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SUBCOMMITTEE ON STRATEGIC FORCES
HOUSE ARMED SERVICES COMMITTEE
U.S. HOUSE OF REPRESENTATIVES

UNITED STATES SPACE COMMAND

PRESENTATION TO THE

SUBCOMMITTEE ON STRATEGIC FORCES

HOUSE ARMED SERVICES COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

SUBJECT: Fiscal Year 2021 Priorities and Posture of the United States Space Command

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INTRODUCTION

The Global Security Environment

Today's complex global security environment presents challenges more significant than we have seen in many years. As highlighted in our National Defense Strategy (NDS), we are facing the "reemergence of long-term, strategic competition characterized by overt challenges to the free and open international order." That formidable threat is particularly acute in the space domain. In the past, our ability to provide space capabilities – such as satellite communications and precision navigation and timing – was largely uncontested.. However, today, our potential adversaries have and continue to develop and field counterspace systems based on what they have learned over the past three decades of observing our success in space. Additionally, they understand the force multiplier space has become and are seeking to take advantage of those same benefits for their own forces. As a result, we can no longer assume that our space superiority is a given. Space is now a warfighting domain, formally acknowledged in the National Space Strategy approved by the President in March 2018. We must prepare to fight for space superiority, and if compelled to fight, we must win. We are ready for that fight today should it come, and we are moving rapidly to ensure we will sustain that readiness in the future.

Elevating the Space Warfighting and Organize, Train and Equip Functions

In August 2019, the United States established the United States Space Command (USSPACECOM) as our nation's 11th Combatant Command, elevating the space warfighting function from a component command of United States Strategic Command, to a singularly focused, independent Geographic Combatant Command. Additionally, in December 2019, the

United States established the United States Space Force (USSF) within the Department of the Air Force as the sixth branch of our Armed Forces, elevating space to be on par with land, air, and sea. In keeping with the structure directed by the Goldwater-Nichols Defense Reorganization Act of 1986, these streamlined, complementary organizations established military space functions to reflect our space warfighting mission imperatives. USSPACECOM, now with a distinctly defined Area of Responsibility beginning at 100 kilometers above mean sea level and extending indefinitely into space, is responsible for Joint and Combined warfighting in, from, and through space. The USSF will organize, train, and equip space warfighting forces for presentation to Combatant Commanders and their Joint and Combined forces. Together, these two lean and agile organizations form the core of our capability to protect and defend U.S. and allied interests in space.

THE MISSION

The USSPACECOM mission is to deter aggression and conflict, defend U.S. and allied freedom of action, deliver space combat power for the Joint and Combined force, and develop Joint warfighters to advance U.S. and allied interests in, from, and through the space domain.

Our primary objective will always be deterrence, with the goal of dissuading any conflict from beginning in, or extending to space. To do that effectively, we must deter from a position of strength. To that end, our singular focus is on warfighting grounded in combat effectiveness, and embodied by space warfighters driven toward mission execution through a culture of excellence. In short, USSPACECOM is one unified team with combat ready forces prepared to fight for and preserve United States and allied space superiority.

The USSPACECOM mission set, born from clear national-level strategic guidance, informed by Joint mission analysis, honed through the Joint planning and war-gaming process, and synchronized across all combatant commands, provides the framework through which we ensure United States and allied space superiority. We will build to Full Operational Capability (FOC) in the following four focus areas:

Deter Aggression/Conflict: USSPACECOM strengthens national deterrence through the provision of space warfighting options that preserve the United States and allied competitive advantage, and promote security and stability.

Defend U.S. and Allied Interests: If deterrence fails, USSPACECOM, in coordination with strong allied and Joint force commanders and inter-agency partners, will lead the protection and defense of our Combined interests in the space domain.

Deliver Space Combat Power: USSPACECOM is committed to providing and expanding space combat power to enable Joint and Combined force success.

Develop Ready and Lethal Joint Warfighters: USSPACECOM will improve the development of space operations forces and capabilities to enhance space warfighting readiness and lethality while accelerating the integration of space capabilities into other warfighting forces.

THE THREAT – Increasing Scope Scale and Complexity

Potential adversaries are determined to negate the military and economic advantages the United States and its allies have enjoyed for decades, developing capabilities and behaving in ways that

have turned space into a warfighting domain. They seek to exploit our reliance on space-based systems that fuel the American way of life, and the American way of war. As a result, it is imperative that we acknowledge this shift, and prepare accordingly, just as we do in the air, land, sea, and cyber domains.

Peer and Near-Peer Competitors

China. China's aggressiveness in civil and military space advancements is unmatched among peer competitors. They continue to field a robust and growing fleet of remote sensing satellites and space surveillance capabilities, while improving their space launch systems to achieve quick-response deployment of low-earth orbit small satellites.

In 2015, China merged their information warfare forces into a new Strategic Support Force, seeking to advance space and counterspace capabilities. They are developing sophisticated on-orbit counterspace systems capable of damaging, disrupting or destroying satellites as far out as geosynchronous orbit. Finally, China has a fleet of jammers capable of targeting reconnaissance platforms, disrupting military communications and our Global Positioning System satellites, as well as ground-based lasers capable of disrupting or damaging satellite sensors in low earth orbit. The United States' clear advantage in space, including access to space, is eroding.

Russia. Recognizing the significance of space in future conflicts, Russia continues to modernize its space capabilities to neutralize our advantage. In 2015, they created the space superiority-focused Russian Federation Aerospace Forces, and invested in space-based intelligence, surveillance and reconnaissance, space launch vehicles, and space-based position, navigation and timing capabilities. Russia views counterspace capabilities as essential for disrupting U.S.

command and control, communications, and intelligence capabilities, and is developing ground-based mobile missile systems that threaten low earth orbit assets. Additionally, they are likely developing laser weapons to disrupt, degrade, or damage satellites and sensors, as well as operating on-orbit satellites which have demonstrated behavior consistent with the characteristics of weapon systems.

To amplify, last November the Russian government launched what they describe as an “inspector” satellite that has since been detected maneuvering and testing near a U.S. government satellite. This new satellite displayed characteristics similar to a Russian satellite launched in 2017 that eventually deployed a high speed projectile into space. In any other domain, similar behavior would be interpreted as potentially threatening, and these behaviors do not reflect the behavior of responsible space faring nations.

North Korea, Iran, and Other Asymmetric Threats. Other less capable, but equally aggressive competitors continue to advance their own ability to threaten space using cyber-attacks, jamming, and electronic attacks with the objective of disrupting, denying, deceiving or degrading our space capabilities, while holding our infrastructure at risk. Both North Korea and Iran maintain independent space launch capabilities as avenues for achieving nascent satellite placement and testing ballistic missile technology.

Competitors and potential adversaries will continue to target vulnerabilities tied to friendly reliance on space. Our role is to prevent them from being successful in those endeavors.

USSPACECOM PRIORITIES

To execute our assigned missions and continue to outpace our closing adversaries, we must address the inevitable challenges of a new combatant command. As we build this command our priorities are fully nested under the Department's priorities of 1) Building a more lethal force, 2) Strengthening Allies and Attract New Partners, and 3) Reforming the Department.

USSPACECOM is building necessary structures for combat effectiveness, adapting and developing combat operations for a new domain; strengthening partnerships with the Intelligence Community, our Allies and Commercial Industry; and solidifying a warrior culture.

Building a More Lethal Force

Our most immediate priority is to fully assume responsibility for the space missions previously assigned to United States Strategic Command and execute those missions without degradation. Additionally, our Unified Command Plan assigned missions have a much sharper focus on conducting offensive and defensive operations, protecting and defending U.S. and partner satellites, and developing Space Warfighters.

Operational Components

Combined Force Space Component Command (CFSCC).

The newly established CFSCC, headquartered at Vandenberg Air Force Base, provides space combat effects to the Joint and Combined Force, while executing enduring, no-fail space effects missions without degradation while rapidly evolving to meet emerging missions in the space domain. This combined command represents a first for our nation and amplifies the growing importance of working with our allied partners. The CFSCC now delivers seamless combat effects through four joint centers. The Combined Space Operations Center is the focal point for

the operational employment of worldwide Combined space forces, and provides the integration of space power into global military operations of every conceivable type. The Joint Navigation Warfare Center focuses on ensuring that position, navigation, and timing data remains accurate and available to the millions of worldwide civil and military users, while providing PNT superiority capabilities for the nation. The Joint Overhead Persistent Infrared Center ensures exquisite USSPACECOM and Intelligence Community collection capabilities continue to provide the information that enables unmatched U.S. overhead early warning superiority. Finally, the Missile Warning Center ascertains and rapidly disseminates worldwide missile launch data, ensuring our warfighters, missile defenders and National Command Authority can respond to the full array of missile threats. These organizations are leading the way in addressing a host of emerging space-based challenges and issues such as the rise of mega-constellations, the emergence of hypersonic technology, global satellite communications, friendly force tracking and sensor management.

Joint Task Force – Space Defense (JTF-SD).

A contested space domain requires new thinking in planning, integrating and executing operations in an operating environment which demands a laser-focused organization. The newly formed JTF-SD, located at Schriever Air Force Base, is a fully Joint and interagency organization that brings Department of Defense (DoD) and Intelligence Community (IC) authorities, mission partners, and commercial systems to the fight. This critical joint command represents another first for our nation. It synchronizes planning, conducts experiments and exercises and supports synchronized space superiority through Battle Management Command and Control. It conducts space superiority operations, supports deterrence, defends our space

capabilities, and provides options to counter potential adversaries in the space domain. It is home to a warfighting-focused operations center, the National Space Defense Center.

JTF-SD has already taken great strides in improving mission partner collaboration by implementing an Operations Order tri-signed by the JTF commander, senior IC representatives and the National Reconnaissance Office (NRO) Mission Operations Division Director. The Intelligence Community will now take direction from the USSPACECOM Commander in order to protect and defend their capabilities. JTF-SD is conducting exercises with the NRO to refine this critical relationships, and is executing three Sprint Advanced Concept Training events involving multiple DoD, IC, and interagency partner organizations to mature the space superiority mission.

Integrated Planning Elements (IPEs).

In building a more lethal force it is an imperative that we integrate effectively with our combatant command partners. The interdependence between combatant commands, consistent with the Chairman's Joint Concept for Integrated Campaigning, is at an all-time high.

USSPACECOM plays a critical role in this global integration.

Immediately upon establishment, USSPACECOM began building and embedding IPEs into the Headquarters of our fellow Combatant Commands. IPEs provide an expert space presence on combatant command staffs to integrate capabilities and effects into planning and operations, synchronized with the timing and tempo of the supported command. These teams, currently established at USSTRATCOM, USEUCOM, and recently providing support to INDOPACOM during the Global Integration Exercise, are already delivering enabling support and impactful

effects, filling a Joint space expertise gap at the Joint combatant command level. We will continue to build these game-changing IPEs, establishing them globally throughout 2020.

Developing Joint Space Warfighters

A critical enabler to increasing our lethality is the development of joint space warfighters. It is clear that a warrior ethos is a combat enabler. We must take our existing space warfighting culture, established by the first USSPACECOM, honed in the Cold War, and hardened in several conflicts since, and adapt it to today's strategic environment. To further cultivate that essential warrior ethos among our cadre of space operators, we regularly participate in and drive advanced, coalition-integrated exercises and rehearsals such as the Schriever Wargame, USSF's Space Flag, and JTF-SD's Space Defense Sprint Advanced Concept Training. These events push our operators to resolve the complex challenges of deterring and defeating adversary aggression while providing combat effects in, from, and through space. The concepts developed must translate into game changing tactics we can employ today and enhance for tomorrow.

The National Defense Strategy Commission recommended developing "a space cadre that ensures an enduring focus on space capabilities" as part of the overarching effort to build "a more lethal and ready force." The ability to fight and win in the new warfighting domain is the direct result of our investment in technologically advanced systems, but is assured by the outstanding Soldiers, Sailors, Airmen, Marines, and Space Force professionals who plan for, prepare and operate these platforms. Our warfighters are the real source of USSPACECOM's combat power, and we are deliberate in our process to attract, develop, educate, and retain warrior-minded space experts.

Strengthen Allies and Attract New Partnerships:

The United States cannot preserve the peaceful use of space unilaterally. Retaining space superiority requires a combined approach. Not only do partners bring critical resiliency and burden sharing, teaming with allies and the commercial sector also helps strengthen deterrence by complicating a potential adversary's cost-benefit calculations. USSPACECOM remains committed to incorporating enhanced government-commercial relationships and international collaboration with key allies and partners while leveraging commercial space technology. We have accelerated and expanded allied participation in space operations, exercises, war games, and education because America has always been stronger when working with our allies and partners. This past year we have expanded our international partner training opportunities by over 577% percent. We must continue to broaden and strengthen those partnerships, even as we recognize the incredible progress which has been made through the establishment of Operation Olympic Defender, our day-to-day named operation for USSPACECOM, which now for the first time includes opportunity for combined participation.

USSPACECOM's Combined Space Operations Center now incorporates representatives from Canada, the United Kingdom, and Australia into its activities and daily battle rhythm. We enhanced our Multi-National Space Collaboration Office at Vandenberg AFB to empower Liaison Officers from Germany, France, and the United Kingdom in order to align policies and TTPs. We are actively working to expand this office by adding Japan, Italy, and South Korea to our collaboration efforts. This year we also established a Combined command and control facility focused on planning and executing combined special access program capabilities. This is another first for the Department of Defense.

In November 2019, I traveled to Brussels and briefed the NATO Military Committee on the need for greater cooperation, collaboration, and shared norms of responsible behavior for space operations. A month later, President Trump and other NATO leaders declared space "an operational domain, recognizing its importance in keeping us safe and tackling security challenges, while upholding international law." Further, we are working with NATO's Supreme Allied Commander Europe and Supreme Allied Command Transformation and their staffs on ways to better integrate USSPACECOM support into NATO operations.

U.S. leadership in space is clearly resonating across the globe. France established its own space command in September, 2019; the United Kingdom has elevated space within their Ministry of Defense; and Japan has announced plans to build a space organization within their Self Defense Force. In November 2019 and February 2020, Germany and France, respectively, formally joined our Combined Space Operations Council.

We have expanded Shared Early Warning (SEW) agreements with nine international partners, including NATO, Israel, Japan, Jordan, Kuwait, Saudi Arabia, Republic of Korea, Taiwan, and the United Arab Emirates. We have also broadened SATCOM agreements with Australia, Canada, Netherlands, Denmark, Luxembourg, New Zealand, and the United Kingdom. In 2019, we conducted sixteen field experiments with several nations, including Australia, Canada, France, Germany, Italy, Japan, South Korea, Spain, and the United Kingdom.

In addition to our rapidly expanding international partnerships, we are partnering with the Department of Commerce to leverage private sector innovation to keep pace with the quickly evolving capabilities in the space domain. What was once slowly acquired, government-developed technology is now more quickly driven by industry. We are expanding our

commercial partnerships to harness technology and effective business practices and are increasing collaboration with the expansion of the CSpOC's Commercial Integration Cell to eight companies to optimize our network of satellite communications partnering and space situational awareness data.

Reform the Department.

The establishment of both United States Space Command and the United States Space Force are critical Department of Defense reforms to meet the challenges delineated in the National Space Strategy and the National Defense Strategy. We are committed to building these organizations in a way that maximize agility and lethality and allows us to respond across great distances in tactically relevant timelines.

We are aggressively working towards a conditions-based Initial Operational Capability (IOC) declaration for USSPACECOM. We have refined our roles and responsibilities, strengthened our partnerships, and have identified the needed authorities necessary to conduct our UCP assigned missions. We are in the process of finalizing our service components and onboarding the staff necessary to achieve IOC. Full Operational Capability will occur when combat forces are fully integrated internally, capabilities are fully established, and facilities are in place and functioning.

THE WAY AHEAD

In the short time since establishment, USSPACECOM has made remarkable progress. We are establishing, aligning, and normalizing new and existing command and control nodes, baselining and integrating existing forces and weapons systems while advocating for new ways to meet emerging threats. We have designed our operational battle rhythm to synchronize with our partner combatant commands' timing and operational tempos worldwide.

In 1957, General Bernard Schriever first articulated his prescient vision of space as a warfighting domain, telling a scientific gathering, "In the long haul, our safety as a nation may depend upon our achieving space superiority. Several decades from now, the important battles may not be air battles, or sea battles, but space battles. We should be spending a certain fraction of our national resources to ensure that we do not lag in obtaining space supremacy."

The fiscal year 2019 and 2020 budgets represented a significant and critical pivot in U.S. strategy to protect and defend our space capabilities. The fiscal year 2021 space budget represents the Department's commitment to making wise, risk-informed, space superiority investments and advancements. This funding is intended specifically to counter a fast moving threat. Our investments will increase our ability to deter adversaries, and if necessary, to fight and win in space by ensuring we can deliver space capabilities to the Joint and Combined force, defend our nation's most vital space assets, and develop the Joint warfighters we need today and for the future.

I thank the Committee for your leadership and support; together we will build on our legacy of readiness and strength to preserve the peace and ensure American prosperity.