority is to modernize the necessary facilities, replace the missile, and modernize command and control (C2) systems.

UH-1N

AFGSC is the lead command for the Air Force's Vietnam-era fleet of 63 UH-1N helicopters. The majority of these aircraft support several critical missions: security of our ICBM fields, transport missions in the National Capitol Region and US Pacific Command areas of responsibility, and critical Continuity of Operations. Additionally, they support Air Force survival training with rescue operations. Further, they participate in the Defense

Support of Civil Authorities program and are frequently called upon to conduct search and rescue activities for missing or injured civilians. As an example, Malmstrom AFB's UH-1N Airmen have been credited with over 400 saves in their history.

UH-1N Replacement

In order to continue supporting these critical national missions and fully comply with Department of Defense (DoD) and United States Strategic Command (USSTRATCOM) requirements, the Air Force has committed $2.3B in FY19-23 toward replacing the UH-1N fleet, as the platform falls short of missile field operational needs—notably speed, range, endurance, payload, and survivability. The Air Force is pursuing a full-and-open competition to procure 84 replacement helicopters. Vendor proposals were received in September 2017, and contract award is anticipated summer of 2018.

Airborne Launch Control System

The Airborne Launch Control System (ALCS) is USSTRATCOM's only alternate and survivable launch control system for the MMIII. The ALCS consists of an airborne component onboard 16 Navy E-6Bs and a ground component housed at all 450 MMIII launch facilities. The current ALCS was fielded in 1987 and requires 100% recapitalization of existing architecture and infrastructure as well as full replacement of specific portions of the system. The ALCS Replacement program will replace and modernize the current system through 2035 and will replace both airborne and ground components enabling integration of GBSD command and control requirements through smart, modular design. ALCS-R is funded to $657.3M in the FY19 Presidential Budget.

Bomber Forces

Eighth Air Force (8 AF) is responsible for the B-52H Stratofortress (B-52) bomber, the B-2A Spirit (B-2) bomber, and the B-1B Lancer (B-1) bomber. Bombers provide decision makers the ability to demonstrate resolve through generation, dispersal, and deployment.

Since 1991, the Air Force has conducted continuous combat operations resulting in a growing toll on Airmen, their readiness, and equipment. Bombers have supported operations

through continuous rotations in United States Central Command (CENTCOM), United States Pacific Command (PACOM), United States Africa Command (AFRICOM), United States European Command (EUCOM), and United States Southern Command (SOUTHCOM) areas of responsibility (AORs). Bomber contributions to our national security in the Cold War, Vietnam, and operations DESERT STORM, ALLIED FORCE, IRAQI FREEDOM, ENDURING FREEDOM, and today's INHERENT RESOLVE and FREEDOM SENTINEL are well documented.

At the end of DESERT STORM in 1991, the Air Force had 290 total force bombers, 17 bomb wings, and 22 bomb squadrons. Today the number has dropped to 157 bombers, 5 bomb wings, and 9 bomb squadrons. That is a 46% decrease in our bomber force, a 70% decrease in bomb wings, and a 60% decrease in bomb squadrons. The demand signal for bombers has continued to increase in the last two decades, while long range airpower assets have decreased by 46% during the same timeframe. To assure our allies and partners, and to increase regional stability, AFGSC provides bomber forces arrayed across the globe, providing flexible, responsive options to combatant commanders. The deployments in support of the CENTCOM AOR and the Continuous Bomber Presence in the PACOM AOR send a strong signal to our allies of our commitment to our treaty obligations and their regional concerns. Additionally, AFGSC provides bomber forces to support SOUTHCOM's Joint-Interagency Task Force-South, EUCOM, and AFRICOM through the Joint Staff's Global Force Management process and Bomber Assurance and Deterrence-ordered deployments and missions. These opportunities enhance our support to our allies and display our resolve to potential adversaries. The core of AFGSC assurance and deterrence is our unwavering commitment to USSTRATCOM and our nuclear mission. AFGSC must balance global force posturing with our nuclear mission, while not jeopardizing readiness and fleet health. Arraying bomber forces globally, to increase strategic flexibility and response to a changing global security environment, while doing no harm to our nuclear mission, will further enhance our assurance to allies and partners and posture our forces in such a manner where our adversaries take notice.

B-1

The B-1 is a highly versatile, conventional-only multi-mission weapon system that carries

a large payload of both guided and unguided weapons, which it can rapidly deliver in support of combatant commanders around the globe. Multiple wartime employments, high operations tempo, and harsh environment exposure have proven the aircraft's combat effectiveness, but have impacted aircraft availability.

The B-1 will continue to be in service for two more decades and avionics and weapon upgrades are critical for it to remain a viable combatant commander tool. The Integrated Battle Station/Sustainment Block-16 ($152M FY19-23) includes an upgraded Central Integrated Test System, Fully Integrated Data Link, Vertical Situation Display, and flight simulator upgrades. These are essential capabilities and the will provide the aircrew with a much more flexible, integrated cockpit.

The stand-off weapons currently employed by the B-1 include the Joint Air-to-Surface Standoff Missile (JASSM), the Joint Air-to-Surface Standoff Missile-Extended Range (JASSM-ER), and very soon the Long Range Anti-Ship Missile (LRASM). This unmatched precision strike capability has guaranteed a critical role for the B-1 in assuring our allies and deterring potential adversaries now and into the future.

B-52

The B-52 may be the most universally recognized symbol of American airpower, it is able to deliver the widest variety of nuclear and conventional weapons, and boasts the best aircraft availability and mission capable rates of all three bomber platforms.

The B-52 will remain a key element of our bomber force until the 2050s and it is paramount that we continue to invest resources into this aircraft. B-52s are still using 1960s radar technology with the last major radar upgrade done in the early 1980s. The current radar on the B-52 will be even less effective in the future threat environment, and without an improved radar system, there will be increased degradation in mission effectiveness. In order to remedy this, the $733M FY19-23 B-52 Radar Modernization Program now has an approved acquisition strategy, a Joint Staff-validated Capability Development Document, and has entered execution in the pre-Milestone B phase. Furthermore, B-52 training simulators are lagging behind operational

aircraft capabilities. They require integration of various programs such as Combat Network Communications Technology (CONECT), internal weapons bay upgrade, data link capabilities, air refueling, and information technology refresh. Supporting the revitalization of these critical training tools will create high fidelity training environments and increase the readiness of B-52 crews in support of nuclear and conventional missions.

Additionally, the 1960-era TF-33 engines currently on the B-52 are operating on parts salvaged from aircraft no longer in the inventory. The supply of these parts, no longer made by industry, will be exhausted and leave the engines unsustainable by 2030. The Air Force is now funding efforts ($1.6B FY19-23) to integrate and deploy replacement B-52 engines, which will save fuel, extend the aircraft's range, and improve reliability and sustainment.

Today, we have 37 B-52s converted to the CONECT configuration. This modification moves the B-52 into the digital age for the first time, providing an on-board local area network, allowing the aircrew to share a common battlespace picture. This modification is installed on every aircraft going through regular program depot maintenance cycle. The Internal Weapons Bay Upgrade increases B-52 smart weapons capacity by 67%. This capability reached its initial operational capability milestone in May 2016 and added Joint Air-to-Surface Standoff Missile (JASSM) and Joint Air-to-Surface Standoff Missile-Extended Range (JASSM-ER) capability in October 2017. Communications remain the cornerstone of our long-range strike capability. The ability to launch bombers and retask and retarget them while enroute to the battlespace is a powerful force multiplier. We will add a critical communications node to enhance the operational picture with Link-16, integrating the aircraft into the warfighter's efforts. Currently, the B-52 is the only Combat Air Forces platform without line-of-site Link-16.

Finally, we have converted 29 operational and 12 stored B-52 aircraft to conventional-only configurations. These conversions were undertaken as a part of New START obligations, and were completed in January 2017, a full year ahead of the treaty-mandated suspense of February 2018.

B-2

For nearly 25 years, B-2s have provided the nation with an assured penetrating bomber capability. The B-2's ability to penetrate enemy defenses, holding targets at risk anywhere on the globe, with a variety of nuclear and conventional weapons, has provided deterrence against our enemies and stability for our allies. The B-2's conventional accomplishments are numerous and incontrovertible; the bomber provided precision attacks during the Kosovo and Iraq Wars, strikes on the Taliban and Al Qaeda in Afghanistan, and on forces in Libya.

B-2 modernization efforts are addressing a nuclear command and control need by bringing a survivable very low frequency communication capability to the aircraft. Additionally, with the proliferation of anti-access/area denial threats, we are ensuring the B-2's ability to penetrate enemy defenses is maintained with the Defensive Management System Modernization program. Finally, the B-2 is upgrading to carry the B61-12 nuclear gravity weapon. This upgrade is currently programmed for $144M in RTD&E and is critical to ensuring the bomber leg of the nuclear Triad remains a visible deterrent to those who wish us harm.

Small fleet dynamics continue to challenge our sustainment efforts primarily due to vanishing vendors and diminishing sources of supply. We are striving to maintain the proper balance of fleet modernization and sustainment while maintaining combat readiness. Lessons learned from the difficulty of sustaining and modernizing the B-2's small fleet, and an ever-decreasing technological advantage, are some of the drivers for the planned minimum B-21 requirements.

B-21

Technology gaps between the US and potential adversaries are closing. The B-21 Raider will support the nuclear triad by providing an advanced and flexible deterrent capability and the ability to penetrate modern and future air defenses. Further, the B-21 will provide flexibility across a wide range of joint military operations using long range capabilities, large and mixed payloads, and survivability. From the outset, the B-21 has been designed to have an open architecture, which enables it to integrate new technology and respond to future threats. The B- 21 program is a national security imperative that will extend American air dominance and lethality against next

generation capabilities and advanced air defense environments.

The B-21 is fully funded in the FY19 budget submission, and initial capability is projected for the mid-2020s. Extensive campaign and mission level analysis will determine the minimum number of B-21s required to meet combatant commander needs in the face of closing technology gaps and increasing threat capabilities.

As the B-21 development progresses, the Air Force is conducting the strategic basing process. While B-21 fielding will include new construction and facility renovation, current bomber bases have infrastructure for operations, maintenance, munitions storage, security, and training. Additionally, base operating support and off-base community support are well-established at current bomber bases. While conducting B-21 bed down, our primary focus will be providing safe, secure, and lethal bomber operations in a cost-efficient manner.

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. Fielded in the 1980s, the ALCM is over 30 years old, well beyond its life expectancy, and is involved in its third life extension program (LEP). While the ALCM remains effective today, we must replace it due to its aging subsystems, the shrinking stockpile of operational missiles (546), and advances in enemy defenses. We plan to invest $380M in FY19-23 to continue SLEPs and testing efforts that include critical telemetry, encryption, and flight termination components until the Long Range Stand-Off (LRSO) missile reaches operational capability in 2030.

Conventional Air Launched Cruise Missile

The AGM-86C, Conventional Air Launched Cruise Missile (CALCM) is a conventional variant to the ALCM. Its only employment platform is the B-52 and unlike the ALCM, CALCM has not received any LEPs to maintain reliability or viability against enemy defenses. NDAA language prevents the service from removing this aging and obsolete weapon system from operational use pending the development, testing, and initial fielding of a LRSO conventional variant. The conventional long range stand-off capability currently resides in JASSM-ER and is a more survivable weapon system with low observable characteristics. JASSM-ER is capable of

employment from the B-52 and B-1, with B-2 capability projected for FY19. It is prudent that when our bomber force continues to make advancements in capability, that we divest ourselves of CALCM and focus our training and maintenance resources towards the use of more capable weapons.

Long Range Stand-Off Missile

The Air Force dedicated $2.6B in FY19-23 for the LRSO to replace the aging ALCM. The ALCM has significant capability gaps that will only worsen through the next decade. The LRSO will be a reliable, long-range, and survivable weapon system and is absolutely an essential element of the nuclear triad. It will be flexible and compatible with B-52 and B-21 platforms.

The LRSO missile will ensure the bomber force continues to hold high value targets at risk in an evolving threat environment, including targets deep within an area-denied environment. I cannot overemphasize this point: B-21 and B-52 without LRSO greatly reduces our ability to hold adversaries at risk, increases risk to our aircraft and aircrew members, and negatively impacts our ability to execute the mission. Additionally, AFGSC is synchronizing efforts with NNSA to fully integrate the W80-4 nuclear warhead with LRSO. This weapon will retain nuclear penetrating cruise missile capabilities through 2060. To meet operational, testing, and logistics requirements, the Air Force plans to acquire approximately 1,000 LRSO cruise missile bodies. This quantity will provide spares and supply sufficient non-nuclear missile bodies throughout ongoing flight and ground testing. The number of nuclear-armed LRSO cruise missiles (i.e., mated to a nuclear warhead) is expected to be equivalent to the current ALCM nuclear force. Milestone A for LRSO was declared in July 2016. The Air Force awarded contracts for technology maturation and risk reduction in August 2017.

B61

The B61 family of gravity nuclear weapons supports the airborne leg of the triad and is the primary weapon supporting our NATO allies under extended deterrence. The B61 is currently undergoing a LEP that results in a smaller stockpile, reduced special nuclear material in the inventory, modernized safety and security features, and reduced lifecycle costs by consolidating four weapon versions into one version, the B61-12. The B61-12 includes the addition of a digital weapons interface and a guided tail kit assembly. AFGSC is the lead command for the $419M FY19-23 B61-12 Tail Kit Assembly program, a DoD-developed system providing reduced

maintenance, reduced cost and increased sustainability. The B61-12 Tail Kit Assembly program is in Engineering and Manufacturing Development Phase 2 and is synchronized with NNSA efforts. The Tail Kit Assembly design and production processes are on schedule and within budget to meet the planned FY20 First Production Unit date, and support the lead time required for the inclusion of the Department of Energy (DoE) warhead service-life extension completion date of March 2020. This joint DoD and DoE endeavor allows for continued attainment of our strategic requirements and regional commitments.

GBU-57

AFGSC assumed responsibility as the lead MAJCOM for the GBU-57 Massive Ordnance Penetrator (MOP) in the summer of 2015. The MOP is a 30,000-pound guided conventional bomb designed to defeat hardened and deeply buried targets and is exclusively employed from the B-2. It has received several upgrades and enhancements based on warfighter requirements.
AFGSC, PACOM, and the Air Force Life Cycle Management Center Program Office are currently validating a requirement to expand the weapon's operational capabilities.

Security & Infrastructure

Nuclear security is a key function of the command's mission, and a major AFGSC security initiative continues to be new weapon storage facilities. These new facilities will consolidate nuclear maintenance, inspection, and storage into a single, modern and secure facility, replacing deficient 1960s-era weapon storage areas. Additionally, this initiative mitigates security, design, and safety deficiencies and improves our operational lethality.

One of our growing concerns is the impact that degraded and unpredictable infrastructure funding is having on our missions, our Airmen, and their families. Our bases are power projection platforms, and should be viewed as 3-D weapon systems. This is particularly true for our ICBM and B-2 bomber bases, which stand in continuous readiness to initiate global strike missions directly from these locations. For years, the Air Force has been forced to make deliberate decisions to take risk in infrastructure funding, in order to apply scarce dollars toward higher readiness and modernization priorities. The cumulative effect has been a steady erosion of our facilities and core infrastructure, and a huge growth in costs to address our exponentially growing repair and

replacement backlogs. As we bring new systems online such as Weapon Storage Facilities, the B-21 Raider, and GBSD, some of our installation infrastructure will receive much needed recapitalization. However, it will be several years before those systems are in place, and will not address much of the infrastructure where our Airmen work and live. We are seeing a growing risk in facilities and infrastructure reliability, higher overall costs due to accelerated deterioration, and increasing potential for unexpected catastrophic, mission- impacting failure. Our innovative Airmen have, and will continue to, focus limited resources on "mission critical, worst first" facilities and infrastructure while accepting risk in the recapitalization of facilities with less-direct mission impact such as community and base support. But there is without question a link between facility condition and quality of life, as well as quality of service. Without your support of the FY 2019 President's Request for MILCON and facility sustainment, restoration and modernization funding, we will not only continue to increase our risk of mission interruption or degradation, but will also be unable to adequately address the quality of life of our Airmen and their families. Providing a predictable, stable budget will not only enhance our lethality, but will go far in providing our Airmen with working and living environments that directly enhance their readiness.

Nuclear Command, Control, and Communications

Air Force nuclear command, control and communications (NC3) systems connect the President to senior advisors and the nuclear forces. Receiving presidential orders and converting them into actionable directives are critical to having a strong strategic deterrent. AFGSC is the Air Force's lead command for National Leadership Command Capabilities (NLCC)/NC3 which establishes a single focal point for the NC3 weapon system.

AFGSC is aggressively working to maintain and sustain the NC3 weapon system. Through the Nuclear Enterprise Review process and a cross-MAJCOM internal Air Force study, we identified multiple areas that have atrophied through decades of low prioritization. In a major organizational effort, AFGSC stood up the USAF NC3 Center in April 2017. The NC3 Center oversees interoperability, standardization, and configuration control of the Air Force's NC3

weapon system, and will plan and program for NC3 investment, sustainment, and operations.

In its first year, the NC3 Center has taken great strides in cross-MAJCOM governance to ensure strong advocacy as NC3 programs compete for resources within the Air Force Corporate process. An outstanding example of the Air Force's increased emphasis on NC3 includes the $275M allocated for E-4B modernization programs, which is in the FY19 Presidential Budget for the FY19-23 FYDP. Additionally, the E-4B replacement program, the Survivable Airborne Operations Center is programmed to receive $182M to begin the effort to replace the aircraft itself. For nuclear planning and execution analysis, $72.6M is allocated to complete the Mission Planning Application System Increment 5 program at USSTRATCOM. The Global Aircrew Strategic Network Terminal Increment 1 program for Advanced Extremely High Frequency (AEHF) capability at nuclear-tasked command posts receives $246M to complete terminal procurement. To ensure connectivity with our B-52 fleet, $132.6M is programed to integrate the Family of Advanced Beyond Line of Sight Terminals onto the aircraft. The B-52 will also integrate a new very low frequency receiver ($175.6M), and we have allocated $73.9M to upgrade our oldest system, the Strategic Automated Command Control System. To ensure connectivity with our ICBMs via USSTRATCOM's only alternate and survivable launch control system for the MMIII, the Airborne Launch Control System-Replacement has been funded $83M in FY19. Collectively, these NC3 efforts add $1.20B over the FY19-23 FYDP to assure the President connectivity to the nation's nuclear forces.

In addition to modernization efforts, the NC3 Center is standardizing the training of Airmen who operate and maintain NC3 equipment. The Center built new courseware and developed "hands-on" simulators for Airmen coming out of technical school to gain experience before arriving at operational bases. For more experienced personnel, the Center also secured distance learning systems to grant engineering graduate degrees through universities such as Harvard, Stanford, and Portland State University. Additionally, the Center has streamlined the reporting of communication system outages so combatant commanders receive real-time status and impact updates of temporary NC3 capability degradations and worked with Defense Logistics Agency to improve processes to provide a reliable, secure supply chain.

Ongoing Initiatives

Since 2014, the Air Force has applied deliberate and sustained focus to address shortfalls. AFGSC's ongoing efforts—spanning the full-range of personnel, management, oversight, mission performance, training, testing, and investment—continue to produce tangible and lasting improvements. As this committee is well aware, the Air Force and AFGSC have undertaken monumental shifts to build a more lethal force.

AFGSC initiated an effort to invigorate Security Forces (SF), specifically in the critical function of nuclear security. This initiative focuses on increasing SF lethality and readiness by enhancing leadership, proficiency, and effectiveness of personnel guarding our strategic deterrence capabilities. Changes have included increasing manning, especially in supervisory positions, increasing training cadre, investing in SF leadership through focused professional development, and implementing a Missile Security Operating Concept. This squadron deployment model, implemented across all three ICBM wings, optimizes core skill presentation in the field, keeps leadership with their Airmen, and provides stable, work-rest-train cycles. While the command has achieved early success with this program, we still have improvements to make in modernizing equipment and infrastructure, and decreasing position vacancies. Finally, Secretary Wilson directed a follow-on review, led by AFGSC, which is expected to result in external recommendations for cross-cutting improvements to Air Force Security Forces that will enhance the nuclear mission by providing world-class security forces with world-class equipment.

In 2017, we stood up an Independent Strategic Assessment Group (ISAG), comprised of former DoD leaders. The ISAG conducted a deep dive into numerous key areas, including current management structure and practices of the Nuclear Enterprise, and how AFGSC can field a more lethal force. The assessments produced nearly 50 action items the command is tackling so we can more effectively accomplish our deterrence and global strike missions. Going forward into this year, I've asked the group to look into additional key areas and provide recommendations. We will continue using this independent look to help shape innovation, change, and improvement throughout the command.

Priorities

My priorities remain the same and are relatively simple. They guide every decision I make. They are Mission, Airmen, and Families…rooted in our Air Force Core Values and reinforced by our rich heritage. We exist to serve the nation by providing strategic deterrence and global strike; we are ready to fight tonight, and are planning for the fight in 2030. The Airmen in this command make this possible and I have charged my staff to emphasize professional development and provide more opportunities for every rank. I truly believe that while we recruit Airmen, we retain families, which is why one of my initiatives is a renewed focus on quality of life. I declared 2017 the Year of the Family in AFGSC. We stood up the Family and Airmen Support Team to identify ways we can improve where our Airmen live, learn, and receive medical care. We will continue to build upon this and other initiatives throughout 2018.

Conclusion

Although we account for less than one percent of the overall federal budget, AFGSC forces represent two-thirds of the nation's nuclear triad and oversee approximately 75% of the nation's NC3 systems. This is especially profound when considering these forces deliver U.S. national security 24 hours a day, 365 days a year, 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 and effectively as possible; however, as stated in the NDS, we cannot expect success fighting tomorrow's conflicts with yesterday's weapons.

Modernization is critical. Great power competition has reemerged. AFGSC is operating a bomber force averaging over 40 years of age; operating ICBMs with 1960s infrastructure; and utilizing 1960s-era weapon storage areas. We cannot afford to delay modernization initiatives. The best way to avoid unthinkable conflict is to deter our adversaries and be prepared to fight with modern and reliable forces. Any American weakness emboldens competitors to subvert the rules-based international order and challenge the alliance and partnership network that underpins it. To continue to do what the nation requires of us, we require a stable budget and we are on a good path moving forward; the American people and our allies are counting on continued congressional action to fund our nuclear enterprise modernization efforts.