## HUMAN SPACEFLIGHT SYMPOSIUM (B3) Utilization & Exploitation of Human Spaceflight Systems (3)

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## OPPORTUNITIES FOR LOW-EARTH ORBIT UTILIZATION, CURRENT AND FUTURE

## Abstract

With little fanfare, a new chapter in space utilization has begun using the International Space Station (ISS) as a 'proving ground.' Realizing a half-century objective of the American space effort to stimulate the low-Earth orbit (LEO) region, an unprecedented number of space transportation systems, both cargo and human-rated, now exist or are realistically planned, and a growing number of companies are providing in-space services. The growing base of commercial providers seeks to solve two challenges confronting the ISS space agencies: how to maintain a robust presence in LEO in the midst of flat budgets while also allowing for the transition to deep-space exploration.