Testimony Presented Before the
Senate Committee on Public Safety, Government Operations, and Military Affairs,
Senate Committee on Education
and the
Senate Committee on Economic Development and Technology
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by
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SB 3037 RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION SYSTEMS

Chairs Espero, Tokuda and Fukunaga, Vice Chairs Kidani and Wakai and Members of the Committees,

My name is Donald Straney, Chancellor of the University of Hawai`i Hilo. I am testifying in support of the intent of SB 3037 relating to the Pacific International Space Center for Exploration Systems (PISCES), although I have concerns about specific features of the bill as it is currently written.

Hawai`i is unique within the United States in providing the opportunities to develop and test equipment and techniques we will need in the exploration of space. We have locations on our islands with characteristics similar to those found on the moon and other planets, providing conditions otherwise available only in artificial laboratory settings. We have extreme environments, mimicking the conditions in space, within easy reach of well-supported laboratories and technical facilities. We also have the experience, gained over several generations, of research at the cutting edge of geology, space technology, engineering and human performance.

Hawai`i has every reason to believe it can help lead the development and testing of the technology needed for the next phase of our nation's exploration of space. Companies are beginning to develop the new technology that will be required and, under PISCES, have begun testing their prototypes in the state. As has happened several times in our nation's history, these companies are most likely to expand and locate in our state to take advantage of the economies of scale and ease of access to testing locations. I believe it is likely that we will be able to take advantage of this promising area of growth to stimulate new commercial opportunities and new career opportunities in the state.

To date, PISCES has been a largely volunteer effort by people in academia, government and industry. It has be supported by funds from grants, from personnel efforts from within the Department of Business, Economic Development, and Tourism and Office of Aerospace Development and from non-general funds made available by the University of Hawai`i Hilo. Despite limited means, it has supported industry-based research and educational outreach on the island of Hawai`i.

PISCES is constrained by not having an articulated plan for expanding its efforts from a largely informal arrangement to one that can become a significant stimulus for our economy. Without such a plan, it is not able to assemble the infrastructure or dedicated industry partners needed to fulfill its promise. I believe having a development plan, with industry, academic and government support is a prerequisite to deciding how PISCES might grow and what forms of support and organization it needs to flourish.

I would like to suggest that the Department of Business, Economic Development and Tourism, the University of Hawai`i Hilo, and the Research Corporation of the University of Hawai`i be charged with developing a joint plan for the future of PISCES and submitting it to you by January, 2013. From the campus's perspective, such a plan is needed to understand how we can support the development of part of our existing Science and Technology Park or our industry incubator to support space industries. We also need to understand what key industry partners will expect in the form of infrastructure and workforce for them to be successful. And we need to include other areas of excellence within the University (e. g. engineering, robotics, space and planetary exploration) in the planning efforts.

With a development plan, government, the university and industry will have a better sense of the direction we need to take with PISCES. I suggest it is premature to make decisions about how PISCES should be integrated into the state economic development structure or about how its governance and management should be designed.

PISCES has considerable promise to stimulate growth in an important new aspect of our state economy. While I believe there is planning needed before we can realize that potential, I am firmly convinced that the industry partners PISCES will have will create important new careers. The University of Hawai`i will be an important component in PISCES' success.

Thank you for providing the opportunity to testify on SB 3037.