



NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
INTERIM DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of

RICHARD C. LIM
Interim Director

Department of Business, Economic Development & Tourism

before the

HOUSE COMMITTEE ON ECONOMIC REVITALIZATION & BUSINESS

Tuesday, March 15, 2011

8:00 a.m.

State Capitol, Conference Room 312

in consideration of

SB 112 SD1
RELATING TO TOURISM.

Chair McKelvey, Vice Chair Choy, and members of the Committee. The Department supports the intent of SB112 SD1 to provide state support for the environmental studies required to obtain a commercial spaceport license for Hawaii airports from the Federal Aviation Administration.

The effort to establish an international commercial spaceport in Hawaii builds upon the ongoing development of innovative "spaceplanes" that can take off and land at local airports using existing runways that service commercial jet aircraft, but which also employ advanced propulsion technologies to carry satellites, experiments and tourists to space.

Between 2012 and 2015, at least three and as many as six suborbital spaceplane companies are projected to be in operation worldwide. To date, ten states have already obtained

or are currently in the process of applying for commercial spaceport licenses to accommodate this anticipated demand. Given its location, Hawaii is ideally located to serve as a node on a global spaceplane transportation network. In addition, with major airport runways proximal to the ocean, Hawaii can use existing aviation infrastructure to enable the launch and landing of spaceplanes at local airports (the landlocked state of New Mexico, by contrast, has had to invest over \$200 Million in public funds to build a commercial spaceport that can safely accommodate such operations). And establishing spaceplane operations in Hawaii would bring a new dimension to our visitor industry – space tourism (projected to be a multi-billion dollar industry over the next decade).

In order for spaceplanes to launch and land from Hawaii’s airports, our state must obtain a commercial space transport license from the Federal Aviation Administration (FAA). Funding requested through this legislation will enable our department to conduct the environmental and safety assessment studies required for this license to certify that spaceplane operations can be conducted safely in Hawaii. Similar studies at airports nationwide have universally resulted in “FONSI”s – “findings of no significant impact”.

Commercial space transport will help drive the “next generation” of global aviation technologies, systems and protocols, and states that engage in this industry from its inception will help establish and mature spaceplane operation centers and flight corridors to be networked worldwide. Hawaii is uniquely qualified to assume a leadership role in this effort for the entire Asia-Pacific region.

Thank you for the opportunity to testify on this bill.

February 8, 2011

Hawaii State Legislature
Hawaii State Capitol
415 S. Beretania Street
Honolulu, HI 96813

Re: Support for Senate Bills 112, 165 and 1496

Members of the Twenty-Sixth State Legislature:

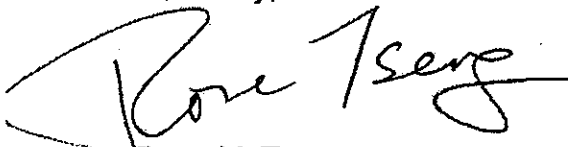
As a member of the Hawaii State Aerospace Advisory Committee, I am pleased to provide testimony in strong support of Senate bills 112, 165 and 1496, which, respectively, appropriate funds for a spaceport license from the Federal Aviation Administration, provide the Office of Aerospace Development with funding and staff support, and establish "development and operation of space exploration and lunar research related activities" as "eligible business activities" for enterprise zones in Hawaii.

I firmly believe that a strong aerospace industry in Hawaii is critical to developing an innovative and progressive "knowledge economy" for our state. Just as aviation was the industry of the future at the beginning of the 20th century, aerospace today represents the hopes and dreams of the young scientists, entrepreneurs and innovators being educated right now for the brightest jobs of the future.

Moreover, the state of Hawaii possesses attributes and resources found nowhere else on Earth which, if appropriately developed and used, will establish an important niche for the state in the aerospace industry.

This is an industry that can help sustain and keep our talented, well educated youth at home, help stabilize and diversify our state's economy, and help improve the quality of life in our state. Support for an aerospace industry today will provide a substantial return of investment for many years to come.

Sincerely,



Rose Y. Tseng
Professor and Chancellor Emerita
University of Hawaii at Hilo

Testimony in Support of SB 112, SB 165, SB 1496

Date: 10 February 2011

Submitted by: Joseph E. Ciotti, PhD
Director, Center for Aerospace Education
Hawai'i Teacher-in-Space/NASA Ambassador
Windward Community College

Dear Members of the Twenty-Sixth Legislature:

I am pleased to provide testimony in strong support of SB 112, SB 165 and SB 1496—all three of which address the strategic and timely growth of aerospace industry in the State of Hawai'i.

I've been intimately involved with space education in Hawai'i for over 40 years and can personally testify to the significant impact that past and recent commitments to this endeavor have had on our youth and the welfare of our State. I've witnessed this through my decades of teaching astronomy and space science at both the secondary and college level, through my extensive K-12 and community outreach efforts at Windward Community College's Center for Aerospace Education which has reached over 300,000 people, through the rocketry projects my Hawai'i Space Grant students continue to undertake, and through over forty years of experience I enjoyed at all three planetariums in Hawai'i—including designing and constructing two of them.

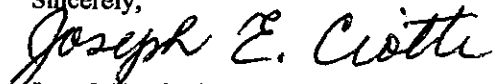
Following in the wake of its rich seafaring heritage, Hawai'i has already undertaken bold spacefaring ventures. From world-class astronomical observatories ... to NASA-sponsored *in situ* rehearsals of manned and robotic space missions ... to its role in international airline transportation and potential future space tourism, Hawai'i is uniquely poised for significant economic growth through the leadership choices it makes regarding the aerospace industry.

Hawai'i is currently perched to assume a prominent role in aerospace research and technology. The decisions made today by the Twenty-Sixth Legislature will determine the flight path our State will follow in a field that has potential for major positive impact on its economy. By committing to the development of a spaceplane launch/landing facilities in Hawai'i (SB 112), operation of space exploration and lunar research related activities as eligible local business (SR 1496), and support for the Office of Aerospace Development to carry out this bold and far-reaching vision (SR165), Hawai'i will have laid its claim as the crossroads along this major space highway.

By recognizing aerospace as a strategic industry in Hawai'i, passage of these Senate Bills will provide the urgently needed support and boost to DBEDT's Office of Aerospace Development in fulfilling its responsibility to oversee the economic growth of this fast-paced and strategically important industry in Hawai'i.

I strongly support SB 112, SB 165 and SB 1496.

Sincerely,



Joseph E. Ciotti, PhD

Professor, Physics, Astronomy & Mathematics
Director, Center for Aerospace Education
Hawai'i-Teacher-in-Space/NASA Space Ambassador
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HAWAI‘I ACADEMY OF SCIENCE

Educational Programs Office

c/o College of Education, UHM • 1776 University Avenue • Honolulu, HI 96822
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February 9, 2011

Testimony in Support of SB112, SB165, SB1496 Hawai‘i State Legislature – 2011 Session

Aloha,

On behalf of the Hawai‘i Academy of Science, we are providing testimony in strong support of bills **SB112, SB165 and SB1496**, which offers our state viable avenues for employment, growth and sustainability.

As sponsors and coordinators for the annual State Science and Engineering Fairs since 1957, the Academy has witnessed the potential of thousands of Hawai‘i’s top students in the science and engineering fields, and has seen many of these students go on to excellent universities and careers. However, many of those high-level technical and research jobs remain on the mainland, leaving our young professionals to make the decision to live and work away from home, or come back to compete for a smaller pool of desired careers.

Hawai‘i needs sources of industry not only for the sake of our future generations, but for the sustainability of our islands as well. The aerospace industry is a tremendous opportunity for our children and a “high-tech” bridge between east and west that also secures Hawai‘i as an integral part of the U.S. economy. Please join with us in our effort to build Hawai‘i’s future.

Mahalo,



Carolyn Kaichi
Director
Hawai‘i State Science and Engineering Fair



Dr. Gareth Wynn-Williams
Past-President
Hawai‘i Academy of Science
University of Hawai‘i Institute for Astronomy



Pacific International
Space Center for
Exploration Systems

TESTIMONY

Date: February 9, 2011

To: Members of the Twenty-Sixth Hawaii State Legislature

From: Dr. Frank Schowengerdt

Subj: Testimony in Support of SB112, SB165 and SB1496

I write in strong support of the aerospace-related bills SB112, SB165 and SB1496. These bills deal with a commercial spaceport license for Hawaii from the FAA; funding for the Office of Aerospace Development (OAD), the Pacific International Space Center for Exploration Systems (PISCES) and the Pacific International Space Alliance (PISA); and inclusion of space exploration and lunar research activities as eligible business activities for enterprise zones in Hawaii.

A measure similar to SB112 was passed in the 2009 legislature, but Hawaii's former Administration did not release funding appropriated through this bill. While commercial space transportation represents a long-range economic development opportunity, it is important that the licensing process begin now so that your state will be ready to launch (literally!) when the technology for sub-orbital point-to-point transportation matures. Other states are much further along in this process than Hawaii, even though your State has many demonstrable advantages over the others. In addition, private investors critical to developing the commercial space transportation network will send their dollars to states that have demonstrated both an interest in and commitment to grow this industry. The best way Hawaii can evidence this interest and commitment is by funding the environmental studies required to obtain a commercial spaceport license from the Federal Aviation Administration. SB 112 will provide the critical funds needed for this purpose.

For the past four years, your State Office of Aerospace Development (OAD), created through State statute, has been working to promote Hawaii's future in aerospace. Hawaii clearly has significant advantages in terms of location, geographical resources and international connectivity that well position aerospace as a strategic growth industry for your State. This is one of the most progressive and forward-looking industries in the world, and Hawaii can play a leadership role, both for our nation and the global space community, in pioneering new vistas for aviation, aeronautics, and space exploration. But to succeed in this endeavor, OAD needs adequate funding and staff support, and SB 165 would provide what I feel is the minimum amount of support this office requires to responsibly carry out its mandate - especially when other states, with significantly fewer advantages than Hawaii, are moving aggressively to expand their aerospace programs as drivers for economic development.

PISCES is one of the unqualified success stories of OAD's efforts to make a mark in space exploration. Through its testing, research, education and public outreach activities, PISCES has put Hawaii on the map in a way that no other activity has in this area. Tests at our site on the lower slopes of Mauna Kea have brought hundreds of scientists, engineers, technicians, government officials, public figures and members of the news media to the Big Island in recent years, and have injected millions of dollars into Hawaii's economy. The tests at PISCES also have demonstrated many new technologies that can help sustain life on the Moon and beyond, but again, which will also benefit the local economy.

For example, during the 2010 tests powerful solar concentrators were used to process the lunar-like soil at the PISCES test site in the same way that they will be used on the Moon to extract oxygen and water for life support. This and similar technology can help make Hawaii more energy-independent through widespread application of solar power in residential and commercial buildings. In addition, technologies tested at PISCES involving communication, robotics, and materials processing can help provide sustainable, high-paying jobs in non-polluting industries that are crucial to economic development in the State. We are also currently planning a robotics challenge involving students and a ground-penetrating radar study at our test site, in addition to a proposed life-support habitat for a human-factors study of interest to NASA.

Support of PISCES through SB165 will also enable us to move forward on developing the International Lunar Research Park (ILRP) initiative on the University of Hawaii at Hilo campus. The prototype ILRP to be developed on the Big Island (simulating one to eventually be deployed on the lunar surface) will provide the space, infrastructure and field areas needed to develop and test technologies for sustaining life on the Moon and beyond, while spinning off technologies to benefit the local economy.

The ILRP will be built in or adjacent to the existing Science and Technology Park at the university, where the base facilities for many of the Mauna Kea telescopes are located, and would be part of the enterprise zone as requested in SB1496. With this designation, companies could lease space in the park to conduct research with government and university personnel, developing and validating technologies that will figure prominently in their business plans for space commerce. The ILRP has received enthusiastic response both inside and outside of NASA, and will be the subject of a workshop at NASA Ames Research Center on April 5th of this year involving such space luminaries as Buzz Aldrin and high-ranking officials from space companies and international space agencies.

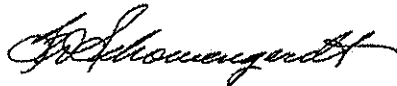
**University of Hawai'i at Hilo
200 W. Kawili St.
Hilo, HI 96720**

In summary, I believe the State of Hawaii could find no better area for economic development to complement its existing traditional sectors than aerospace. This industry produces jobs that pay roughly twice the U.S. national average, that are clean and attractive, and that cannot be outsourced to other countries. In fact, the space exploration activities in which we are currently engaged and that are supported through this legislation can attract people and businesses from all over the world.

We have already demonstrated this at PISCES by bringing in sustained business from the Canadian and German space agencies, in addition to research support from NASA. Rather than competing with current economic drivers in Hawaii such as tourism and agriculture, aerospace activities will attract more tourists to the Big Island to see what it will be like to live and work on the Moon, and will contribute new technologies to the agriculture sector as spin-offs from the sustainability research to be conducted at the ILRP.

I therefore urge your State Legislature to support these bills for the good of the state, the nation and the world.

Sincerely,

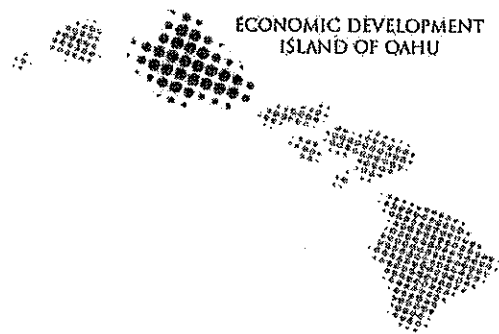
A handwritten signature in black ink, appearing to read "Frank Schowengerdt", written in a cursive style.

Frank Schowengerdt
Director

March 14, 2011

Hawaii State Legislature
State Capital
Honolulu, Hawaii 96813

COMMITTEE ON ECONOMIC
REVITALIZATION & BUSINESS
Rep. Angus L.K. McKelvey, Chair
Rep. Isaac W. Choy, Vice Chair



Tuesday, March 15, 2011

Conference Room 312
State Capitol
415 South Beretania Street

SUPPORTING TESTIMONY RELATING TO: SB 112-SD1 - RELATING TO TOURISM

Tourism; Space Industry; Federal Aviation Administration; Spaceport License

Aloha Chair McKelvey, Vice Chair Choy and Members of the Committees:

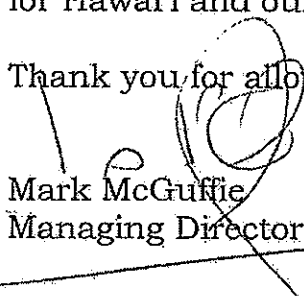
Enterprise Honolulu, the O'ahu Economic Development Board, **strongly supports the passage of SB 112-SD1**, enabling the State's Office of Aerospace Development to conduct environmental and safety assessment studies required for this license to be applied for, approved and issued from the Federal Aviation Administration (FAA).

As the FAA is expected to issue a limited amount of spaceport licenses, it is timely that this legislation be approved now, to further enhance our economic vitality and diversify the visitor industry with new opportunities derived from space tourism.

The advent of commercial space transportation has arrived, the Hawaiian Islands are uniquely positioned strategically and geographically. To secure a commercial space port license, will further enhance our economic advantages with companies such as Space X and Virgin Galactic.

During the twenty-fifth legislature, 2009 Session, there was a similar bill passed, however, the past administration did not release the funds to start the process. Please let us move forward on this important initiative and ensure a brighter future for Hawai'i and our generations to come.

Thank you for allowing this testimony to be included at this hearing.


Mark McGuffie
Managing Director


ENTERPRISE
HONOLULU

THE BUSINESS CLIMATE OF PARADISE

735 Bishop Street, Suite 412, Honolulu, Hawaii 96813 • 808-521-3611
Fax: 808-536-2281 • www.enterprisehonolulu.com



The Aerospace States Association

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Tennessee
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Vermont
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Washington
West Virginia
Wisconsin
Wyoming

February 7, 2011
Testimony for SB 112, SB 165 and SB 1496
2011 Session - Hawaii State Legislature

Dear Members of the Twenty-Sixth State Legislature:

We are most pleased to provide testimony in strong support of SB 112, SB 165, and SB 1496 – all of which recognize aerospace as a strategic and timely growth industry for Hawaii, and collectively provide the critically needed support to help realize your State's full potential in this dynamic technology sector.

As you may know, the Aerospace States Association is a nonpartisan organization, led by Lt. Governors and other top-ranking state leaders, that advocates on behalf of all fifty states for R&D funding, workforce training, economic development in aerospace and aviation, and excellence in math and science education to help keep states competitive in the global aerospace marketplace. We view the aerospace industry as an engine that defends our nation, drives our economy, and provides Americans with inspiring and highly paid jobs. Our homeland security, economic vitality, and national mobility clearly rely upon and benefit from a strong and diversified aerospace sector.

The State of Hawaii has been an active member of ASA since its inception, and over the years has substantially contributed to both the growth of our organization and our national debate on aerospace. Your State also has several unique characteristics - in particular, its mid-Pacific location, Moon-Mars like terrain, and strategic international ties with the Asia-Pacific community – which make it an ideal location to support a wide range of aerospace-related activities, including pioneering research in astronomy, planetary geosciences and deep space surveillance; the development, testing and evaluation of innovative technologies to advance both robotic and human space missions; growth as a strategic international node supporting advanced aviation training and the rapidly emerging commercial space transportation sector; and innovation in STEM education to inspire the next generation of aerospace entrepreneurs. The Hawaiian team won the first national Real World Design Challenge sponsored by ASA. Your new Space Act Agreement with NASA also well positions Hawaii to be both a major contributor to and beneficiary of our national space program.

ASA is committed to supporting state-based initiatives that can strengthen our nation's leadership in aerospace, and believe the recommendations set forth in these resolutions will both advance this objective as well as strengthen Hawaii's role as a major contributor to and beneficiary of the global space enterprise. We look forward to working with all of you in realizing this vision.

Thank you for the opportunity to testify on these measures.

Respectfully,

Brian Dubie
Chair, Aerospace States Association



HAWAI'I AEROSPACE
ADVISORY COMMITTEE

Elliot Holokauahi Pulham, Chair

March 13, 2011

Representative Angus McKelvey, Chair
Committee on Economic Revitalization & Business
Hawai'i State Legislature

Representative Isaac Choy, Vice Chair
Committee on Economic Revitalization & Business
Hawai'i State Legislature

Members of the ERB Committee

SUBJECT: Senate Bill No. 112

Dear Representative McKelvey, Representative Choy, and Members of the ERB Committee:

On behalf of the Hawai'i State Aerospace Advisory Committee, I am writing to encourage your strongest possible support for S.B. No. 112, which would appropriate funding for the Office of Aerospace Development, DBEDT, to pursue a commercial spaceport license from the Federal Aviation Administration (FAA) for the State of Hawai'i.

As you know, the creation of the Hawai'i Aerospace Advisory Committee was authorized by the Legislature (Act 52, 2009 Session) and approved by the Governor on May 6, 2009. Our purpose, per this Act, is to advise and assist the Legislature and State agencies in monitoring, assessing and promoting aerospace development statewide. The Committee is comprised of leading aerospace industry executives, distinguished academicians from across the state, and economic development executives from Oahu, Kauai, Maui and Hawai'i – all united with a common purpose to help the State diversify its economy and promote innovative education and employment opportunities for the people of Hawai'i.

The Hawai'i Aerospace Advisory Committee met in Honolulu on January 11, 2011 to explore these opportunities and ways to realize them. During this meeting, we discussed the merits of obtaining a commercial spaceport license for the State, and are unanimously in favor of doing so.

The commercial space transportation industry is taking root quickly, and poised to grow dramatically in the years ahead. Companies like Space Exploration Technologies (SpaceX) and Orbital Sciences Corporation are successfully demonstrating the ability to provide space transportation services to the government on a commercial basis. Other companies, like Sir Richard Branson's Virgin Galactic, are preparing to launch commercial, suborbital tourism enterprises.

Many states and nations are investing substantial sums to attract this burgeoning industry – yet Hawai'i has unique advantages that would allow it to successfully compete for this industry with minimal investment of public funds. These competitive advantages include a world class tourism infrastructure, an international aviation hub, and several airport runways (including those Honolulu and Kona International Airports, as well as Keahole Airport in West Oahu) that are long enough to accommodate suborbital spaceflight operations, as well as proximal to the ocean (so that operations can be conducted without overflying populated areas).

The commercial space transportation industry accounted for more than \$1 billion in revenue in 2009, and will grow many fold over the years ahead. The key enabler for Hawai'i to compete for the prestige, jobs, and tourism revenue at stake is a commercial spaceport license, to be issued by the FAA's Office of Commercial Space Transportation. Funding appropriated through SB 112 would enable the State to conduct the environmental assessment studies required to obtain this crucial permit and open new aerospace development opportunities for Hawai'i – including space tourism!

As such, and on behalf of the Hawai'i Aerospace Advisory Committee, I strongly encourage your support of S.B. No. 112.

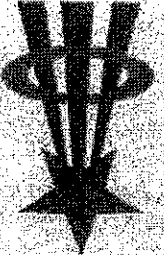
Me ka ha'aha'a,

A handwritten signature in black ink, appearing to read "E. Pulham", with a long horizontal line extending to the right.

Elliot Holokauahi Pulham



ONIZUKA MEMORIAL COMMITTEE
DEDICATED TO THE MEMORY OF COLONEL FREDERICK S. ONIZUKA



To: Hawaii Legislators

From: Nancy C. Taehma

RE: Support of SB112, SB165 & SB1496

Date: February 9, 2011

Dear Members of the Twenty-Sixth Legislature:

I am pleased to provide testimony in very strong support of SB112, SB165, and SB1496 advocating support of aerospace related funding:

Considering the current financial situation of Hawaii, it is imperative and prudent that our State seek innovative and innovative methods of improving our economy for all of its citizens. We can no longer depend on the traditional tourist or agriculture industries to provide enough jobs to sustain our economy. As a science teacher for the past forty-one years in Hawaii, I envision our students being educated and trained to support aerospace related professions along with the improvement of their Science, Technology, Engineering, and Mathematics skills. Hawaii's youth need the desire to remain in our State and the possibilities afforded by the aerospace industry will allow them to have the vision and inspiration to succeed in professional careers here in Hawaii.

SB112 will expand our traditional tourism based industry by providing funds for a spacecraft license application. This Federal Aviation Administration license will afford the possibility of many new jobs and professions for Hawaii's citizenry. An international commercial spacecraft will allow the stabilization and expansion of our economic base. SB165 will fund several aerospace related possibilities and as a science teacher, I especially support the Office of Aerospace Development and the NASA related programs. These programs will undoubtedly benefit our students and the general public by providing the education, skills, and support to allow them to remain in Hawaii rather than moving to other locations to secure good jobs.

I also support SB1496 since it makes possible the creation of businesses related to lunar and space research which would not only broaden our economic base, but motivate our Hawaii residents to succeed in their desires to become business entrepreneurs within their own communities. With opportunities afforded by SB1496, many new space related businesses will be created to sustain Hawaii in the future. I strongly urge you to support SB112, SB165, and SB1496 since they expand the aerospace related industries and therefore, create jobs and careers for Hawaii's population.

Respectfully submitted,

Nancy C. Taehma
Onizuka Space Center, Curator
Hawaii Resource Science Teacher
NASA Solar System Educator
NASA Messenger Educator Fellow
NASA New Horizons Educator Fellow

PO BOX 830, KAILUA-KONA, HI 96745 PHONE: (808) 328-3441 FACSIMILE: (808) 320-9701

GEORGE APPELBAE · RICHARD M. ASSBACH · DEBORAH L. BAKER · MIDORI FUJIMOTO · RAYMOND A. KIMOTO
MORRIS A. KIMURA · CLAUDE S. ONIZUKA · DIANE OUTICUIT · NORMAN M. SAKATA · LARRY TAMINOTO
GLENN G. UOHIMURA · FRED YAMASHIRO · JOHN DE FRIES · ALBERT SHOTSUKA · DALE SUEZAKI · LYNN SATO



Lockheed Martin Commercial Launch Services
12257 South Wadsworth Blvd., MS 1003
Littleton, CO 80125, U.S.A.
Telephone: 800.328.1665

In reply, please refer to: CLSB0-1102-0007

February 9, 2011

Members of the Twenty-Sixth State Hawai'i State Legislature

Subject: Senate Bills No. 112, 165 and 1496

Dear Representatives:

President Obama, in the State of the Union address on January 25, challenged America to win the future by creating an environment, through innovation, education, and infrastructure, that will "make America the best place on Earth to do business." By this measure, Hawai'i has been winning its future.

Hawai'i has employed its greatest assets and resources in productive, profitable and sustainable industry to make it the best place on Earth for astronomical research, as well as tourism. With its stunning beauty and idyllic location, Hawai'i is the very definition of "vacation destination." The world's astronomers have established unparalleled observatories on its 14000-foot peaks, standing tall into clean, unobstructed air. The same high, dry peaks offer unmatched opportunity to recreate conditions on other planets we will soon visit, and test our methods and machines where the consequences of failure are not so dire.

Hawai'i cannot rest on these successes if it is to continue to win its future. As the world changes, so must Hawai'i change to address and accommodate new challenges and opportunities.

A new concept in tourism – space tourism – is yet in its infancy, but is gaining momentum. Virgin Galactic, Space Exploration Technologies, Orbital Sciences Corporation, Blue Origin, Bigelow Aerospace, and Sierra Nevada Corporation are among the companies developing systems with the goal to offer tourists, as well as scientists and businesses, a means into space. These are the very companies that the President's Administration holds up as examples of the innovative spirit required to win the future. Hawai'i has the opportunity to establish itself as a founding member of this new industry, by helping to develop the infrastructure, spaceports with unique services and capabilities, on which this new industry will be built. Hawai'i can capitalize on its investments and experience in exploration research to encourage the development of new and expanded research and commercialization opportunities, and foster international cooperation for space initiatives, such as the Pacific International Space Center for Exploration Systems (PISCES) and the International Lunar Research Park (ILRP).

As a member of the Hawai'i State Aerospace Advisory Committee, I am writing to encourage your strongest possible support for Senate Bill 112, which would appropriate funding for the Office of Aerospace Development, DBEDT, to pursue a commercial spaceport license from the Federal Aviation Administration (FAA) for the State of Hawai'i; for Senate Bill 165, which would promote the continuing development of the aerospace industry in Hawaii by providing the office of aerospace development with sufficient funding and staff support to effectively carry out its statutory duties; and Senate Bill 1496, which would establish "development and operation of space exploration and lunar research related activities" as "eligible business activities" for enterprise zones in Hawai'i

The President, quoting Robert Kennedy, reminded us that "the future is not a gift. It is an achievement."

Respectfully yours,

A handwritten signature in black ink, appearing to read "Steven J. Skladanek".

Steven J. Skladanek
Director of Marketing, Lockheed Martin Commercial Launch Services
Member, Hawai'i Aerospace Advisory Committee



MARS INSTITUTE

10 Feb 2011

Attn: 26th Legislature of the State of Hawaii

RE: Mars Institute Testimony to the State of Hawaii Legislature in Support of Senate Bills 112, 165 and 1496.

Dear Members of the Twenty-Sixth Legislature,

I am happy to provide testimony in strong support of Hawaii State Senate Bills 112, 165, and 1496, scheduled for consideration today.

I am chairman of the Mars Institute, a 501 c3 non-profit research organization whose mission is the advance the scientific study, exploration, and public understanding of the planet Mars. The Mars Institute is a world leader in space research, with focus on not just Mars itself, but also on the stepping stones that will allow humans to explore Mars: the Moon, near-Earth asteroids, and Mars's moons, Phobos and Deimos.

The Mars Institute has collaborations and partnerships with academia and industry across the nation and internationally, including with emerging space-faring nations of the Pacific Belt, particularly Australia and Japan. The Mars Institute is internationally recognized for its expertise in planetary analog research (research at sites on Earth that resemble the Moon or Mars and allow simulations of their exploration), and is the organization operating the *Haughton-Mars Project Research Station*, the world's largest privately operated polar research station (on Devon Island, in the Arctic). The Mars Institute collaborates with PISCES in Hawaii to advance Moon and Mars exploration, and views Hawaii potential in helping advance space exploration as critical and of strategic importance, for scientific, economic, and national security reasons.

We are 100% behind Senate Bills 112, 165, and 1496.

Pascal Lee, Ph.D.
Chairman, Mars Institute
NASA Research Park
Moffett Field, CA 94035-0006
Tel: (408) 687-7103; E-mail: pascal.lee@marsinstitute.net



11710 Plaza America Drive
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Email: rcoppola@ptc.com

February 8, 2011

Dear Members of the Twenty-Sixth Legislature:

On behalf of the 40 Real World Design Challenge partner organizations in government, industry and academia, I am pleased to provide testimony in strong support of SB112, SB165 and SB1496, which collectively advocate aerospace as a strategic and timely growth industry for Hawaii.

The aerospace industry is a vital part of the economy of the United States and the State of Hawaii. It is critical for both national security and global economic competitiveness. Space tourism can provide an additional dimension to Hawaii's economy and enhance the existing tourist industry with billions of dollars in revenue. Lunar research and development also has the potential to stimulate the state's economy through industry contracts and tourism (a lunar research center is likely to become an exciting tourist destination!). For the past half century, Hawaii has been a leader in aerospace, and should consider this sector as a key part of the state's strategic economic development portfolio as you reach for the future.

We are delighted that Hawaii has been a partner in the Real World Design Challenge since its inception – with exceptional results (Iolani School on Oahu won the 2008/2009 National Championship and placed second in the 2009/2010 national competition!). The Real World Design Challenge in “green aviation”, along with other educational initiatives, is enabling Hawaii to build the education and workforce pipeline needed to support the aerospace industry and other Science Technology, Engineering and Mathematics (STEM) disciplines. Much of the innovation in our society emanates from aerospace research and development and related spinoff technologies. These technologies are spawning new industries, which students in Hawaii (as “innovators of tomorrow”) can help develop to grow the “innovation economy” of the 21st Century.

Innovation is a key driver of the economy. SB112, SB165 and SB1496 collectively afford substantial opportunities to help catalyze and sustain innovation in Hawaii. As such, I hope all of these measures will receive strong bi-partisan support during the 2011 Session.

Thank you for the opportunity to testify on this legislation.

Sincerely,

Dr. Ralph K. Coppola
Director, Real World Design Challenge &
Senior Director of Global Government & Strategic Education Programs at PTC

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, March 13, 2011 11:17 AM
To: ERBtestimony
Cc: swartzg001@hawaii.rr.com
Subject: Testimony for SB112 on 3/15/2011 8:00:00 AM

Testimony for ERB 3/15/2011 8:00:00 AM SB112

Conference room: 312

Testifier position: oppose

Testifier will be present: No

Submitted by: gregory swartz

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Submitted on: 3/13/2011

Comments:

I seriously doubt that the people of Hawaii would ever allow Hawaii to be used as a base for launching missiles/rockets of any type. Isn't this a waste of money?