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HUMAN SPACEFLIGHT SYMPOSIUM (B3)

Commercial Human Spaceflight Programs (2)

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THE ISS, EXPLORATION, AND THE DEVELOPMENT OF A LEO COMMERCIAL MARKET

Abstract

The International Space Station (ISS) has completed another year of successful operations in low Earth orbit, bringing humanity's current time living off of the Earth to more than 16 continuous years. During the past year, the ISS saw the completion of the first station-based Year in Space, after NASA astronaut Scott Kelly and Russian cosmonaut Mikhail Kornienko returned to Earth after nearly a year aboard. The lessons learned from this flight and from NASA's Human Research Program are integral to learning how to keep humans healthy and safe for the duration of time it will take to travel to Mars and other deep space destinations. Also this past year, the ISS Program made progress towards the continuing development of a commercial market in low Earth orbit, with the deployment of the Bigelow Expandable Activity Module- the first privately-developed ISS module- as well as numerous deployments of privately-developed small satellites, Cubesats, and research experiments. NASA also released several announcements and opportunities for the private sector to become more intimately involved with ISS operations and future exploration activities. The entire ISS International Partnership has committed to operating the station through at least 2024, allowing more time to conduct the research, develop the commercial opportunities, and continue to learn to live and thrive in space that only the International Space Station can provide.