



# The Twenty-Third Legislature 2006

State of Hawaii

## ❧ Concurrent Resolution ❧

as jointly adopted by

**The Hawaii State Senate**

and

**The Hawaii State House of Representatives**

*Encouraging the Legislature, the Administration, the University of Hawaii, and Hawaii's Congressional Delegation to work collaboratively with the National Aeronautics & Space Administration, the Japan Aerospace Exploration Agency, and other public and private aerospace-related agencies and institutions, to expand and diversify the aerospace industry through the development of the Pacific International Space Center for Exploration Systems.*

**WHEREAS**, the Legislature recognizes the substantial scientific, economic, and educational benefit and future potential of Hawaii's aerospace industry; and

**WHEREAS**, over the past four decades, the State of Hawaii has engaged in and directly benefited from a variety of aerospace-related initiatives, including astronomical research, planetary exploration, astronaut training, space-based mineralogical and oceanographic mapping, the development of advanced global communications and remote sensing systems, terrestrial and oceanic resource monitoring, vulcanological and meteorological studies, space camp activities for Hawaii's youth, the Hawaii Space Grant College program for undergraduate and graduate students, and other university and private sector-based research, education, and training programs; and

**WHEREAS**, these initiatives have been funded by and continue to receive annual support that exceeds \$60,000,000 for university-based programs alone from the National Aeronautics and Space Administration, the National Science Foundation, the United States Department of Commerce, the National Oceanic and Atmospheric Administration, the United States Department of Energy, the United States Department of Defense, and other federal and private agencies and institutions nationwide; and

**WHEREAS**, the State of Hawaii, by virtue of its diverse natural resources, resident scientific and technological expertise, unique geographical terrain, and strategic mid-Pacific location, is very well positioned to continue to develop, grow, and sustain new aerospace-related programs and activities statewide; and

**WHEREAS**, in 2004, President George W. Bush outlined the United States' vision for future space exploration, setting forth goals and objectives to advance the United States' scientific, security, and economic interests through a robust national space program, including future robotic and manned missions to the moon and Mars; and

**WHEREAS**, in concert with this vision, considerable resources will need to be devoted to the development, testing, and evaluation of new technologies to support both robotic and human space missions; the training of scientists, engineers, and astronauts to help design and implement these missions; and the education of the general public on the opportunities and benefits of space exploration; and

**WHEREAS**, to enable and facilitate these activities, there is an urgent need to develop earth-based analogue missions that can:

- (1) Simulate extraterrestrial exploration;

(2) Help integrate science and mission operations, crew training, technology development, and other elements critical to mission design; and

(3) Ultimately define and measure the benefit of space exploration to humankind; and

**WHEREAS**, the federal National Aeronautics and Space Administration Authorization Act of 2006 enables the development of ground-based analog capabilities in remote locations in America to assist in the development of lunar operations, life support, and *in-situ* resource utilization experience and capabilities; and

**WHEREAS**, these locations will be selected in accordance with their accessibility, significant temperature extremes, access to energy and natural resources, including geothermal and volcanic energy, and ability to involve local populations, academia and industrial partners to ensure that ground-based benefits and applications are encouraged and developed; and

**WHEREAS**, the volcanic soils and lunar-like terrain, diverse multi-ethnic population, and substantial scientific and technical expertise found in Hawaii make the islands an ideal location to support international programs for testing and evaluating innovative technologies to support future robotic and manned exploration of the moon and Mars, as well as for training scientists, engineers, and future astronauts for such missions; and

**WHEREAS**, these strategic assets were previously used in the late 1950s and early 1960s to train astronauts, test and evaluate equipment, and educate the general public in preparation for the National Aeronautics and Space Administration's Apollo missions to the moon; and

**WHEREAS**, these assets closely match the selection criteria for ground-based analogue capabilities as set forth in the National Aeronautics and Space Administration Authorization Act of 2006; and

**WHEREAS**, through the Japan-United States Science, Technology and Space Applications Program coordinated by the Hawaii Department of Business, Economic Development, and Tourism, a multidisciplinary team of scientists, engineers, aerospace executives, university educators, and government officials from the United States and Japan has developed a comprehensive proposal to establish a Pacific International Space Center for Exploration Systems in Hawaii; and

**WHEREAS**, the primary objectives of the Pacific International Space Center for Exploration Systems are to facilitate astronaut training, aerospace education, and space technology testing and evaluation in Hawaii that would capitalize on the State's unique human, technological, and environmental resources to support robotic and human missions to the moon, Mars, and beyond; and

**WHEREAS**, these goals closely comport with the National Aeronautics and Space Administration's objectives to establish remote sites with ground-analogue capabilities to support future space exploration missions; now, therefore,

**BE IT RESOLVED** by the Senate of the Twenty-third Legislature of the State of Hawaii, Regular Session of 2006, that this body, the Administration, and the University of Hawaii are strongly encouraged to work collaboratively with the Japan-United States Science, Technology and Space Applications Program, the National Aeronautics and Space Administration, the Japan Aerospace Exploration Agency, and other public and private aerospace-related agencies and institutions, both national and international, to support the United States Space Exploration Program and help expand and diversify Hawaii's aerospace industry through the development of the Pacific International Space Center for Exploration Systems; and

**BE IT FURTHER RESOLVED** that the primary objectives of this collaboration will be to enable the Pacific International Space Center for Exploration Systems to:

- (1) Provide a testbed for the demonstration, evaluation, and validation of innovative technologies to support future robotic and human missions to the moon, Mars, and other planetary bodies in our solar system;
- (2) Facilitate the training of scientists, engineers, and other professionals engaged in research and development activities associated with future space exploration, with an emphasis on planetary geosciences, astronomy, and remote sensing;
- (3) Conduct in-field training programs for astronauts from the United States, Japan, and other nations engaged in multinational space missions;
- (4) Coordinate international meetings of space professionals in Hawaii toward the design, development, and implementation of innovative space research programs; and
- (5) Catalyze aerospace education programs in local secondary schools, community colleges, and universities statewide; and

**BE IT FURTHER RESOLVED** that the Department of Business, Economic Development, and Tourism, through its Strategic Industries Division, is requested to provide a central point of contact to facilitate this collaboration; and

**BE IT FURTHER RESOLVED** that the Department of Business, Economic Development, and Tourism is requested to report on the progress and status of this collaboration to the Legislature not later than twenty days prior to the convening of the Regular Session of 2007; and

**BE IT FURTHER RESOLVED** that certified copies of this Resolution be transmitted to the Governor, the President of the University of Hawaii, the Director of Business, Economic Development, and Tourism, and Hawaii's congressional delegation.

*Duly certified and recorded this 12<sup>th</sup> day of May, 2006, by the Chief Clerks for the Hawaii State Senate and the Hawaii State House of Representatives.*