George R. Ariyoshi 999 Bishop Street, 23rd Floor Honolulu, HI 96813

March 21, 2014

TESTIMONY IN SUPPORT OF SCR82 / SR39 - DESIGNATING JULY 20, 2014, AS "TRANQUILITY BASE DAY" IN HAWAII TO HONOR THE FORTY-FIFTH ANNIVERSARY OF THE APOLLO 11 LUNAR LANDING AT TRANQUILITY BASE AND URGING THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION TO INCLUDE TRANQUILITY BASE AND ASSOCIATED ARTIFACTS ON THE WORLD HERITAGE LIST.

Dear Members of the 27th State Legislature,

I <u>strongly</u> support the intent of these resolutions to designate July 20, 2014 as "Tranquility Base Day" and to encourage UNESCO to include the Apollo 11 landing site and associated artifacts on the World Heritage List.

Hawaii played an instrumental role supporting the Apollo 11 lunar mission – from training astronauts Neal Armstrong, Buzz Aldrin, and Mike Collins for this adventure on the volcanic soils of the Big Island, to providing a vital communications link with the Apollo spacecraft through the Kokee Tracking Station on Kauai. The legacy of Apollo, and Hawaii's contributions to this historic venture, are clearly worthy of both statewide and international recognition, and can serve as a catalyst to inspire the next generation of space scientists, engineers and entrepreneurs who will pioneer the frontiers of space.

As such, I would urge you pass SCR82/SR39, and would be happy to address any questions you may have concerning this recommendation. I may be reached by e-mail at kyahiku@wik.com, by phone at (808) 544-6765, or by fax at (808) 544-8398.

Thank you for the opportunity to testify on these resolutions.

Aloha,

Jenjellryth: George R. Ariyoshi



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of

RICHARD C. LIM Director

Department of Business, Economic Development & Tourism before the

HOUSE COMMITTEE ON VETERANS, MILITARY, & INTERNATIONAL AFFAIRS, & CULTURE AND THE ARTS

Wednesday, April 16, 2014 9:00 a.m. State Capitol, Conference Room 312

in consideration of

SCR82

DESIGNATING JULY 20, 2014, AS "TRANQUILITY BASE DAY" IN HAWAII TO HONOR THE FORTY-FIFTH ANNIVERSARY OF THE APOLLO 11 LUNAR LANDING AT TRANQUILITY BASE AND URGING THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION TO INCLUDE TRANQUILITY BASE AND ASSOCIATED ARTIFACTS ON THE WORLD HERITAGE LIST.

Chair Takai, Vice Chair Ito, and members of the Committee. The Department of Business, Economic Development and Tourism **supports** this concurrent resolution to designate July 20, 2014 as "Tranquility Base Day" and to encourage UNESCO to include the Apollo 11 landing site and associated artifacts on the World Heritage List.

Hawaii played a monumental role in supporting the Apollo 11 lunar mission – from training astronauts Neal Armstrong, Buzz Aldrin, and Mike Collins for this adventure on the volcanic soils of the Big Island, to providing a vital communications link with the Apollo spacecraft through the Kokee Tracking Station on Kauai. As such, it is most appropriate for our State to both recognize and commemorate this historic achievement through the proposed "Tranquility Base Day" proclamation, as well as to encourage UNESCO to officially designate the Apollo 11 landing site and related artifacts as World Heritage properties.

Thank you for the opportunity to testify on this resolution.



03/20/2014

Testimony in strong support of Hawaii State Resolutions: HCR 133 and HR 97; and SCR 82 and SR 39

Statement of Buzz Aldrin, Apollo XI

To the Members of the 27th Hawaii State Legislature:

I would like to offer my strong endorsement of Hawaii State Resolutions – SCR 82 and SR 39; and, HCR 133 and HR 97, which will build on, and substantially further, the many early successes already demonstrated by your strong support of the Pacific International Space Center for Exploration Systems (PISCES).

I am delighted to see the continued outstanding leadership that you are demonstrating in supporting the development and operation of this truly unique and vitally important capability that will serve Hawaii, the United States, and the international space community, as a premier planetary analog test bed to help prepare for humanity's next bold frontier - the scientific investigation, sustainable exploration, commercial development, and settlement of space.

The importance of this new capability has been widely recognized both nationally by NASA, NOAA, and other federal and state agencies, as well as by the broader international community, which is now coming together to collaborate here on the Big Island to further our mutual goals in space, as is evident by the many memorandums of understanding and agreement which have been signed over the past two years.

In recognition of this leadership, and in anticipation of an important major milestone in human history - the 45th Anniversary of the historic Apollo XI lunar landing that Neil Armstrong and I were privileged to undertake on July 20th, 1969, while our crewmate Mike Collins orbited overhead, I would like to offer my strongest endorsement of State Resolutions SCR 82 and SR 39, to designate July 20th, 2014 as 'Tranquility Base Day', to honor the historical site where man first stepped upon another world.

I would like to further strongly endorse the companion call for the United States to urge the United Nations Educational, Scientific and Cultural Organization to designate Tranquility Base, and its associated hardware and artifacts, as an International World Heritage Site, to preserve this important site for all humanity, and for future explorers, to enjoy and to recognize this remarkable accomplishment for all mankind.

I would also like to strongly endorse State Resolutions HCR 133 and HR 97, which would endorse the planned partnership between PISCES, the National Aeronautics and Space Administration (NASA), other State Agencies, and several private sector industry partners, to collaborate in the research and development of 'basaltic concrete and other additive materials' to exploit the use of basalt, and other indigenous materials, from the Big Island's abundant lava flow fields to produce materials and structures to validate the ability to create similar materials on the moon, and other planetary bodies, that would be created from readily available planetary in situ resources.

The use on in situ resources, a term that NASA and commercial space sector researchers refer to as In Situ Resource Utilization (ISRU) has been identified as one of the most important processes to enable future affordable and sustainable human exploration and settlement of space, as it will make it possible to create needed surfaces, structures, habitats, and other capabilities, to support human activity in space, as compared with the extremely high costs of transporting such structures from the Earth to the moon, or other planetary bodies.

Following the successful demonstration of this research, it is anticipated that it will prove possible to apply this technology to manufacture and fabricate basaltic concrete surfaces, and other structures, that could be applied to many of Hawaii's roads, and other industrial needs, thereby substantially reducing the high cost of importing these materials from the mainland, and other suppliers across the globe to meet these needs.

Therefore, in recognition of the importance of conducting this research for exploration, and subsequently leveraging this capability for the economic benefit of the State of Hawaii, I also strongly endorse the proposal to extend the research phase of this work to address industrial applications here in Hawaii.

I firmly believe that the investment that you are making today in supporting PISCES, and in endorsing this exciting and promising new exploration research and technology, and its eventual application to meeting the needs of the State, will undoubtedly assure Hawaii a unique leadership role in this challenging new frontier, while also contributing substantially to the economic prosperity and well being of the State.

I again, strongly encourage your continued leadership in supporting PISCES - a timely and vitally important asset for not only your State, but also for our Nation, and for the broader international space community, as well as for the State of Hawaii.

Thank you for the opportunity to testify on these resolutions.

Buzz Aldrin Apollo XI

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