Paper ID: 32177 oral

HUMAN SPACEFLIGHT SYMPOSIUM (B3)

Utilization & Exploitation of Human Spaceflight Systems (3)

Author: Mr. Sam Scimemi National Aeronautics and Space Administration (NASA), United States, Sam.scimemi@nasa.gov

LIFE IN LOW-EARTH ORBIT AFTER THE INTERNATIONAL SPACE STATION

Abstract

The International Space Station (ISS) Partnership has spent tens of billions of dollars in the design, construction, and operations of a one-of-a-kind orbital asset over the past 20 years. This public investment, unprecedented in peaceful space exploration, has brought together the space agencies of 15 nations and touched the lives of people in nearly 90 countries. Towards the end of the 2020s, the original component elements of the ISS will begin to reach the end of their designed lifespan. At the same time, it is expected that research and technology activities sponsored by government agencies will still require activity in low-Earth orbit (LEO). It is also expected that the growing private and non-space agency demand for research and technology development will continue to expand. What comes after the ISS or what is left in LEO is a topic of much debate and speculation. This paper will address the issues and possible outcomes of human spaceflight in LEO after the ISS, and the International Partnership as it is today.