

BUSINESS INNOVATION SYMPOSIUM (E6)
New Space and New Science (3)

Author: Dr. Alexander MacDonald
Jet Propulsion Laboratory - California Institute of Technology, United States,
alexander.c.macdonald@jpl.nasa.gov

EMERGING SPACE: THE EVOLVING LANDSCAPE OF 21ST CENTURY AMERICAN
SPACEFLIGHT

Abstract

NASA's Emerging Space Office (ESO) was formed in recognition of the rising importance of private-sector individuals and organizations that invest their own time and money in space activities. This emerging space community is increasingly a major force in American space developments. Members of the emerging space community include commercial companies looking to develop new markets in space, private groups and societies dedicated to furthering new initiatives in space, and individual Americans - from billionaire entrepreneurs to garage-inventors - who share in the dream of opening up the space frontier to all. NASA's Emerging Space Office monitors and provides analytical support to the Office of the Chief Technologist on the state of this rapidly growing sector to assist in NASA's legislated responsibility to "seek and encourage, to the maximum extent possible, the fullest commercial use of space." As part of this effort, in 2014, the Emerging Space Office issued its 'Emerging Space Report' which presented a narrative and economic perspective on the role of private-sector space activities within a national context, current important emerging space trends, and a vision for how public-private partnerships might lead to economic development across the solar system. This paper will summarize this report, as well as add lessons learned on the practical challenges of realizing its vision.