

**Statement by Mr. Kevin Conole, United States Representative,
on “Space and Global Health,” February 10, 2023**

Thank you, Chair. The United States Delegation appreciates the subcommittee noting the crucial role of space data and technology in the public health domain through this agenda item on “Space and global health.” The U.S. would like to provide a just a few examples of our leadership in this field. NASA has patented a technology to make high volumes of medical grade oxygen via electrolysis, with less power, and more oxygen per unit than currently available oxygen concentrators. The result would be a large oxygen concentration unit capable of providing abundant oxygen to a small hospital or clinic, with the potential to scale larger. As a reminder, medical grade oxygen is also required for making semi-conductors, and this technology would allow companies to make their own oxygen on-site. These technologies, as well as research in stem cells, plant biology, 3-D printing and protein crystal growth on the International Space Station are improving and profoundly advancing global health by allowing new science in cell repair, new methods for maintaining the health of crops, and the development of new medications and proteins not possible in gravity. The Artemis program will continue this legacy of innovation, as new medical technologies will need to be developed to enable exploration, with light and lean architectures, making their use ideal for remote and third world medical use.

Chair, as the climate crisis increases the heat risks to public health, NOAA, together with U.S. and international partners is applying Earth observations to help communities better manage the increasing heat risks. In 2022 NOAA and partners launched a pilot project “Building Equitable Resilience to Extreme Heat” to support local initiatives designed to protect public health and reduce the negative health effects of extreme heat events by connecting NOAA’s climate information with those who need it most, especially disproportionately affected populations. In addition, NOAA continues working with the Global Heat Health Information Network to help other countries replicate effective urban heat island mapping campaigns.

In addition, NOAA operates the Search and Rescue Satellite Aided Tracking (SARSAT) system – part of the international Cospas-Sarsat Program, which helps locate lost or distressed aviators, mariners and recreationists at any time, in any condition, around the world. In 2022, NOAA satellites helped rescue thousands of

people across the globe.

Thank you, Chair, for the opportunity to share this information with the subcommittee and to highlight the health benefits of space exploration to the world, for the benefit of all humankind.