Statement by Kevin Conole, Head of United States Delegation
Agenda Item 7, "Space Debris"
April 20, 2021

Thank you, Madame Chair. The United States has led the development of orbital debris mitigation policy, requirements, and efforts to characterize the orbital debris environment for more than 40 years. Orbital debris was included in the United States' National Space Policy for the first time in 1988. The intent was to minimize the creation of new debris to slow down the debris population growth. Every National Space Policy since that time, including those in 1989, 1996, 2006, and 2010, followed the same intent to focus on limiting the generation of new debris. The latest U.S. National Space Policy released in December 2020 continued the tradition by emphasizing the importance of limiting the generation of new debris to preserve the near-Earth space environment for the long-term sustainability of outer space activities.

The consistency in our policies reflect the United States' long-standing commitment to address the global orbital debris problem. It also underlines the importance of orbital debris mitigation, which focuses on minimizing the generation of new debris, such as limiting accidental on-orbit explosions and follow proper postmission disposal. These important mitigation measures were originally developed by the United States in NASA's orbital debris mitigation guidelines in 1995 and in the U.S. Government Orbital Debris Mitigation Standard Practices in 2001. Similar mitigation guidelines were established by the Inter-Agency Space Debris Coordination Committee, the IADC, in 2002, followed by the development of the COPUOS Space Debris Mitigation Guidelines, which were endorsed by the General Assembly in 2007. Together, with the 21 guidelines for the long-term sustainability of outer space activities (LTS), they form a solid foundation that the satellite operators can adopt to curtail the orbital debris problem.

Unfortunately, these guidelines and best practices have not been followed by global satellite operators at a satisfactory level. A good example is the 25-year, post-mission, orbital lifetime limit for upper stages and spacecraft in low Earth orbit (LEO). The technical community has demonstrated this 25-year rule to be an effective way to control the debris population increase, but many satellite operators still do not follow this best practice. Every year, tens of upper stages and

spacecraft end their mission operations in LEO but are left in long-lived orbits. This behavior fuels the potential of a collision cascade effect and makes any remediation efforts more difficult and potentially cost-prohibitive in the future. The United States calls on all spacefaring nations, emerging space nations, international organizations, and non-government organizations to implement the IADC and the COPUOS Space Debris Mitigation Guidelines, as well as the LTS Guidelines. As the global community continues to explore and expand activities in space for social and economic benefits, we must increase our efforts on orbital debris mitigation for the safe operations of future space missions. We look forward to hearing from other Member States both during this session and in the coming years on ways in which the space debris mitigation guidelines are being implemented.

Madame Chair, in addition to policy development, the United States continues to invest in orbital debris research, technology development, and monitoring capabilities to support the global community in mitigating risks from orbital debris. For example, the U.S. Space Force's Space Fence achieved Initial Operational Capability in March 2020. With operational acceptance, the Space Fence will continue to extend object tracking and conjunction assessment capability to better protect operational spacecraft. NASA released an updated Debris Assessment Software (DAS) in August 2020. Global satellite owners and operators use DAS to assess mission compliance with orbital debris mitigation guidelines and best practices. The latest DAS release also includes the most recent NASA Orbital Debris Engineering Model, which is used by many operators to assess risk from orbital debris.

NASA also released a new handbook on "Spacecraft Conjunction Assessment and Collision Avoidance Best Practices" last December. This handbook's purpose is to share information with satellite operators on best practices for coordinating on-orbit activities to improve future operational safety. The U.S. National Science and Technology Council also published the National Orbital Debris Research and Development Plan in January. This plan provides the Federal Government a reference for coordinating and prioritizing future orbital debris R&D activities. These are just a few examples of our contributions to the community since the 57th session. NASA's Chief Scientist for Orbital Debris, Dr. J.-C. Liou, will deliver a technical presentation on Tuesday to provide additional details about our recent orbital debris research activities.

Thank you, Madame Chair.