IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3) Interactive Presentations - IAF HUMAN SPACEFLIGHT SYMPOSIUM (IP)

Author: Ms. Yvette Marie Gonzalez Moon Village Association (MVA), United States

> Ms. Fatoumata Kebe Université Pierre et Marie, France

THE COMMERCIAL SPACE INVOICE: HOW DOES THE GENERAL PUBLIC AFFORD FUTURE SPACE PARTICIPATION?

Abstract

On April 28th, 2001, Dennis Tito became the world's first private astronaut. In the following decade, Space Adventures made it possible for seven other space spaceflight participants to historically join Tito's accomplishment, paying privately a total of almost 40 million US dollars in experiences on the International Space Station. Since then, only career astronauts have had the opportunity to travel and work in Space. Today, private companies work to reduce the cost of access to Space for potential spaceflight participants and commercial astronauts. Blue Origin, SpaceX, XCOR Aerospace, Sierra Nevada Corporation, Masten Space Systems, and Virgin Galactic are among the key actors in opening this access to orbital, sub orbital, or lunar space participation. Yet the cost remains inaccessible to a large portion of the general public. As Space is increasingly becoming open domain, more and more potential private astronaut candidates are seeking training - beyond the career astronauts and wealthy. This widening access gives rise to scrutiny and more specifically, legal concerns. It also ushers in the emergence of groups of the like of Commercial Spaceflight Federation, Citizens in Space, the Austrian Space Forum (OEWF), and Polar Suborbital Science in the Upper Mesosphere (PoSSUM) that address safety, share best practices, promote science, exchange knowledge, and encourage international cooperation in defining the future of commercial spaceflight. Existing international and national legal laws are not yet suited or fully adapted to commercial access to space, or the "New Space" era, mainly because they were developed during the "Old Space" era, a time when such opportunities and context did not yet exist. This challenge represents a one of many major issues and - if there is to be a thriving human spaceflight economy, with lower barriers to access, increasing the number of individuals eligible for flight, and ultimately cutting costs dramatically - must be addressed imminently. This interactive presentation will examine how addressing key policy, legal, economic, cultural, and anthropological issues will fuel progress, collaboration, innovation, and affordability for a legitimate and growing commercial human spaceflight industry.