Hawai`i Island Space Exploration Society

Is Pleased To Introduce In

2001

Hawai`i Space Tours

In Preparation For

Humanity's Return To The Moon And Beyond

Our special series of space-themed tours will take you on a journey from the past to the future, from the sea to the stars.

Hawaii to the Moon — As you enjoy spectacular other-world scenery, and visit Mauna Kea observatories, learn about Hawaii's role in the human journey to the Moon, and how Hawaii can participate in our return.

Volcanoes of the Solar System — Visit Hawaii's famous "drive-in volcano", Kilauea, and learn why scientists from around the world come to Hawaii to study extraterrestrial geology.

Oceans of the Solar System — Join us as we take a submarine adventure to inner-space, riding beneath the ocean as we explore how the search for water in the solar system is the search for life.

Our tours are designed for ***professionals, educators, entrepreneurs, and are ideal for families, small groups or school groups***. The can be customized to meet your needs.

Future Tours: HISES is developing unique experiences involving Pacific-based Sea Launch, Project LETO, International Space University's Summer Session.

Call the Hawaii Space Exploration Society at **1-808-326-1910** for more information.

Hawaiians sailed. Ancient, it was cherished and incorporated into the foundation of the new. Aloha also was carried with the earliest ancestral voyagers. They used it to build the foundation of their new life.

These people were adventurers, explorers, and settlers. Not knowing if they would be able to return to the homeland, they took with them the necessities of their lives - pigs, chickens, dogs, taro, sweet potato, breadfruit, gourds - and many other things they knew to be useful. And they took Aloha.

In the twenty-first century we can look to their example. We, too, can carry with us an inexhaustible supply of Aloha. It has no mass, no height, depth, nor breadth. It takes no space except in the human heart. And yet, we believe it is the most important item which can be taken on our journeys to the Moon and Stars.

Contact news@spaceagepub.com.

Space Tourism and Hawaii

Space tourism, broadly defined, is the industry of providing services to paying customers traveling beyond Earth's atmosphere for leisure, entertainment and education. It also includes earth-based attractions that simulate the space experience such as space theme parks, space training camps, and virtual reality facilities. The market research on the demand for space tourism conducted in North America by the National Aerospace Laboratory in 1997 revealed that 60% of those surveyed were interested in traveling to space for vacation. Dennis Tito's successful trip to ISS in the spring 2001 boosted the emerging industry worldwide, opening up a new epoch for civilians traveling to space.

Hawaii has been a travel and tourist destination for at least two centuries. Historical studies reveal that Hawaii's visitor industry emerged soon after Captain James Cook's arrival in 1778. Attracted by the "sandalwood tourism," 5,800 visitors arrived in Hawaii annually by 1829. This figure increased to 19,700 in 1848. After World War II, Hawaii's visitor industry expanded rapidly, achieving a record-breaking performance in 2000 with nearly 7 million visitors to the State and total visitor expenditures of $10.9 billion. The State of Hawaii's Department of Business, Economic Development, and Tourism projected that over 10 million visitors would come to the islands in 2010 and total visitor expenditures would exceed $13 billion.

This prosperous market, coupled with the world's premier astronomical observatories atop Mauna Kea, the spectacular Moon-like volcanic terrain and lava fields where Apollo astronauts were trained, equatorial sea-launching facilities due south, and the lunar exploration base simulation to be built on the island, provides Hawaii with tremendous potential to become the world's leading space tourism center. Professionals as well as ordinary people may travel to Hawaii to taste the simulated space experience, which would foster humanity's return to the Moon.

Aloha

Words are symbols, a spoken shorthand conveying dreams, aspirations, and ideals. "Aloha," a symbol which embodies the essence of Hawaii, translates into English as "every greeting, every farewell, and every form of honest love," according to one teacher of Hawaiian culture. Aloha is the re-cognition of the humanity within each individual, the recognition of individual responsibility for others, and the recognition of society's responsibility for the individual. The concept of "Aloha" is the cornerstone of Hawaiian culture. It assures the travelers welcome, and it assures a safe departure. It is a haven in time of storm, and a fair wind along the journey. It is the food and drink of the soul. As we continue our explorations to new worlds, it is paramount that we continue the tradition of Aloha.

The walls of the ancient Hawaiian temple, Waha 'Ula, were built incorporating a stone carried by canoe from the southern homelands from which those who became

Hawai`i Lunar Connections

The Moon plays a prominent role in Hawaii mythology and culture. All Hawaiian keikis (children) learn rhymes for phases of the Moon, and that goddess Hina dwells in the Moon. There are 30 Hawaiian names for the lunar nights of the month and 12 for the months of the year. Hawaii has long been linked romantically with the Moon, and grows decade by decade as a favorite honeymoon destination.

Lunar-like lavascapes sweep large plateaus on the Big Island, and offer geologists and astronomers an ambiance that encourages aspiration toward extraterrestrial science. Visitors today can walk and explore safely and easily across a kilometer and more distant from the highway, and experience what Apollo astronauts achieved as they trained for their epochal voyages 40 years ago.

It is the stars, and the study of them, that most connects Hawaii to the Moon at the dawn of the 21st century and a new millenium. Astronomical conditions and facilities on Hawaii's Mauna Kea provide experience for construction and operation of observatories on the Moon. Remote and centrally isolated, with diffuse atmosphere, sub-zero temperature and limited working mobility, the Mauna Kea complex atop the 4,206 meter summit of the largest mountain on the planet hosts the greatest collection of large astronomical telescopes on Earth.

This great variety of technologies and observations will produce transcending results on Luna, astronomy's next frontier world: Radio, optical and infrared telescopes and interferometers; interferometry for ultra-violent to sub-millimeter wavelengths and for very long baselines, including Earth-Moon VLBI; X-ray, gamma-ray, cosmic ray and neutrino detection; very low frequency radio observation, and more. Operating amidst the extinct Hawaii volcano's fine grain lava and dust particles offers experience for major challenges posed by silicon-edged powdery, deep and abundant lunar regolith.

Hawaii connects to the Moon, finally, through its Pacific qualities – geographically and attitudinally. It was "in peace for all mankind" that characterized humanity's greatest 20th century achievement, and inscription at the Sea of Tranquility. So that this highest ideal and very essence of our species may survive and grow from one world to the next, 21st century successors of ancient seafaring explorers must voyage from Hawaii to the Moon.

Presentation

to

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FROM HAWAII TO THE MOON:
2001 DESIGN STUDY INTRODUCTION

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21st Century Pacific Space Access

Hawaii's geography gives it central importance in the Pacific hemisphere. Some day astronomer-engineers, training in lunar observatory prototype conditions atop Mauna Kea may take off to the Moon from mid-Pacific, equatorial sea-launching operations. Humanity and Hawaii could become, in 21st century, a Gaea, space-faring civilization.

Pacific Rim existing assets include Sea Launch, operating at 154° West, 0°North; Vandenberg AFB CA; Xichang, Jiuquan, and Taiyuan Space Centers in China; Svobodny in Russia; and Kodiak Island, Alaska. Under development are Hainan Space Center; Christmas Island, Kiribati; South Korea Sat Launch Center; and India Ocean Christmas Island.

Hainan commercial spaceport (40 Billion Yuan) to be located in Wenchang, 3 km away from seashore. Aeon Airstrip (US$21 million), Christmas Island in Kiribati, is being developed by Japan NASDA as landing strip for next 20 years. On Oenarodo Island, South Korea is building center near Kohung. Russia-Australia APSC to launch 3-4 stage Aurora rockets from Christmas Island in India Ocean.

Russia is also developing Ekranoplane heavy-lift launch system: space plane and ground effect sea-based platform. Both it and Sea Launch may eventually make human-rated lifters to land on Moon.