

Statement of Mr. John D. Hill
Performing the Duties of Assistant Secretary of Defense for Space Policy
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International Organizations, and Global Corporate Social Impact
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Thank you, Chairman Cooper, Ranking Member Turner, Chairman Castro, Ranking Member Malliotakis, and distinguished Members of the Subcommittees. I am honored to testify today alongside my distinguished colleagues. There is a strong partnership between the Department of Defense (DoD) and the Department of State on space policy matters, including activities that we will address today to foster a rules-based international order for outer space activities.

U.S. Leadership in Promoting Responsible Space Activities

U.S. leadership in developing voluntary, non-legally binding norms, guidelines, and standards of responsible behavior for outer space activities, as an element of the overall rules-based international order built by the United States and its allies and partners, is a longstanding principle of U.S. policy. President Biden’s March 2021 “Interim National Security Strategic Guidance” states: “We will lead in promoting shared norms and forge new agreements on emerging technologies, space, cyber space, health and biological threats, climate and the environment, and human rights[;]” and “[w]e will explore and use outer space to the benefit of humanity, and ensure the safety, stability, and security of outer space activities.”

Similarly, the December 2020 National Space Policy directs U.S. Government departments and agencies to “[l]ead the enhancement of safety, stability, security, and long-term sustainability in space by promoting a framework for responsible behavior in outer space, including the pursuit and effective implementation of best practices, standards, and norms of behavior.” Additionally, the National Space Policy directs national security departments and agencies to communicate which space activities the United States considers undesirable or irresponsible, while promoting, demonstrating, and messaging responsible norms of behavior. This direction echoes guidance found in the 2010 National Space Policy, which established a goal of “Strengthen[ing] stability in space through: domestic and international measures to promote safe and responsible operations in space.”

DoD actively contributes to U.S. diplomatic efforts, led by the Department of State, to shape voluntary, non-legally binding standards and norms of responsible behavior in outer space. The June 2020 Defense Space Strategy directs the Department, working with U.S. allies, partners, and other U.S. Government departments and agencies, to: “Promote standards and norms of behavior favorable to U.S., allied, and partner interests” in order to shape the strategic environment. This language builds on earlier direction from the 2011 National Security Space

Strategy, which describes the interests of DoD and the Intelligence Community in, “a stable space environment in which nations exercise shared responsibility to act as stewards of the space domain and follow norms of behavior.” In conducting its space operations, DoD strives to act consistently with voluntary international measures the United States supports while complying with relevant domestic and international law, including the Charter of the United Nations (which reflects the inherent right of self-defense), and the 1967 *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (commonly known as the “Outer Space Treaty”).

Together, these policies and strategies highlight the longstanding and essential role of U.S. leadership in developing voluntary, non-legally binding norms, standards, and guidelines of responsible behavior, as well as voluntary transparency and confidence-building measures for outer space activities. Although current U.S. National Space Policy, similar to previous National Space Policies, allows for the United States to “[consider] proposals and concepts for arms control measures if they are equitable, effectively verifiable, and enhance the national security of the United States and its allies,” no current proposals for space arms control meet these criteria. Instead, as a more pragmatic means to manage an evolving strategic environment, U.S. Government efforts are focused on developing voluntary, non-binding measures derived from current technical and operational practices.

A Rapidly Evolving Space Domain

Space activities are changing rapidly, both quantitatively and qualitatively. Space is no longer the province of only a few government actors. In addition to efforts around the world to establish or grow national space programs for scientific, national security, or other government purposes, burgeoning domestic and international commercial sectors are multiplying the number of satellite operators worldwide. In some cases, these satellite operators are planning to launch hundreds – if not thousands – of new satellites into orbit. If even a fraction of these plans come to fruition, the number of satellites placed on-orbit over the next decade will eclipse the number of satellites launched into space since the beginning of the space age.

In addition to new commercial operators providing traditional space-based services such as communications and earth observation, many new commercial ventures are offering services and capabilities previously only available to governments. Emerging applications such as on-orbit satellite refueling and servicing, space-based radio-frequency mapping, and space tourism are fundamentally reshaping the character of commercial space activities.

The recognition of the utility of space for national security purposes is also driving some nations to develop counterspace capabilities. China and Russia, in particular, are fielding a wide range of weapons intended to deny the United States and its allies and partners the use of space-based capabilities in a crisis or conflict. Testing of such weapons – including testing on-orbit – may pose new challenges for the stability and security of the space domain.

Taken individually, each of these changes would be notable. When viewed collectively, the evolving nature of global space activities has the potential to create significant challenges for the safety and security of space operations, as well as for the stability and sustainability of the space domain overall.

The Value of Voluntary, Non-Legally Binding Norms of Responsible Behavior in Outer Space

Developing a shared understanding among States of what constitutes safe and responsible space activities benefits all space operators, including DoD. Adherence to common guidelines for space operations creates a more stable and predictable space environment. Much as roadway traffic rules prevent accidents and reduce congestion, safety-focused “space traffic management” guidelines, such as limiting debris, avoiding collisions, and sharing space surveillance information, can reduce the likelihood of accidents and protect valuable orbital regimes from the deleterious effects of long-lived space debris. All who operate in space – including DoD, one of the single largest space operators in the world – benefit from a safer and more sustainable operating environment.

Common standards of behavior for space operations can also increase transparency and enhance security and stability in space because behaviors that are not consistent with those common standards will be more readily detectable by military, commercial, and civil operators alike. For DoD, a shared understanding of what constitutes responsible behavior in outer space by all space actors would enable indications and warning of potential threats to U.S. and allied and partner space activities by highlighting activities of potential concern. Whether a particular space operation follows such common standards would be one factor that commanders could consider when determining whether a behavior that appears “abnormal” is merely an aberration or is actually a demonstration of hostile intent or a hostile act.

Taking an active role in shaping norms of behavior benefits DoD. As one of the world’s most experienced space operators, with one of the largest satellite fleets, DoD strives to conduct space operations that can serve as a model for safe and professional behavior. DoD policies, procedures, and standards for mitigating risks, together with those of the National Aeronautics and Space Administration, function as both an important reference point for many space operators globally and a starting point for U.S. domestic policies on responsible space practices. These, in turn, form the basis for U.S. proposals for standards of behavior. Making concrete proposals within international venues negotiating such standards of behavior raises the likelihood that U.S. policies and practices will garner widespread support internationally and that, therefore, they will serve as a baseline for standards and guidelines that the international community ultimately implements.

International Activities

DoD works closely with the Department of State and other U.S. Government departments and agencies to promote U.S. views on responsible behavior. As a whole, the U.S. Government exercises leadership on this topic in international diplomatic fora, such as the United Nations

Committee on the Peaceful Uses of Outer Space (UNCOPUOS); through government-to-government and military-to-military bilateral and multilateral dialogues; and through engagement with civil society and the commercial space sector to develop and promulgate concepts for responsible space operations.

The United States has achieved multiple successes in the past fifteen years, starting with the “Space Debris Mitigation Guidelines of the United Nations Committee on the Peaceful Uses of Outer Space,” which were endorsed by the UN General Assembly in 2007. The international community now recognizes these non-binding guidelines, which were based largely upon U.S. standards established in the 2001 U.S. Government Orbital Debris Mitigation Standard Practices (ODMSP), as the definitive international guidelines for minimizing the creation of long-lived and harmful space debris.

Following adoption of the Space Debris Mitigation Guidelines, UNCOPUOS then embarked on developing a broad set of space sustainability guidelines covering topics ranging from space operations to international cooperation. In 2019, at the conclusion of ten years of difficult negotiations in which my office represented DoD and the U.S. Government, the UN General Assembly welcomed the adoption of a preamble and 21 “Guidelines for the Long-Term Sustainability of Outer Space Activities,” the first-ever set of comprehensive international best practices for space safety and sustainability. The United States – including both U.S. Government and commercial space operators – played an active role in these negotiations, proposing many of the guidelines that the Committee adopted and shaping the text of all guidelines for consistency with existing U.S. policy and practice.

More recently, DoD has been working with the Department of State and other U.S. Government departments and agencies to produce the U.S. national submission in response to a request contained in a 2020 UN General Assembly Resolution on “Reducing space threats through norms, rules, and principles of responsible behaviours.” That resolution, spearheaded by the United Kingdom, invites each UN Member State to “share ideas on threats, development and implementation of norms of behaviors, and on the reduction of the risk of misunderstanding and miscalculation.” Later this year, the UN Secretary General will compile Member State inputs, including those of the United States, into a report to apprise all UN Member States on the nature of threats facing space activities today and to inform future discussions on practical measures to enhance space stability and security.

Conclusion

The United States is continuing its longstanding leadership role in space operations by shaping voluntary, non-legally binding norms, standards, and guidelines of responsible behavior in space. Voluntary adherence to such norms and standard practices can create a safer and more stable and predictable space operating environment for all space actors and can facilitate indications and warnings of potentially hostile acts or hostile intent.

DoD policies and practices often serve as the basis for voluntary international measures, and DoD can model responsible behavior through its routine space operations. DoD works carefully to ensure that defense space operations are consistent with voluntary, non-legally binding international measures the United States supports and conducted in accordance with relevant domestic and international law, including the inherent right of self-defense.

U.S. leadership in the development of a rules-based international order for space activities reaps benefits for U.S. civil, commercial, and national security space operators. As space activities worldwide become more prolific and more varied, widespread implementation of voluntary, non-binding norms, standards, and guidelines of responsible behavior will benefit U.S. national security and foster a conducive environment for growing global space activities.