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BY THE SUBCOMMITTEE ON STRATEGIC FORCES
UNITED STATES SENATE

DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE

PRESENTATION TO THE
SUBCOMMITTEE ON STRATEGIC FORCES
UNITED STATES SENATE

SUBJECT: Fiscal Year 2024 U.S. Space Force Budget Request

STATEMENT OF: The Honorable Mr. Frank Calvelli, Assistant Secretary of the Air Force for Space
Acquisition and Integration

General David D. Thompson, Vice Chief of Space Operations, United States Space Force

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Introduction

Chairman King, Ranking Member Fischer, and distinguished members of the Committee, thank you for inviting us to testify before you today, representing Secretary Kendall, General Saltzman, and our nation's Space Force.

We continue to face an unprecedented strategic competitor in China, and our space environment continues to become more contested, congested, and competitive. We have seen an exponential growth of in-space activity, including counter-space threats. The Department of the Air Force and the United States Space Force are fundamentally transforming our space architecture to be more resilient, proliferated, and integrated to meet warfighter requirements to counter the growing threat from strategic competitors. In three years' time, we have made significant progress to transform our force to counter the threat, but there is still much more we must accomplish.

To that effect, on November 22, 2022, the CSO outlined three lines of effort to ensure that the Space Force maintains urgency and momentum in the progress we have made over the past three years:

- *Field Combat-Ready Forces* so that the Space Force has the personnel, training, and equipment required to prevail in a fight.
- *Amplify the Guardian Spirit* so that the Space Force attracts, develops, inspires, empowers, and retains individuals who thrive in our organization and under our values.
- *Partner to Win* so that the Space Force can collaborate with mission partners to accomplish our critical set of roles and functions.

These lines of effort ensure that the force is advancing its readiness for the high-end fight. We must deliver and field the forces and capabilities necessary to adequately deter and if deterrence fails, prevail against any potential adversaries.

Transforming the Space Architecture to Field Combat-Ready Forces

As previously mentioned, the Department of the Air Force and the United States Space Force are fundamentally transforming our space architecture to be more resilient, proliferated, and integrated to meet warfighter requirements to counter the growing threat from strategic competitors.

We are actively moving away from building a small number of highly capable but vulnerable large satellites, to a proliferated resilient **Missile Warning / Missile Tracking (MW/MT)** architecture. Our resilient MW/MT focuses on tracking advanced threats by integrating critical missile tracking capabilities that previously did not exist. The Space Development Agency (SDA) and Space Systems Command (SSC) are developing the low earth orbit (LEO) and medium earth orbit (MEO) architecture through an incremental process that allows us to incorporate new technologies and get them on orbit fast. The Space Development Agency just launched the first two LEO tracking satellites this month and will launch six more by the end of this fiscal year. Thirty-nine more tracking satellites will be delivered in their next Tranche, which

is set to launch in 2025. SSC's resilient MW/MT MEO portion will follow with nine satellites in two orbital planes with launches in Fiscal Year (FY) 2026 and FY 2027.

As we develop this new capability, we are continuing the development of the Next Generation Geosynchronous and Next Generation Polar missile warning programs as a bridge to enable the eventual transition to the resilient MW/MT architecture.

Simultaneously we are transitioning our **space domain awareness** architecture to focus on deterring and defending against attempts to negate our critical space capabilities. We continue our Geosynchronous Space Situational Awareness Program (GSSAP), which remains our hallmark program for space domain awareness. We are adding three new radar sites (United States, Australia, and United Kingdom) with the Deep Space Advanced Radar Capability to enhance our deep-space object tracking. Additionally, we are upgrading our space tracking telescopes in the Continental United States and Hawaii as part of our Ground-Based Operational Surveillance System program. These upgrades include new cameras, better sensitivity, and better search capability. We are also collaborating with the Intelligence Community (IC) on a new GEO-based satellite system called Silent Barker that will launch this year, which provides on-orbit optical space domain awareness for orbit determination, discovery, custody, and change detection of deep space objects.

We are fundamentally transforming our **military satellite communications** architecture through disaggregation, proliferation, capacity expansion, and partnerships with Allies and commercial entities.

We are designing new architectures that disaggregate the strategic and tactical missions currently found on the Advanced Extremely High Frequency satellites. These future architectures increase resilience by reducing vulnerabilities associated with very large multi-mission satellites and increase architectural diversity via payload hosting opportunities.

The proliferated transport layer will provide resilient low-latency military data connectivity to a range of warfighter platforms. The first eight of these satellites were launched in April. Another twelve will launch this June, followed by 138 more in 2024.

We continue to expand and enhance our wideband satellite communications capabilities by making ground system improvements that will increase resiliency of the Wideband Global SATCOM (WGS) satellites 11 and 12. Additionally, we are on track to operationalize the new Protected Tactical Waveform by the end of 2024 to be used over WGS, which adds critical anti-jam capabilities for our warfighters. We are also beginning the service life extension development for two additional Mobile User Objective System satellites to extend narrowband services as interim gap-fillers as we define the future architecture.

In partnership with Norway, our Enhanced Polar System Recapitalization payload will provide protected SATCOM coverage in the North Polar Region and will launch next year. We are also beginning a commercial SATCOM partnership with Luxembourg and have cooperative agreements on the use of U.S. military satellite communications with 10 countries.

These holistic efforts enhance our ability to fight in contested and degraded operational environments through increased capacity, extended coverage, and anti-jam capabilities. Our pivot to a resilient, integrated, and proliferated military satellite communications architecture provides diverse capabilities that enable warfighters to have data transport in any environment and whenever needed in daily operations, crisis, or conflict.

We continue to build upon the success of our **Global Positioning System (GPS) program**. We have four GPS III satellites completed and in storage and are on contract to produce another 10 satellites. GPS III and IIF satellites will increase military signal power as well as produce a more resilient fourth civil signal. In FY 2024, we will launch and begin testing of the Navigation Technology Satellite 3, an end-to-end space-based prototype across space, ground, and user equipment segments to improve resiliency in contested environments against jamming and spoofing. We are also making progress with the development and testing of the cyber-hardened next-generation GPS ground control segment and paying careful attention to this troubled program which is years late and significantly overrun on costs.

We are transitioning our solution for **moving target indication** from the air domain to the space domain. The Long-Range Kill Chains is a new FY 2024 program element that supports a proliferated space-based ground moving target indication (GMTI) capability. The Space Force is collaborating with the Intelligence Community to design, develop, deploy, and operate space-based GMTI. It will provide actionable information on adversary surface targets that the Space Force will deliver to the warfighter through the Advanced Battle Management System as an integral part of Joint All-Domain Command and Control. The space-based systems will surpass the range limitations of current air platforms and provide capabilities in contested and non-contested environments to ensure the strategic advantage provided by GMTI is available to warfighters even when facing near-peer competitors.

At the same time, we are making tough budget choices. We are reducing the Next Generation Overhead Persistent Infrared (NG OPIR) Geosynchronous Earth Orbit (GEO) (NGG) space vehicle purchases from three to two, ensuring we have the resources to pivot to resilient MW/MT. The NGG and NG OPIR Polar programs successfully completed several major milestones, and the Space Based Infrared System (SBIRS) constellation continues to have positive performance, thus ensuring our critical missile warning capability. We are also delaying the purchase of additional GPS IIF satellites in FY 2024. The GPS constellation is healthy, with four satellites ready for launch in FY 2024, FY 2025, and FY 2026. This enables the Space Force to fund immediate resiliency priorities in other mission areas with no impact to the GPS military code or civil service.

Critical Capabilities Delivered in the Last Year (Jan 2022 – Present)

Over the past 15 months, the Department has provided significant new capabilities on orbit. In January 2022, we launched two SSC-developed GSSAP satellites bringing the constellation to a total of 6 satellites. Having two more GSSAP satellites enables the Space Force to provide immediate and precise orbital predictions of all geosynchronous objects, as well as detailed space domain awareness in the GEO belt, which is critical to our space superiority.

In July 2022, SSC launched two experimental satellites, one of which was the Wide Field of View demonstration. This new technology will increase the amount of Earth coverage to over 3,000 kilometers at any one time, an unprecedented area not previously incorporated into any missile warning platform. The data from this demonstration will be used to develop future missile warning sensors in LEO and MEO.

SSC completed the SBIRS constellation with the launch of the GEO-6 satellite in August 2022 and operational acceptance in March 2023. The robust SBIRS constellation will continue providing persistent ballistic missile warning and launch detection crucial to national defense and deterrence, thus enabling the pivot to a resilient MW/MT architecture.

In November 2022, SSC launched the second Long Duration Propulsive Evolved Expendable Launch Vehicle (EELV) Secondary Payload Adapter (ESPA) (LDPE) mission. LDPE provides a low-cost, multi-mission propulsive platform that enables multiple prototype demonstrations. Both the LDPE and the ring-shaped payload adapter provide small satellite providers with launch opportunities more readily than ever before. This vehicle was delivered in only four years from contract award, approaching SAF/SQ's recent guidance to drive contract scope to three years or less from start to launch.

In January 2023, the sixth of ten SSC-developed GPS III satellites launched. Enabled by on-orbit verification efficiencies to expedite warfighter capability delivery, Space Operations Command operationally accepted GPS III-06 just 12 days after launch.

Also, in January 2023, the Space Rapid Capabilities Office (SpRCO) launched and initialized three operational prototypes, including two for enhanced situational awareness and one cryptographic interface payload providing secure space-to-ground communications capability. These systems are the first SpRCO on-orbit assets, with all three successfully testing within two months from launch, a major accomplishment for critical rapid acquisitions."

One of the most notable achievements in space acquisition occurred when SDA successfully launched the first 10 satellites of the Proliferated Warfighter Space Architecture. On April 2, 2023, SDA delivered 8 transport layer and 2 tracking layer Tranche 0 satellites just 31 months after contract award. The second launch, to complete the 28-satellite Tranche 0, will occur Summer of 2023, providing the warfighter immersion tranche by supporting military exercises, missile tracking tests, and demonstrating technology and process feasibility. This accelerated timeline represents a necessary benchmark for space acquisitions.

Overall, in the past 15 months we conducted a total of 9 National Security Space Launch missions to provide critical capabilities to the Nation.

Launch

Our launch programs, National Security Space Launch (NSSL) and Rocket Systems Launch Program (RSLP), evolved tremendously over the past five years with unprecedented growth in the commercial launch market and focus on the pacing challenge. We are adapting our procurement strategies and concept of operations to best leverage emerging commercial launch

capabilities to meet warfighter needs across the DoD, IC, and other mission partners. We totaled seven successful NSSL launches in FY 2022 and are on track to exceed that count this fiscal year.

NSSL has a long and respected legacy of success, delivering reliable medium and heavy space lift for our nation's most complex payloads and demanding orbits without fail. In NSSL Phase 2, we met the Congressional mandate to end U.S. reliance on Russian-made engines by investing in new rocket technologies and expanding competition. We drove down government launch costs and provided assured access to space through two launch service providers (SpaceX and United Launch Alliance) capable of meeting all reference orbits.

We are in an exciting period of transition as FY 2024 marks the fifth and final order year of the NSSL Phase 2 contract in which we are ordering 20 launch services for the Space Force and National Reconnaissance Office (60% increase from FY 2023) along with the launch support required to place critical capabilities on orbit. Simultaneously, we are preparing for the next NSSL procurement phase starting in FY 2025. Building upon Phase 2, Phase 3 pursues a dual-lane, hybrid approach to maximize competition and use of the Nation's robust commercial launch industry as we transition to more proliferated space architectures. NSSL Phase 3 will provide Assured Access to Space and protects capacity for the DoD's less risk-tolerant missions with two fully certified launch service providers in one lane while allowing emerging providers to compete, when ready, for the DoD's more risk-tolerant missions in another lane. This diversification produces a resilient launch architecture that allows the Space Force to rapidly harness new technological discoveries to improve launch reliability and success.

Complementary to NSSL, the RSLP focuses primarily on launching our smaller payloads, e.g., suborbital targets, experimental, demonstration, and allows us to meet the full spectrum of launch. We have access to 11 different launch service providers through RSLP and we are working to on-ramp more providers in the next year. Our ability to use space effectively relies on maintaining assured access, being the first to field necessary capabilities, and the ability to rapidly reconstitute them, if necessary. In sum, our portfolio of launch programs continues to push the envelope to accelerate launch timelines to deliver integrated, resilient capabilities more rapidly whenever and wherever needed.

FY 2024 marks the first time the Space Force has specifically budgeted for Tactically Responsive Space (TacRS), acknowledging TacRS as an emerging imperative. Importantly, TacRS is more than just launch capability; it also includes the end-to-end mission for satellite, ground capability, integration activities, and operations. Together, these activities constitute a complete mission set required to deliver a space capability to the warfighter in a rapid manner, on-demand to either reconstitute or augment capabilities in a more contested environment.

We successfully completed the first TacRS demonstration, Tactically Responsive Launch-2, in June 2021 after building a demonstration satellite in 12 months and launching it 21 days after call-up. For the next demo, VICTUS NOX, we plan to build the satellite in 10 months and only have a 3.5-day call-up (60-hour activation and launch within 24 hours of an operational need); VICTUS NOX is scheduled to launch this summer. In FY 2024, we are investing \$60 million to demonstrate a 24-hour notification to launch timeline and to develop the operations, training,

testing, acquisitions, concept of operations, and Tactics, Techniques, and Procedures required to establish an enduring TacRS capability.

Managing the Space Acquisition Enterprise

The Assistant Secretary of the Air Force for Space Acquisition and Integration (SAF/SQ), a new role created by the National Defense Authorization Act for Fiscal Year 2020, is singularly focused on transforming the space acquisition enterprise to add speed to our acquisitions and meet the growing threat posed by strategic competition. There are three organizations with unique capabilities and authorities that procure space capabilities for the Space Force: Space Systems Command (SSC), Space Development Agency (SDA), and Space Rapid Capabilities Office (SpRCO). Each has unique strengths and, in some cases, unique statutory authorities. SAF/SQ manages their programs as an integrated portfolio leveraging their strengths and authorities.

As the Space Service Acquisition Executive, SAF/SQ conducts reviews with each of the portfolio leads (Program Executive Officers) every two weeks to discuss the status of programs within their purview. SAF/SQ also holds Quarterly Program Reviews for a deeper program analysis. During these quarterly reviews, the government program managers present the technical, schedule, cost, and staffing status, open risks and issues, upcoming activities, and an overall assessment of program health. Based on the data from the quarterlies so far—the latest in February 2023—we identified a few troubled programs to track more closely. For those programs, the program office provides a biweekly update on progress against a detailed schedule to get to a healthy status. Holistically, these reviews enable the space acquisition workforce to remain focused on delivering rapid, resilient, and integrated capabilities to our warfighters, on cost and on schedule.

In October of 2022, SAF/SQ issued strategic acquisition guidance to the workforce, outlining **Nine Space Acquisition Tenets**. The tenets form the basis of a new direction to transform our space acquisition approach and refocus our space acquisition professionals on addressing the threat in the next decade by emphasizing speed and program management discipline. The tenets are:

- 1) Build Smaller Satellites, Smaller Ground Systems, and Minimize Non-Recurring Engineering
- 2) Get the Acquisition Strategy Correct
- 3) Enable Teamwork Between Contracting Officer and Program Manager
- 4) Award Executable Contracts
- 5) Maintain Program Stability
- 6) Avoid SAPs and Over Classifying
- 7) Deliver Ground Before Launch
- 8) Hold Industry Accountable for Results
- 9) Execute – Deliver Capabilities that Work, and Deliver them on Schedule and on Cost

To emphasize how these tenets enable speed, SAF/SQ derived a simple formula for going fast in space acquisition which includes:

- 1) Build smaller systems
- + 2) Use existing technology designs to minimize non-recurring engineering
- + 3) Drive contract scope to 3 years or less from start to launch
- + 4) Use fixed-price contracts

= Mission Capabilities Faster to Our Warfighters

This simple formula is the cornerstone of our approach to build resilient architectures faster with innately integrated capabilities. Together, the tenets and formula provide the vision for how our space acquisition workforce is approaching a transformation to the process of delivering space capabilities to meet and outpace the growing threat posed by strategic competitors.

Further, thanks to Congress, SAF/SQ chairs the Space Acquisition Council (SAC) for the Department of Defense, and the CSO is a key statutory member. The SAC has been a valuable tool to ensure collaboration and integration while avoiding duplication of effort across the entire national security space enterprise across all departments. Additionally, SAF/SQ chairs the Acquisition Strategy Panel for all Space Force programs seeking acquisition strategy changes. This forum allows us to evaluate newly proposed space systems, contracts, and incentive strategies to ensure we optimize our approach to acquisitions and that our portfolio of programs remains concentrated on delivering resilient capabilities faster and more integrated with the warfighter.

SAF/SQ is committed to using all the tools and authorities Congress has provided, which are aiding us in speeding up space acquisition and delivering capabilities to the warfighter rapidly and effectively. We will continue to leverage Middle Tier of Acquisition to quickly identify, prototype, and field innovative solutions to our challenging problems. At the same time, we are using Other Transaction Authorities to increase program flexibility, as well as the pool of possible vendors. Overall, these tools and authorities enable us to use industry practices to move faster, utilize non-traditional companies, expand flexibility, and improve affordability. The priorities and tenets enable our acquisition force to develop and acquire capabilities our Guardians and warfighters need to maintain readiness and deter the threat posed by strategic competitors.

Space Force Readiness

More Resilient and Effective Space Capabilities

As the CSO recently testified, the Space Force is accelerating its pivot towards resilient satellite constellations, ground stations, networks, and data links; informed by transformational force

design analysis. Space Force readiness, and the Department's broader integrated deterrence emphasis, ultimately demands resilient space systems and capabilities that effectively deter both on-orbit and terrestrial threats. As such, most of the Space Force's on-orbit assets must be proliferated, disaggregated, and distributed.

Through effective and efficient resilience, the Space Force will not only ensure enduring access to space capabilities, but it will also disincentivize and deter targeted aggression. The President's FY 2024 budget request demonstrates the Department's significant, analytically-informed investments in resilient systems. Planned upgrades include military MW/MT, Space Data Transport, Command, Control, Communications, and Battle Management (C3BM) systems, and space-based targeting proliferated architecture that will be more resilient during a strategic attack.

As always, the Space Force will continue to work closely with DoD and IC stakeholders, as well as our allied and commercial partners, to develop and deliver a digital engineering ecosystem that enables the Space Force to rapidly mature innovative concepts into integrated solutions and deliver warfighting capabilities faster.

Force Design

A key element of readiness are the capabilities inherent in the systems the Space Force uses to execute its missions. The Space Force, primarily through the Space Warfighting Analysis Center, executes a force design process intended to assess future capabilities through the lens of operational need, counter-space threat, and cost.

Additionally, in implementing the National Defense Authorization Act for Fiscal Year 2022, the Secretary of Defense designated the CSO as the Force Design Architect for Space Systems of the Armed Forces. In this new role, the CSO presents the Secretary of Defense with coordinated space-mission force design recommendations for the Armed Forces. Such recommendations are informed by high-fidelity modeling and analysis which balance warfighting performance, resilience against potential adversaries, and affordability. Recommendations include a transition plan to position the Department to make programmatic and budgetary decisions related to science and technology investments, force development, and acquisition. Current force design priorities are space data transport and tactical targeting – both of which are vital to prevailing in high intensity conflicts.

Operational Test and Training Infrastructure

At its very core, Space Force readiness requires our systems and operators to be ready for full spectrum operations in a contested space domain. And while our organizational structures and processes increase our ability to assess and sustain readiness levels, the Space Force needs an appropriate infrastructure to adequately conduct test and evaluation, advanced training, and tactics development activities against a thinking adversary to effectively deliver readiness generation.

In previous testimony before this subcommittee, we described the Space Force's operating concept and core elements of its Operational Test and Training Infrastructure (OTTI). OTTI is an "umbrella" term, describing a collection of distributed, enterprise-wide test and training systems

and processes, effectively integrated and synchronized to establish and sustain combat readiness across the spectrum of conflict. It aggregates multiple program elements and their associated activities, programs, capabilities, and funding.

Space Force's current OTTI is a loose federation of systems that build proficiency and procedural currency for a benign environment – it does not build warfighting capacity demanded by the current and emerging strategic environment. The Space Force does not yet have the ability to present realistic threat-stimuli to missions specific trainers; conduct integrated – both intra-service and joint – training; or visualize and “experience” the domain.

That said, Congress's strong support for Space Force's OTTI efforts has greatly accelerated these priorities, and the Space Force continues to make significant strides in developing and implementing its planned OTTI architecture, governance structure, and resourcing strategy, which is appropriately reflected in the President's FY 2024 budget request and in the Department's Future Years Defense Program.

Readiness and Training

The Space Force continues to prioritize and advance our updated readiness, training, and force generation initiatives. The new Space Force Generation model, SPAFORGEN, reached Initial Operational Capability on October 1, 2022, and cycles Guardians through three phases to increase individual and overall force readiness. The “Prepare” and “Ready” phases afford Guardians with the time and capacity for training to develop the tools, skills, and capabilities necessary for mission execution in a contested domain against a thinking adversary. This includes both operational procedures and high-end training to certify forces for contested operations in space.

As part of SPAFORGEN, Space Training and Readiness Command (STARCOM) is making great strides to prepare space forces to prevail in conflict, if deterrence fails, through innovative education, training, doctrine, and testing. Last August, STARCOM completed the first and largest to-date of a new series of exercises that included both live and simulated events to test combat tactics of our Total Force including both Guardians and Air National Guard space professionals. As we move forward, STARCOM will continue to increase space-related content and engagement for Guardians in Basic Military Training (BMT); Non-Commissioned Officer Academy; United States Air Force Academy; Officer Training School (OTS); and Reserve Officer Training Corps.

Force Presentation to Combatant Commands

The Space Force presents space capabilities that underpin all instruments of our national power. Pursuant to law, the Space Force retains the responsibility to organize, train, and equip space forces. To that end, the Space Force generates and presents ready space forces to Combatant Commands to deter aggression and, if necessary, prevail in conflict.

Our SPAFORGEN model ensures that forces presented to Combatant Commands can execute missions and tasks and are equipped to make appropriate recommendations on the effective employment, task organization, operational synchronization, and command relationships of space forces. Unlike the previous force generation model, the new approach packages forces into

optimized capabilities-based elements and standardizes the way we present forces to the Combatant Commanders.

To ensure full integration and synchronization of space activities with other domains in combatant commands' areas of responsibility in 2022, the Space Force activated three new component field commands for U.S. Indo-Pacific Command, U.S. Central Command, and U.S. Forces Korea. Component field command Guardians provide space planning and employment expertise, as well as command and control for the combatant commanders.

Unit/Mission Transfers

In accordance with existing statute and congressional intent, the DoD continues to transfer fully mission-capable space operational units, support equipment, property, and related resources from other services and organizations to the Space Force with no mission degradation or adverse personnel impact.

In FY 2022, the U.S. Army transferred its Satellite Payload, Planning, Management, & Control function, which included five Wideband Satellite Communications Operations Centers, four Regional Satellite Communications Support Centers, Consolidated Satellite Communication Systems Experts, and 502 associated manpower authorizations (302 military/200 civilian). The transfer of this function and associated resources is directly in line with the USSF Military Satellite Communications mission.

Additionally, in accordance with Title 10, United States Code, Section 9086, the DoD successfully transferred the SDA to the Space Force. The Space Force continues to ensure SDA's seamless integration within the service and remains steadfast in its commitment to ensure adequate resourcing and manning.

Looking forward, in FY 2024, the United States Army intends to transfer its Theater Missile Warning Battlespace Characterization (TMW-BC) functions, including four Joint Tactical Ground Station (JTAGS) locations (Osan, Misawa, Al Udeid, Sigonella), one skill qualification Training Suite, the JTAGS Product Office (JPO), and 97 associated manpower positions to the Space Force. The transfer of this function and associated resources is directly associated with the Space Force's Missile Warning mission. The Space Force already operates the SBIRS constellation and Strategic Missile Warning ground infrastructure; adding the Theater Missile Warning function will consolidate global Missile Warning under one military Service.

Integration with Allies and Partners

Allies and Partners represent a significant advantage for the United States. Our strategic competitors do not have the potential for establishing the coalitions and cooperation that the U.S. can establish. This is especially true in the space domain. The Space Force continuously engages with our allied and partner spacefaring nations to guarantee shared military, civil, and industrial success in space. Especially as our competitors continue to demonstrate threatening actions within the space domain, it remains imperative that the United States deepen our existing ties with Allies and Partners to maintain space stability. As the CSO has stated, spacepower is a collective endeavor, and the Space Force is prioritizing partnerships most likely to deliver

combat ready forces and capability to allow the United States and our allies to deter aggression, and if deterrence fails, prevail in a fight.

Space Force is executing the CSO's Partner to Win Line of Effort which states we cannot succeed without robust joint, coalition, international, interagency, academic, and commercial partnerships. We are striving to eliminate barriers to collaboration in any form, to include over classification and incompatible systems. The Space Force must also prioritize direct collaboration and placing Guardians in positions where such collaboration can organically strengthen. To that end, in January 2023 the Space Force published its Guidance for Global Partnerships, which directs the service and all its components to evolve from data-sharing agreements to operations integration, payload sharing, and mission sharing, where appropriate. Further, the Space Force continues to lead international Space Engagement Talks, and efforts to share our force design analysis, which are identifying focused resource commitments that allow trusted partners to share the burden of delivering combat-ready space forces and the spectrum of worldwide capabilities.

Weapon System Sustainment

Space Force Weapon System Sustainment directly supports Space Force's ability to sustain the day-to-day readiness of 52 weapon systems performing Space missions, to include Sensing, Navigation, Satellite Communications, Space Domain Awareness, Battlefield Command & Control, and Space Control. The President's FY 2024 budget request supports missions to provide space capabilities to the joint force while balancing Service priorities and managing risk. This position takes a predictive planning and proactive approach to mitigating obsolescence as our future requirements continue to grow due to increasing costs for hardware, software, and cybersecurity maintenance driven by aging space systems.

Facilities and Infrastructure Investment

Space Force Facility, Restoration, Modernization and Military Construction total obligation authority enables the Service to prioritize requirements to reduce risk to mission and the force. Structural, electrical, and power improvements to operational facilities reduces risk to mission and enables our joint and coalition partners in the fight, while quality of life infrastructure and facility improvements reduce risk to the force by improving resiliency amongst our Guardians, Airmen, and their families. The Space Force derives almost all of its support from the Air Force, including logistics, security, medical services, and human resources; however, Space Force's ability to prioritize its unique requirements at our 14 installations, more than 70 sites, and other geographically separated units ensures we appropriately align responsibility, resources, accountability, and authorities for the Space Force to execute assigned missions as an independent service.

Space Force's top installation priorities include sustaining critical facilities and infrastructure that enable the full spectrum of missions—from launch and command and control to post-launch and into the operational phase of sustaining 52 Space Force Weapons Systems.

The President's FY 2024 budget request reflects an increase from last year due to the Service prioritizing projects that reduce risk to Space and Combatant Command missions at Pituffik Space Base, and the Eastern and Western Ranges to support Assured Access to Space. Moving

forward, the Space Force will continue to prioritize projects that increase facility and infrastructure resiliency and Service readiness.

Conclusion

The rich history of America's space endeavors is defined by determination, persistence, and willingness to innovate. Now is the time to invest in accelerating such innovation and fielding the capabilities to our warfighters to deter those who seek to disrupt such endeavors. We will strive to maintain access to, through, and from space in order to preserve the benefits that the domain provides for all nations.

The Department of the Air Force and the United States Space Force have made good progress in transforming our space architecture to be more resilient, more integrated, and more capable.

We must ensure that we field the greatest fighting force, systems, and capabilities necessary to deter potential adversaries from acts of aggression and, if necessary, defeat them in conflict. Our innovative approaches to space systems acquisition and integration will sustain our advantage in space and allow our Nation to pursue groundbreaking civil, military, and commercial capabilities.

As our strategic competitors, specifically China and Russia, continue to make significant space-related advances that seek to threaten our freedom of movement, maintaining our strategic edge has never been more critical. Destructive direct-ascent antisatellite missile tests, hypersonic and maneuverable missile demonstrations, and a host of dangerous behaviors by our strategic competitors require the Department of the Air Force and the Space Force to be prepared to protect and defend our national security interests in space – through a resilient, reliable, and effective set of space capabilities. Our competitors seem to have figured out speed. We must do the same.

Thank you to the Committee for your dedication to the Department of the Air Force and our United States Space Force. We look forward to your questions.