## SENATE 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.

WHEREAS, over the past half century, aerospace has played a pivotal role in expanding and diversifying the national economy by forging new inroads to scientific discovery, advancing national engineering and manufacturing expertise, pioneering innovations in communications and computer technologies, enhancing surveillance of the Earth, and enabling better understanding of weather systems and climate change; and

WHEREAS, aerospace has also spurred spinoffs of commercial products that have significantly enhanced the public's quality of life, provided rich educational and training opportunities for kindergarten through twelfth grade students and college students nationwide, and expanded means and venues for the exploration and development of space; and

WHEREAS, the aerospace industry today holds equal if not greater potential for enabling future innovation in science and technology, enhancing aviation and global security, promoting science, technology, engineering and mathematics (STEM) education to help grow a technologically proficient workforce, improving healthcare diagnostics and delivery worldwide, forging renewable energy systems for application worldwide, and advancing remote sensing and management of critical global resources; and

WHEREAS, Hawaii's strategic mid-Pacific near-equatorial location; substantial telemetry, space surveillance, and other related infrastructure; moon- and Mars-like terrain; resident expertise in a broad range of aerospace-related technologies; and long-standing ties with space-faring nations throughout the Asia-Pacific region, comprise strategic assets and capabilities that can be leveraged to help realize humankind's full potential

in space, and in so doing engage the State as a major contributor to and beneficiary of global space enterprise; and

WHEREAS, Hawaii has historically played a seminal role in developing the nation's space program, beginning with astronaut training for the Apollo lunar missions and the development of world-class observatories on the island of Hawaii, and leading to a variety of nationally funded programs in planetary geosciences, satellite communications, space-based remote sensing and environmental monitoring, deep-space surveillance, and other aerospace-related activities sponsored by the University of Hawaii, the United States military, and numerous aerospace-related companies statewide; and

WHEREAS, today Hawaii continues to support national space efforts through a wide range of aerospace-related activities on all major islands, including the Mauna Kea Science Reserve on Mauna Kea as the world's premier astronomical observing site, the Air Force Maui Optical and Supercomputing Observatory supporting the nation's most sophisticated deep space surveillance complex, the University of Hawaii's Institute for Astronomy and Hawaii Institute for Geophysics and Planetology on Oahu, pioneering basic and applied research in diverse space-related fields, and the Pacific Missile Range Facility on Kauai, providing the world's largest multi-environment test and evaluation range for aerospace technologies; and

 WHEREAS, local aerospace companies, founded and grown in Hawaii, are equipped with the technical talent and state-of-the-art infrastructure to develop next-generation electro-optic technologies, space surveillance and defense systems, command and control networks, and other resources and capabilities that can be adapted for military and civilian aerospace applications; and

WHEREAS, major national aerospace corporations, already established in Hawaii, have expressed interest in expanding their operations in the islands as a bridge to Asia-Pacific markets, especially in the development and delivery of advanced systems for aviation maintenance and training, air traffic control, satellite communications, and deep space tracking, surveillance, and reconnaissance; and

2016-1382 SR SMA.doc

1 2 3

4

5

WHEREAS, the Federal Aviation Administration, the National Aeronautics and Space Administration, and other federal agencies and aerospace corporations nationwide are working to develop next-generation aviation technologies to enhance the safety and efficiency of future air travel; and

6 7 8

9

10

11

WHEREAS, Hawaii's abundant open air space, trans-Pacific and inter-island air routes, and extensive civilian and military aviation infrastructure make Hawaii an ideal test site to demonstrate and validate next-generation aviation technologies; and

12 13 14

15

16

17

18

19

20

WHEREAS, Hawaii's unique location, geography, and technological assets are also ideally suited to support the launch of next-generation commercial spacecraft, including spaceplanes, to carry small satellites, experimental payloads, and tourists to space; monitor and manage human-caused and natural disasters; and develop and test space-based power systems to capture sunlight as a renewable energy resource for interplanetary spacecraft and Earth-based applications; and

21 22

24

25

26

27

WHEREAS, there is growing global concurrence that multinational collaboration can help reduce the costs and enhance the benefits of robotic and human missions to space and that Hawaii, by virtue of its strategic location and assets, is ideally situated to help lead the charge as a catalyst for multinational space partnerships; and

28 29 30

31 32

33 34

35 36

WHEREAS, in order to realize this vision, considerable resources will need to be devoted to the development, testing, and evaluation of new technologies to enable long-term missions to space; the training of scientists, engineers, and astronauts to help design and implement these missions; the development of multinational partnerships that can synergize resources and reduce costs for future space missions; and educating and engaging the general public in these efforts; and

37 38 39

40

WHEREAS, Hawaii's unique location, geography, international connectivity, and other strategic assets and capabilities are ideally suited to address all of these challenges; and

41 42

## S.R. NO. 36

WHEREAS, to diversify and expand Hawaii's economy, the State must promote strategic growth industries that can attract substantial federal and private sector investments, support high-paying and sustainable technology-based employment opportunities for local residents, develop creative means to inspire and train students in STEM-related fields, and enable pioneering research and commercial development programs at universities and businesses statewide; and

5 ·

WHEREAS, aerospace is demonstrably a dynamic growth industry that has advanced and can continue to support all of these goals to diversify and expand Hawaii's economy; and

WHEREAS, aerospace thrives in Hawaii because of the State's unique location and intrinsic resources, and therefore is a growth industry that will not be exported from the State as it matures; and

WHEREAS, Hawaii already has established extensive working relationships throughout the global aerospace community that can be leveraged to grow an aerospace industry statewide; and

WHEREAS, all of the aforementioned assets, capabilities, and advantages that predispose aerospace as a dynamic growth industry for Hawaii imply that modest upfront investments in this sector will bring substantial and sustainable scientific, educational, and commercial returns to the State; now, therefore,

BE IT RESOLVED by the Senate of the Twenty-eighth Legislature of the State of Hawaii, Regular Session of 2016, that this body recognizes aerospace as a strategic and timely growth industry for Hawaii; and

BE IT FURTHER RESOLVED that the state Administration is requested 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; and

 BE IT FURTHER RESOLVED that in support of this effort, the State should make aerospace a high priority for innovation and development in the 2017-2019 fiscal biennium; and

BE IT FURTHER RESOLVED that the Office of Aerospace Development, as established under section 201-72, Hawaii Revised Statutes, within the Department of Business, Economic Development, and Tourism, should promote and help advance such activities and programs on behalf of the State, to include coordination with the Pacific Missile Range Facility on Kauai, the Hawaii Space Flight Laboratory on Oahu, the Advanced Maui Optical and Space Surveillance facility on Maui, the Pacific International Space Center for Exploration Systems on the island of Hawaii, the National Aeronautics and Space Administration, the Federal Aviation Administration, and other state-based, national, and public and private international agencies and organizations, as appropriate; and

BE IT FURTHER RESOLVED that in furtherance of this goal, the Office of Aerospace Development is requested to prepare, for review and consideration by the state Administration and the Legislature, a strategic plan for aerospace development in Hawaii that will explore possibilities and options for expanding and diversifying the aerospace sector statewide, identifying specific goals and plausible outcomes over a five-year period, with recommendations for specific methodologies and policies to help achieve these goals and outcomes; and

BE IT FURTHER RESOLVED that this strategic plan be completed in advance of the 2017-2019 fiscal biennium, with copies delivered to the state Administration and Legislature for consideration no later than September 1, 2016; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Governor; President of the Senate; Speaker of the House of Representatives; Director of Business, Economic Development, and Tourism; Director of the Office of Aerospace Development; President of the University of Hawaii System; Superintendent of Education; Adjutant General; Commander of the United States Pacific Command; Commander of the United States Pacific Fleet; Commander of the Pacific Air

ZOTO-1382 SR SMA. GOC

1

Forces; Commanding General of the United States Army Pacific; and Commander of the United States Marine Corps Forces, Pacific.

OFFERED BY:

2016-1382 SR SMA.doc