

SPACE ACTIVITY AND SOCIETY (E5)  
Space Expectations: How the Public Views Space Activities (2)

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## ENGAGING THE PUBLIC IN LUNAR-GRAVITY AND MARS-GRAVITY EDUCATIONAL FLIGHTS

### Abstract

Society's expectations from Space is becoming a key factor in the decision-making process for governmental spending both in science and technology as well as in manned aerospace flight programmes, especially considering today's financial constraints world-wide.

The need to get common people and particularly students and youth, in general, more involved in space exploration is more and more outstanding.

One of the few ways in which the direct benefits and inherent values of S.T.E.M. (Science, Technology, Engineering and Mathematics) disciplines can be effectively communicated to the general public is by implementing a system capable to allow anybody to hand-on experience the sensations and live the thrill of actual research spaceflight-like "science adventures" through parabolic flight missions.

This is the reason why it is important to keep on striving for a systematic opening of parabolic flight opportunities to the laymen, through a series of OPEN flight missions in so-called Lunar-gravity and Mars-gravity flight conditions on board existing aircrafts for missions implemented by SpaceLand.

The costs for such initiatives are negligible with respect to the potential cultural and scientific return to the society and such operations allow to increase and enhance both interest and excitement of the general public for Space, especially addressing tomorrow's youth.

The support which the SpaceLand parabolic flight research and educational program is getting also in intellectual and political terms both in Europe and from NASA top-management provides good reasons to keep on being optimistic about the on-going project of providing systematic access to parabolic flight opportunities for the general public.

The underlying concept is to train, by underwater and ground simulators as well as dynamic space training facilities, and eventually qualify for flight any member of the public to then board the flight missions in their capacity as observers or even as test subjects or test operators on board serious though breath-taking parabolic flights.

This paper will provide an opportunity to present, discuss and explore the on-going flight campaigns which have already brought top-level scientists, including science groups coordinated by Nobel Prize winners, together with very young kids (11 year old), elderly men (86 and, respectively, 93 year old) and disabled women (totally handicapped), to fly on such research missions for state-of-the-art research addressing, inter alia, ICT, neurobiology, telemedicine and bioengineering at cutting-edge level.

In other words, by engaging the public on board such Moon-G, Mars-G and Zero-G flights at very impressive return vs. cost ratios, we can bring people, and particularly the youth, to the awareness of considering Space as a strategical asset of today's and tomorrow's society, turning Space programs into an useful everyday's reality for the progress of science, technology and knowledge.