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HUMAN EXPLORATION OF THE SOLAR SYSTEM SYMPOSIUM (A5)
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ILOA ADVANCING HUMAN MOON MISSIONS: GIANT STEPS INTO THE GALAXY

Abstract

The return of humans to the Moon, for good, will mark the start of human existence as a Multi World Species. The Moon's South Pole, the prime frontier to a whole new world, invites development by international, public and private partnerships.

International Lunar Observatory Association (ILOA) recognizes that the recent landing and operations on the lunar surface by China's Chang'e-3 (CE3) lander and Yutu rover may mark the beginning of permanent activity on the Moon. ILOA through its MoUs with NAOC and CNSA for the CE3 mission is participating in first developments on the Moon in almost 40 years and has created innovative new interfaces for international cooperation.

Many national and independent enterprises are on the way. India is re-igniting its Chandrayaan Moon lander / rover project after successful flight of the indigenous heavy lift GSLV rocket. Korea, under inspiring new leadership, has declared landing on the Moon a central national objective and has shortened the timeframe from 2025 to 2020.

National programs and policies from USA, Canada, China, Russia, India, Europe, Japan, Korea and others, as well as independent enterprises such as Moon Express, Golden Spike (GSC), Bigelow Aerospace, Shackleton Energy, ILOA, Space Adventures and Japan Manned Space Systems Corporation are realizing that collaboration and integration / interoperability are vital to efficient and effective Cislunar development.

Human Moon missions by 2020 are the focus of growing collaboration between ILOA and GSC. ILOA and affiliated Space Age Publishing Company are voting GSC shareholders and contributed valuable intellectual property from earlier Human Service Mission technical studies with Space Dev (2005, 2006) to the GSC crewed lunar lander feasibility study which completed Phase 1 in 2013. A cooperative initiative coalescing independent, national and international enterprises could see 2-4 people on the surface for 1-4 weeks at an estimated cost of US$5-10 billion.

ILOA intends to realize a Human Service Mission to its future observatory through independent marketing, fundraising and securing support for a 10% share of one astronaut's time on an early Golden Spike or other human Moon expedition.

ILOA seeks to catalyze and advance development of a Cislunar Superhighway for the 21st Century. Humanity will always strive to explore and develop new capabilities. Earth-Moon baseline infrastructure could be the foundation for our expansion to Free Space, Near-Earth-Objects, Mars, Main Asteroid Belt, outer Solar System, and Galaxy / Stars beyond.