

Pacific International Space Center for Exploration Systems
PISCES 2007

CONFERENCE PROGRAM



November 7-9, 2007
Naniloa Volcanoes Resort, Big Island of Hawai'i



Pacific International
Space Center for
Exploration Systems



UNIVERSITY
OF HAWAII
HILO

Aloha PISCES Conference Participants,

E Komo Mai - welcome to this inaugural conference of the Pacific International Space Center for Exploration Systems at the Naniloa Volcanoes Resort in Hilo on the Big Island of Hawai'i. We are delighted that you are here to share this exciting event with us, to learn more about PISCES and to help us shape it for the maximum benefit of the people of the Big Island, the State of Hawai'i, the Nation and the World.

Please take a moment to go over the agenda and the registration roster. We have put together a program that we believe will provide an unprecedented opportunity for you to help develop a new research and education center focused on sustaining life on another planet. We have assembled experts and stakeholders from across the space exploration world and the local community. We invite you to engage in a process that will eventually encompass all facets of society as we prepare to leave Planet Earth in the coming decades.

PISCES was founded under the auspices of the Hawai'i Department of Business, Economic Development and Tourism, and is an outgrowth of discussions held at the annual Japan-US Science, Technology and Space Applications Program (JUSTSAP) symposia over the past several years. This year's JUSTSAP symposium will be held at the Waikoloa Resort on the Kohala Coast of the Big Island immediately following the PISCES conference.

Mahalo Nui Loa (Thank you very much) to the members of the PISCES organizing team for their tireless efforts over the past year to develop the concept and to Jim Crisafulli, Director of the Office of Aerospace Development for the State of Hawai'i for his countless hours of labor to make PISCES a reality. Our appreciation is extended to the State legislature and administration for having the foresight to take this bold step toward leadership in space exploration.

I join the staff of the University of Hawai'i at Hilo Conference Center in wishing you a most enjoyable and rewarding conference!

Enjoy the conference!

Aloha and A Hui Hou! (Until we meet again)

Frank Schowengerdt
Director of PISCES

AGENDA

Wednesday, Nov. 7

5:00 p.m. – 8:00 p.m.	Registration	<i>Naniloa Volcanoes Resort Lobby</i>
7:00 p.m. – 9:00 p.m.	Opening Reception	<i>Sandalwood Lawn</i>

Thursday, Nov. 8

7:30 a.m.- 8:15 a.m.	Breakfast Buffet	<i>Sandalwood Restaurant</i>
7:30 a.m.- 4:30 p.m.	Registration	<i>Kilohana Room Foyer</i>
8:30 a.m.	<u>Plenary Session</u>	<i>Kilohana Room</i>

Oli (Opening Chant) by Mailelalani Canario

Words of Welcome

Robert Fox, *PISCES co-Director, presiding*

Randy Hirokawa, *Dean of College of Arts and & Sciences*
University of Hawai`i at Hilo
On behalf of

Rose Y. Tseng, *Chancellor*
University of Hawai`i at Hilo

Jim Crisafulli, *Director*
State of Hawai`i Office of Aerospace Development

Mark McGuffie, *Executive Director*
Hawai`i Island Economic Development Board

Stephen Day, *Chairman*
Japan-US Science, Technology &
Space Applications Program

8:55 a.m.	<u>Introduction to PISCES</u> Frank Schowengerdt, <i>PISCES Director</i>
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9:30 a.m.	<u>Keynote Address:</u> The Honorable James “Duke” Aiona <i>Lt. Governor of the State of Hawai`i</i>
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AGENDA

Thursday, Nov. 8 Continued

10:00 a.m. **Refreshment Break** *Kilohana Room*

10:15 a.m. **PISCES Users Panel** *Kilohana Room*
Frank Schowengerdt, *PISCES Director, presiding*

NASA's Analog Program
Doug Craig, *NASA Headquarters*

JAXA's Manned Exploration Program
Naoki Sato, *JAXA*

NASA's ISRU Requirements
Jerry Sanders, *NASA Johnson Space Center*

NASA's Robotics/EVA Requirements
Terry Fong, *NASA Ames Research Center*

U.S. Industry Participation
Larry Clark, *Lockheed-Martin*

U.S. University Participation
Kim Binsted, *University of Hawai'i at Manoa*

Japanese Industry Participation
Spicy Hasegawa, *JAMSS*

Japanese University Participation
Osamu Odawara, *Tokyo Institute of Technology*

Noon **Lunch** *Polynesian Room*

Guest Speaker: Jane Poynter
Partner - Paragon Space Development Corporation
and Crew Member - Biosphere II

AGENDA

Thursday, Nov. 8 Continued

1:30 p.m.

Development Breakout Groups

Planning Progress Reports by Members of PISCES Team

Site Selection

Mark Henley, *The Boeing Company*

Palm Lounge

ISRU

Mike Duke – *Colorado School of Mines*

*Sandalwood
Restaurant*

Robotics

Neville Marzwell – *NASA Jet Propulsion Laboratory*

Polynesian Room

Business Plan

Dan Bland – *JAMSS America*

Kilohana Room

Education and Outreach

Beth McKnight

– *McKnight Communications*

*Ho`omalimali
Room*

3:00 p.m.

Refreshment Break

*Sunset Bar area -
Lobby*

3:15 p.m.

Development Breakout Groups - (continued)

Groups should prepare reports to be given at plenary session Friday morning

4:30 p.m.

Student Design Presentations

Robert Fox, *PISCES co-Director, presiding*

Kilohana Room

6:30 p.m.

Student Awards Banquet

Frank Schowengerdt, *PISCES Director, presiding*

Presentation by Mike Duke – *Colorado School of Mines*

Polynesian Room

AGENDA

Friday, Nov. 9

7:30 a.m.- 8:15 a.m.	Breakfast Buffet	<i>Sandalwood Restaurant</i>
8:30 a.m.	<u>Reports from Development Breakout Groups</u> Site Selection - Mark Henley ISRU - Mike Duke Robotics - Neville Marzwell Business Plan - Dan Bland Education and Outreach - Beth McKnight	<i>Kilohana Room</i>
9:45 a.m.	General Discussion of PISCES Development Plans	
10:15 a.m.	Refreshment Break	<i>Kilohana Room</i>
10:30 a.m.	<u>Local Government Perspectives</u> Jim Crisafulli, presiding Administration: Theodore Liu, <i>Director</i> <i>Dept. of Business, Economic Development & Tourism</i> State Legislature: The Honorable Will Espero, <i>Senator</i> The Honorable Clift Tsuji, <i>Representative</i> The Honorable Gene Ward, <i>Representative</i> County of Hawai`i: The Honorable Harry Kim <i>Mayor of the County of Hawai`i</i>	<i>Kilohana Room</i>
Noon	Lunch <u>Guest Speaker:</u> Doug Comstock, <i>Director</i> <i>Innovative Partnership Program</i> <i>NASA Headquarters</i>	<i>Polynesian Room</i>
1:30 p.m.	<u>Local Academic Perspectives</u> Robert Fox, <i>PISCES co-Director, presiding</i> Jene Michaud, <i>Professor of Geology and former Chair, UHH Faculty Congress</i> <i>University of Hawai`i at Hilo</i> Larry Gray, <i>President</i> <i>UHH Undergraduate Astrophysics Club</i> Randy Hirokawa, <i>Dean</i> <i>UHH College of Arts & Sciences</i>	<i>Kilohana Room</i>

AGENDA

Friday, Nov. 9 Continued

Christian Veillet, *Director*
Canada-France-Hawai'i Telescope

John Lockwood, *President*
Geohazards Consultants International, Inc.

2:30 p.m. **Local Community Perspectives** *Kilohana Room*

Robert Fox, *PISCES co-Director, presiding*

Robert Lindsey, *Hawai'i Island Trustee*
Office of Hawaiian Affairs

Mark McGuffie, *Executive Director*
Hawai'i Island Economic Development Board

Barbara Hastings, *President-Elect*
Hawai'i Island Chamber of Commerce

Steve Durst, *President*
Space Age Publishing Company

3:30 p.m. **Refreshment Break** *Kilohana Room*

3:45 p.m. **Open Discussion**
Potential Issues/Possible Solutions and Next Steps *Kilohana Room*

Frank Schowengerdt, *PISCES Director and*
Robert Fox *PISCES co-Director presiding*

5:30 p.m. Gather in Naniloa Volcanoes Resort Lobby

5:45 p.m. Departure to `Imiloa Astronomy Center *Naniloa Volcanoes
Resort Lobby*

6:00 p.m. **Dinner** *Imiloa Café*

7:30 p.m. **Presentation** *`Imiloa
Planetarium*

Nainoa Thompson, *President*
The Polynesian Voyaging Society

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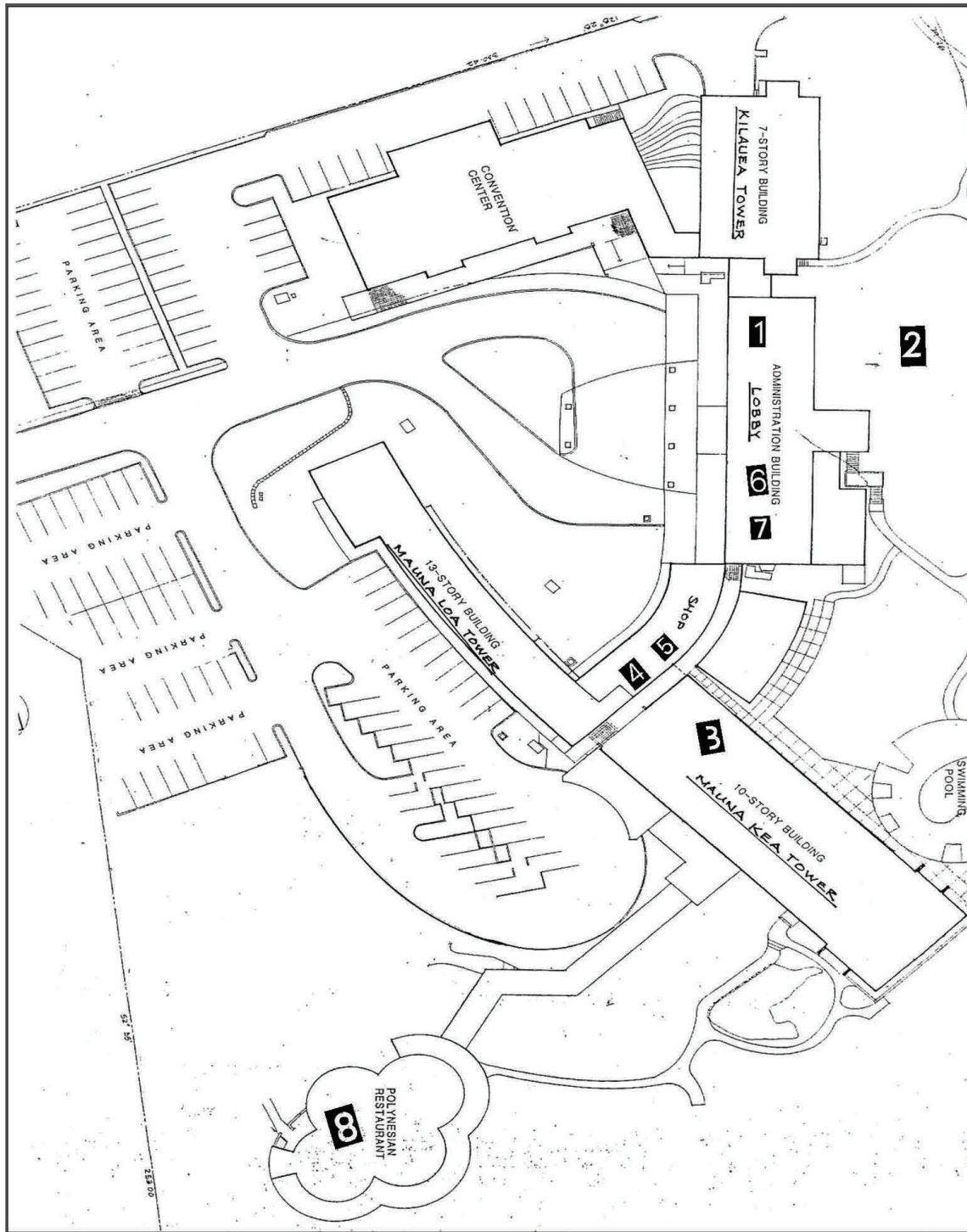
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|-------------------------------|---|
| 1. Main Lobby | 5. Aloha Room (Ground Floor) |
| 2. Sandalwood Lawn | 6. Ho'omalimali Area |
| 3. Kilohana Room (10th Floor) | (Ground Floor by Restaurant) |
| 4. Palm Lounge (1st Floor) | 5. Sandalwood Restaurant (Ground Floor) |
| | 6. Polynesian Room |



Program Designed by:
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