25th IAA SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5) Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (4)

Author: Mr. Arthur R. Woods Ars Astronautica, Switzerland, arthur.woods@arsastronautica.com

> Dr. Marco C Bernasconi MCB Consultants, Switzerland, mcb@ieee.org

THE SPACE OPTION STAR

Abstract

The Space Option Star is an interdisciplinary, multi-dimensional art and technology project with a high communication potential, designed to inspire the world population about the many advantages of using space technology to meet the growing needs of the humanity. The Space Option Star has a dual purpose: first, to inform the world population about the Space Option concept as an optimistic path to humanity's sustainable future and, second, to demonstrate an early example of Space Solar Power (SSP) which is a key element in the Space Option future scenario. The Space Option Star will utilize an inflatable laminated membrane technology incorporating a thin-film photovoltaic outer surface in the shape of an icosahedron. Once in orbit, the reflective, 21-faceted form will reflect sunlight as it rotates causing it to appear as a blinking star in the night sky for a period of approximately one month or longer. In addition to the visibility aspects which will make Space Option Star a significant global art work visible to much of the world's population, interactive components will enable direct communication with Space Option Star at public locations around the world such as art and science museums and schools. The technical mission of the Space Option Star will be to collect sunlight, transform it into energy and then to transmit this energy via a microwave beam (Wireless Power Transmission - WPT) to provide power for an auxiliary object in orbit which will then use this power to communicate with Earth locations.

Website: http://www.thespaceoption.com/the_pace_ption_star_project.php