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SUBCOMMITTEE ON STRATEGIC FORCES
SENATE ARMED SERVICES COMMITTEE
UNITED STATES SENATE

DEPARTMENT OF THE AIR FORCE
PRESENTATION TO THE SENATE ARMED SERVICES COMMITTEE
SUBCMOMITTEE ON STRATEGIC FORCES
UNITED STATES SENATE

SUBJECT: FY23 Posture for Department of Defense Nuclear Forces
STATEMENT OF: General Anthony J. Cotton, Commander
Air Force Global Strike Command

April 27, 2022

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INTRODUCTION

Chairman King, Ranking Member Fischer, and distinguished Members of the subcommittee, thank you for this opportunity to discuss the sustainment and modernization of the air and land-based legs of the nuclear triad. It is an honor to represent the Air Force Global Strike Command (AFGSC) and the contributions the Air Force delivers to our national and global security through Air and Land Based Strategic Deterrence.

On behalf of the 32,000 men and women of AFGSC, I would like to offer my sincere thanks to Congress for your longstanding support and commitment to ensuring our total force service members have the resources needed to provide credible deterrence and ultimately defend the nation. I would also like to take the opportunity to commend our Airmen, known as Strikers, who have persevered with professionalism and dedication during a global pandemic and shifting geopolitical landscape. Our command's Strikers, including our civilian workforce and total force personnel, are always ready to respond while ensuring the cornerstone of our national security remains safe, secure, and reliable.

Strategic security is rapidly evolving and increasing in complexity across the geopolitical landscape. Our nation's reality now includes potentially facing two nuclear peers in the coming years. We must continue to posture our strategic capabilities for the dynamic challenges we face today and in the years to come. China has accelerated its military growth and is rapidly expanding its nuclear capabilities. Simultaneously, Russia has spent the last 14 years recapitalizing its nuclear forces and continues to invest in new technologies. In this context, maintaining a safe, secure and reliable nuclear posture continues to be of paramount importance to the nation and AFGSC.

As Commander of AFGSC, my four lines of effort focus on our people, our mission, modernizing our force and proactive engagement. These four areas are essential as we transition into an era of great power competition. We move firmly into the future by developing and equipping them to execute the mission even in ambiguity. We must provide them with the weapon systems needed to compete in this era and the communities necessary to support them and their families. This will include increasing the quality of life of our personnel. We must build relationships with leaders and policy makers across local, state and international communities to do this.

THREATS

The current global context is dynamic and unprecedented, marked by the reemergence of long-term strategic competition with Russia and now China. Both possess capabilities and intent to advance their interests at the expense of the U.S. and our allies. AFGSC remains committed to providing a safe, secure and reliable deterrent even as our nation faces challenges in a multipolar world. China continues rapid nuclear expansion as it constructs hundreds of intercontinental ballistic missile silos, operationalizes a nuclear bomber, and fields a third generation SSBN fleet. In addition to this, China is also developing fractional-orbit bombardment systems and long-range anti-aircraft missiles demonstrating increasing strategic conventional capabilities.

Russia similarly continues provocations, including the development of anti-satellite weapons, hypersonic technologies, and malign cyberspace activities. Russia conducted a reckless and irresponsible direct-ascent anti-satellite missile test on 15 November 2021.Russia has also violated international rules and norms with their recent invasion of Ukraine, and its willingness and capacity to conduct offensive malicious cyber activities threatening the networks of U.S., ally and partner nations. Furthermore, Russia possesses approximately 2,000 non-strategic nuclear weapons, which are not covered or limited by New START, and cites U.S. withdrawal from the Anti-Ballistic Missile Treaty among its supposed justifications for developing five new nuclear weapon delivery capabilities, including two unique hypersonic weapons. AFGSC will not waver in our focused contributions to integrated deterrence, ensuring two-thirds of the triad continues to underpin the capabilities our nation brings to bear.

PEOPLE

Our Strikers are the foundation of AFGSC and our greatest asset. The core of our competitive advantage will always come from our people. We have several ongoing initiatives that safeguard our Airmen and their families to help build community and support resiliency. Furthermore, AFGSC has implemented several initiatives to help attract, recruit, develop, and retain a high-performing and diverse force. Our installation-level Pathways to Inclusion Councils have collaborated with local communities to bring resources to our Strikers. These resources, combined with our diversity, equity, inclusion, and accessibility programs, build upon and create initiatives that bolster opportunity for everyone. For example, Ellsworth AFB improved accommodations for those with physical disabilities, increasing employment and installation access opportunities. The Kirtland AFB Sexual Assault Prevention and Response (SAPR) and the Violence Prevention Integrator established a Violence Prevention Board tasked with educational oversight and victim advocacy. Another initiative within the command nominates and trains individuals as “Mental Health Heroes” for the base community charged with reducing mental health stigmas and encouraging help-seeking behaviors within organizations.

We have many quality of life initiatives across the Command, ranging from childcare to education. We share the Department of the Air Force’s commitment for quality and affordable childcare. Even as we face challenges of availability, staffing, and capacity, we are taking measures to improve access to childcare for our Airmen and their families. We continue to explore expanding capacity through alternative means, including the Family Child Care program, which provides greater flexibility in scheduling childcare for military families. We also seek to provide additional educational opportunities for our personnel throughout their career. Our School Liaison Program continues to work with community stakeholders to increase awareness and support initiatives for military families in their communities. Through Education Community Partnerships, AFGSC installations are improving educational support programs by leveraging the installation resources at local schools. Engagement with state officials and community stakeholders has resulted in positive legislative outcomes in education for military families including:

- Advanced enrollment and registration,
- Homeschool student participation in public school activities and athletics,
- Post-secondary in-state tuition rates approved for military member and dependents, and

- Purple Star Programs recognizing military-friendly schools.

To ensure we remain the world's premier long-range precision strike team, we continue to provide professional strategic deterrence education, leadership training, and opportunities to produce well-prepared and critical thinking leaders at every level. The Command works with academic and industry partners to build upon the leadership education efforts of the broader Air Force. The Command's *Senior Leaders Course*, in partnership with the Air University Leadership Development Course Command Module, prepares incoming squadron command teams for the challenges of command and further develops them into successful Air Force leaders. Our *Senior Leader Development Program* targets commanders and senior headquarters' staff by providing them with an understanding of successful leadership traits and equipping them with the tools to improve their personal leadership skills.

Our leadership development efforts reach Airmen of all experience levels as we provide several major programs and initiatives that provide Airmen the opportunity for continued development and growth in Nuclear Deterrence Education and Nuclear Command, Control and Communications (NC3). For those who require a first nuclear deterrence education "touchpoint," our *Strategic Deterrence Basic Course* and our *Nuclear 150 Course* orient personnel with little or no experience with the nuclear deterrence mission.

We have also developed a congruent *NC3 150* course designed specifically to educate our Airmen with little to no exposure to the NC3 mission. We provide *Nuclear* and *NC3 200, 300,* and *400* level courses for our mid-range and more advanced Airmen. The Air Force Institute of Technology's Strategic Force College at Kirtland AFB and Barksdale AFB host these courses, providing our Strikers progressive educational experiences supporting the Air Force's nuclear deterrence and NC3 missions. We have graduated over 3,000 students from Nuclear and NC3 Courses, and over 2,500 students from the *Strategic Deterrence Basic Course*.

Our command deliberately develops Airmen through the internship programs known as *Striker Pathfinder*, *Striker Titan*, *Striker Trailblazer* and *Striker Airman Coders*. *Striker Pathfinder* provides officers an in-depth view of strategic studies from various academic institutions such as Harvard University, Missouri State University, AFIT and more. This program exposes officers to a wide variety of staff functions and provides unique developmental opportunities at National Labs, units across the USAF and USN, and the National Capital Region for exposure to strategic level and national leadership, academic forums, and allied foreign nations for exposure to the broader implications of the AFGSC mission.

Striker Titan is an enlisted professional development program allowing NCOs to see a broad perspective of the Air Force's long-range precision nuclear and conventional strike capabilities, how other agencies integrate into the mission, and strategic/nuclear educational opportunities. Titans receive leadership development and mentorship through assigned Chief Master Sergeant mentors at their bases and regularly interface with the Command Chief. They receive similar exposure as *Striker Pathfinder*, traveling widely and seeing firsthand the scope of the nuclear enterprise.

Striker Trailblazer provides civilian members with a one-year deliberate developmental opportunity consisting of strategic deterrence, leadership education, professional development,

and experiential TDYs. The Trailblazers remain assigned to their current duty location, and receive developmental education accomplished through periodic learning opportunities every five weeks. At the end of the program, Striker Trailblazers gain a solid foundation and understanding of the nuclear enterprise, ultimately promoting effective advocacy for the Air Force Nuclear Enterprise.

We formed *Striker Airmen Coders* to recognize the innovation of our Airmen and provide them with opportunities to gain state-of-the-art technical skills in areas such as software coding, data analytics, and artificial intelligence through the online Air Force Digital University. Lastly, we have collaborated with the United States Navy (USN) to form the *Striker Trident Exchange* program, targeting nuclear operators at the O-3 level. The program aims to provide a greater breadth and depth of experience for future planners and leaders in the nuclear deterrence mission. These rigorous programs allow our interns to gain a broad perspective on senior leader decision making and provide them the opportunity to accomplish developmental and experiential education.

Fostering a culture of diversity, equity, inclusion and accessibility for all Strikers ensures we retain the best, brightest, and most talented Airmen. We are on the right path moving forward, but we know there is always more work to do. In 2021, AFGSC secured training resources for diversity and inclusion through numerous universities and forums. In addition, we instituted Barrier Analysis Working Groups (BAWGs) to identify and eliminate existing barriers and to create opportunities within the civilian and military workforce regardless of race, ethnic background, gender and disabilities.

The Command has taken the negative impacts of the COVID-19 pandemic and molded them into positive outcomes. Our Strikers are innovative and found ways to ensure our mission continued seamlessly in the face of challenges. The Missile Wings adopted a squadron deployment construct where each missile squadron deploys to the field one week at a time. When COVID-19 prevented travel, our team stood up a Mobile Training Team to conduct and complete annual assessments. Resiliency within our Wings remains a focus as we navigate our return to normalcy following COVID. However, we must ensure we introduce and integrate Airmen assessed during the pandemic to pre-COVID in-person processes. We will continue leveraging technology to ensure mission accomplishment as we transition from remote work to increasingly in-person operations. Our Strikers have revised how we operate as needed to ensure we emerged from this pandemic more flexible and adaptable than before.

MISSION

Most AFGSC Strikers serve within two numbered Air Forces, 8th AF and 20th AF. The 8th houses our bomber aircraft, and the 20th AF is the home of our Minuteman III ICBM forces, including the future Sentinel community. Both numbered Air Forces also have the all-important support aspects that keep our missions running smoothly. The Strikers of 20th Air Force continue to operate and maintain the Minuteman III and defend the nation--providing strategic deterrence and standing ready to respond at a moment's notice. For more than 50 years, the Minuteman III has been on nuclear alert 24 hours a day, seven days a week, and 365 days a year. Strikers met the evolving challenges of the COVID-19 pandemic head-on and maintained the highest readiness levels across the entire Department of Defense (DoD). Minuteman III

maintainers keep this aging weapon system on 24/7 alert, performing 599 major maintenance actions, covering 17.2-million miles traveled across gravel roads and interstates in Montana, North Dakota, Colorado, Nebraska and Wyoming.

Defenders and helicopter aircrew continue to secure the weapon system across an Area of Responsibility geographically larger than South Carolina. In coordination with our teammates at the Department of Energy and the numerous local law enforcement agencies, our Airmen conducted 292 safe, secure, and effective weapons convoys. Additionally, the 576th Flight Test Squadron conducted nine operational tests on the Minuteman III weapon system in 2021, including two operational test launches from Vandenberg Space Force Base. Every minute of every day, the men and women of 20th AF keep watch over the United States, ensuring we are always ready to defend the nation and our allies.

Current operations in 8th Air Force are equally high-paced. In 2021, AFGSC bombers successfully executed ten deployments, 18 CONUS-to-CONUS missions, and seven cross-combatant command missions. We accomplished this in concert with the divestiture of 17 B-1Bs and the maintenance stand-downs of B-1 and B-2 platforms in the summer and fall of 2021. Missions were flown during all 12 months, and our bombers integrated with 29 NATO allied countries, five European partner nations, and seven Middle Eastern partners. We also conducted our first ever bomber deployment to Norway while B-1s became the first American bomber to land in India in over 75 years.

Bomber Task Forces (BTF) missions are currently integrating the 4-Bin Force Generation Model and the Agile Combat Employment (ACE) concept to achieve Combatant Commander and Chief of Staff of the Air Force (CSAF) objectives. After 30 years of continuous combat deployments to the Middle East, adopting the 4-Bin Model enables the Air Force to present combat-ready forces in a predictable and sustainable manner that supports the 2022 National Defense Strategy. In addition, with the global footprint reduction, adversarial technological advances in intelligence, surveillance, and reconnaissance and all-domain long-range fires have placed traditional air bases at significantly increased risk. ACE provides a proactive and reactive operational scheme of maneuver executed within threat timelines to increase survivability while generating combat power. AFGSC is partnering with our overseas major commands to accomplish multiple site surveys of airfields and air bases around the world to determine their suitability to support bomber operations. During fiscal year 2022, the Command will serve five potential operating locations on four separate continents to enable ACE. Ongoing planning between Combatant Commands will allow bombers more flexibility with smaller deployment footprints.

Given the magnitude of their mission to secure two-thirds of the nation's nuclear triad, twenty-five percent of all Air Force Security Forces are assigned to AFGSC. At present, AFGSC has 53 Joint Lightweight Tactical Vehicles (JLTV) awaiting installation of mission support equipment with delivery to AFGSC installations in early FY23. The arrival of the new JLTVs will address the current fleet's shortfalls and will enhance the security of AFGSC's strategic resources. In a parallel move, AFGSC recognized the need for a mixed fleet of armored vehicles to sufficiently support the unique operating environments and varying mission sets across AFGSC. The addition of a lighter tactical suite of vehicles allows commanders the ability to tailor their responses to an incident while ensuring the safety of Defenders across AFGSC. Our

nation charges us to maintain a safe, secure, and reliable nuclear triad. The importance of this mission cannot be overstated, so we must modernize our strategic forces while we conduct our daily operations.

BALANCING SUSTAINMENT & MODERNIZATION

We are at a pivotal moment in U.S. history facing a critical choice: modernize our nuclear force or allow our nation to lose its strategic advantage. Our conventional and nuclear platforms are as relevant as ever, but lifecycles dictate the need to modernize and ensure we continue to be effective and lethal. Over the next decade, delays in modernization program timelines and programs that do not meet expectations will put our nation's security at risk. Moreover, there are no allied bomber forces or allied ICBM forces to rely upon – the free world's ability to hold potential adversaries at bay with two-thirds of the triad rests on our shoulders.

AFGSC is currently undertaking one of the largest nuclear modernization efforts in our nation's history. However, we must balance our modernization efforts with maintaining the lethality and effectiveness of our current conventional and nuclear forces until replacements can arrive. Until Sentinel and B-21 are fully operationally capable, Minuteman III, B-1, and B-2 sustainment must continue. This balance between no-fail sustainment and on-cost, on-schedule modernization is the primary focus of my headquarters. Minuteman III remains an effective deterrent in the near term as we begin preparations for its replacement, Sentinel. Sentinel bed-down preparations have commenced this year with the Re-entry Vehicle Maintenance Facility and the Stage Processing Facility MILCON projects at Vandenberg Space Force Base to support Sentinel flight tests. Since 2017, Sentinel has consistently met all acquisition milestones as we approach the first flight test in the next 16 to 18 months.

AFGSC continually updates the Bomber Roadmap, reflecting current conditions, ensuring continued support to operational plans while transitioning from a three-bomber fleet to a two-bomber fleet of B-52s and B-21s. The effective and on-time modernization of the B-52 while we sustain a sufficient number of B-1s and B-2s will be critical until an adequate number of B-21s are available. Continued B-52 effectiveness and lethality are dependent upon the completion of the Commercial Engine Replacement (CERP) and the Radar Modernization programs.

B-52 CERP is a top priority and replaces the aging and obsolete TF33-PW-103 (TF33) engines with Rolls Royce F130 turbofans. Legacy TF33 engines, fabricated six decades ago, do not meet current environmental emissions regulations and standards. Retrofitting modern engines on the B-52 embraces the tenets of an aggressive, clean energy transformation posture by tremendously reducing the carbon and noise footprints of the aircraft. Furthermore, a newer engine significantly reduces the emissions of unburned hydrocarbons, carbon dioxide, nitrogen oxides, and smoke numbers. In addition to the air pollutants emitted by the TF33 engine, its noise pollution fails to meet International Civil Aviation Organization standards.

Without re-engining the B-52, we put the backbone of our bomber forces at risk. The costs of sustaining the current engine are enormous, and there are no further options for finding parts due to vendors that are no longer in the business of producing parts for this 70+ year-old aircraft. We cannot sustain the TF33 engine for the expected future life of the B-52, which makes our CERP modernization effort much more critical. CERP is transitioning from Middle Tier Acquisition to a Major Capability Acquisition this year. It will complete Preliminary Design Review and issue a Development Request for Proposal, with a milestone B target date of May 2023.

Concurrently, the B-52 Radar Modernization program will dramatically improve B-52 lethality. The system will exponentially increase B-52 radar reliability, provide more precise navigation solutions, offer the ability to detect and track moving targets, and perform all-weather self-targeting. The radar program reached Milestone B in June of 2021 and will complete the first install in 2023.

We are committed to protecting requirements and funding stability on the baseline acquisition program for both the Sentinel and the B-21 Raider. Since the B-21 program's inception, the top-level key system attributes and key performance parameters have remained unchanged. The Air Force awarded the Engineering and Manufacturing Development (EMD) contract in 2016. Since then, the B-21 program has remained under acquisition program baseline (APB) target costs and within its APB target schedule for both the start of production and required assets available for initial operational capability. The next major milestones for the program are the first flight and the beginning of low rate initial production. Leveraging modular systems and open standards, as we have done with the B-21 will enable us to have a technology that matures naturally through continuous upgrades.

In the calendar year 2021, the Acting Secretary of the Air Force confirmed Ellsworth AFB as the first B-21 Main Operating Base. Ellsworth has not hosted a stealth or nuclear mission since the early 1990s when the B-1B was still nuclear capable. Military construction at Ellsworth is on the critical path to B-21 nuclear certification. The Air Force needs the facilities and workforce at Ellsworth to support the nuclear deterrence mission and meet USSTRATCOM requirements. The Air Force will work to integrate the capabilities that underpin nuclear certification into future budget requests.

Last calendar year, the Joint Staff approved an enduring Capability Development Document (CDD) for the B-21. This enduring CDD paves the way for a proactive and streamlined B-21 modernization process, which starts in parallel to EMD, to mature and then rapidly integrate advanced capabilities at the earliest opportunity. The enduring CDD coupled with B-21's open architecture design, built-in growth margin, and the Air Force's decision to procure technical data rights during EMD will keep this platform relevant, affordable and adaptable as the threat picture and mission set evolve. The initial B-1 divestiture of 17 B-1s was completed on 23 September 2021, a week ahead of the Congressional deadline. All divested aircraft selected for storage are now in the 309th Aerospace Maintenance and Regeneration Group following standard practices. Other locations and agencies supporting various B-1 test and evaluation programs received the remaining divested aircraft.

Safe and secure nuclear storage and maintenance are the cornerstone of Air Force nuclear generation capabilities and remain a high priority for the greater nuclear modernization effort. However, AFGSC operations currently rely on 1960s and 1970s era Weapons Storage Areas (WSAs) that have exceeded their designed service lives. With the on-going B-21, Sentinel, LRSO, and B61-12 programs, these new and modern weapon systems drive a need to diversify our assets and locations. To meet this need, the command is working to recapitalize our weapons storage and maintenance capacity by consolidating weapons storage, maintenance, and generation operations at select installations into newly constructed Weapons Generation Facilities (WGFs). WGFs eliminate exposure of nuclear assets to outside environmental elements and external observation, thus significantly increasing both maintenance capability and security. In addition, the WGF's design ultimately provides greater security features and operational flexibility than all current WSAs.

The first WGF construction project is underway at F.E. Warren Air Force Base, followed by construction at Malmstrom and Barksdale Air Force Bases. The command synchronized the B-21 WGF construction with the B-21 fielding locations and timelines to provide certified facilities to support B-21 full operational capability target dates. Conceptually, the ICBM and bomber WGFs are similar, consisting of a hardened facility envelope containing all storage, maintenance, and generation functions. Recapitalizing the WGFs for the safety and security of weapons remains a pressing priority for the Air Force, as the aging infrastructure is operating well beyond designed life and outside of modern safety and security requirements. While many factors influence WGF costs, every effort is underway to ensure efficient and fiscally responsible facilities that will deliver increased capability for maintenance, storage, and generation of our nation's nuclear arsenal.

The UH-1N Replacement Program was born out of the Air Force Common Vertical Lift Support Platform. The CSAF signed the UH-1N Replacement Program Capabilities Production Document on 3 May 2016, and the VCJCS signed the Joint Requirements Oversight Council (JROC) Memo on 22 Jun 2016. Congressional and OSD guidance was for full and open competition "utilizing the robust American helicopter industry." As a result, the USAF awarded the contract to Boeing-Leonardo in 2018 to provide up to 84 MH-139A helicopters at a program cost of $2.38B, resulting in a $1.7B savings to the taxpayer compared to the program's initial Independent Cost Estimate. The USAF received the first four MH-139A Air Vehicles between December 2019 and March 2020.

The MH-139A is a military commercial derivative aircraft and airworthiness certification relies heavily on civil certifications issued by the FAA. The program has faced some challenges recently, including delays for elements of the FAA certification known as Supplemental Type Certifications (STC). STC delays directly affected the completion of the initial Developmental Test and Evaluation, which is a prerequisite to the arrival of aircraft to Malmstrom AFB, the first operational base, now projected to be the end of FY23. However, Initial Operational Test and Evaluation will continue into FY24, which will allow for Full-Rate Production, Required Assets Available and Initial Operational Capability in FY25.

AFGSC continues to transition from a legacy to a modern NC3 enterprise. The Air Force has begun recapitalizing the aging E-4B with the Survivable Airborne Operations Center (SAOC) program. The E-4B is a vital link in the National Military Command System, providing

NC3 and C2 of the triad. To fund the program through the FYDP, the SAOC program has received funding from the OSD Cost Assessment and Program Evaluation for $5.36B. AFGSC authored an Air Force validated SAOC Capabilities Development Document that gained JROC validation in March 2022.

The Air Force continues to refine the SAOC acquisition strategy, leveraging modernization opportunities, open system architecture, and digital engineering to reduce overall program costs. The SAOC will achieve Full Operational Capability in the early to mid-2030s. While AFGSC leads one of the nation's largest nuclear modernization efforts in decades, we must also maintain a safe, secure, and reliable nuclear triad. As the Air Component to USSTRATCOM, and as stewards of two-thirds of the nuclear triad, we must employ a specific and strategic approach to modernize our capabilities in the face of 21st-century global competition. Our command is committed to delivering improved weapon systems as efficiently and affordably as possible by pursuing mature technologies, stabilizing requirements, and owning the technical baseline of our weapons systems – a formula that has proven successful in our acquisition efforts thus far.

NUCLEAR WEAPONS STOCKPILE

While today's stockpile is safe, secure and effective, we cannot allow the reliability or performance of the bedrock of our national security to degrade. We are at a point where we are modernizing delivery platforms, weapons, and supporting infrastructure simultaneously, and our ability to properly modernize hinges not only on DoD program execution, but also on our partners at the Department of Energy's (DoE) National Nuclear Security Administration (NNSA).

The NNSA plays a critical role in modernizing the nuclear security enterprise, including the recapitalization of our pit production infrastructure. Prioritizing essential NNSA infrastructure and modernization programs of record is a national imperative and fundamental to safeguarding our deterrent force. Any delay in stockpile modernization will have a cascading effect on the schedule. NNSA is cognizant of the fact that a faster, more comprehensive overhaul is necessary to maintain schedule alignment. Significant investments are being undertaken in recapitalizing infrastructure to build resiliency and re-establishing production capabilities lost in the post-Cold War period and require sustained funding from Congress to complete in a timely manner.

As we shift attention from life extension efforts to modernizing our remaining weapons, we must identify and overcome any obstacles that could delay program execution. Understanding stockpile modernization programs take many years to fully execute, it is critical that we find avenues to reduce these timelines. Failure to do so will increase the operational risk to Sentinel and other major modernization efforts, putting our nuclear deterrent force at risk.

WIND FARM ENCROACHMENT

As our country expands its energy resilience through the development of various alternative energy sources, the dramatic growth in the wind energy sector has created unanticipated challenges for ICBM security. Since the deployment of Minuteman III, a 1,200-

foot easement around all missile launch and alert facilities has helped keep structures at a minimum safe distance from private and commercial encroachment. However, when we fielded Minuteman III 50 years ago, we did not foresee wind turbines would one day share the same operational space as our ICBMs. Unfortunately, some wind turbines create a significant mission impact on helicopter and security operations. At present, existing wind turbines at 46 launch and missile alert facilities across our three missile wings affect flight safety and security operations.

Helicopter operations form an integral part of day-to-day security operations and security incident response within the ICBM complexes. Wind turbines near these facilities interfere with security operations by restricting helicopter approach avenues, limiting turning radius, severely affecting air-to-ground security response integration, and creating hazards for infiltration and exfiltration of responding forces. These activities are all necessary components that ensure the security of ICBM operations and vital national assets. The construction of wind turbines within a two nautical mile radius of launch and alert facilities poses a tremendous risk to helicopter and security operations, is exacerbated by the weather, time of day, and lighting conditions, places aircrew and facility personnel at greater risk, and extends security response time in critical situations.

We fully support renewable energy initiatives to ensure energy security for our nation. AFGSC works closely with DoD's Military Aviation and the Installation Assurance Siting Clearinghouse and is engaged with multiple energy developers as we look for collaborative solutions to existing and proposed wind turbine projects. In addition, Strikers at our ICBM wings and 20th Air Force have met with local legislators and spoken with wind energy developers to explain the risks to our mission and people imposed by the construction of wind farms within a two nautical mile radius of these launch and alert facilities.

CONCLUSION

Today we face competitors who have the ability to escalate conflict across the globe in any domain and at any time. We as a nation have not faced this reality at any point in history, and our approach must be continually adapted as the strategic environment evolves. We appreciate our partnership with the defense committees and across the entire defense enterprise to ensure the continued protection of our homeland.

AFGSC is the home of nuclear and conventional long-range precision strike for the United States and the free world. We continue to sustain legacy systems while modernizing our force to meet the challenges inherent in an increasingly complex global security environment. Our Airmen, the very core of our mission, ensure we provide safe, secure and lethal combat-ready forces to the Combatant Commanders. It is because of our people, we are always ready to provide long-range conventional or nuclear precision strike anytime, anywhere.