SB 3107

Measure Title: RELATING TO ECONOMIC DEVELOPMENT.

Report Title: Small Satellites; Launch and Processing Facility; Appropriation (\$)

Description: Appropriates funds for the department of business, economic development, and tourism to conduct an economic assessment study on the development and economic viability of a small satellite launch and processing facility on the island of Hawaii.



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt DAVID Y. IGE GOVERNOR

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Statement of

LUIS P. SALAVERIA Director Department of Business, Economic Development, and Tourism

before the

SENATE COMMITTEE ON ECONOMIC DEVELOPMENT, ENVIRONMENT, AND TECHNOLOGY

and the

SENATE COMMITTEE ON PUBLIC SAFETY, INTERGOVERNMENTAL, AND MILITARY AFFAIRS

Wednesday, February 10, 2016 1:20 p.m. State Capitol, Conference Room 414

in consideration of

SB 3107

RELATING TO ECONOMIC DEVELOPMENT.

Chairs Wakai and Nishihara, Vice Chairs Slom and Espero, and Members of the Committees. The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent to conduct an economic assessment study on the development and viability of a small satellite processing and launch facility on the island of Hawaii.

Recent advances in the miniaturization of satellite components, standardization of many satellite parts, and related factors have made the building, launch, and operation of small satellites ("smallsats") technologically feasible and increasingly economical which, in turn, is fueling a broad range of innovative applications utilizing smallsats related to space science, in-orbit technology testing and demonstration, and earth observation.

As noted in this legislation, Hawaii's unique mid-Pacific, near-equatorial location provides a cost-effective site from which to launch payloads into orbit. The proposed economic assessment study would provide an analysis of the opportunities this industry holds for Hawaii, as well as a roadmap for leveraging Hawaii's competitive advantages in commercial space launch.

We support this bill provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Thank you for the opportunity to testify on this measure.



Pacific International Space Center for Exploration Systems

February 8, 2016

Robert M. Kelso Executive Director, PISCES 99 Aupuni St. Suite 212-213 Hilo, HI 96720

TESTIMONY IN SUPPORT OF:

SB3107- RELATING TO ECONOMIC DEVELOPMENT OF A SMALL SATELLITE LAUNCH FACILITY FOR HAWAII

Dear Members of the 28th Hawaii State Legislature,

As Executive Director for PISCES, I am writing <u>in support</u> of the passage of SB3107, which provides operating expenses to conduct an economic assessment of the establishment of a small satellite launch and processing facility on the island of Hawaii.

Over the last few years, there has been an increase in the production and market for small satellites supporting emerging companies and low-earth-orbit (LEO) market niches.

BlackSky, OneWeb, and UrtheCast join a number of other companies actively developing constellations of smallsats, weighing from a few hundred kilograms down to a few kilograms. Those satellites are intended for applications ranging from communications to imagery to GPS radio occultation, a technique to sample the atmosphere that can provide data for meteorology.

In the past, dedicated small satellite launch vehicles were either too expensive, rarely flew or both. Today, there is an emerging fleet of commercial, dedicated smallsat launchers.



Pacific International Space Center for Exploration Systems

Several commercial/private companies developing smallsat launchers have begun to approach Hawaii about possible launch sites on east Hawaii for due-east equatorial launches of small satellites.

Hawaii, given its close proximity to the equator, has a geographic advantage over many other traditional launch sites.

This bill will provide the monies for the State of Hawaii to independently assess the economic potential of this market for the State, and send a message from the State of Hawaii that the state is interested in such high-technology, workforce-development initiatives.

The study would:

- Assess the market and interest for establishing a customer base in Hawaii
- Assess challenges/ barriers to entry
- Assess organizational models for implementation

Your affirmative consideration of this bill will be deeply appreciated.

Mahalo,

Robert M. Kelso

Executive Director, PISCES

Letter from Honeybee Robotics in support of Hawaiian Legislative Bills

Feb 8, 2016

Re.: Letter in support of SB2758, HB2597 for PISCES and SB3107 for economic assessment of satellite launch and processing facility on the Big Island

Honeybee Robotics is the world's leading developer of planetary sample acquisition and manipulation systems in support of surface and subsurface planetary exploration missions.

Established in 1983, Honeybee Robotics is a NASA-approved flight hardware supplier with extensive experience in flexible automation technologies, custom mechanisms, spacecraft electro-mechanical components, and robotic systems and subsystems for the aerospace industry.

Honeybee Robotics has managed over 300 NASA-funded projects, from small research and development efforts under the SBIR program to larger efforts funded by various NASA ROSES programs and multimillion dollar flight development efforts such as the Mars Exploration Rovers (MER) Rock Abrasion Tool and Mars Science Laboratory (MSL) Sample Manipulation System (SMS) for the Sample Analysis at Mars (SAM) instrument suite.

In regard to the above referenced Senate and House bills, Honeybee Robotics supports the establishment of the Pacific International Space Center for Exploration Systems (PISCES) and is in favor to allow for an economic assessment to establish a small satellite launch and processing facility on the Big Island for the following reasons:

- PISCES helps in the diversification of industries in Hawaii and spurs the development of technological jobs, which would prevent brain drain and provide local high-tech job opportunities to local kids.
- PISCES would also serve to help prepare local students to better meet the demands of the global high-tech job market.
- A small satellite launch and processing facility will help establish Hawaii on the front line of aerospace industries worldwide due to its privileged geographical location for equatorial launches.

Please feel free to contact us for any questions regarding our support for the legislative bills discussed above.

With Kind Regards, Kristian Mueller Honeybee Management <u>Mueller@HoneybeeRobotics.com</u> 398 W Washington Blvd. Suite 200 Pasadena, CA 91103

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From:	mailinglist@capitol.hawaii.gov		
Sent:	Monday, February 08, 2016 1:17 PM		
То:	EET Testimony		
Cc:	rfvromo@gmail.com		
Subject:	Submitted testimony for SB3107 on Feb 10, 2016 13:20PM		

SB3107

Submitted on: 2/8/2016 Testimony for EET/PSM on Feb 10, 2016 13:20PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing
Rodrigo & Charlotte Romo	Individual	Support	No

Comments: My wife and I strongly support the funding of Bill SB3107 to fund an economic assessment of the establishment of a small satellite launch and processing facility on the island of Hawaii. Currently the state's dependency on tourism as a primary form of revenue does not provide a sustainable model. It is imperative that Hawaii makes every effort possible to diversify its industry base and to attract high tech & aerospace industries to do work here. This would help diversify the state's revenue and just as important would help create high tech /high paying jobs in state to prevent or reduce the brain drain that the state suffers every year by highly qualified college graduates leaving to the mainland in search for high tech jobs. A small satellite launch and processing facility would provide jobs the local youth interested in aerospace and interested in staying home. Hawaii is uniquely positioned geographically to be a top rated small satellite launch site for equatorial launches. Small satellite launches have significantly increased over the past decade and advances in technology will only cause the demand for prime launch sites to grow. It would be a shame if Hawaii were to miss this opportunity to enter into a very promising new space age industry.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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