

---

---

# SENATE RESOLUTION

ENCOURAGING THE LEGISLATURE, THE ADMINISTRATION, THE UNIVERSITY OF HAWAII, AND HAWAII'S CONGRESSIONAL DELEGATION TO WORK COLLABORATIVELY WITH THE NATIONAL AERONAUTICS AND 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.

1           WHEREAS, the Legislature recognizes the substantial  
2 scientific, economic, and educational benefit and future  
3 potential of Hawaii's aerospace industry; and  
4

5           WHEREAS, over the past four decades, the State of Hawaii  
6 has engaged in and directly benefited from a variety of  
7 aerospace-related initiatives, including astronomical research,  
8 planetary exploration, astronaut training, space-based  
9 mineralogical and oceanographic mapping, the development of  
10 advanced global communications and remote sensing systems,  
11 terrestrial and oceanic resource monitoring, vulcanological and  
12 meteorological studies, space camp activities for Hawaii's  
13 youth, the Hawaii Space Grant College program for undergraduate  
14 and graduate students, and other university and private sector-  
15 based research, education, and training programs; and  
16

17           WHEREAS, these initiatives have been funded by and continue  
18 to receive annual support that exceeds \$60,000,000 for  
19 university-based programs alone from the National Aeronautics  
20 and Space Administration, the National Science Foundation, the  
21 United States Department of Commerce, the National Oceanic and  
22 Atmospheric Administration, the United States Department of  
23 Energy, the United States Department of Defense, and other  
24 federal and private agencies and institutions nationwide; and  
25

26           WHEREAS, the State of Hawaii, by virtue of its diverse  
27 natural resources, resident scientific and technological  
28 expertise, unique geographical terrain, and strategic mid-  
29 Pacific location, is very well positioned to continue to



1 develop, grow, and sustain new aerospace-related programs and  
2 activities statewide; and

3  
4 WHEREAS, in 2004, President George W. Bush outlined the  
5 United States' vision for future space exploration, setting  
6 forth goals and objectives to advance the United States'  
7 scientific, security, and economic interests through a robust  
8 national space program, including future robotic and manned  
9 missions to the moon and Mars; and

10  
11 WHEREAS, in concert with this vision, considerable  
12 resources will need to be devoted to the development, testing,  
13 and evaluation of new technologies to support both robotic and  
14 human space missions; the training of scientists, engineers, and  
15 astronauts to help design and implement these missions; and the  
16 education of the general public on the opportunities and  
17 benefits of space exploration; and

18  
19 WHEREAS, to enable and facilitate these activities, there  
20 is an urgent need to develop earth-based analogue missions that  
21 can:

- 22  
23 (1) Simulate extraterrestrial exploration;  
24  
25 (2) Help integrate science and mission operations, crew  
26 training, technology development, and other elements  
27 critical to mission design; and  
28  
29 (3) Ultimately define and measure the benefit of space  
30 exploration to humankind; and

31  
32 WHEREAS, the federal National Aeronautics and Space  
33 Administration Authorization Act of 2006 enables the development  
34 of ground-based analog capabilities in remote locations in  
35 America to assist in the development of lunar operations, life  
36 support, and in-situ resource utilization experience and  
37 capabilities; and

38  
39 WHEREAS, these locations will be selected in accordance  
40 with their accessibility, significant temperature extremes,  
41 access to energy and natural resources, including geothermal and  
42 volcanic energy, and ability to involve local populations,  
43 academia and industrial partners to ensure that ground-based  
44 benefits and applications are encouraged and developed; and



1  
2 WHEREAS, the volcanic soils and lunar-like terrain, diverse  
3 multi-ethnic population, and substantial scientific and  
4 technical expertise found in Hawaii make the islands an ideal  
5 location to support international programs for testing and  
6 evaluating innovative technologies to support future robotic and  
7 manned exploration of the moon and Mars, as well as for training  
8 scientists, engineers, and future astronauts for such missions;  
9 and

10  
11 WHEREAS, these strategic assets were previously used in the  
12 late 1950s and early 1960s to train astronauts, test and  
13 evaluate equipment, and educate the general public in  
14 preparation for the National Aeronautics and Space  
15 Administration's Apollo missions to the moon; and

16  
17 WHEREAS, these assets closely match the selection criteria  
18 for ground-based analogue capabilities as set forth in the  
19 National Aeronautics and Space Administration Authorization Act  
20 of 2006; and

21  
22 WHEREAS, through the Japan-United States Science,  
23 Technology and Space Applications Program coordinated by the  
24 Hawaii Department of Business, Economic Development, and  
25 Tourism, a multidisciplinary team of scientists, engineers,  
26 aerospace executives, university educators, and government  
27 officials from the United States and Japan has developed a  
28 comprehensive proposal to establish a Pacific International  
29 Space Center for Exploration Systems in Hawaii; and

30  
31 WHEREAS, the primary objectives of the Pacific  
32 International Space Center for Exploration Systems are to  
33 facilitate astronaut training, aerospace education, and space  
34 technology testing and evaluation in Hawaii that would  
35 capitalize on the State's unique human, technological, and  
36 environmental resources to support robotic and human missions to  
37 the moon, Mars, and beyond; and

38  
39 WHEREAS, these goals closely comport with the National  
40 Aeronautics and Space Administration's objectives to establish  
41 remote sites with ground-analogue capabilities to support future  
42 space exploration missions; now, therefore,  
43



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

13  
14 BE IT FURTHER RESOLVED that the primary objectives of this  
15 collaboration will be to enable the Pacific International Space  
16 Center for Exploration Systems to:

- 17
- 18 (1) Provide a testbed for the demonstration, evaluation,  
19 and validation of innovative technologies to support  
20 future robotic and human missions to the moon, Mars,  
21 and other planetary bodies in our solar system;  
22
  - 23 (2) Facilitate the training of scientists, engineers, and  
24 other professionals engaged in research and  
25 development activities associated with future space  
26 exploration, with an emphasis on planetary  
27 geosciences, astronomy, and remote sensing;  
28
  - 29 (3) Conduct in-field training programs for astronauts from  
30 the United States, Japan, and other nations engaged in  
31 multinational space missions;  
32
  - 33 (4) Coordinate international meetings of space  
34 professionals in Hawaii toward the design,  
35 development, and implementation of innovative space  
36 research programs; and  
37
  - 38 (5) Catalyze aerospace education programs in local  
39 secondary schools, community colleges, and  
40 universities statewide; and  
41



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

5  
6 BE IT FURTHER RESOLVED that the Department of Business,  
7 Economic Development, and Tourism is requested to report on the  
8 progress and status of this collaboration to the Legislature not  
9 later than twenty days prior to the convening of the Regular  
10 Session of 2007; and

11  
12 BE IT FURTHER RESOLVED that certified copies of this  
13 Resolution be transmitted to the Governor, the President of the  
14 University of Hawaii, the Director of Business, Economic  
15 Development, and Tourism, and Hawaii's congressional delegation.

16  
17  
18 OFFERED BY:

