

Under Secretary for Arms Control and International Security Andrea Thompson
Remarks to the Fifth PSSI Space Security Conference
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**as prepared*

Jana, thank you for those kind welcoming remarks. I am the other Thompson that is here today to give remarks on behalf of the United States on space security issues. In the U.S. if you are going to have a meeting on space security issues, you are guaranteed to have at least one Thompson in the room, sometimes more. It can get a bit confusing.

I want to start by thanking PSSI for hosting this fifth conference and inviting me to give some remarks. It is an exciting time to be working on space issues. This is a period of technological change and innovation that has significant policy implications. It is an issue that is a priority for this Administration as evidenced by the reestablishment of a National Space Council chaired by Vice President Pence and four Presidential space directives. At the President's direction, the United States is working to establish a U.S. Space Force and a U.S. Space Command, which will help to focus our attention on the emergent threats in the space domain. I would add that space holds a personal connection for me as a former cadet of mine from West Point, Lieutenant Colonel Anne McClain, is currently orbiting the earth on the International Space Station.

Finally, from a historical perspective, 2019 is also the fiftieth anniversary of the Apollo 11 landing on the moon; and there is a renewed national commitment to get back to the moon.

In a world that is ever more reliant on space capabilities, it is important for this conference to address topics such as deterrence and space crisis management, and the role of the private sector in space security. That latter is really important and challenging. There is not much distinction in outer space between a number of important governmental and private sector activities. Our governments rely more and more upon private companies for satellite communications and imagery as well as space launch and other support functions. Private sector space systems and their supporting ground infrastructures already are targets. Against this backdrop we should begin thinking now and together about the responsibility of governments to those private companies in a crisis or conflict.

For my remarks, I'd like to provide my perspective on two subjects related to this agenda. First, I want to discuss what the State Department is doing to enhance deterrence in the space domain and second, let me talk about the need for rules to enhance crisis stability.

First, let me start by reiterating what you have heard before, space has become a warfighting domain. Russia and China have made it so. It was China that conducted an anti-satellite test in 2007 that created thousands of pieces of debris; a system which the U.S. Intelligence Community has determined is operational in China. It is Russia that has publicly announced the deployment of a ground-based anti-satellite laser. And it is those two countries that are conducting sophisticated and concerning on orbit activities. All of this is occurring both literally and figuratively in a vacuum. In the land, sea and air domains, we have considerable experience in developing rules of responsible behavior, known as the laws of armed conflict. Those terrestrial

laws apply to outer space, but we don't have any specific rules for conflicts that extend to outer space and that is a problem that can lead to miscalculations in a crisis or significant consequences to those operating in the space domain.

So, what do we need to do about it? As Vice President Pence said, the United States seeks to “forge a new era of peace through strength in outer space.” Under the President’s National Space Strategy, the United States will seek to deter, counter, and defeat threats in the space domain that are hostile to the national interests of the United States and our allies. Accordingly, the Administration’s new strategy calls for strengthening the safety, stability, and sustainability of our space activities. You’ve heard about the Space Force. That is just one aspect of the U.S. comprehensive approach to enhancing deterrence.

A key part of any deterrence strategy is communicating your position in a clear manner. For the first time, this Administration has taken steps to ensure that global competitors know we take the security of our space-based assets seriously by including a declaratory policy in the National Security Strategy. That strategy affirms that “any harmful interference with or attack upon critical components of our space architecture that directly affects this vital interest will be met with a deliberate response at a time, place, manner, and domain of our choosing.” We use the phrase “space architecture” to describe both the space-based systems and the associated ground infrastructure that is critical to the operation of satellites. Depending upon the mission and situation, this space architecture includes U.S. Government owned systems, U.S.-licensed commercial systems as well as the space systems of an allied or foreign partners. Finally, just because interference or an attack occurs in space, this statement from the National Security Strategy makes clear that a U.S. or combined response may come in any domain. We will decide when and where to respond.

This is an incredibly important statement of policy and our competitors should reflect on the fact that we are serious about the consequences of an attack on our space assets.

We also address the issues of attacks on our space-based Nuclear Command, Control and Communications (known as NC3) systems in the Nuclear Posture Review. That review calls for the United States to ensure that our space-based NC3 assets are resilient and agile, thereby deterring potential attacks against those systems.

It is also important to note that these efforts to deter conflict in space are not something the United States is undertaking alone. We recognize the importance of our allies in this effort and have begun working closely with them to address these threats. That is why we welcomed NATO’s adoption of language at the Brussels Summit calling for the development of an overarching NATO Space Policy. That is why every year the G7 Statement includes language on space security. That is why we include allies in the Schriever Wargame series so we can harmonize our plans and policies. And, that is why the State Department leads bilateral dialogues with our allies as well as partners like the European Union to discuss space security and how we can cooperate together to address these threats.

We recognize that it is through these collective efforts that we can deter these threats.

So that brings me to my second topic, how do we manage the competition to prevent a conflict in space. To do that, we believe we need to work collectively to develop rules of behavior that can prevent miscalculations in a crisis or limit the consequences of a conflict from extending into outer space. We cannot leave it to Russia and China to establish the norms or rules for operating in space. It is the responsible countries represented in this room that must lead on these developments.

Miscalculations is a particular issue we are focused on in the United States. Russia has publicly displayed its ground-based anti-satellite laser. We are literally talking about combat at the speed of light. What are the crisis implications of that type of system? When faced with attacks that can unfold at the speed of light damage to or destruction of critical national security satellites, there is going to be a tendency not to want to absorb the first blow.

Or what if a potential adversary starts moving a satellite close to a U.S. or allied satellite in a crisis? Depending on a range of factors, some that may be unknown to the potential adversary, that type of close-approach may be viewed as threatening. But, as long as this satellite's maneuvers are not deemed to be causing "harmful interference" with your satellite, there are currently no clear guidelines for preventing a collision or defending from a hostile action. What are the impacts of such actions on crisis stability?

That is why we need to work together as allies to develop these rules of behavior. We need to understand what actions can cause challenges or create threats. I look forward to hearing your thoughts on these subjects in the coming panels and I look forward to engaging with you in the coming months on these topics.

One area where progress has been made on this issue is in the United Nations Committee on Peaceful Uses of Outer Space. In particular, U.S. government and private sector experts have worked closely with our allies and other members of the Committee over the past decade to develop 21 consensus guidelines for the long-term sustainability. These voluntary, non-legally binding guidelines represent best practices for spaceflight safety. They are an important set of transparency and confidence building measures (TCBMs). Along with our G7 partners, we believe the practical implementation of these guidelines by all spacefaring nations should serve as the basis for further work by COPUOS in the coming years and also serve as a foundation for other bilateral and multilateral TCBMs.

Finally, I would be remiss as the Under Secretary for Arms Control and International Security to not make a few comments on why arms control isn't our preferred approach to dealing with the security situation in outer space. In many cases, arms control is an appropriate response to dealing with a particularly difficult security issue. But, we are not there yet in outer space. We cannot define a "space weapon" without potentially foreclosing promising opportunities for commercial activities like on-orbit servicing or active space debris removal capabilities. It is exceedingly difficult to verify the existence of weapons in space and credible verification is the cornerstone of compliance with any arms control treaty. Finally, we need willing and trustworthy partners, and we just don't have those. To those who have offered flawed space arms control proposals – we have been clear in our objections and why these proposals would decrease stability – the opposite of any well-constructed arms control treaty. That is why the United

States is focused on advancing and developing norms of behavior in outer space and best practices for space operations, not legally-binding treaties driven by lowest-common denominator agreements that undermine existing norms and principles.

As Vice President Pence has noted, “President Trump and our entire administration believe it is our duty to ensure that our most cherished values and ideals are the foundation of our future in space — that it’s a future of freedom, of free commerce, and free enterprise, and security.”

So to conclude, let me state that the rules and values of space, like every great frontier, will be written by those who had the courage to get there first and the commitment to stay. As the United States renews its commitment to leadership in space, we welcome opportunities to work together with you, your governments and your companies to ensure an orderly space environment so that all humanity can have a secure and prosperous future on this infinite frontier.