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SPACE TOURISM: THE MARKET BEYOND EARTH'S ORBIT

Abstract

The prospect of space tourism has been a long time in coming. As early as the 1960s, Pan Am established its "First Moon Flights Club" and developed the Orion III, a fictional commercial spaceplane showcased in Stanley Kubrick's film 2001: A Space Odyssey. In 2002, Futron released the Space Tourism Market Study, based on a survey performed for Futron by Zogby International, assessed interested forecasted demand for suborbital and orbital space tourism. At the time, one company, Space Adventures, was selling seats on regularly-scheduled Soyuz taxi flights to the International Space Station (ISS). Space Adventures continues to sell those seats, most recently to Canadian entertainment entrepreneur Guy Laliberté the 8th space tourist. Facilitated in part by \$10-million Ansari X PRIZE, the development of commercial space tourism continues, highlighted by several successful test flights in 2010 and the likely commencement of services by Virgin Galactic in 2011. Yet despite the excitement surrounding the emergence of space tourism, there remains significant doubt about the long term feasibility of market – both technical and financial. Indeed, success or failure will hinge on the ability of companies to tap the mass market by providing affordable and innovative adventure experiences.

The paper initially observes three generic types of space tourism: sub-orbital, orbital and circumlunar where each market represents a different class of traveler. Space tourism companies are evaluating secondary and alternative markets and missions to hedge against demand constraints. Earlier flyers represent pioneers who are thrill-seeking and desire early achievement. These individuals differ from the mass market who seeks more common-place recreational activities. Governments may also be important participants in space tourism, both buying "strategy" missions tied to broader space activity as well as a platform for research and experimentation.

The recreational market also may represent different groups of voyagers, so the commercial bazaar could result in a segmented market for people of different income levels, orbital missions and adventure profiles. Yet one thing is clear: the success or failure of one, may positively or negatively impact the development of another. Surely, a fatal accident in the sub-orbital arena would affect plans for orbital vacationers! Likewise the success of orbital hotels would generate interest in lunar tourism. This paper will evaluate the market for space tourism by combining technical accomplishment, and market demand, as well as the segmentation of adventure profiles and customer preferences. If successful, space tourism will surely define the "Space Club".