

IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)
Enabling safe commercial spaceflight: vehicles and spaceports (3)

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THE SPACEPORT AS HUB FOR SPACE TRAVELLERS PREPARATION TO FLIGHT THROUGH
ENHANCED, FULLY IMMERSIVE EXPERIENCE: THE LUNAR CITY PARK & TRAINING
EXPERIENCE INITIATIVE.

Abstract

The Spaceport is at a first glance perceived as a set of infrastructures and facilities to operate a spaceflight system; since some of the current initiatives for access to space are targeting space tourism, corroborated by promising market forecasts, focusing on future flight tourists and space travellers is paramount to drag them into the space related matters and attract their interest, while familiarizing them with Space; this paper provides an insight of the Lunar City Park Training Experience initiative, aimed at filling the gap in education and training for the space tourists and future travellers, no matter if they really want to pursue a real spaceflight; yet, the Spaceport is regarded as the pivotal place to the purpose, since it provides the proper asset frame within a spaceflight-oriented environment. Lunar City Park Training Experience intends to provide customers with a comprehensive experience in space, that proceeds through different progressive phases, leading the customer to live a fully immersive suborbital flight, experience life on board the International Space Station long, and eventually reach up to the Moon and Mars; the pathway is based upon virtual reality equipment, simulators, scientific-rated audio and video contents, aimed at beefing up the training and education effectiveness, as well as fostering the scientific learning among widespread people; typical space environment aspects such as weightlessness, high level accelerations, and hovering and floating in space will be part of the experience. Educating new generation space travellers will foster the future space tourism development so that training will not only be instrumental to the actual flight, but will inspire people who are only interested to the simulated thrill of space travel; the Lunar City Park Training Experience initiative is very flexible and scalable, allowing modular adjustments to suit the technical and commercial goals of multiple spaceports no matter their location or the technology they support. Lunar City Park Training Experience is also aimed at providing professional and certified training to space tourists and will ultimately evolve towards a totally entertainment experience which 'lives' at the Spaceport. Preliminary business case predictions based on different kind of users have been laid out and the expected return for investment looks very promising. The Lunar City Park Training Experience flexibility to different sites makes it very attractive to operators who are interested in global international operations, wishing to integrate their spaceflight offers with additional value added capabilities.