Dr. Scott Pace Executive Secretary, National Space Council Lunch Keynote *"Space Development, Law, and Values"* IISL Galloway Space Law Symposium Cosmos Club, Washington, D.C., December 13, 2017, 12:00 pm

Good afternoon. Thank you for that kind introduction, and for the invitation to speak today at the 12th annual Eilene Galloway Symposium on Critical Issues of Space Law. It is a particular honor to speak at this symposium, as Ms. Galloway described her work as one in which "I translate the world of scholarly research" into a form in which "it can be understood in the world of practical politics." That is something I have tried to do in my own work. Today, I would like to offer some perspectives on space development, space law, and American values.

This year marks the fiftieth anniversary of the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, otherwise known as the Outer Space Treaty. This treaty provides the legal foundation for a range of subsequent outer space agreements, and has served the United States and the international community well over a half century. There is no doubt that it is in our national interest to continue our space activities within the international legal framework that the Treaty provides.

Not all space agreements have been similarly beneficial. The very first space policy debate I was ever involved with centered on the grassroots campaign to ensure that the United States would not sign or ratify the 1979 Moon Agreement. I found it astounding that representatives of our government would even consider an agreement that would subordinate U.S. private sector activities on the moon to an unelected international authority. In effect, that agreement would have created a set of rules for the moon and other celestial bodies that, in some ways, would have been more restrictive than the laws we have here in the United States. This was an example of an agreement that was contrary to American interests; it was never approved by the Senate or ratified by the President.

In the years since the Outer Space Treaty entered into force in 1967, many things have changed. First, we are no longer in a bipolar Cold War world comprised of two primary space actors, the United States and the Soviet Union. Today, there are many more nations and intergovernmental organizations involved in outer space, and hundreds of non-state actors such as commercial companies, and scientific and academic entities that own, operate, or benefit from space systems and space-derived information. The globalization and democratization of space have increased interest in issues of space governance and the potential role of space law to manage new challenges.

Secondly, in today's world, technology and entrepreneurship threaten to outpace the legal and domestic regulatory mechanisms intended to enable and manage space activities. When technological generations occur every 18 months or so, it would appear to outside observers that the pace of international space discussions at the United Nations is, by comparison, glacial. As many of you know, the development of voluntary "best practices" for the long-term sustainability (LTS) of outer space activities at the UN Committee on the Peaceful Uses of Outer Space is expected to be finalized next year after years of cooperative, but sometimes contentious, efforts. In the intervening time since LTS discussions began, we have seen many new developments, from new space start-ups, reusable rockets, and proposals for mega-constellations, alongside more traditional governmental space activities.

On the other hand, the LTS discussions, and the earlier effort to create international guidelines for the mitigation of orbital debris, were successful in creating an international consensus in support of best practices based on real world experience. Similarly, non-binding UN principles on remote sensing reached consensus in 1986. In contrast, efforts to negotiate an international code of conduct for outer space activities are in abeyance, the Conference on Disarmament has not agreed on a program of work for decades, and no new international space treaties have been negotiated since the Moon Agreement of 1979, which was of course only ratified by a handful of states.

So how do we go about shaping international activities in outer space to ensure that the United States, its allies and partners, and other established and emerging spacefaring nations can continue to use space for peaceful purposes? How can the United States, as an order-building power since World War II, take a leadership role in promoting the rule of law and American interests in a domain that presents unique challenges in traditional international relations?

I am privileged to work for the Chairman of the National Space Council, Vice President Mike Pence. He clearly highlighted the need for such U.S. leadership at the first meeting of the National Space Council when he said,

"But above all else, we choose to lead in space because we know that the rules and values of space, like every great frontier, will be written by those who get there first – and we owe it to mankind to bring American values to the boundless expanse of the heavens."

Let me describe some of the core elements of this Administration's policy approach to space development, law and, as the Vice President said, bringing American values to space.

First, the United States will support those activities that will advance U.S. national interests internationally. As General H.R. McMaster said at the first meeting of the reconstituted National Space Council on October 5, America first does not mean American alone. To the

contrary, prioritizing America's interests means we will secure the benefits of space, not only for ourselves but for and with our friends and allies.

Second, the United States should strive to be the most attractive jurisdiction in the world for private sector investment and innovation in outer space. This requires a transparent, efficient, and minimally burdensome domestic regulatory mechanism for U.S. companies conducting space activities. This Administration embraces meeting U.S. international obligations through a "light-touch" regulatory approach that maximizes industry's ability to innovate and national freedom of action.

Third, the U.S. Government, working with its space partners and the private sector, should use legal and diplomatic means to create a stable, peaceful environment not only for governmental activities, but also for commercial ones. These legal and diplomatic means include efforts to minimize and mitigate harmful interference to our space systems, whether from terrestrial actors or from space actors. In addition to the UN Charter and other applicable law, such as the right of self-defense, several provisions of the Outer Space Treaty provide legal principles that would be applied toward these ends.

Fourth, the U.S. private sector must have confidence that it will be able to profit from capital investments made to develop and utilize in-situ resources, commercial infrastructure, and facilities in outer space. Furthermore, certain types of rights and obligations typically associated with exclusive use and private property are needed. In 2015, the United States took an important step with the enactment of the *Commercial Space Launch Competitiveness Act*. This Act provides that U.S. citizens are entitled to own, as private property, asteroid and space resources they have obtained in accordance with applicable law, including our international obligations. I commend to you last year's Galloway speech by Brian Egan, then-Legal Adviser at the U.S. State Department, which sets out a detailed articulation of U.S. views on this subject.

Fifth, we need to respond to questions about how we register space objects, as well as the responsibilities of space object ownership and operation. We need to engage with the international community to shape ambiguities that remain in the Outer Space Treaty and the existing international legal regime. As a launching State, the United States takes its jurisdictional responsibility very seriously and conducts a comprehensive payload review to assure compliance with existing legal obligations for commercial and foreign payloads launched from U.S. space launch vehicles. The United States, in turn, expects other States also to adhere to their international legal obligations and responsibilities. Another issue that we're facing is Article VI of the Outer Space Treaty, which as you knowrequires "authorization and continuing supervision by the appropriate State Party to the Treaty," and the United States is examining ways to modernize its regulatory system to carry out this international obligation for new and evolving private space activities.

Sixth, the Administration seeks to develop non-binding international norms that are complementary to the existing legal regime through both "bottom-up" best practices developed cooperatively with other space actors, and "top-down" non-legally binding confidence-building measures. Neither of these approaches necessitates the negotiation of new outer space treaties or international arms control agreements. In a rapidly changing environment of nanosats, "mega constellations," and commercially available on-orbit servicing or rendezvous and proximity operations, creating new legally binding agreements is unlikely to be timely or successful. On the other hand, non-legally binding guidelines, based on international consensus, can be reflected in national law and regulation. In this way, we can address rapid technical changes without subordinating U.S. activities to new trans-national authorities.

Finally, many of you have heard me say this before, but it bears repeating: outer space is not a "global commons," not the "common heritage of mankind," not "res communis," nor is it a public good. These concepts are not part of the Outer Space Treaty, and the United States has consistently taken the position that these ideas do not describe the legal status of outer space. To quote again from a U.S. statement at the 2017 COPUOS Legal Subcommittee, reference to these concepts is more distracting than it is helpful. To unlock the promise of space, to expand the economic sphere of human activity beyond the Earth, requires that we not constrain ourselves with legal constructs that do not apply to space.

While working in a school of international affairs, I participated in discussions over areas beyond traditional definitions of sovereignty, such as the high seas, international air space, the polar regions, space, and cyberspace. These are today's legal and diplomatic frontiers, and are thus areas of potential conflict among state and non-state entities that impact U.S. interests. As with past frontiers, it is those who show up, not those who stay home, who create the rules and establish the norms in new areas of human activity.

Pascal Lamy is a former director of the World Trade Organization and someone with long experience with the role of law in international relations. He makes an analogy with the states of matter – solid, liquid, and gaseous – in which sovereign nations represent the solid elements of international order, international law and practice are in the gaseous state, and transnational organizations such as the European Union and the European Space Agency are in a fluid, liquid state. I find this analogy helpful in thinking about the role of law in space.

In a world in which space capabilities are increasingly global, no one state will be in a position to impose rules unilaterally for the exploration and development of space. Similarly, the diversity of competing national interests in space make it unlikely that a single international space authority or even a new space treaty will emerge anytime soon. Thus, the task for the United States, if it wishes to influence how space is developed and utilized, is to create attractive

projects and frameworks in which other nations choose to align themselves and their space activities with us, as opposed to others. Just as the United States shaped the post-war world with a range of international institutions to protect its values, so we should look to the creation of new "liquid" arrangements to advance our interests, values and freedoms in space.

U.S. leadership requires active engagement in interpreting and implementing existing space agreements and other international law, while pursuing non-binding "best practices" and confidence-building measures with our allies, security partners, and potential adversaries to meet today's space challenges. It necessitates enacting transparent, effective, and minimally burdensome domestic legislation and regulatory mechanisms to enable U.S. companies to benefit from technology development and new commercial opportunities.

In advancing American leadership, the Administration looks forward to working with members of Congress on both sides of the aisle, to ensure the United States is the global leader in civil, commercial, and national security space activities. This requires an up-to-date regulatory environment that enables innovation and meets U.S. international obligations as we modernize regulations to promote U.S. industry while protecting U.S. national security and foreign policy interests.

I would like to take a moment to applaud the efforts of Congress in facilitating a timely debate on critical issues of space law. Notably, both Senator Ted Cruz and Representative Lamar Smith have chaired a number of hearings on the issues of space law and regulation this year, and Representative Smith has introduced legislation on the topic earlier this year.

In conclusion, the development of space will depend on the development of laws, regulations, and institutions that will support and enable the expansion of human activity into this new domain. In doing so, we should bear in mind that it is not just our machines that we send into space, or even our astronauts, but rather, U.S. space activity represents our values as well. What we *do* in space and *how* we do it reflect our values and not just our technologies. We should seek to ensure that our space activities reflect those values: democracy, liberty, free enterprise, and respect for domestic and international law in a peaceful international order. There will be many nations, and many cultures, on the space frontier; we should work to ensure that our nation and our values lead this next greatest adventure.

Thank you.