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BY THE SENATE COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON READINESS AND MANAGEMENT SUPPORT
UNITED STATES SENATE

DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE

PRESENTATION TO THE
SENATE COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON READINESS AND MANAGEMENT SUPPORT
UNITED STATES SENATE

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

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

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INTRODUCTION

Chairwoman Hirono; Ranking Member Sullivan; distinguished members of the subcommittee; thank you for another opportunity to testify on the current status of, and future plans for, the readiness of the U.S. Space Force. On behalf of the Secretary of the Air Force, the Honorable Frank Kendall, and the Chief of Space Operations (CSO), General Saltzman, I continue to appreciate this subcommittee's strong support as we develop and sustain the ready space forces our nation requires.

Space is a unique domain that is not only fundamental to our national security, but to our very way of life. And yet, the space domain has dramatically shifted to a contested environment, where our potential adversaries are increasingly active, aggressive, and disruptive. As a result, Congress created the Space Force to better protect our national interests and directed that it be organized, trained, and equipped to: (1) provide the United States freedom of operation in, from, and to space, (2) conduct prompt and sustained space operations, and (3) protect US interests in space.

However, our competitors continue to rapidly field space capabilities that threaten the United States' freedom of action and national security. While the world has witnessed the destructive and irresponsible nature of some of these threats, to include direct-ascent antisatellite tests, potential adversaries' daily activities in the space domain endanger and imperil our national security. To effectively support a comprehensive approach to integrated deterrence, the Space Force's lean and agile force posture must be prepared to respond, as necessary, to defeat such hostile activity. Simply put, to retain and improve U.S. advantages in the space domain, we must field the most resilient, effective, and ready space forces across the globe.

Readiness is ensuring our forces have the tools, training, and manpower to accomplish their critical functions. The Space Force is ultimately responsible for ensuring our Guardians are ready to accomplish their missions in an increasingly complex, congested, and contested environment. To meet that task, it is imperative that our force design, readiness standards, and test and training infrastructure adequately prepare our forces for the challenges they face today and are likely to face in the future.

While the Space Force has made significant progress over the past three years, there is still more we must accomplish. 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.

Underpinning these lines of effort is the critical need to be ready for the high-end fight. We need to deliver and field the forces and capabilities necessary to adequately deter and ultimately dominate potential adversaries.

DELIVERING 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 proliferation, the Space Force will not only ensure enduring access to space capabilities, but it will also disincentivize and deter targeted aggression. The President's Fiscal Year 2024 (FY) budget request demonstrates the Department's significant, analytically-informed investments in resilient systems. Planned upgrades include military Missile Warning, Missile Tracking, Space Data Transport, Command, Control, Communications, 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 Intelligence Community 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 (SWAC), 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 peer 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 peer-to-peer conflicts.

Operational Test and Training Infrastructure

At its very core, Space Force readiness requires our systems and operators to be ready for the full spectrum of 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.

When I last testified before this subcommittee, I 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.

The 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 competition and conflict 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 threats 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 US 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 Space Development Agency (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 Space Based Infrared System 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 reckless and dangerous actions within the space domain, it remains imperative to 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 or prevail in a fight.

The 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 the 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, and 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, the 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 its assigned missions as an independent service.

The 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.

THE GUARDIAN IDEAL AND PROGRESS TO A DIGITAL SERVICE

Talent Management

The Space Force continues to shape the Guardian experience and foster an organizational culture that empowers exercising mission command to secure American interests in space and contributing our unique space domain expertise in joint operations. The Space Force is setting the foundation to achieve the tenets of the Guardian Spirit, through the Space Force's human capital multi-pronged approach. First, through building a competency-based requirement system and inventorying all competencies and levels of mastery for each Guardian, the Space Force can make informed and connected development and assignment decisions, leading to greater Guardian involvement in their careers and greater mission accomplishment. Additionally, while we continue to develop a new performance appraisal system to focus on contribution to the team and mission, including multi-sourced input where appropriate, we are implementing a Guardian-centric bridging strategy for evaluations tying our values to mission accomplishment.

The Space Force will shift from managing people within prescribed career fields to managing positions based on the competencies and experiences needed to succeed. For instance, we have implemented beta test for aligning competencies and levels of mastery to requirements, and as part of managing talent, we conducted our first development team event for Master Sergeants bringing all Senior Non-Commissioned Officers in line with this concept. Eligible Guardians were able to self-nominate for critical positions and state their career desires, and commanders provided recommendations for each eligible Guardian as well. During the event, key enlisted leaders assessed each Guardian's demonstrated performance, the Guardian's potential, the best interest for the Guardian, their families, and the best interest of the service to match Guardians to key leadership and developmental positions. The inclusion of the Guardian's voice enables transparent choice architecture across the enterprise to meet both personal strengths and service needs.

Further, the USSF is in the process of establishing intermediate-level education and senior-level education programs in collaboration with a private university, culminating in a Master of International Public Policy degree starting in Summer 2023. The programs are being designed to meet service and joint professional

military education requirements and will be offered to USSF and sister service officers and civilians as well as international and interagency partners. This approach allows the Space Force to tailor its education for leaders for unique space related issues and establish a mechanism, whereby Guardians earn a degree from a recognized private university. The collaboration will enable greater capacity to offer STEM electives, opportunities for laboratory research, and increased access to a wider range of commercial space sector engagements along with the traditional elements of joint professional military education.

We expect leaders at every level to take bold, purpose-driven, and data-informed actions, while making full use of their team's diverse abilities to overcome challenges to accomplish our mission as set forth in the National Defense Strategy.

Space Digital Workforce

Because of its highly technical nature, the Space Force requires a workforce that retains the digital fluency to rapidly turn data into useful insights to accelerate innovation of operational and business activities. Digital aptitude remains essential to help lead the transformation to becoming an interconnected, innovative, digitally-dominant force in order to deter and defeat threats to space operations. To help achieve this goal, the Space Force continues to provide Digital University access to every Space Force member, including civilians, which incorporates curated digital content designed to establish a foundational level of fluency on modern digital topics.

The Space Force remains on the forefront of digital transformation to meet demand for existing and emerging need. The President's FY 2024 budget request builds upon our previous investments and sustains our commitment to creating a space digital workforce capable of meeting our joint warfighter requirements. To this end, the Space Force will continue to build a cadre of organic software coders to streamline software development and promote the adoption of software technology that will prove instrumental to Space Force operations, testing, and training.

THE WAY AHEAD

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 deter those who seek to disrupt such endeavors. We will not cede our unfettered access to the space domain.

In that effort, the Space Force will continue to prioritize readiness in all capacities. We need to 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 individual and enterprise-wide readiness will sustain our advantage in space and allow our Nation to pursue groundbreaking civil, military, and commercial capabilities.

As our potential adversaries, particularly China and Russia, continue to make significant space-related advances that broadly threaten our freedom of movement, maintaining space readiness has never been more critical. Antisatellite tests, hypersonic and maneuverable missile demonstrations, and a host of other dangerous and irresponsible behaviors require the Space Force to aggressively deploy effective deterrence mechanisms – including a resilient, reliable, and effective set of space capabilities.

To reiterate, the Space Force's overall readiness depends wholly on our people, equipment, and training. By retaining the optimal quantity and mix of personnel; fielding and protecting the right systems; and deploying basic, advanced, and continuous full-spectrum training, the Space Force will sustain the resilient, effective, and ready force our Nation requires.

Thank you for your continued leadership and support for the Space Force and our Guardians, and I look forward to working with this committee.