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FROM AVIATION TOURISM TO SUBORBITAL SPACE TOURISM: PASSENGER SCREENING AND TRAINING ISSUES

Abstract

There are many major issues for the enhancement from aviation tourism to suborbital space tourism (SST), and two of which are the passenger screening and training issues. The purpose of this paper is to investigate the current development status of these two major issues. On 28 August 2015, the Federal Aviation Administration (FAA) of USA released recertification for the STS-400 Space Training System and 12/4 Altitude Chamber Training System of the National AeroSpace Training And Research (NASTAR) Center of Environmental Tectonics Corporation (ETC). NASTAR provides a 2-day program designed to provide future space travelers with the core knowledge and skills to become a safe, confident and capable SST participant. The Virgin Galactic Company has a 3-day plan to make preparation and training for SST travelers in the Spaceport America includes medical examination, zero-g and high-g trainings. Training results of its 81 founder customers from 22 to 88 years old show that as high as 92.6 percent (75 customers) pass successfully. However, Kluge, Stern, Trammer, Chaudhuri, Tuschy and Gerzer of DLR published a paper and suggested a physical examination of the applicant adjusted to the professional pilot's examination procedure along with an intensive training program. This could be a very rigorous screening and training requirement and might be very difficult to pass for tourists from general public. As of the current situation, the most difficult aspect could be the lack of statistics data in SST. Therefore, a feasible strategy might happen that rigorous requirements are enforced at the early phase and then broadened or tightened gradually based on the accumulation of actual commercialization flight data.