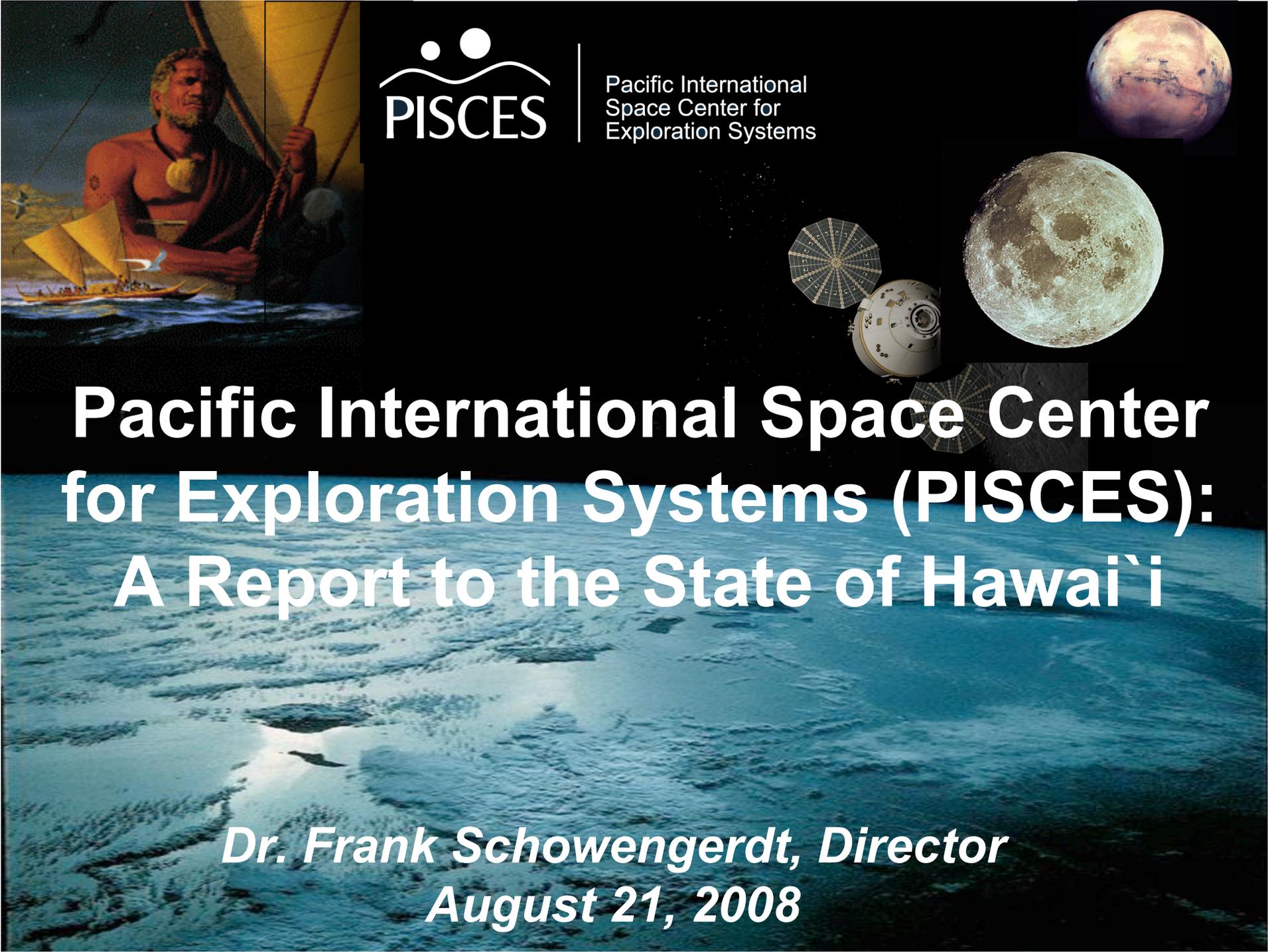




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The background is a collage of images. On the left, a man in traditional Polynesian attire is shown on a boat. On the right, there are images of the planet Mars, the Moon, and a satellite. The bottom half of the image shows a view of Earth from space, with a blue ocean and white clouds.

# Pacific International Space Center for Exploration Systems (PISCES): A Report to the State of Hawai`i

*Dr. Frank Schowengerdt, Director  
August 21, 2008*



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Exploration Systems

# Strategic Location



*The Center of the Space-Faring World*



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# Natural Environment

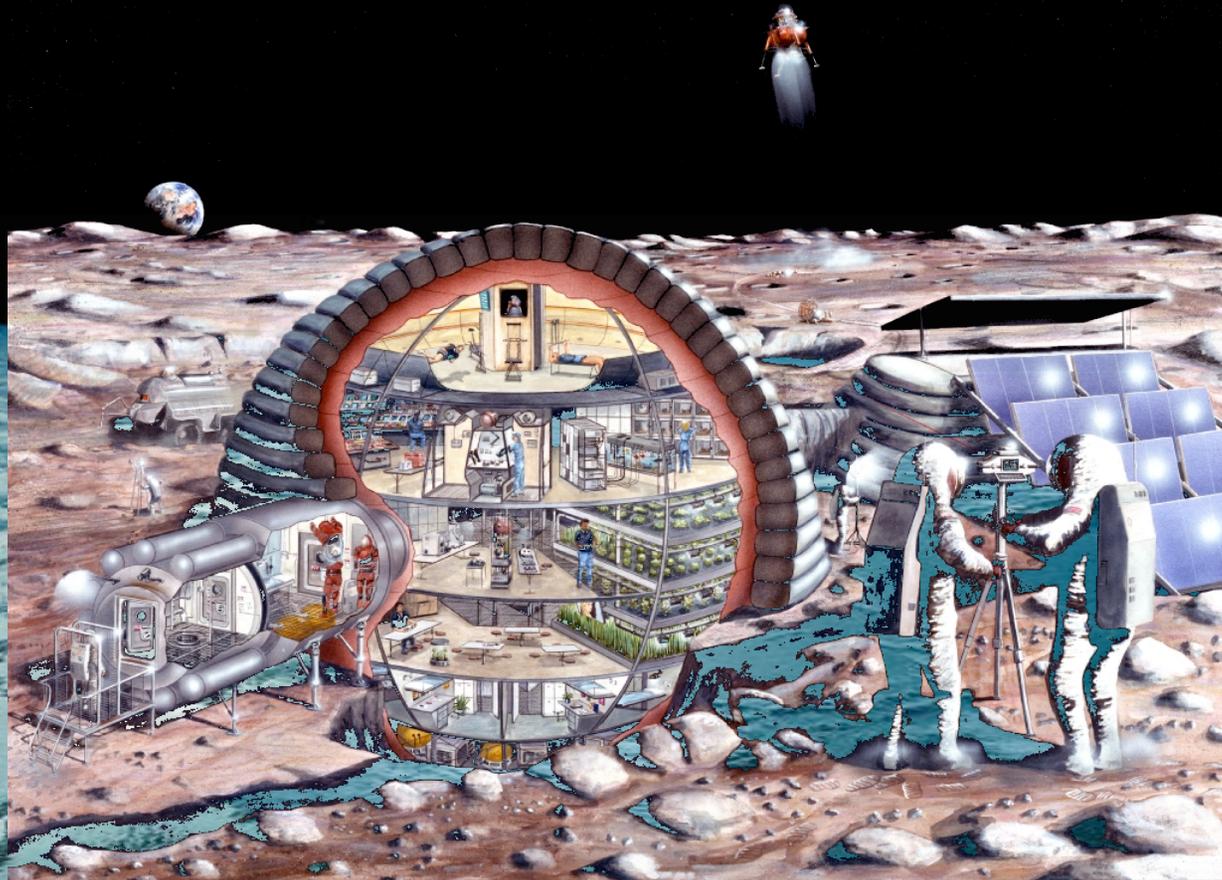


*More Lunar- and Martian-Like Than Any on Earth*



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# *An International Research and Education Center*

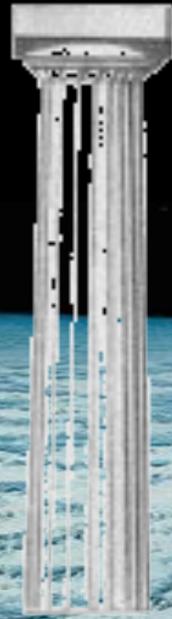


*Dedicated to Sustaining Life on the Moon and Mars*

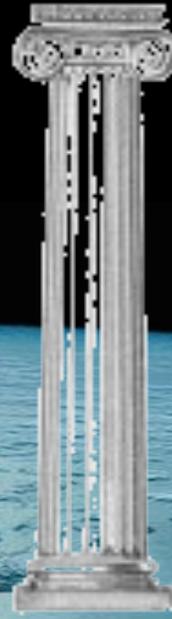


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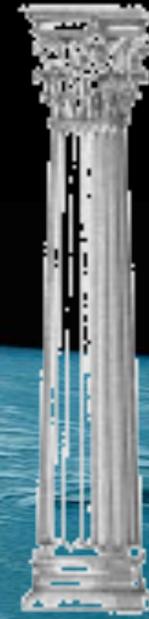
# Pillars of Sustainability



**CONSUMABLES**



**ENERGY**



**MATERIALS**

***For Humans at a Lunar Settlement***



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# Base Facilities



*University of Hawai`i at Hilo*



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# Field Sites



***Pu `u Haiwahini and Haiwahini Craters Area***



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# Mid-Level Facility

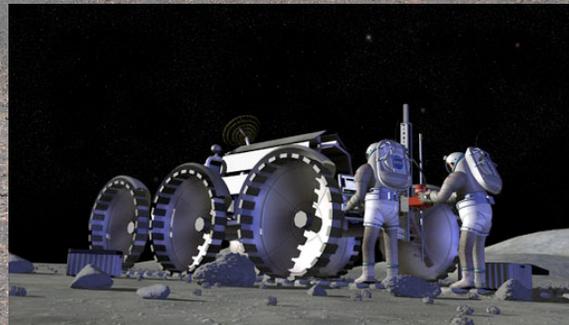
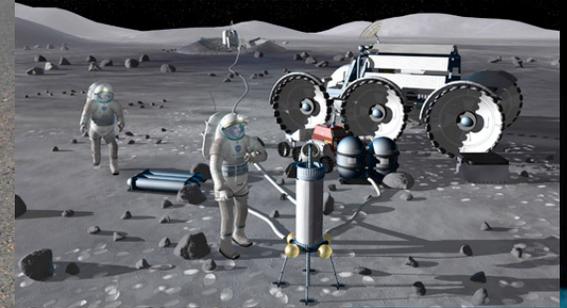


*Hale Pohaku*



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# Analog Outpost



*Pu`u Nene*



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# NASA Projects

## Regolith and Environment Science & Oxygen and Lunar Volatile Extraction (RESOLVE) (KSC, JSC, NORCAT, CMU)



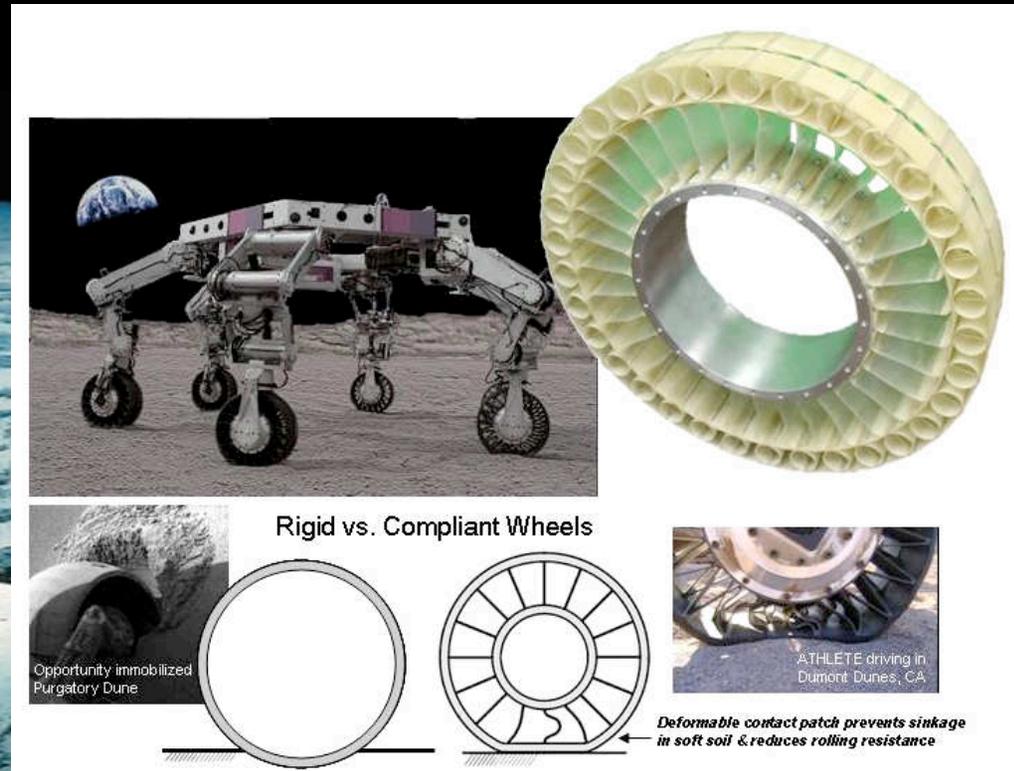
*Tests Scheduled November 2008*



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# NASA Projects

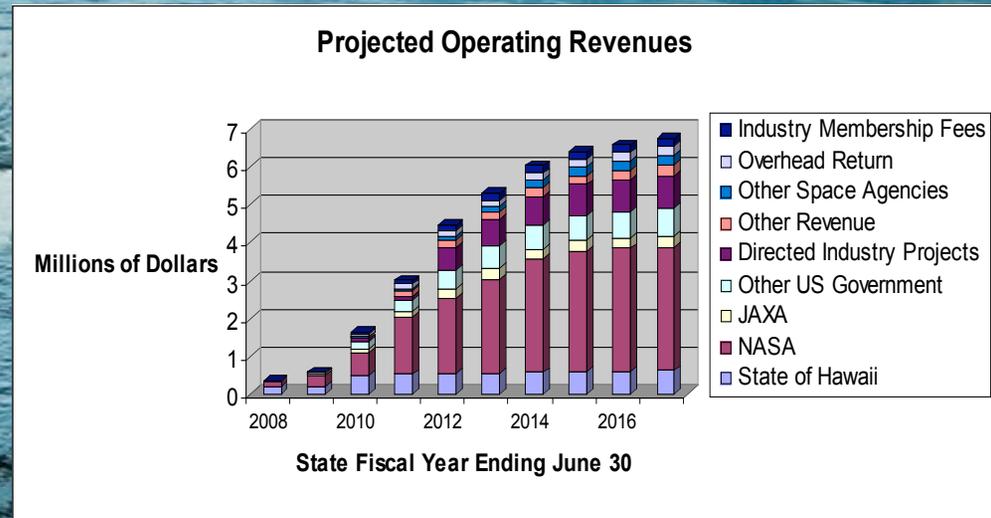
## Tweel™ (Integrated Tire and Wheel – Time Magazine’s 2005 Invention of the Year) (JPL, Michelin, CMU)



### Tests Scheduled November 2008

# The Future

- **Proposals**: NASA Lunar Science Institute, NASA Education for Museums and Planetariums (with Imiloa), NASA Lunar Advanced Science and Exploration Research (LASER), Other Federal Agencies, Companies
- **Facilities**: Base Facility, Test Sites, Outpost Development
- **Operating Funds**: NASA, JAXA, Industry, Other Agencies
- **Capital Fundraising Campaign**: Individuals, Foundations, State & Federal
- **State Funds**: Leveraged 1:1 (2008) to 12:1 (2017)



*From the PISCES Strategic Plan, 2007-2017*