Statement by Kevin Conole, United States Representative, on "Space and Global Health," February 9, 2022

Thank you, Mr. 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." Thank you to Switzerland for their leadership of the working group on this topic. The U.S. is a world leader in this field.

Just to provide a few examples: 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, which may help this industry as well as the medical equipment that depend on semi-conductors, tremendously. These technologies, as well as the research in stem cells, plant biology, and protein crystal growth on the International Space Station are already changing and having a profound impact on 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.

Mr. 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. For example, NOAA and the U.S. Centers for Disease Control and Prevention (CDC) created the National Integrated Heat Health Information System; and NOAA is 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 2021, NOAA satellites helped rescue 330 people in the United States alone.

Thank you, Mr. 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.