

Potential of commercial human spaceflight

ABSTRACT

The Space Race between the Soviet Union and the United States back in 1960s had propelled vast development of space technology. Although it was still nascent during that time, space technology had spurred the launch of the first human to outer space and eventually the first human to step on the Moon. Nevertheless, the much celebrated technology breakthrough in human spaceflight could not expand its benefit to society due to the dual nature of space projects. Unlike other forms of technology, spacecraft and rocketry remain to be highly confidential and special privilege of space faring nations particularly their space agencies. With receding funding growth to these space agencies especially after the end of the Space Race, this paper aims to explore the potential of commercial human spaceflight in modern days to rejuvenate the development of space technology and its challenges. The scope of this paper is limited to commercial and private initiatives of human spaceflight, but not government or space agency. Towards the end, this paper concludes that commercial human spaceflight particularly the suborbital spaceflight has the potential to develop space tourism, point-to-point transportation, science research, satellite deployment, remote sensing, education, technology demonstration and media promotion.

Keyword: Commercial human spaceflight; Private human spaceflight; Space tourism; Suborbital spaceflight; Orbital spaceflight