



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
GOVERNOR

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Statement of

RICHARD C. LIM
Director

Department of Business, Economic Development & Tourism
before the

**HOUSE COMMITTEE ON
ECONOMIC REVITALIZATION & BUSINESS**

Friday, April 20, 2012
9:00 a.m.

State Capitol, Conference Room 423
in consideration of

SCR137, SD1, HD1 (Proposed)

**REQUESTING THE OFFICE OF AEROSPACE DEVELOPMENT TO EXPLORE AND
PROMOTE PARTNERSHIPS IN AEROSPACE WITH THE STATE OF ALASKA TO
EXPAND AND DIVERSIFY BOTH STATES' ECONOMIES AND THE UNITED STATES
SPACE PROGRAM.**

Chairs McKelvey, Vice Chair Choy, and members of the Committee. The Department of Business, Economic Development and Tourism supports the intent of this resolution, especially as it will help address our goals for technology innovation and business development in Hawaii.

We recognize the complementary nature of aerospace-related assets in Hawaii and Alaska, as well as the potential for inter-state collaboration to advance both local economic development opportunities in this industry and our national space program.

DBEDT will work with the University of Hawaii, the local business community, and other interested parties to explore the opportunities proposed through this measure.

Thank you for the opportunity to testify on this resolution.



Pacific International
Space Center for
Exploration Systems

April 19, 2012

The Honorable Angus McKelvey, Chair
and Members of the House Committee on Economic Revitalization & Business
The House of Representatives, State Capitol
Honolulu, Hawaii 96813

Dear Chair McKelvey and Members:

Subject: **Resolution SCR137 SD1 HD1**

REQUESTING THE OFFICE OF AEROSPACE DEVELOPMENT TO DEVELOP AND
PROMOTE A PARTNERSHIP IN AEROSPACE WITH THE STATE OF ALASKA TO
EXPAND AND DIVERSIFY BOTH STATES' ECONOMIES AND THE UNITED STATES
SPACE PROGRAM

Hearing at 9:00AM on April 20, 2012 in Room 423

Aloha. I am John Hamilton, Deputy Director of PISCES (Pacific International Space Center for Exploration Systems). I am writing this letter to show my full support of Resolution SCR137 SD1 HD1.

The States of Hawai'i and Alaska have a vast reservoir of unique assets within aerospace. Our largely undeveloped natural terrains boast a variety of volcanic terrains with strong similarities to the rocky planets. This presents a potential opportunity for our two states to work together in complementary analog testing of future robotic and manned missions. Additionally, the geographic remoteness of Hawai'i and Alaska from the mainland US permits for long-range testing of UAVs. This testing has many valuable applications in various sectors of our society such as defense, homeland security, police & fire surveillance, search & rescue and also remote resource mapping. UAV technologies are rapidly finding useful applications in civil and commercial areas. Meteorological data collection across the vast stretches of the Pacific can provide useful information on in situ measurements of storm systems such as hurricanes. Real-time detection and monitoring of lava outbreaks and eruptions is another application. The combination of remote sensing, robotics, avionics and control blends multiple technologies in a utilitarian way.

Bringing UAV technologies to Hawai'i will mean an influx of remote sensing, robotics, avionics, and control system technologies and research along with the associated jobs. The uses above are but a few of the obvious ones. From the perspective of PISCES and our work in Hawai'i County, we can see several direct uses for these. UAV platforms can be used as analogs to satellite systems or even spacecraft, mimicking their motion and interactions with mutual communications and sensor sharing. Tele-operation of UAVs is very similar to the proposed tele-operation of lunar and deep space systems from the International Space Station or other future space platforms in L1/2 near the Moon. Additionally, UAVs have been proposed for effective and low cost means to survey the global terrain of Mars at altitudes much lower than orbiting satellites. These projects can be developed and tested NOW at our facilities in Hawai'i.

Thus the potential uses for UAVs in Hawai'i are great. I urge support of this resolution.

Mahalo,

John Hamilton
Deputy Director, PISCES

John
Hamilton

Digitally signed by John Hamilton
DN: cn=John Hamilton, o=University
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Date: 2012.04.19 16:43:51 -10'00'



Pacific International
Space Center for
Exploration Systems

April 19, 2012

The Honorable Angus McKelvey, Chair
and Members of the House Committee on Economic Revitalization & Business
The House of Representatives
State Capitol
Honolulu, Hawaii 96813

Dear Chair McKelvey and Members:

Subject: Resolution SCR137 SD1 HD1
REQUESTING THE OFFICE OF AEROSPACE DEVELOPMENT TO DEVELOP
AND PROMOTE A PARTNERSHIP IN AEROSPACE WITH THE STATE OF
ALASKA TO EXPAND AND DIVERSIFY BOTH STATES' ECONOMIES AND THE
UNITED STATES SPACE PROGRAM
Hearing Date: April 20, 2012
Hearing Time: 9:00 AM

Aloha, as the Operations Manager for PISCES, a resident of Hawai'i and a native Hawaiian, I am testifying in favor of Resolution SCR137 SD1 HD1.

The States of Hawai'i and Alaska have a vast reservoir of unique assets within aerospace. Our largely undeveloped natural terrains boast a variety of volcanic terrains with strong similarities to the rocky planets. This presents a potential opportunity for our two states to work together in complementary analog testing of future robotic and manned missions. Additionally, the geographic remoteness (of Hawai'i and Alaska) from the "lower 48" allows for long-range testing of unmanned aircraft vehicles (UAV) over water. Our importance as geographically strategic *points* of defense for the United States and the vast stretch of international waters between us, offers the United States the opportunity to develop a new *line* of defense via joint testing and deployment of UAVs (unmanned aircraft vehicles) in Hawai'i and Alaska.

Unmanned aircraft systems are a rapidly growing sector in aerospace that will benefit the State of Hawai'i and benefit from cooperative efforts between the States of Hawai'i and Alaska. In addition to defense applications, unmanned aircraft vehicles (UAV) have cross-sector applications that will prove beneficial to the State of Hawai'i. UAVs can be used in search & rescue operations, monitoring hazardous conditions (e.g. hurricanes, volcanoes, fires, etc.), exploring rainforest canopies, and high resolution mapping and exploration of rugged terrains. Bringing UAV technologies to Hawai'i will mean an influx of remote sensing, robotics, avionics, and control system technologies and research along with the associated jobs.



Pacific International
Space Center for
Exploration Systems

Passing this resolution would provide the State of Hawai`i with the opportunity for large-scale gains in science, technology, the economy, and jobs. I ask you to please pass this resolution.

Mahalo Nui Loa,

**Christian
Andersen**

Digitally signed by Christian Andersen
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ou=Operations Manager,
email=canderse@hawaii.edu, c=US
Date: 2012.04.19 16:32:00 -10'00'

Christian "Kauhiokalani" Blackshear Andersen
PISCES
Operations Manager



Lieutenant Governor Mead Treadwell
STATE OF ALASKA

April 19, 2012

Rep. Angus McKelvey, Chair
Rep. Isaac Choy, Vice Chair
House Committee on Economic Revitalization & Business
Hawaii State Capitol
Honolulu, HI 96813

Dear Rep. McKelvey, Rep. Choy and Members of the Committee,

After reading SCR137, which requests your State Administration, through its Office of Aerospace Development, to explore and promote opportunities for the State of Hawaii and State of Alaska to partner in aerospace enterprise, I write to say I, too, believe Alaska and Hawaii can benefit from cooperation.

Both of our states are blessed with a diversity of geographical, technological and environmental resources that are ideally suited to advance a broad range of activities in aviation, aeronautics, and the exploration and development of space. As noted in this resolution, many of these assets are complementary in nature, and, through cooperation, could provide unique opportunities for our nation to develop, test and validate innovative technologies that could help pioneer the next generation of air transportation, commercial space launch, and ultimately robotic and human missions beyond low-Earth orbit.

Aviation is crucial to our tourism industries, as well as in connecting parts of our states that cannot be reached by roads Alaska also provides the most direct air routes between the South Pacific, Hawaii and Europe, and cooperation in promoting those routes could build both states' visitor counts.

As Chair of the Aerospace States Association, I recently had an opportunity to visit the Aloha State and meet with numerous representatives from the University of Hawaii, the Mauna Kea Observatories, Hawaii's Aerospace Advisory Committee, and leaders from your State Administration, House and Senate. Cooperation will not only strengthen our local economies, but also support our national space program, providing opportunities to advance STEM education, technology innovation, and humankind's pioneering pursuits on the frontiers of space.

Good wishes as you consider this resolution.

Sincerely,

A handwritten signature in black ink that reads "Mead Treadwell".

Mead Treadwell



From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, April 18, 2012 11:11 AM
To: ERBtestimony
Cc: apohi21@gmail.com
Subject: Testimony for SCR137 on 4/20/2012 9:00:00 AM

Testimony for ERB 4/20/2012 9:00:00 AM SCR137

Conference room: 423
Testifier position: Comments Only
Testifier will be present: No
Submitted by: Bill Brown
Organization: Aupuni O Hawai'i
E-mail: apohi21@gmail.com
Submitted on: 4/18/2012

Comments:

Aloha,

It is wonderful on the efforts to secure the islands as a strategic point for advance technology against all those who would strike against the United States. Although the propose measure connects with the extramural revenues for the state, we would suggest that the portion of this measure includes native Hawaiian Initiatives in commerce to each respected communities on Hawaiian Home Lands.

E Hawai'i au,

Bill Brown

Aupuni O Hawai'i

