THE SENATE TWENTY-FIFTH LEGISLATURE, 2010 STATE OF HAWAII

S.C.R. NO. /00

FEB 2 6 2010

SENATE CONCURRENT RESOLUTION

RECOGNIZING AEROSPACE AS A STRATEGIC AND TIMELY GROWTH INDUSTRY FOR HAWAII AND REQUESTING THE STATE ADMINISTRATION TO TAKE PROACTIVE, COORDINATED, AND SUSTAINED ACTION TO FULLY REALIZE THE SIGNIFICANT SCIENTIFIC, EDUCATIONAL, AND COMMERCIAL BENEFITS THE AEROSPACE INDUSTRY CAN BRING TO THE STATE.

1 WHEREAS, over the past half century, aerospace has played a pivotal role in expanding and diversifying our national economy: 2 3 Forging new inroads to scientific discovery; 4 (1)5 (2) Dramatically advancing national engineering and 6 manufacturing expertise; 7 8 Pioneering innovation in communications technology and 9 (3) computer science; 10 11 (4) Enhancing surveillance of planet Earth; and 12 13 (5) Augmenting the understanding of factors that drive 14 weather systems and climate change; and 15 16 WHEREAS, aerospace has spurred spinoffs of commercial 17 products that have significantly enhanced our qualities of life, 18

18 products that have significantly enhanced our qualities of life, 19 providing rich educational and training opportunities for K-12 20 and college students nationwide, and ultimately affording new 21 frontiers for humankind to explore and develop; and

WHEREAS, today, the aerospace industry holds an equal if
not greater potential for mobilizing the nation's strategic
assets and capabilities to:

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(1) Enable future innovation in science and technology;

(2) Enhance aviation safety and global security;



Promote STEM (science, technology, engineering, and (3) 1 mathematics) education to grow a technologically 2 3 proficient workforce; 4 5 (4)Improve healthcare diagnostics and delivery worldwide; 6 7 (5) Forge sustainable renewable energy systems for planet Earth: 8 9 10 (6) Advance remote sensing and management of critical global resources; and 11 12 13 (7) Ultimately pioneer future pathways to space; and 14 WHEREAS, Hawaii affords strategic assets and capabilities 15 that can be leveraged to help realize humankind's full potential 16 in space, and in so doing engage our State as a major 17 contributor to and beneficiary of the global space enterprise; 18 19 and 20 21 WHEREAS, Hawaii's strategic assets include its unique mid-Pacific location, moon- and Mars-like terrain, resident 22 expertise covering a broad range of aerospace-related 23 technologies, and long-standing ties with space-faring nations 24 throughout the Asia-Pacific region; and 25 26 WHEREAS, historically, Hawaii has played a seminal role in 27 28 developing the nation's space program, beginning with astronaut training for the Apollo lunar missions and the development of 29 30 world-class observatories on the Big Island, and leading to a variety of nationally-funded programs in planetary geosciences, 31 satellite communications, space-based remote sensing and 32 environmental monitoring, deep-space surveillance, and other 33 34 aerospace-related activities sponsored by the University of Hawaii, the U.S. military, and numerous companies statewide; and 35 36 37 WHEREAS, today Hawaii continues to support our national space efforts through a wide range of aerospace-related 38 39 activities on all major islands, including: 40 41 (1)The Mauna Kea Science Reserve on Mauna Kea as the 42 world's premier astronomical observing site; 43





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1 (2) The Air Force Maui Optical and Supercomputing Observatory supporting our nation's most sophisticated 2 deep space surveillance complex; 3 4 The University of Hawaii's Institute for Astronomy and 5 (3) Hawaii Institute for Geophysics and Planetology on 6 7 Oahu, pioneering both basic and applied research in diverse space-related fields; and .8 9 The Pacific Missile Range Facility on Kauai, providing 10 (4) the world's largest multi-environment test and 11 evaluation range for aerospace technologies; and 12 13 WHEREAS, local aerospace companies, founded and grown in 14 Hawaii, are equipped with both the technical talent and state-15 of-the-art infrastructure to develop next-generation electro-16 optic technologies, space surveillance and defense systems, 17 command and control networks, and other resources and 18 capabilities that can be adapted for both military and civilian 19 aerospace applications; and 20 21 WHEREAS, major national aerospace corporations, already 22 established in Hawaii, are looking to expand their operations in 23 the islands as a bridge to Asia-Pacific markets, especially in 24 25 the development and delivery of advanced systems for aviation maintenance and training, air traffic control, satellite 26 communications, and deep space tracking, surveillance and 27 28 reconnaissance; and 29 WHEREAS, the Federal Aviation Administration (FAA), the 30 National Aeronautics and Space Administration (NASA), and other 31 federal agencies and aerospace corporations nationwide are 32 working to develop next-generation aviation technologies 33 (NextGen) to enhance the safety and efficiency of future air 34 35 travel; and 36 WHEREAS, Hawaii's abundant open air space, trans-Pacific 37 and inter-island air routes, and extensive civilian and military 38 aviation infrastructure make it an ideal test site to 39 demonstrate and validate NextGen technologies; and 40 41 WHEREAS, Hawaii's unique location, geography, and 42 technological assets are also ideally suited to support the 43



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launch of next-generation commercial spacecraft, including space 1 planes, to: 2 3 4 (1) Carry small satellites, experimental payloads, and tourists to space; 5 6 7 (2) Monitor and manage man-made and natural disasters Pacific-wide; and 8 9 (3) Develop and test space-based power systems to capture 10 sunlight as a renewable energy resource for 11 interplanetary spacecraft and Earth-based 12 applications; and 13 14 WHEREAS, there is growing global concurrence that 15 multinational collaboration can help reduce the costs and 16 enhance the benefits of robotic and human missions to space, and 17 that Hawaii, by virtue of its strategic location and assets, is 18 19 ideally situated to help "lead the charge" as a catalyst for multinational space partnerships; and 20 21 22 WHEREAS, NASA has announced a new vision for space exploration that embraces commercial applications, STEM 23 education, and international partnerships to spur the 24 development of innovative technologies and infrastructure and to 25 reduce the costs and enhance the benefits of future robotic and 26 human missions to the Moon, Mars, and beyond; and 27 28 WHEREAS, in order to realize this new vision, considerable 29 resources will need to be devoted to: 30 31 The development, testing, and evaluation of new **32** (1)technologies to enable long-term missions to space; 33 34 (2)The training of scientists, engineers, and astronauts 35 to help design and implement these missions; 36 37 38 (3) The development of multinational partnerships that can synergize resources and reduce costs for future space 39 missions; and 40 41 (4) Educating and engaging the general public in these 42 43 efforts; and 44



WHEREAS, Hawaii's unique location, geography, international 1 connectivity, and other strategic assets and capabilities are 2 ideally suited to address all of these challenges; and 3 4 5 WHEREAS, in recognition of Hawaii's aerospace potential, the State of Hawaii is entering into a new Space Act Agreement 6 with NASA to facilitate long-term collaboration in support of 7 the national space agenda that will leverage Hawaii's unique 8 assets and capabilities to help achieve national goals for space 9 exploration while expanding and diversifying research, 10 educational and commercial development programs in Hawaii, such 11 as the Hawaii Space Flight Laboratory (HSFL), the Pacific 12 13 International Space Center for Exploration Systems (PISCES), and the Pacific International Space Alliance (PISA); and 14 15 16 WHEREAS, to effectively address Hawaii's current economic malaise, the State's limited funding resources should be 17 invested in strategic growth industries that can attract 18 19 substantial federal and private sector investments, support high-paying and sustainable employment opportunities for local 20 residents, develop creative opportunities to inspire and train 21 students in STEM-related fields, and expand and diversify 22 research and commercial development programs at universities and 23 24 businesses statewide; and 25 WHEREAS, aerospace is demonstrably a dynamic growth 26 industry that has advanced and can continue to support all of 27 these goals in Hawaii; and 28 29 WHEREAS, aerospace thrives in Hawaii because of our unique 30 location and intrinsic resources, and therefore is a growth 31 32 industry that will not be exported from the State as it matures; 33 and 34 WHEREAS, Hawaii already has established extensive working 35 relationships throughout the global aerospace community that can 36 be leveraged to grow an aerospace industry statewide; and 37 38 WHEREAS, all of the aforementioned assets, capabilities, 39 and advantages which predispose aerospace as a dynamic growth 40 industry for Hawaii imply that modest upfront investments in 41 this sector will bring substantial and sustainable scientific, 42 educational and commercial returns to the State; now, therefore, 43 44 2010-1150 SCR SMA.doc



BE IT RESOLVED by the Senate of the Twenty-fifth 1 Legislature of the State of Hawaii, Regular Session of 2010, the 2 House of Representatives concurring, that the Legislature 3 recognizes aerospace as a strategic and timely growth industry 4 5 for Hawaii; and 6 BE IT FURTHER RESOLVED that the state administration is 7 8 requested to take proactive, coordinated, and sustained action to fully realize the significant scientific, educational, and 9 commercial benefits the aerospace industry can bring to the 10 State; and 11 12 13 BE IT FURTHER RESOLVED that the State should make aerospace a high priority for innovation and development in the FY 2012-14 15 2013 biennium; and 16 BE IT FURTHER RESOLVED that the State should work 17 collaboratively and proactively with federal and municipal 18 agencies, as well as local and overseas universities and 19 companies, to explore and promote opportunities to expand and 20 21 diversify aerospace-related activities in Hawaii; and 22 BE IT FURTHER RESOLVED that to grow scientific, educational 23 24 and commercial enterprise statewide, particular emphasis be given to the identification and development of activities and 25 programs that can leverage Hawaii's unique location, 26 qeographical assets, resident expertise, and international 27 connectivity, by: 28 29 Developing Hawaii as an international center 30 (1)facilitating multinational partnerships that can 31 32 reduce the costs and enhance the benefits of future space exploration; 33 34 (2) Concentrating on K-12 education and university-based 35 STEM education and training that can grow Hawaii's 36 technologically-proficient workforce; 37 38 39 (3) Establishing Hawaii as an Asia-Pacific hub for **40** advanced aviation training and NextGen technology development; and 41 42 Realizing Hawaii's full potential as a global leader (4) 43 in commercial space transportation, including the 44 2010-1150 SCR SMA.doc



development of a commercial spaceport that will enable space-based research and space tourism; and

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4 BE IT FURTHER RESOLVED that the Office of Aerospace Development as established under section 201-72, Hawaii Revised 5 Statutes, within the Department of Business, Economic 6 Development and Tourism, promote and help coordinate these 7 activities and programs on behalf of the State, and that 8 adequate financial and staffing resources be provided to the 9 Office of Aerospace Development to enable it to effectively 10 assume and undertake these duties; and 11

BE IT FURTHER RESOLVED that certified copies of this 13 Concurrent Resolution be transmitted to the Governor of Hawaii; 14 Director of Business, Economic Development, and Tourism; 15 Director of the Office of Aerospace Development; President of 16 the University of Hawaii; Superintendent of Education; the 17 Administrator of the National Aeronautics and Space 18 Administration; and the Director of the Federal Aviation 19 20 Administration.

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