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BY THE SUBCOMMITTEE ON STRATEGIC
FORCES AND SUBCOMMITTEE ON INTERNATIONAL
DEVELOPMENT, INTERNATIONAL ORGANIZATIONS
AND GLOBAL CORPORATE SOCIAL IMPACT
UNITED STATES HOUSE OF REPRESENTATIVES

DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE

PRESENTATION TO THE
HOUSE ARMED SERVICES COMMITTEE & HOUSE FOREIGN AFFAIRS COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: Creating a Framework for Rules-Based Order in Space

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INTRODUCTION

Chairman Cooper, Ranking Member Turner, Chairman Castro, Ranking Member Malliotakis, and distinguished members of the Committee. Thank you for the opportunity to testify today in my capacity as Commander, Space Operations Command (SpOC), on the U.S. Space Force (USSF) perspective towards creating a framework for a rules-based order in space and development of voluntary, non-legally binding norms and responsible behavior in the space domain.

The United States is a space-faring nation. We have long understood that our nation is strongest economically, militarily, and diplomatically when we have access to, and freedom of operation in space. Consistent with the 1967 Outer Space Treaty, the policy of the United States is that “[a]ll nations have the right to explore and to use space for peaceful purposes and for the benefit of all humanity.” In that regard, the United States believes that is the shared interest of all nations to act responsibly in space to ensure the safety, stability, security, and long-term sustainability of space activities.

Unfortunately, potential adversaries have taken note of the enormous civil and military benefits the United States and other nations are now deriving from the peaceful use of outer space and they are developing capabilities aimed at denying access to and freedom of action in space. We now acknowledge we can no longer take this vital national interest for granted; it must be secured. The rapid advancements of potential adversaries’ capabilities to threaten the freedom of operation in space for the United States as well as our allies and partners, must be countered with immediate improvements to our space defense architecture and capabilities. Adversaries like the People’s Republic of China and the Russian Federation are aggressively developing weapons to deny or destroy our nation’s space capabilities in a crisis or conflict. Both Russia and China have ground-based laser and electronic warfare systems capable of temporarily dazzling, permanently blinding, or jamming our satellite systems. China has invested in satellite grappling technologies, like the Shijian-17 satellite’s robotic arm, which could be used in future conflicts. Russian systems like the COSMOS 2519 and COSMOS 2542 satellites provide on-orbit weapons system designed to kill satellites kinetically in low-Earth orbit. The United States would prefer that conflict not begin in, nor extend to space, but we will be prepared to protect United States interests in space, just as we do in all domains.

The USSF was established to organize, train, and equip space forces to preserve freedom of action, enable Joint lethality and effectiveness, and provide independent options to U.S. national leadership, allies, and the Joint Force capable of achieving national objectives. Our responsibilities include developing Guardians, acquiring military space systems, maturing the military doctrine for space power, and organizing space forces to present to our Combatant Commands as we ensure freedom of operation in space. United States space capabilities coupled with international partnerships have become a cornerstone of deterrence, not just in space, but in every domain. Without freedom to maneuver in space, our deployed forces, our homeland, and our allies across the globe are at greater risk.

It is important to note that while the USSF provides capabilities and resources, it is U.S. Space Command (USSPACECOM) who executes missions in the space area of responsibility. To that end, SpOC is the primary force provider of space forces and capabilities for USSPACECOM, other Combatant Commanders and the Joint Force, and we provide significant capabilities to international partners and the U.S. Interagency. This is accomplished through eight mission-oriented Space Mission Deltas that prepare and present combat-ready forces across a variety of mission sets. Space Delta 5 represents the USSF command and control organization within SpOC that is presented to USSPACECOM and the Combined Force Space Component Command (CFSCC) to accomplish the Combined Space Operations Center (CSpOC) mission. The CSpOC, based at Vandenberg Air Force Base, California, reports to the CFSCC and executes the operational command and control of joint space forces to achieve theater and global objectives. Under the leadership of Major General DeAnna Burt, the Deputy SpOC Commander is dual-

hatted as Commander of USSPACECOM's CFSCC. It is in this role CFSCC plans and executes space operations through four distinct and geographically dispersed operations centers, including the CSpOC; the Missile Warning Center at Cheyenne Mountain Air Force Station, Colorado; the Joint Overhead Persistent Infrared Center at Buckley AFB, Colorado; and the Joint Navigation Warfare Center located at Kirtland AFB, New Mexico.

Through CFSCC, we enable USSPACECOM's ability to provide support to terrestrial forces and integrate with commercial partners, while supporting defense of the domain against real and perceived aggression. While it is not in the purview of USSPACECOM or the USSF to lead in international venues in the development of voluntary norms of responsible behavior, our collective role in this regard remains unchanged: we have always – and will continue to – operate all of our satellites of various constellations in a safe, professional, and responsible manner, and have for decades. As a global partner to our sister Services, interagency partners, allies, academia, and commercial entities, the USSF is committed to being a good teammate with all our stakeholders. We are determined at SpOC to lead by example through the forces we organize, train, and equip. We support the Department of State's whole-of-government approach to the development of a framework for responsible behavior in outer space, and as that framework continues to develop, will smartly fall in line.

THE IMPORTANCE OF NORMS IN THE SPACE DOMAIN

The absence of features equivalent to national borders in space means there is no sovereign territory separating forces. While separation of terrestrial forces creates opportunity for early warning, defense by maneuver, and deterrence by credible escalation capabilities, the current lack of equivalent separation in space allows actors to operate at any location in the domain and at any distance from other spacecraft. This may allow a potential attacker to maneuver close to other space assets, from where they can execute a "first mover" surprise attack. This creates a potentially destabilizing "use it or lose it" dilemma that accelerates escalation. This risk could be mitigated by shared understandings among space actors, including through voluntary, non-legally binding best practices, standards, and norms of responsible behavior.

Every interaction in space, whether it is driven by military, government, civil, or commercial entities, creates a pattern of behavior that can communicate intent, which can be evaluated against a behavioral baseline built on best practices, standards, and norms. USSF space domain awareness capabilities allow the Joint Force to execute the mission of determining intent as communicated by words and behaviors. Alignment between what an actor claims to be doing and what we observe, such as who initiates movement into closer proximity with another spacecraft, or who does – or does not – respond to warnings in safe, professional, and responsible manner, refines our understanding of an actor's intent. As a participant in Department of Defense (DoD) Responsible Behaviors Working Group, the USSF will actively use interactions, consistent with applicable law and policy, to shape and exemplify responsible behaviors that enhance national security and reduce opportunity for a competitor or potential adversary to misinterpret our intent.

THE DEPARTMENT OF DEFENSE IS FOCUSING ON RESPONSIBLE BEHAVIOR

In 2020, the Department of Defense (DoD) established the Responsible Behaviors Operational Planning Team, a cross-functional team gathering space stakeholders across the Department, to include several divisions of the USSF. Under the leadership of the Under Secretary of Defense for Policy, the USSF has and USSPACECOM have participated in a review of military space operations during peacetime. Drawing from these well-established practices, the team is in the process of developing and documenting a set of DoD-focused responsible behaviors with which the DoD is and intends to remain consistent during the conduct of space operations. After this initial set of broad responsible behaviors is

developed, the USSF anticipates collaborating with USSPACECOM to create and coordinate specific implementation guidance. While still in development, it is our hope that these foundational concepts on responsible behavior will eventually guide the development of some voluntary, non-legally-binding transparency and confidence-building measures or guidelines of responsible behavior in space during peacetime, and ultimately form the foundation for establishing norms of responsible behavior. For our part, the USSF will actively use our on-orbit interactions, consistent with applicable law and policy, to exemplify peacetime responsible behaviors that enhance national security, support stability, and reduce the opportunity for a competitor or potential adversary to misperceive or misinterpret our intent in a way that could create the opportunity for escalation.

USSF STRATEGIC APPROACH

The Defense Space Strategy, approved by the Secretary of Defense in June 2020, calls for promotion of standards and norms of behavior in space favorable to U.S., allied, and partner interests. Furthermore, the 2020 National Space Policy made significant strides in specifying Department of State (DOS) responsibilities toward strengthening the United States leadership in space. The 2021 Interim National Security Strategic Guidance affirms that the United States will lead in promoting shared norms and forge new agreements on outer space. It is in this context, and in collaboration with DOS, that the DoD plays a critical role in preserving the safety, stability, security, and long-term sustainability of space activities. As a military organization, we do not have a primary role in international fora in the development of a framework for responsible behavior in space; however, it is the position of the USSF that rules on safe and professional conduct would be immensely helpful toward our mission to protect the U.S. and our allies in, from, and to space.

Under the leadership of the Secretary of State, the USSF will continue to support DoD's participation in the whole-of-government approach to develop preferred voluntary, non-legally binding norms of responsible behavior in space through our efforts at SpOC. We anticipate such norms contributing to the safety of the domain by reducing the risk of accidents and mishaps, contributing to the sustainability of the domain, and promoting freedom to operate in space. Finally, norms must contribute to the stability of the domain by providing enhanced indications and warnings and informing Commanders' decisions regarding an actor's hostile intent.

When space was less congested, collaboration with foreign partners was not a prerequisite of security. Today, evolution of the security environment requires greater interoperability with partners and allies, many of whom have already integrated with U.S. combat capability in other domains. The USSF also supports a multi-national approach by partnering with allies and other like-minded space faring nations to encourage stability in the space domain. We are already working with like-minded allies and space-faring nations through organizations such as the CSpOC to discuss and review how we can align our operations in space to develop and promulgate concepts for responsible space operations. We also use efforts such as the Schriever Wargame Series to test these principles in the face of rapid changes in technology helping to ensure the practices we would like to see adopted as guiding principles will endure in the coming years and decades. Some of these discussions at the military-to-military level can be challenging as we work with different actors with varying capabilities and differing interpretations of international law, including space law. Yet we are finding that, collectively, we more often than not can agree on what constitutes responsible behavior, demonstrate and message responsible behavior, and boldly 'call out' irresponsible behavior. Leveraging multilateral efforts to internationalize U.S. preferred norms of behavior will only strengthen our position on the global stage.

THE WAY AHEAD

The Department of Defense has been the leader in military space operations since the dawn of the space age. Throughout its history, the Department pursued its space mission while ensuring and maintaining the safety, security, stability, and sustainability of the domain. In fact, seeing a need to help keep space safe, the former Air Force Space Command (now U.S. Space Force) has partnered with U.S. Strategic Command (now U.S. Space Command), for many years, with the support of Congress, to provide orbital conjunction assessments to any space owner/operator around the globe who provides their contact information, while also making available spacetrack.org to create transparency in the tracking of tens of thousands of objects on orbit. As more actors come to space, the domain is changing, with an increased risk of collisions, as well as miscalculations or misunderstandings. It is incumbent on the Department to continue space leadership through demonstrating and acknowledging responsible behavior in space.

In support of DoD and with our teammates across the federal government, the USSF will continue to promote and inform on how we establish, partner, shape, and leverage responsible behavior in space. Our Service's inception brings the unprecedented opportunity to integrate organizational design while creating new military options with the Joint Force, interagency, industry, and especially our allies and partners. Communicating and demonstrating responsible behavior will be a part of such a strategy.

I thank Congress for your leadership and support. We are eager to work with your respective committees on a Rules-Based Order in space needed to secure our Nation's vital interests.