

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
New Worlds - Innovative Space Education and Outreach (7)

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OPENING AEROSPACE FLIGHTS TO EVERYBODY: THE NEW SPACELAND CENTERS TO
ENGAGE THE PUBLIC IN THE ASSETS OF S.T.E.M. AND SPACE DISCIPLINES

Abstract

The decision-making process for governmental spending in space programmes relies on expectations by the general public, especially considering today's financial constraints: the need to get world citizens more and more aware of the benefits of space exploration and human spaceflight is outstanding. An effective way to communicate the myriad values of S.T.E.M. disciplines (Science, Technology, Engineering, Math) to the public is by implementing a system capable to allow anybody to hand-on experience the sensations and live the thrill of "research and educational spaceflight-like adventures" which only parabolic flights can provide at low-costs, in astronaut-like training and educational "space-themed" facilities. This is the reason why it is important to consolidate synergies between public and private sectors to reduce budgets and increase educational-training opportunities to enable anybody to access and enjoy OPEN flight campaigns in so-called Lunar-gravity and Mars-gravity flight conditions on board existing parabolic flight aircrafts. In this respect, SpaceLand is funding, with private institutions, unprecedented Centers of Excellence for Microgravity offering to thousands people per year the chance to live such experiences on microgravity flights, at the same time supporting technology innovation and science research activities led by high-tech SMEs and research centers. This "win-win" approach allows to increase and enhance both interest and excitement of the general public for Space while providing new stimuli for local social-economical development thanks to a new concept of "theme-parks" with ground and underwater space training facilities open to anybody wishing to qualify for weightlessness both on parabolic and, shortly, also on sub-orbital flights. This paper provides details related to such endeavours based on agreements recently signed to centralize ground and flight operations in one location, where students and general public can meet and work with top-level scientists, entrepreneurs and innovators. Among the first results, the weightless research experiences acquired by youngsters (e.g. 11 year-old-kids), elderly men (up to 93 year of age) and the first disabled women flying zero-gravity will be presented addressing, inter alia, ICT, neurobiology, telemedicine and bioengineering RD at cutting-edge level. By opening such new "space-themed educational parks" and engaging the public on Moon-G, Mars-G and Zero-G flights, ordinary people can really be given that precious awareness of Space as a strategical asset of tomorrow's society, turning Space into an useful everyday's reality for progress in science, technology and knowledge as well as providing the host territory with all-year-round means to reach new cultural and economic development.