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THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF  
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BEFORE THE  
HOUSE ARMED SERVICES COMMITTEE  
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Chairman Thornberry, Ranking Member Smith, and distinguished members of the committee, I am honored to join with you today to present my views on space warfighting readiness. I am especially pleased to be here with my two long-time colleagues and want to take this opportunity to thank the members of the committee for your leadership on these important matters. As I begin, I want to stress that the views I express today are mine and do not represent the Department of Defense, United States Strategic Command, or the United States Air Force.

Mr. Chairman, the United States is perilously close to losing the significant advantages that come from being the world's leading spacefaring nation, and time is not on our side. Decades of dedicated investment in space have yielded important warfighting and intelligence collection benefits for the United States and our allies and partners. As I often said while in uniform, space is woven into the fabric of our scientific endeavors, information age economy, and national security. Space capabilities make it possible for US policymakers to know critical things about our world and adversaries that they would otherwise not know. Space capabilities enable the American way of warfare by making it possible for US military commanders and forces to see the battlespace more clearly, communicate with certainty, navigate with accuracy, and strike with precision.

However, our adversaries and potential adversaries have noted these significant advantages and have moved aggressively to field forces that can challenge our space capabilities from the ground, through cyberspace, and in space. From simple (and widely available and affordable) GPS jammers in the hands of extremists to highly sophisticated anti-satellite (ASAT) weapons in the hands of near-peer competitors like Russia and China, today's

military commanders are facing serious threats in a domain that is increasingly congested, contested, and competitive. Our space advantages have eroded and will continue to do so if action is deferred or delayed.

No one should be surprised. The threat that the intelligence community and military commanders have warned of for many years has arrived and is growing. It may have come a bit faster than some predicted, but it arrived nonetheless and, while there are many reasons for why we are seemingly behind in our response, our energy and resources must be focused on making the necessary improvements in a timely way.

Deterrence is always the preferred outcome, and our ability to deter a conflict that begins in or extends into space is based on our readiness to fight such a conflict. While the US has never sought to wage war in space, deterrence credibility is diminished if adversaries believe they can gain an advantage by attacking US space assets. I believe classic deterrence theory applies to space; adversaries will be deterred if they believe they cannot achieve their objectives, will suffer unacceptable consequences if they try, or both.

This is not the first time the US has had to consider challenges to our space capabilities. During the Cold War, we expected and planned for the Soviet Union to employ its significant capabilities (to include a direct ascent ASAT) to disrupt or destroy our space assets. Although there are lessons to be applied from that era, today's problem is far more complex and potentially far greater in impact. Given our dependence and that of our allies and partners on space, the loss of critical assets today could prove decisive to our ability to successfully prosecute a military campaign. It is also possible (perhaps highly likely) that hostilities might

begin in space or against ground-based space assets in an ambiguous way, and as a precursor to terrestrial or conventional action. In any case, adversaries are developing counter-space capabilities as part of sophisticated strategies designed to degrade or deny US advantages in global awareness and power projection.

As a result, the US must be prepared to plan and conduct complex operations in space that involve joint, interagency, and combined (allied) capabilities and forces in the context of broader commercial, non-governmental, and international actors and interests. While being mindful of the unique needs associated with space, space operations must integrate seamlessly into the multi-domain operations US military commanders will have to conduct to achieve their objectives. We should not be preparing to fight (and therefore, deter) an isolated “space war” as some headlines would suggest. Space is an integral component of our warfighting structure and challenges to our space capabilities must be addressed within the context of that structure.

I think it’s helpful to frame today’s space challenges in non-space terms. For example, I believe we can find and adopt a conceptual way ahead for space if we examine past challenges to our air or maritime superiority. Broadly speaking, in those cases the US formed effective policies and strategies, assigned the problem to a responsible warfighting commander with appropriate authorities, and turned to the military departments to provide forces ready to fight and win in the face of the new threat. This formula for success is well known and understood and applicable to the threats we are facing for space.

As the committee knows, there is a lot of positive work underway to address the shortfalls; much of it stimulated by your interest. I know many steps have been taken over the

last several years and more are underway. What follows is my perspective with acknowledgement that many, perhaps all, of these steps are already in work at some level.

Policy and Strategy: National leaders in the Executive and Legislative Branches must align on a cogent, comprehensive plan of action as well as the ends, ways, and means to implement that action plan. The national security space (NSS) enterprise exists within the overall national space enterprise and its success is linked to the viability and vitality of that enterprise. A focused, balanced (government and commercial), and energetic national program is the foundation to ensure the US retains its space leadership role and its ability to provide the cutting-edge capabilities needed for national security, scientific and technological advancement, and economic growth.

Consistent with prior administrations of both political parties, the current National Security Strategy recognizes that unimpeded access to and use of space is a vital national interest and notes that the US will respond to threats to our vital national interests in space “at a time, place, manner, and domain of our choosing.” While sound policy, to effectively deal with a conflict that begins or extends into space this general policy must be implemented in a manner that is helpful to commanders in operational planning and execution.

Policymakers must work with commanders to develop strategic intentions and political-military objectives that drive space planning and course of action development, provide views on matters like hostile intent and actions, and concepts of collective self-defense and responsibility to protect. Further, policymakers and commanders must assess whether modifications are needed to the national and military planning and decision-making processes

to enable operations with relevant speed and agility. Finally, given the interagency (and, increasingly, commercial) nature of the US national security space enterprise, policymakers must carefully identify and address barriers to effective planning and execution to include security policy, clearance processing, and information sharing.

Authority and Responsibility: Typically, two categories of authorities are discussed related to space: operational and acquisition. Regarding operational authorities, given the multiplicity of actors involved in today's military operations (including space) it is important for commanders to achieve a common understanding of authorities vertically across organizations and horizontally across mission partner organizations to achieve unity of effort. It is also important to ensure space operational authorities are "normalized", so space forces are fully integrated into the joint force with appropriate rules of engagement. To ensure unity of effort, it is also important to clarify the relationships and responsibilities among the Commander, US Strategic Command and other US government space operators once hostilities in space are imminent or underway. Regarding acquisition authorities, it is important to align authorities with service responsibilities and to delegate those authorities to the lowest feasible level.

Operational Concepts: Countering an adversary's efforts to deny our space capabilities within or even outside a conflict begins with an operational concept (CONOPS). Such a CONOPS would address the critical missions and tasks, the broad ways and means the force will use to accomplish them, organizational relationships, supporting and supported relationships (interagency, joint, multi-national), and information flow and exchange requirements. Ultimately, a CONOPS is the critical element in the planning process, is inextricably linked to planning, and drives the formulation of technical solutions, capability development, and

resource allocation. Bringing the ongoing space CONOPS work to conclusion and updating joint force CONOPS to account for degraded or denied space capabilities are complementary, high priority activities.

Organizational Structure for Warfighting: In my view, today's joint warfighting structure is appropriate and adequate to prepare for and fight a space-related conflict. It is in the combatant commands where all the pieces are brought together that form the nation's warfighting capability. As a Combatant Commander, the Commander US Strategic Command has the necessary responsibility and authority to organize his command for warfighting effectiveness, develop plans and courses of action, conduct exercises, exercise command authority over assigned forces and establish relationships with entities over which he doesn't have command authority (unity of effort). Most importantly, this is the same process used for land, air, and sea. Collaborative planning between Combatant Commands and among the relevant US government and commercial space organizations is a critical step that must be pursued with high priority. Updated plans can then be trained and exercised with realism; including allies and commercial entities.

Capability Development and Acquisition: Forces must be equipped and trained to fulfill their mission responsibilities in the face of determined adversary action against space assets. Capability architectures (not just space architectures) must become more resilient and all forces must be prepared and equipped to operate in an environment that assumes some degradation of space assets (e.g., communications and GPS). Faster acquisition, leveraging commercial capabilities, better integration with allies and coalition partners all play a role in addressing today's shortfalls.

In my view, we should move quickly to create a rapid acquisition process for space and continue to increase resources devoted to space situational awareness, C3, protection and resilience as a matter of national priority. The services must collaborate to develop and deploy resilient and defensible mission architectures and fully leverage commercial capabilities and opportunities.

Mr. Chairman, you asked for my perspective on the current readiness of US forces to succeed and successfully operate in a conflict that begins in or extends to the space domain. In summary I think we are not yet where we need to be, but I am encouraged by the focus and commitment I see from the Congress and the Executive Branch, and by the sense of urgency I see from my uniformed colleagues. But getting to where we need to go requires a priority shift and a long-term commitment of energy and resources.

Fortunately, we are not starting from scratch. As usual, I am most encouraged by the talent and commitment of the young men and women that make up our space forces and their leaders. They are the foundation we need to meet the challenge and increasing their readiness is a high priority. While the US Air Force and others have made great progress since Desert Storm in bringing space support to national leaders and the warfighters, the military services must now shift from a culture that presumed space superiority to a culture prepared to gain and maintain space superiority as a first condition of providing that support. From acquisition to education and training to operational planning and execution, the US needs to field a space force—and a joint force—that is ready for space conflict.

Thank you for inviting me, and I look forward to working with you in this effort.