



EXECUTIVE CHAMBERS  
HONOLULU

NEIL ABERCROMBIE  
GOVERNOR

July 9, 2013

**GOV. MSG. NO. 1379**

The Honorable Donna Mercado Kim,  
President  
and Members of the Senate  
Twenty-Seventh State Legislature  
State Capitol, Room 409  
Honolulu, Hawaii 96813

The Honorable Joseph M. Souki,  
Speaker and Members of the  
House of Representatives  
Twenty-Seventh State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear President Kim, Speaker Souki, and Members of the Legislature:

This is to inform you that on July 9, 2013, the following bill was signed into law:

SB1256 SD1 HD2 CD1

RELATING TO THE PACIFIC INTERNATIONAL  
SPACE CENTER FOR EXPLORATION SYSTEMS  
**ACT 273 (13)**

Sincerely,

SHAN TSUTSUI  
Acting Governor, State of Hawaii

on JUL 9 2013

ACT 273

THE SENATE  
TWENTY-SEVENTH LEGISLATURE, 2013  
STATE OF HAWAII

S.B. NO. 1256  
S.D. 1  
H.D. 2  
C.D. 1

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## A BILL FOR AN ACT

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR  
EXPLORATION SYSTEMS.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1 SECTION 1. The legislature finds that for the last fifty  
2 years the State of Hawaii has partnered with the National  
3 Aeronautics and Space Administration to develop and advance the  
4 national space program, beginning with the astronaut training  
5 program for the Apollo lunar missions and including a broad  
6 range of discoveries in astronomy and planetary geosciences,  
7 satellite communications, space-based environmental monitoring,  
8 deep-space surveillance, and other activities, which have  
9 established the United States as a global leader in space  
10 exploration.

11 The legislature further finds that the State entered into  
12 an agreement with the National Aeronautics and Space  
13 Administration to expand the State's role as a contributor to,  
14 and beneficiary of, the national space enterprise. The  
15 agreement will enable the State to leverage strategic assets and  
16 capabilities for space exploration, including the State's unique  
17 geographical features, which resemble lunar and Martian terrain,



1 resident expertise in space science and technology, and  
2 extensive research partnerships with other space programs  
3 throughout the Asia-Pacific region.

4 The Pacific international space center for exploration  
5 systems was statutorily established by the legislature in Act  
6 169, Session Laws of Hawaii 2012, to provide unique  
7 opportunities to expand and diversify technology-based  
8 enterprises and education statewide and to advance the national  
9 space program by leveraging Hawaii's substantial assets and  
10 capabilities in space exploration.

11 One goal for the Pacific international space center for  
12 exploration systems is to develop a world-class center of  
13 excellence in Hawaii that can facilitate the design, testing,  
14 and validation of new technologies to support robotic and human  
15 missions to space. Another goal is to serve as an economic  
16 driver for the island of Hawaii that will promote the  
17 establishment and growth of new sustainable and green industries  
18 along with associated jobs, workforce development, internships,  
19 and science, technology, engineering, and math education  
20 programs.

21 The legislature further finds that the Pacific  
22 international space center for exploration systems has a unique



1 opportunity to facilitate and accelerate the development of  
2 aerospace surface-system technologies by exploiting Earth-based  
3 commercial applications in the State. The preliminary focus for  
4 this program should be in the research of a sustainable concrete  
5 supply, robotic operator training and certification, and the  
6 attraction of companies to presently unpopulated business  
7 sectors in Hawaii.

8 For the study and development of a sustainable concrete  
9 supply, the legislature recognizes that current market demands  
10 for concrete in Hawaii are primarily met through imported cement  
11 and asphalt. Research and development that enables innovative  
12 technologies for basalt concrete composition and delivery is an  
13 attractive and self-sustaining alternative to continued cement  
14 and bitumen imports. Currently, the Pacific international space  
15 center for exploration systems is working with the International  
16 Space Exploration Research Institute of Hanyang University in  
17 South Korea; the National Aeronautics and Space Administration,  
18 including the Kennedy Space Center, the Ames Research Center,  
19 and the Johnson Space Center; the University of Notre Dame; the  
20 University of Hawaii at Manoa; the University of Hawaii at Hilo;  
21 the American Society of Civil Engineers; and local industries to  
22 identify, verify, and validate sustainable and in-situ concrete



1 binders using the existing basalt resources in the State. This  
2 is a critical step toward realizing Hawaii's potential in this  
3 industry and provides an investment in the future of Hawaii and  
4 its economy by offering a self-sufficient and in-situ source of  
5 concrete for local applications.

6 The legislature further finds that with an increasing  
7 technological availability of robotics for emergency response  
8 and hazard mitigation, there is an emerging need for robotics  
9 training and certification for civil and government robotic  
10 operators. The Pacific international space center for  
11 exploration systems is working with the Northern Center for  
12 Advanced Technology in Canada to develop a robotic operator  
13 training and certification program, and will be collaborating  
14 with the University of Hawaii community colleges on course  
15 facilitation and development. Additionally, the Pacific  
16 international space center for exploration systems is exploring  
17 opportunities with the Northern Center for Advanced Technology  
18 in underwater robotics.

19 The legislature further finds that the recent emergence of  
20 private commercial space access and a resurgence of global space  
21 initiatives will involve significant private sector investment  
22 in the development, testing, validation, and verification of



1 robotics, broadband, energy production, energy storage,  
2 recycling, and renewable and sustainable technologies that can  
3 have immediate application to improve the economy and the  
4 general well-being of the State. The legislature also  
5 recognizes the need to formulate partnerships with private  
6 industry to facilitate state-based manufacturing and operations  
7 in conjunction with the associated local workforce development.  
8 The Pacific international space center for exploration systems  
9 is exploring possible partnerships with Planetary Power, which  
10 produces solar and hybrid energy generation and storage systems,  
11 to establish a Pacific base of operations in Hawaii to  
12 facilitate the manufacturing of specific components for fixed  
13 and mobile solar concentrator units that will offer higher  
14 efficiency than photovoltaic systems, as well as hybrid  
15 biodiesel systems.

16 The Pacific international space center for exploration  
17 systems is also working to establish a memorandum of  
18 understanding with Hawaii Techworks and the east Hawaii  
19 community development corporation to ensure that there is a  
20 skilled local workforce in place to support these manufacturing  
21 operations.



1           The legislature further finds that all of these initiatives  
2 align with current demands in the State, as well as President  
3 Obama's Advanced Manufacturing Partnership, and represent  
4 critical components for a stronger economy in the State.

5           The purpose of this Act, therefore, is to appropriate funds  
6 to provide funding for the Pacific international space center  
7 for exploration systems to manage and facilitate its work in  
8 bringing aerospace technology and corporations to Hawaii, to  
9 expand and diversify Hawaii-based industry, and to provide the  
10 training relevant to prepare Hawaii's workforce for employment  
11 in technology-related fields, and to require the Pacific  
12 international space center for exploration systems to report to  
13 the legislature on its activities.

14           Moneys appropriated through this Act will be used to fund:

- 15           (1) Existing employee salaries and the creation of new  
16                 positions, including a marketing officer, a project  
17                 integration manager, an information-technology field  
18                 technician, and two student internships;
- 19           (2) Operational expenses, including the rental of staff  
20                 offices and warehouse space for Pacific international  
21                 space center for exploration systems hardware and  
22                 equipment; utilities; intrastate and interstate travel



1 to meetings and conferences; marketing costs  
2 associated with website creation, graphic design, and  
3 the development of brochures and trade advertising;  
4 travel and lodging expenses for the Pacific  
5 international space center for exploration systems  
6 board of directors; and the Pacific international  
7 space center for exploration systems conferencing  
8 contracts; and

- 9 (3) The purchase of essential equipment, materials, and  
10 services, including electronic test and design  
11 equipment in support of robotics training and  
12 education; mechanical equipment in support of robotics  
13 training, the sustainable concrete project, advanced  
14 manufacturing skills training, and ongoing testing of  
15 robotic surface systems by the Pacific international  
16 space center for exploration systems; command and  
17 control equipment for new and existing robotics  
18 hardware; situational awareness monitoring for robotic  
19 operations training; software licensing; and a data  
20 server for archiving project results, product designs,  
21 and online training materials for a robotics operator  
22 training course.





1 SECTION 2. Chapter 201, Hawaii Revised Statutes, is  
2 amended by adding a new section to part V, subpart B to be  
3 appropriately designated and to read as follows:

4 "§201- Pacific international space center for  
5 exploration systems; reporting requirement. The Pacific  
6 international space center for exploration systems shall submit,  
7 no later than September 1 of each year, an annual report to the  
8 legislature that includes:

- 9 "(1) An updated business plan regarding the aerospace  
10 technology research and development park project;
- 11 (2) Details on any progress made toward the development of  
12 a world-class space center in Hawaii;
- 13 (3) The development of technologies and any concomitant  
14 effect on the level of resource imports into the  
15 State;
- 16 (4) The status of all working relationships with  
17 educational and research institutions and federal  
18 agencies;
- 19 (5) Details on any progress made toward the development of  
20 a robotic operator training and certification program;
- 21 (6) The level of private sector investment in aerospace  
22 and related industries, including the number and

1           nature of any partnerships with private industry to  
2           facilitate state-based manufacturing and operations  
3           related to green energy technology;

4           (7) The status of the memorandum of understanding with  
5           Hawaii Techworks and the east Hawaii community  
6           development corporation regarding the cultivation of a  
7           skilled local workforce to support planned  
8           manufacturing operations; and

9           (8) A detailed statement of assets, liabilities, revenues,  
10           and expenses for each fiscal year ending June 30."

11           SECTION 3. There is appropriated out of the general  
12 revenues of the State of Hawaii the sum of \$400,000 or so much  
13 thereof as may be necessary for fiscal year 2013-2014 for the  
14 Pacific international space center for exploration systems for  
15 personnel costs, operational expenses, and the purchase of  
16 equipment, materials, and services.

17           The sum appropriated shall be expended by the department of  
18 business, economic development, and tourism for the purposes of  
19 this Act.

20           SECTION 4. New statutory material is underscored.

21           SECTION 5. This Act shall take effect on July 1, 2013.

S.B. NO.

1256  
S.D. 1  
H.D. 2  
C.D. 1

APPROVED this 9 day of JUL , 2013



ACTING GOVERNOR OF HAWAII